Appendix I Traffic Impact Analysis

Appendices

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FINAL Transportation Impact Analysis

City of Westminster

General Plan Update

Prepared for:
Placeworks, Inc.

June 2016

OC14-0307

FEHR PEERS

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1.0 EXECUTIVE SUMMARY

PROPOSED GENERAL PLAN UPDATE

Fehr & Peers has completed a transportation analysis for the proposed 2016 Westminster General Plan Update in the City of Westminster, California. The proposed City of Westminster General Plan Update (the project) consists of largely infill development and includes residential, commercial, industrial, and mixed-use land use designations. In total, the General Plan land use proposes a buildout of approximately 6,836 acres, 36,484 housing units, 34,842 households, a population of 118,463, a total of 19,163,257 non-residential square feet, and a total of 39,407 jobs.

SCOPE OF STUDY

Intersections, roadway segments, freeway mainline segments, and multi-modal transportation facilities such as pedestrian, bicycle, and transit were all considered in this transportation impact assessment study. The study area includes facilities mostly in the City of Westminster and its sphere of influence, but also includes facilities under the jurisdiction of Caltrans, the City of Garden Grove, the City of Fountain Valley, the City of Huntington Beach, and the County of Orange. An analysis under the Orange County Congestion Management Program was also performed.

ANALYSIS METHODOLOGIES

The Highway Capacity Manual 2010 methodology was used for intersections and segments under the jurisdiction of the City of Westminster or Caltrans. The Intersection Capacity Utilization methodology was used for intersections under the jurisdiction of other Orange County cities, the County of Orange, and/or the Orange County Congestion Management Program. For roadway segments, Capacity and level-of-service thresholds from the existing and proposed Westminster General Plan. The Orange County Traffic Analysis Model (OCTAM) was used to develop future year traffic volume forecasts.

RESULTS

This transportation impacts assessment was done under the framework of CEQA. The assessment found the following locations required physical improvements in order to be consistent with applicable plans, ordinances or policies establishing measures of effectiveness for the performance of the circulation system. Also noted are the recommended mitigation measures associated with the impact:

- #6. Bolsa Chica Road & Westminster Boulevard
  - Add an eastbound right-turn overlap phase
- #36. Garden Grove Boulevard & Western Avenue
  - Optimize the signal timing for anticipated traffic demand
- #63. Westminster Boulevard & Magnolia Avenue
  - Optimize the coordinated PM signal timing for anticipated traffic volume demand.
- #89. Garden Grove Boulevard & Goldenwest Street
  - Modify the eastbound approach from having one left turn lane, one shared through-left turn lane, one through lane, and one right turn lane, to having two left turn lanes, three through lanes, and one right turn lane.
- #91. Garden Grove Boulevard & SR 22 Westbound Off-Ramp/Eagle Drive
  - Optimize the signal timing for anticipated traffic demand
- #95. Bolsa Avenue & Newland Street

  - Add an eastbound and westbound through lane through restriping and minor roadway widening
- #99. Edinger Avenue & Newland Street
  - Add an eastbound and westbound through lane through restriping
- Newland Street, Heil Avenue to Edinger Avenue
  - Widen to four lanes or add this location to the list of protected locations identified in the City's General Plan Policy M_IP-2: Complete Street Exemptions.

Several freeway mainline segments are impacted by the proposed General Plan Update.

All other items covered in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) were determined to have less than significant impacts.

2.0 INTRODUCTION

Fehr & Peers has completed a transportation analysis for the proposed 2016 Westminster General Plan Update in the City of Westminster, California. This report summarizes the methodology, findings and conclusions of the analyses, including identification of recommended mitigation measures necessary to maintain consistency with the goals and policies of the proposed General Plan.

This chapter outlines the geographic scope of the transportation impact analysis, including the study area.

2.1 PROJECT DESCRIPTION

The proposed City of Westminster General Plan Update consists of largely infill development and includes residential, commercial, industrial, and mixed-use land use designations. The proposed General Plan land use designations are provided in Table 2-1 below.

Table 2-1
General Plan Proposed Density and Intensity Assumptions

Proposed Land Use Designation	Land Use Code	Density Range	Assumed Density	Persons Per Household
Residential - Low	LDR	04-07 du/ac	7 du/ac	3.4
Residential -Medium	MDR	08-14 du/ac	12 du/ac	3.4
Residential - High	HDR	15-25 du/ac	22 du/ac	3.4
Proposed Land Use Designation	**Land Use Code**	**Max FAR**	**Assumed Intensity**	**Square Footage Per Employee**
Neighborhood Commercial	NC	0.35	0.33	500
Regional Commercial	RC	0.65	0.40	400
Urban Industrial	UI	1.0	0.45	600

Table 2-1
General Plan Proposed Density and Intensity Assumptions

Industrial	I	0.50	0.50	1000
Proposed Land Use Designation	**Land Use Code**	**Maximum Density, FAR**	**Assumed Density, Intensity**	**Persons Per Household, Square Footage Per Employee**
Mixed-Use Civic Center	MU-CC	40 du/ac, 1.0 FAR	36 du/ac, 0.60 FAR	3.4 pph, 500 sf/employee
Mixed-Use Corridor	MU-CO	40 du/ac, 1.0 FAR	30 du/ac, 0.40 FAR	3.4 pph, 500 sf/employee
Mixed-Use Little Saigon	MU-LS	40 du/ac, 1.0 FAR	36 du/ac, 0.60 FAR	3.4 pph, 400 sf/employee
Mixed-Use Northwest District	MU-NW	40 du/ac, 1.0 FAR	24 du/ac, 0.35 FAR	3.4 pph, 500 sf/employee
Mixed-Use Westminster / Downtown	MU-DT	36 du/ac, 1.0 FAR	24 du/ac, 0.35 FAR	3.4 pph ,400 sf/employee
Mixed-Use Westminster Mall	MU-WM	40 du/ac, 1.0 FAR	30 du/ac, 0.50 FAR	3.4 pph, 400 sf/employee

Source: Placeworks, December 2015

In total, the General Plan land use proposes a buildout of approximately 6,836 acres, 36,484 housing units, 34,842 households, a population of 118,463, a total of 19,163,257 non-residential square feet, and a total of 39,407 jobs. In the context of CEQA and this transportation impact assessment, the buildout of the general plan will be referred to as "the project."

Roadway Typologies

- Park
- School
- Local Street
- Multi-Use Trail
- Bicycle Corridor
- Connector Street
- School Street
- Sigler Park District
- Multi-way Boulevard
- Arterial Roadway
- City of Westminster Boundary
- City of Westminster Sphere of Influence
- Other City Boundaries
- Proposed Mixed Use Area

Source: City of Westminster, 2014

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WESTMINSTER General Plan Update
OPPORTUNITY. COMMUNITY. PROGRESS.
PLACEWORKS

Figure 2-1

Proposed General Plan Roadway Typology Map

2.2 STUDY AREA

The study area of this analysis includes those intersections, roadway segments, and freeway segments in and around the City of Westminster that are anticipated to be affected by the proposed General Plan. The following lists define the study area:

Signalized Intersections:

1. Bolsa Chica Road & Churchill Avenue
2. Bolsa Chica Road & Duncannon Avenue
3. Bolsa Chica Road & Old Bolsa Chica Road
4. Bolsa Chica Road & Rancho Road
5. Bolsa Chica Road & St. James Street
6. Bolsa Chica Road & Westminster Boulevard
7. Bolsa Avenue & Bushard Street
8. Bolsa Avenue & Brookhurst Street
9. Bolsa Avenue & Chestnut Street
10. Bolsa Avenue & Goldenwest Circle
11. Bolsa Avenue & Cultural Court/Asian Garden
12. Bolsa Avenue & Moran Street
13. Bolsa Avenue & East Drive
14. Bolsa Avenue & Edwards Street
15. Bolsa Avenue & Goldenwest Street
16. Bolsa Avenue & Hoover Street
17. Bolsa Avenue & Hope Street
18. Bolsa Avenue & Magnolia Street
19. Bolsa Avenue & Pagoda
20. Bolsa Avenue & Purdy Street
21. Bolsa Avenue & Victoria Lane
22. Bolsa Avenue & Ward Street
23. Bolsa Avenue & West Drive
24. Brookhurst Street & Bishop Place
25. Brookhurst Street & Margo Lane
26. Brookhurst Street & McFadden Avenue
27. Bushard Street & Bishop Place

28. Bushard Street & Hazard Avenue
29. Bushard Street & McFadden Avenue
30. Edwards Street & Trask Avenue
31. Edwards Street & Mar Vista Street
32. Edwards Street & Royal Oak Drive
33. Garden Grove Boulevard & Edwards Street
34. Garden Grove Boulevard & Hoover Street
35. Garden Grove Boulevard & Village Center Drive
36. Garden Grove Boulevard & Western Avenue
37. Goldenwest Street & 21st Street
38. Goldenwest Street & Georgetown Avenue
39. Goldenwest Street & Hazard Avenue
40. Goldenwest Street & Main Street
41. Goldenwest Street & Natal Drive
42. Goldenwest Street & Hood Drive/Lisa Lane
43. Goldenwest Street & Trask Avenue
44. Goldenwest Street & Wyoming Street
45. Hoover Street & Hazard Avenue
46. Magnolia Street & Bishop Place/Natoma Avenue
47. Magnolia Street & Edinger Avenue
48. Magnolia Street & Hazard Avenue
49. Magnolia Street & McFadden Avenue
50. McFadden Avenue & Ward Street
51. Newland Street & 15th Street
52. Newland Street & Oasis Avenue
53. Newland Street & McFadden Avenue
54. Newland Street & Palos Verdes Avenue
55. Springdale Street & Iroquois Road
56. Springdale Street & Navajo Road/Meinhardt Road
57. Trask Avenue & Descanso Drive
58. Trask Avenue & Hoover Street
59. Westminster Boulevard & Commerce Way
60. Westminster Boulevard & Edwards Street
61. Westminster Boulevard & Goldenwest Street
62. Westminster Boulevard & Hoover Street

63. Westminster Boulevard & Magnolia Street
64. Westminster Boulevard & Milan Street
65. Westminster Boulevard & Monroe Street/All American Way
66. Westminster Boulevard & Newland Street
67. Westminster Boulevard & Olive Street
68. Westminster Boulevard & Rancho Road/Hammon Place
69. Westminster Boulevard & Springdale Street
70. Westminster Boulevard & University Street
71. Westminster Boulevard & Westmart Place
72. Westminster Boulevard & Willow Lane South
73. Westminster Boulevard & Willow Lane North
74. Beach Boulevard & Bolsa Avenue (Caltrans)
75. Beach Boulevard & Center Avenue (Caltrans)
76. Beach Boulevard & Edinger Avenue (Caltrans)
77. Beach Boulevard & Garden Grove (Caltrans)
78. Beach Boulevard & Hazard Avenue (Caltrans)
79. Beach Boulevard & Heil Avenue (Caltrans)
80. Beach Boulevard & McDonald Avenue (Caltrans)
81. Beach Boulevard & McFadden Avenue (Caltrans)
82. Beach Boulevard & Stark Street (Caltrans)
83. Beach Boulevard & Trask Avenue (Caltrans)
84. Beach Boulevard & Westminster Boulevard (Caltrans)
85. Beach Boulevard & 13th Street (Caltrans)
86. Beach Boulevard & SR-22 WB Off-Ramp (Caltrans)
87. Beach Boulevard & SR-22 EB Off-Ramp (Caltrans)
88. Bolsa Chica Road & Garden Grove Boulevard (Caltrans)
89. Garden Grove Boulevard & Goldenwest Street (Caltrans)
90. Garden Grove Boulevard & SR-22/I-405 Ramps (Caltrans)
91. Garden Grove Boulevard & SR-22 WB Off-Ramp/Eagle Drive (Caltrans)
92. Garden Grove Boulevard & SR-22 Off-Ramp (West of Golden West Street) (Caltrans)
93. Goldenwest Street & I-405 Ramps (Caltrans)
94. I-405 Ramps & Mall Ring Road (Caltrans)
95. Bolsa Avenue & Newland Street (County of Orange)
96. Brookhurst Street & Edinger Avenue (Fountain Valley)
97. Brookhurst Street & Hazard Avenue (Garden Grove)

98. Bushard Street & Edinger Avenue (Fountain Valley)
99. Edinger Avenue & Newland Street (Huntington Beach)
100. Goldenwest Street & McFadden Avenue (Huntington Beach)
101. Hazard Avenue & Newland Street (Orange County)
102. Magnolia Street & Foxglove Avenue (Fountain Valley)
103. Magnolia Street & Heil Avenue (Fountain Valley)
104. McFadden Avenue & Gothard Street/Vermont Street (Huntington Beach)
105. Newland Street & Heil Avenue (Huntington Beach)
106. Newland Street & Madison Avenue (Orange County)
107. Newland Street & Trask Avenue (Garden Grove)
108. Westminster Boulevard & Bushard Street (Garden Grove)
109. Westminster Boulevard & Deodora Drive/Swan Street (Garden Grove)

Roadway Segments:

1. Beach Blvd from Westminster Blvd to Hazard Ave
2. Beach Blvd from Heil Ave to Edinger Ave
3. Beach Blvd from McFadden Ave to Bolsa Ave
4. Beach Blvd from Bolsa Ave to Hazard Ave
5. Beach Blvd from Westminster Blvd to Trask Ave
6. Beach Blvd from 22 EB Off-Ramp to 22 WB Off-Ramp
7. Bolsa Ave from Hoover St to Beach Blvd
8. Bolsa Ave from Chestnut St to Hoover St
9. Bolsa Ave from Edwards St to Goldenwest St
10. Bolsa Ave from Beach Blvd to Newland St
11. Bolsa Ave from Newland St to Magnolia St
12. Bolsa Ave from Magnolia St to Bushard St
13. Bolsa Ave from Bushard St to Brookhurst St
14. Bolsa Ave from Brookhurst St to Ward St
15. Bolsa Chica Rd from Duncannon Ave to Old Bolsa Chica Rd
16. Bolsa Chica Rd from Rancho Rd to Westminster Blvd
17. Brookhurst St from Edinger Ave to Margo Ln
18. Brookhurst St from McFadden Ave to Bolsa Ave
19. Brookhurst St from Bolsa Ave to Hazard Ave
20. Bushard St from McFadden Ave to Bishop Pl

21. Bushard St from Edinger Ave to McFadden Ave
22. Bushard St from Bolsa Ave to Hazard Ave
23. Bushard St from Hazard Ave to Westminster Blvd
24. Edinger Ave from Newland St to Magnolia St
25. Edinger Ave from Beach Blvd to Newland St
26. Edinger Ave from Magnolia St to Bushard St
27. Edinger Ave from Bushard St to Brookhurst St
28. Edwards St from Westminster Blvd to Trask Ave
29. Edwards St from Bolsa Ave to Westminster Blvd
30. Edwards St from Trask Ave to Garden Grove Blvd
31. Garden Grove Blvd from Hoover St to Beach Blvd
32. Garden Grove Blvd from Bolsa Chica Rd to 22/405 Ramps
33. Garden Grove Blvd from Edwards St to Goldenwest St
34. Garden Grove Blvd from Goldenwest St to 22 WB Off Ramp/Eagle Dr
35. Garden Grove Blvd from 22 WB Off Ramp/Eagle Dr to Hoover St
36. Goldenwest St from Hazard Ave to Main St
37. Goldenwest St from McFadden Ave to Bolsa Ave
38. Goldenwest St from I-405 to Hazard Ave
39. Goldenwest St from Westminster Blvd to Trask Ave
40. Goldenwest St from Trask Ave to Garden Grove Blvd
41. Hazard Ave from Bushard St to Brookhurst St
42. Hazard Ave from Goldenwest St to Hoover St
43. Hazard Ave from Hoover St to Beach Blvd
44. Hazard Ave from Beach Blvd to Newland St
45. Hazard Ave from Newland St to Magnolia St
46. Hazard Ave from Magnolia St to Bushard St
47. Heil Ave from Beach Blvd to Newland St
48. Hoover St from Westminster Blvd to Trask Ave
49. Hoover St from Bolsa Ave to Hazard Ave
50. Hoover St from Hazard Ave to Westminster Blvd
51. Hoover St from Trask Ave to Garden Grove Blvd
52. Magnolia St from Bolsa Ave to Hazard Ave
53. Magnolia St from Edinger Ave to McFadden Ave
54. Magnolia St from Heil Ave to Edinger Ave
55. Magnolia St from McFadden Ave to Bolsa Ave

56. Magnolia St from Hazard Ave to Westminster Blvd
57. McFadden Ave from Goldenwest St to Beach Blvd
58. McFadden Ave from Beach Blvd to Newland St
59. McFadden Ave from Newland St to Magnolia St
60. McFadden Ave from Magnolia St to Bushard St
61. McFadden Ave from Bushard St to Brookhurst St
62. McFadden Ave from Brookhurst St to Ward St
63. Newland St from McFadden Ave to Bolsa Ave
64. Newland St from Heil Ave to Edinger Ave
65. Newland St from Edinger Ave to McFadden Ave
66. Newland St from Bolsa Ave to Hazard Ave
67. Newland St from Hazard Ave to Westminster Blvd
68. Newland St from Westminster Blvd to Trask Ave
69. Rancho Rd from Bolsa Chica Rd to Westminster Blvd
70. Springdale St from Westminster Blvd to Navajo Rd
71. Springdale St from Navajo Rd to Iroquois Rd
72. Trask Ave from Edwards St to Goldenwest St
73. Trask Ave from Goldenwest St to Hoover St
74. Trask Ave from Hoover St to Beach Blvd
75. Trask Ave from Beach Blvd to Newland St
76. Ward St from Bolsa Ave to Hazard Ave
77. Ward St from McFadden Ave to Bolsa Ave
78. Westminster Blvd from Newland St to Magnolia St
79. Westminster Blvd from Hammon Pl to Springdale St
80. Westminster Blvd from Bolsa Chica Rd to Rancho Rd
81. Westminster Blvd from Edwards St to Goldenwest St
82. Westminster Blvd from Goldenwest St to Hoover St
83. Westminster Blvd from Hoover St to Beach Blvd
84. Westminster Blvd from Beach Blvd to Newland St
85. Westminster Blvd from Magnolia St to Bushard St

Freeway Segments:

1. Southbound I-405 between Seal Beach Blvd & SR-22 Diverge
2. Southbound I-405 between SR-22 Diverge & Bolsa Chica Rd

3. Southbound I-405 between Bolsa Chica Rd & Westminster Blvd
4. Southbound I-405 between Westminster Blvd & Bolsa Ave
5. Southbound I-405 between Bolsa Ave & Beach Blvd
6. Southbound I-405 between Beach Blvd & Magnolia St
7. Southbound I-405 between Magnolia St & Warner Ave
8. Southbound I-405 between Warner Ave & Brookhurst St
9. Southbound I-405 between Brookhurst St & Euclid St
10. Northbound I-405 between Euclid St & Brookhurst St
11. Northbound I-405 between Brook St & Warner Ave
12. Northbound I-405 between Warner Ave & Magnolia Ave
13. Northbound I-405 between Magnolia Ave & Beach Blvd
14. Northbound I-405 between Beach Blvd & Bolsa Ave
15. Northbound I-405 between Bolsa Ave & Westminster Blvd
16. Northbound I-405 between Westminster Blvd & Bolsa Chica Rd
17. Northbound I-405 between Bolsa Chica Rd & SR-22 Merge
18. Northbound I-405 between SR-22 Merge & Seal Beach Blvd
19. Eastbound SR-22 between I-405 & Valley View St
20. Eastbound SR-22 between Valley View St & Goldenwest St
21. Eastbound SR-22 between Goldenwest St & Beach Blvd
22. Eastbound SR-22 between Beach Blvd & Magnolia St
23. Eastbound SR-22 between Magnolia St & Brookhurst St
24. Eastbound SR-22 between Brookhurst St & Euclid St
25. Westbound SR-22 between Euclid St & Brookhurst St
26. Westbound SR-22 between Brookhurst St & Magnolia St
27. Westbound SR-22 between Magnolia St & Beach Blvd
28. Westbound SR-22 between Beach Blvd & Goldenwest St
29. Westbound SR-22 between Goldenwest St & Valley View St
30. Westbound SR-22 between Valley View St & I-405 Merge

2.3 ANALYSIS SCENARIOS

To identify potential significant project impacts, Fehr & Peers analyzed the following three scenarios:

- Existing Year (2015) Conditions – Existing counts collected in the study area in April of 2015.
- Cumulative Year (2035) No Project Conditions – Consists of forecasted volumes to Year 2035 based on growth and travel forecasts contained in the Orange County Transportation Analysis Model (OCTAM). This scenario assumes no growth in existing land use for the City of Westminster.
- Cumulative Year (2035) Plus Project Conditions – Consists of forecasted volumes to Year 2035 based on the growth and travel forecasts contained in the Orange County Transportation Analysis Model (OCTAM) and the land use projects proposed by the General Plan Update.

The transportation impact analysis was performed during the typical weekday AM and PM peak hour conditions. For each scenario, the study intersections and freeway facilities were analyzed both in the AM and PM peak hours. Additionally, for each scenario the average daily traffic was used to analyze roadway segment locations in the City of Westminster.

3.0 ANALYSIS METHODOLOGIES

This chapter discusses the analysis methodologies and assumptions used to determine project impacts as approved by the City.

3.1 LEVEL OF SERVICE CRITERIA

3.1.1 INTERSECTION ANALYSIS

Intersections within the City of Westminster's jurisdiction were evaluated using the Highway Capacity Manual (HCM) Transportation Research Board 2010 methodology. Intersections within Caltrans Right of Way were also evaluated using the HCM 2010 methodology.

Intersections within the City of Fountain Valley, City of Huntington Beach, City of Garden Grove, and the County of Orange, were evaluated using the Intersection Capacity Utilization (ICU) methodology. Intersections designated in the Orange County Congestion Management Program (CMP) were also evaluated using the ICU methodology.

3.1.1.1 Highway Capacity Manual

The *Highway Capacity Manual (HCM) 2010* Transportation Research Board (TRB) methodology is considered the state-of-the-practice methodology for evaluating intersection operations. The HCM 2010 Methodology estimates a quantitative delay at intersections. After the quantitative delay estimates are complete, the methodology assigns a qualitative letter grade that represents the operations of the intersection. These grades range from level of service (LOS) A (minimal delay) to LOS F (excessive congestion). LOS E represents at-capacity operations. Descriptions of the LOS letter grades are provided in Table 3-1.

3.1.1.2 Intersection Capacity Utilization

The ICU methodology is the required Orange County CMP methodology. As such, many jurisdictions utilize this methodology as the standard approach for evaluating signalized intersection operations. The ICU methodology evaluates the critical movements for each signal and compares that to the critical movement capacity of the intersection, resulting in a volume-to-capacity (V/C) ratio. After the quantitative V/C estimates are complete, the methodology assigns an LOS grade representing the quality of intersection operations. Descriptions of the LOS letter grades for the V/C ratios are provided in Table 3-1.

TABLE 3-1 INTERSECTION LOS CRITERIA

LOS	Description	Signalized Delay (Seconds)	V/C Ratio
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	≤ 10.0	<0.61
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10.0 to 20.0	0.61 to 0.70
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 to 35.0	0.71 to 0.80
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 to 55.0	0.81 to 0.90
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55.0 to 80.0	0.91 to 1.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	> 80.0	>1.00

Source:

1. *Highway Capacity Manual* (Transportation Research Board, 2010).
2. Orange County *Congestion Management Program*, 2013

Synchro 8 Build 806 was used to perform the HCM 2010 level of service calculations for intersections under the jurisdiction of Caltrans and the City of Westminster, while Traffix 8.0 software was used to perform the ICU level of service calculations for all other intersections.

The following parameters, based on the Caltrans guidelines, were used in the traffic analysis for intersections under the jurisdiction of Caltrans and the City of Westminster:

- Through and turn lane capacities of 1,900 vehicles per hour per lane (3,800 vehicles per hour for dual left-turn lanes)
- Field collected Peak Hour Factors (PHF) were used in the Existing (2015) scenario. A PHF of 0.95 was used for intersections in the Cumulative (2035) No Project and Cumulative (2035) Plus Project scenarios.
- A peak hour truck percentage of 2% was applied to represent heavy truck and general traffic characteristics in the study area based on our field visit and knowledge of the study area.
- Signal timing was obtained and utilized from either the City of Westminster or from Caltrans District 12.

The following parameters, based on the Orange County CMP guidelines, were used in the intersection analysis for intersections under the jurisdiction of the City of Huntington Beach, the City of Fountain Valley, the City of Garden Grove, and the County of Orange:

- Through and turn lane capacities of 1,700 vehicles per hour per lane (vphpl) and dual left-turn lane capacities of 3,400 vphpl were assumed in the ICU assessment.
- A five percent yellow clearance cycle was included for ICU assessment.
- De facto right-turn lanes was assumed for lane widths of at least 20 feet and wider and 150 feet and longer.

3.1.2 ROADWAY ANALYSIS

Roadway segment LOS is defined on the basis of Average Daily Traffic (ADT). Roadway segments for Existing (2015) and Cumulative (2035) Years were analyzed utilizing the roadway segment LOS criteria from the City of Westminster General Plan (1996). These traffic volume thresholds are shown in Table 3-2.

Roadway segments for Cumulative (2035) Plus Project were analyzed utilizing HCM 2010 methodology. These traffic volume thresholds are shown in Table 3-3.

TABLE 3-2 EXISTING LOS CRITERIA FOR ROADWAY SEGMENTS

Number of Lanes[1]	LOS C (vehicles)	LOS D (vehicles)	LOS E (vehicles)
2	9,300	16,800	17,900
3	14,300	25,150	26,000
4-Undivided	19,300	33,500	34,100
4-Divided	24,000	41,050	41,500
5	28,700	48,600	48,900
6	42,500	72,000	72,400
8	14,300	25,150	26,000
Source: City of Westminster General Plan (1996)			

TABLE 3-3 PROPOSED GENERAL PLAN LOS CRITERIA FOR ROADWAY SEGMENTS

Number of Lanes[1]	LOS C (vehicles)	LOS D (vehicles)	LOS E (vehicles)
Arterial			
2	9,300	16,800	17,900
3	14,300	25,150	26,000
4	19,300	33,500	34,100
5	24,000	41,050	41,500
6	28,700	48,600	48,900
8	42,500	72,000	72,400
Bicycle Corridor			
2	9,300	16,800	17,900
3	14,300	25,150	26,000
4	19,300	33,500	34,100
5	24,000	41,050	41,500
6	28,700	48,600	48,900
8	42,500	72,000	72,400

TABLE 3-3 PROPOSED GENERAL PLAN LOS CRITERIA FOR ROADWAY SEGMENTS

Number of Lanes[1]	LOS C (vehicles)	LOS D (vehicles)	LOS E (vehicles)
School Street			
2	9,300	16,800	17,900
3	14,300	25,150	26,000
4	19,300	33,500	34,100
5	24,000	41,050	41,500
6	28,700	48,600	48,900
8	42,500	72,000	72,400
Connector Street			
2	9,300	16,800	17,900
3	14,300	25,150	26,000
4	19,300	33,500	34,100
5	24,000	41,050	41,500
6	28,700	48,600	48,900
8	42,500	72,000	72,400
Multi-Way Boulevard			
4	21,200	36,500	37,100

Source: Highway Capacity Manual (Transportation Research Board, 2010).
Notes:
1. LOS criteria for 8 lane and Multi-way facilities are not defined in HCM 2010 therefore standard criteria developed by Fehr & Peers is applied.

3.1.3 FREEWAY ANALYSIS

Freeway mainline segments were analyzed utilizing the HCM 2010 methodology. LOS for each of these segments is defined on the basis of density (passenger cars/mile/lane). Table 3-4 presents the LOS criteria for basic freeway analysis.

TABLE 3-4 LOS CRITERIA FOR BASIC MAINLINE FREEWAY SEGMENTS

Level of Service	Density (Passenger Cars per Mile per Lane)
A	≤11
B	<11-18
C	<18-26
D	<26-35
E	<35-45
F	Demand exceeds capacity >45

Source: Highway Capacity Manual (Transportation Research Board, 2010).

3.2 PERFORMANCE CRITERIA AND THRESHOLDS OF SIGNIFIANCE

The following LOS significance criteria were employed to determine if the project causes significant traffic impacts to intersections within the study area.

3.2.1 CITY OF WESTMINSTER

The City has adopted LOS "D" as the minimum acceptable standard on facilities where automobiles are prioritized. On streets where automobiles are not prioritized, LOS E is considered acceptable. This is based on Policy 1.3 of the General Plan Mobility Element.

3.2.1.1 Intersections

A significant impact occurs if the addition of project-generated trips causes an intersection to change from an acceptable LOS to a deficient LOS; or if project traffic increases the delay at any intersection already operating at an unacceptable LOS by 2.0 seconds.

3.2.1.2 Roadway Segments

A significant impact occurs if the addition of project-generated trips causes a roadway segment to change from an acceptable LOS to a deficient LOS; or if project traffic increases the ADT at any roadway segment already operated at an unacceptable LOS by 2% or more.

3.2.1.3 Multi-Modal Analysis

The Non-Automotive assessment evaluates the project's consistency with existing and planned bicycle, pedestrian, and transit facilities in the area. The assessment below focuses on evaluating consistency with existing facilities and consistency with any planned facilities in the area. As such, the following significance criteria is applied:

- **Multi-Modal Analysis Threshold** – A significant impact occurs if the project conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreases the performance or safety of such facilities.

3.2.2 CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS)

3.2.2.1 Intersections

For intersections under Caltrans' jurisdiction, the significance criteria are consistent with the Caltrans' *Guide for the Preparation of Traffic Impact Studies*. A significant impact would occur at a signalized study intersection when the project-related traffic causes:

- An intersection to degrade from an acceptable LOS to an unacceptable LOS based on the target LOS presented in the Caltrans' Transportation Concept Report; or
- A ramp terminal intersection to degrade from an acceptable LOS C or better to LOS D, LOS E, or LOS F; or
- An increase in delay for intersections already operating at an unacceptable level.

If a Caltrans intersection is operating at LOS D or worse, mitigation is needed to improve the "plus project" delay to the existing "no project" delay. If an impact drops an acceptable LOS to a below than acceptable LOS, mitigation is required to bring the LOS back to the acceptable threshold level.

3.2.2.2 Freeway Segments

A significant impact would occur at a freeway mainline segment when the project-related traffic causes:

- A freeway mainline segment to degrade from an acceptable LOS C or better to LOS D, LOS E or LOS F; or
- An increase in density for density for freeway mainline segments already operating at LOS D, LOS E, or LOS F.

3.2.3 NEIGHBORING JURISDICTIONS AND CMP

3.2.3.1 Intersections

For intersections outside the jurisdiction of the City of Westminster or Caltrans, the significance criteria are consistent with each City's circulation Element's LOS policy or the Orange County CMP:

- For the City of Fountain Valley, the acceptable LOS is D
- For the City of Garden Grove, the acceptable LOS is D
- For the City of Huntington Beach, the acceptable LOS is D
- For the County of Orange, the acceptable LOS is D

A significant impact would occur at each study intersection when the project-related traffic causes:

- A signalized or unsignalized intersection to degrade from an acceptable LOS D to an unacceptable LOS, or
- The V/C ratio to increase by 0.01 or more at a signalized intersection operating at an unacceptable LOS.

If an intersection in the above jurisdictions is operating at LOS E or worse, mitigation is needed to improve the "plus project" delay to the existing "no project" delay. If an impact drops an acceptable LOS to a below than acceptable LOS, mitigation is required to bring the LOS back to the acceptable threshold level. No mitigation is required for intersections operating at or above the acceptable threshold (LOS D).

3.3 TRAFFIC VOLUME FORECASTING

3.3.1 ORANGE COUNTY TRAFFIC ANALYSIS MODEL (OCTAM)

Orange County Traffic Analysis Model (OCTAM) is a regional model that is based on the traditional four-step sequential modeling methodology with "feedback loop" procedures to insure internal modeling consistency. The model incorporates multi-modal analytical capabilities to analyze the following modes of travel: local and express bus transit, urban rail, commuter rail, toll roads, carpools, truck traffic, as well as non-motorized transportation which includes pedestrian and bicycle trips. Regional transportation models, such as the OCTAM, use socioeconomic data to estimate trip generation, mode choice, as well as several submodels to address complex travel behavior and multi-modal transportation issues. The model responds to changes in land use types, household characteristics, transportation infrastructure, and travel costs such as transit fares, parking costs, tolls, and auto operating costs.

OCTAM Version 3.4 (constrained network) was used to develop the future traffic volume forecasts. Three model scenarios were utilized in the forecasting process: Base Year, Future Year No Project, Future Year Plus Project, as described below:

- Base Year Model – This scenario contains the base year (2010) land use and roadway network assumptions without and modifications by Fehr & Peers.
- Future Year Model No Project – This scenario contains the future year (2035) land use and roadway network assumptions. The most recent information for the I-405 improvement project from I-605 and SR-73 was updated in the roadway network. Additionally, TAZ's in the City of Westminster were overwritten with the Base Year Model data to represent the No Project land use scenario (e.g. account for regional growth in the region, but no growth assumed in the City).
- Future Year Model Plus Project – This scenario is identical to the Future Year No Project scenario, except the General Plan proposed land use socioeconomic data growth by TAZ was incorporated in the City of Westminster.

To develop Cumulative No Project scenario forecasts, the Future Year Model No Project was compared to the Base Year Model outputs using the difference method. To develop Cumulative Plus Project scenario forecasts, the Future Year Model Plus Project was compared to the Base Year model outputs using the difference method. The difference method was done using standard techniques consistent with National Cooperative Highway Research Program (NCHRP) Report 255. The arithmetic difference was taken between the future year and base year model outputs and that difference was used to determine an annual growth. That annual growth was then successively added to the existing traffic counts collected in 2015 to reach the cumulative year of 2035. This method was applied for both turning movement volumes and roadway segment average daily traffic (ADT) volumes. In other words, the roadway segment forecasting used roadway segment model outputs at the link level and the intersection turning movement volume forecasting used intersection turning movement forecasts. To provide a conservative analysis, negative growth was not allowed in the Cumulative Year No Project (2035) scenario volumes. If the model predicted negative growth over existing conditions, the existing conditions volumes were utilized.

3.4 FUTURE YEAR ROADWAY IMPROVEMENT ASSUMPTIONS

The following intersection configuration improvements have been assumed based on plans from the I-405 Improvement Project:

#9. Bolsa Avenue & Chestnut Street

- Eastbound approach from 1 left turn lane and 2 through lanes to 1 left turn lane and 3 through lanes.

#10. Bolsa Avenue & Goldenwest Circle

- Eastbound approach from 1 through lane and 1 through/right shared lane to 2 through lanes and 1 right turn only lane.

#15. Bolsa Avenue & Goldenwest Street:

- Southbound approach from 1 left turn lane, 2 through lanes, and 1 through/right shared lane to 2 left turn lanes,3 and 1 right turn lane.
- Northbound approach from 2 left turn lanes, 2 through lanes, and 1 through/right shared lane to 2 left turn lanes, 3 through lanes, and 1 right turn lane.

#93. Goldenwest Street & I-405 Ramps

- Southbound approach from 2 through lanes and 1 free-right lane to 4 through lanes and 1 free right lane.
- Northbound approach from 3 through lanes to 4 through lanes.

#75. Beach Boulevard & Center Avenue

- Eastbound approach from 2 left turn lanes and 2 right turn lanes to 2 left turn lanes and 3 right turn lanes.

#76. Beach Boulevard & Edinger Avenue

- Eastbound approach from 2 left turn lanes, 3 through lanes, 1 right turn only lane to 2 left turn lanes, 3 through lanes, and 1 through/right lane.
- Northbound approach from 2 left turn lanes, 3 through lanes, and 1 right turn only lane to 2 left turn lanes, 4 through lanes, and 1 right turn lane.

#88. Bolsa Chica Road & Garden Grove Boulevard

- Eastbound approach from 2 right turn lanes, 1 left turn lane to 2 right turn lanes and 2 left turn lanes.
- Northbound approach from 2 through lanes, 1 through/right turn shared lane to 3 through lanes and 1 right turn lane.

#90. Garden Grove Boulevard & SR-22 / I-405 Ramps

- Northbound approach from 1 left turn lane and 1 left/through/right shared lane to 2 left turn lanes and 1 through/right shared lane.

4.0 EXISTING (2015) CONDITIONS

This chapter discusses the existing transportation conditions in the project study area. This discussion addresses the roadway, transit, bicycle, and pedestrian networks. An operational analysis of the study area intersections, roadway segments, and freeway mainline facilities is also discussed.

4.1 EXISTING ROADWAY FACILITIES

4.1.1 REGIONAL ROADS

Interstate 405 (I-405) San Diego Freeway – I-405 freeway is a north-south facility beginning in the San Fernando Valley and terminating in the City of Irvine. Within the city limits, the freeway has ten lanes, including two high-occupancy vehicles lanes, with a posted speed limit of 65 miles per hour.

State Route 22 (SR-22) Garden Grove Freeway – SR-22 is an east-west facility beginning in the City of Long Beach and terminating in the City of Orange. Within the city limits, the freeway has six to eight lanes, including two high-occupancy vehicle lanes, with a posted speed limit of 65 miles per hour.

State Route 39 (SR-39) Beach Boulevard – SR-39 is a north-south facility beginning in the City of Huntington Beach and terminating in the City of La Habra. Within the city limits, the highway has eight lanes with a posted speed limit of 65 miles per hour.

4.1.2 LOCAL ROADS

Bolsa Chica Road – Bolsa Chica Road was previously classified as a *Major Arterial* in the 1996 City of Westminster General Plan and is classified as an *Arterial* in the Proposed General Plan. Bolsa Chica Road is a north-south facility with four to six lanes and a posted speed limit of 50 miles per hour.

Springdale Street – Springdale Street was classified as a *Primary Roadway* in the 1996 City of Westminster General Plan and is classified as a *Bicycle Corridor* in the Proposed General Plan. Springdale Street is a north-south facility with four lanes and a posted speed limit of 35 miles per hour.

Edwards Street – Edwards Street was classified as a *Primary Roadway* between Bolsa Avenue and Trask Avenue, and as a *Secondary Street* between Trask Avenue and Garden Grove Boulevard in the 1996 City of Westminster General Plan. In the Proposed General Plan, Edwards Street is classified as a *Connector Street* between 1st Street and Westminster Boulevard, a *School Street* between Westminster Boulevard and Bestel

Avenue, and a *Bicycle Corridor* between Bestel Avenue and Garden Grove Boulevard. Edwards Street is a north-south facility with four lanes and a posted speed limit of 35 miles per hour.

Goldenwest Street – Goldenwest Street was classified as a *Major Arterial* in the 1996 City of Westminster General Plan. In the Proposed General Plan, Goldenwest Street is classified as a *School Street* between McFadden Avenue and Edinger Avenue and as an *Arterial* between Edinger Avenue and Garden Grove Boulevard. Goldenwest Street is a north-south facility with six lanes and a posted speed limit of 40 miles per hour.

Hoover Street – Hoover Street was classified as a *Primary Roadway* between McFadden Avenue and Bolsa Avenue, and as a *Major Arterial* between Bolsa Avenue and Garden Grove Boulevard in the 1996 City of Westminster General Plan. Hoover Street is classified as a *Bicycle Boulevard* in the Proposed General Plan. Hoover Street is a north-south facility with four lanes and a posted speed limit of 40 miles per hour.

Newland Street – Newland Street was classified as a *Secondary Roadway* between Heil Avenue and Edinger Avenue, and as a *Primary Roadway* between Edinger Avenue and Trask Avenue in the 1996 City of Westminster General Plan. In the Proposed General Plan, Newland Street is classified as a *Bicycle Boulevard* between Heil Avenue and Trask Avenue and as a *School Street* between Trask Avenue and SR-22. Newland Street is a north-south facility with two to four lanes, with a posted speed limit of 40 miles per hour.

Magnolia Avenue – Magnolia Avenue was classified as a *Primary Roadway* in the 1996 City of Westminster General Plan and is classified as an *Arterial* in the Proposed General Plan. Magnolia Avenue is a north-south facility and has six lanes with a posted speed limit of 45 miles per hour.

Bushard Street – Bushard Street was classified as a *Secondary Roadway* in the 1996 City of Westminster General Plan. In the Proposed General Plan, Bushard Street is classified as a *Bicycle Boulevard* between Edinger Avenue and Hazard Avenue, and as a *Connector Street* between Hazard Avenue and Westminster Avenue. Bushard Street is a north-south facility and has four lanes with a posted speed limit of 40 miles per hour.

Brookhurst Street – Brookhurst Street was classified as a *Major Arterial* in the 1996 City of Westminster General Plan and is classified as an *Arterial* in the Proposed General Plan. Brookhurst is a north-south facility and has six lanes with a posted speed limit of 45 miles per hour.

Ward Street – Ward Street was classified as a *Commuter Roadway* in previous the 1996 City of Westminster General Plan and is classified as a *Bicycle Boulevard* in the Proposed General Plan. Ward Street is a north-south facility and has two to four lanes with a posted speed limit of 35 miles per hour.

Garden Grove Boulevard – Garden Grove Boulevard was classified as a major arterial between Beach Boulevard and Goldenwest Street, and a *Primary Roadway* between Goldenwest Street and Bolsa Chica Road in the 1996 City of Westminster General Plan. In the Proposed General Plan, Garden Grove Boulevard is classified as a *Connector Street*. Garden Grove Boulevard is an east-west facility and has three to six lanes with a posted speed limit of 40-45 miles per hour.

Trask Avenue – Trask Avenue was classified as a *Primary Roadway* between Newland Street and Hoover Street, and as a *Secondary Roadway* between Hoover Street and Edwards Street in the 1996 City of Westminster General Plan. In the Proposed General Plan, Trask Avenue is classified as a *School Street* between Goldenwest Street and Chestnut Street and between Jefferson Street and Newland Street, and as a *Bicycle Boulevard* between Edwards Street and Goldenwest Street and between Chestnut Street and Jefferson Street. Trask Avenue is an east-west facility and has four lanes with a posted speed limit of 35 miles per hour.

Westminster Boulevard – Westminster Boulevard was classified as a primary arterial in the 1996 City of Westminster General Plan. In the Proposed General Plan, Westminster Boulevard is classified as a *Multi-Way Boulevard* between Hoover Street and I-405, and as an *Arterial* between I-405 and Bolsa Chica Road, and Bushard Street and Hoover Street. Westminster Boulevard is an east-west facility and has four lanes with a posted speed limit of 45 miles per hour.

Hazard Avenue – Hazard Avenue was classified as a *Secondary Roadway* in the 1996 City of Westminster General Plan. In the Proposed General Plan, Hazard Avenue is classified as a *Bicycle Corridor* between Euclid Street and Hoover Street, and as a *Connector Street* between Hoover Street and Goldenwest Street. Hazard Avenue is an east-west facility and has three to four lanes with a posted speed limit of 40 miles per hour.

Bolsa Avenue – Bolsa Avenue was classified as a *Major Arterial* in the 1996 City of Westminster General Plan. In the Proposed General Plan, Bolsa Avenue is classified as an *Arterial Roadway* between Euclid Street and Brookhurst Street and between Magnolia Street and Edwards Street, and as a *Multi-Way Boulevard* between Brookhurst Street and Magnolia Street. Bolsa Avenue is an east-west facility and has four to six lanes with a posted speed limit of 40-45 miles per hour.

McFadden Avenue – McFadden Avenue was classified as a *Primary Roadway* in the 1996 City of Westminster General Plan. In the Proposed General Plan, McFadden Avenue is classified as a *School Street* between Euclid Street and Hortense Drive, and as a *Connector Street* between Hortense Drive and Goldenwest Street. McFadden Avenue is an east-west facility and has four lanes with a posted speed limit of 40-45 miles per hour.

Edinger Avenue – Edinger Avenue was classified as a *Primary Roadway* in the 1996 City of Westminster General Plan. In the Proposed General Plan, Edinger Avenue is classified as an *Arterial Roadway* between Bushard Street and Beach Boulevard, as a *School Street* between Hoover Street and Goldenwest Street. Edinger Avenue is an east-west facility with four lanes and a posted speed limit of 40-45 miles per hour.

Heil Avenue – Heil Avenue was classified as a *Secondary Roadway* in the 1996 City of Westminster General Plan. In the Proposed General Plan, Heil Avenue is classified as a *Connector Street* from Magnolia Street to Dana Circle, and as *School Street* from Dana Circle to Beach Boulevard. Heil Avenue is an east-west facility with two lanes and a posted speed limit of 35-40 miles per hour west of I-405 and 25 miles per hour east of I-405.

4.2 EXISTING TRANSIT FACILITIES

There are ten transit lines that currently operate within the study area. The lines are operated by the Orange County Transportation Authority (OCTA).

4.2.1 LOCAL FIXED BUS ROUTES

- Route 21 (Buena Park – Huntington Beach) – Route 21 is in the north-south direction from the Buena Park Metrolink Station to the Warner Loop at Pacific Coast Highway (PCH) 1 in Huntington Beach. Route 21 is along the western edge of the study area via Valley View Street and Bolsa Chica Road and has a bus stop at Graham Street/McFadden Avenue. This route operates Monday through Saturday between 5:30AM to 10:00AM and 2:00PM to 9:00PM with 60 minute headways.

- Route 29/A (La Habra – Huntington Beach) – Route 29/A is in the north-south direction from Beach Boulevard/La Habra Boulevard to Pacific Coast Highway/1st Street. Route 29/A goes through the center of the study area via SR-39 Beach Boulevard and stops at Beach Boulevard/Westminster Avenue and Goldenwest Transportation Center Area/Park-and-Ride. Route 29 operates Monday through Friday between 6:00AM to midnight with 10 to 60 minute headways, Saturday between 7:00AM to 11:30PM with 10 to 60 minute headways, and Sunday and holidays between 8:00AM to 11:30PM with 15 to 50 minute headways. Route 29A serves the Goldenwest Transportation Center and operates Monday through Friday between 4:00AM to midnight with 30 to 60 minute headways, Saturday between 4:00AM to 11:30PM with 30 to 60 minute headways, and Sunday and holidays between 5:00AM to 11:30PM with 20 to 50 minute headways. Route 29/A is classified as an OCTA High Quality Transit Route.

- Route 33 (Fullerton to Huntington Beach) – Route 33 is in the north-south direction from the Fullerton Park-and-Ride Area to Pacific Coast Highway/Magnolia Street. Route 33 goes through the eastern portion of the study area via Magnolia Street and has bus stops at Magnolia Street/Westminster Avenue and Magnolia Street/Edinger Avenue. This route operates Monday through Friday between 4:30AM to 9:00AM with 30 to 40 minute headways, Saturday between 7:30AM to 7:30PM with 60 minute headways, and Sunday and holidays between 8:30AM to 7:20PM with 60 minute headways.

- Route 35 (Fullerton to Huntington Beach) – Route 35 is in the north-south direction from the Fullerton Park-and-Ride Area to Pacific Coast Highway/Brookhurst Street. Route 35 goes through the eastern portion of the study area via Brookhurst Street and has bus stops at Brookhurst Street/Westminster Avenue and Brookhurst Street/Edinger Avenue. This route operates Monday through Friday between 4:30AM to 10:00PM with 20 to 60 minute headways, Saturday between 5:00AM to 8:20PM with 40 to 60 minute headways, and Sunday and holidays between 5:00AM to 7:30PM with 60 minute headways.

- Route 56 (Garden Grove to Orange) – Route 56 is in the east-west direction from the Orange Transportation Center to Chapman Avenue/Valley View Street. Route 56 is along the northern edge of the study area via Garden Grove Boulevard and has stops at Garden Grove Boulevard/Brookhurst Street and Garden Grove Boulevard/Beach Boulevard. This route operates Monday through Friday between 5:00AM to 10:00AM with 30 to 70 minute headways, Saturday between 7:00AM to 8:00PM with 60 to 90 minute headways, and Sunday and holidays between 7:00AM to 7:50PM with 60 to 90 minute headways.

- Route 60-560 (Long Beach to Tustin) – Route 60 is in the east-west direction from the Veterans Affairs (VA) Hospital/California State University, Long Beach (CSULB) Area to Larwin Square. Route 60 goes through the northern portion of the study area via Westminster Boulevard and has bus stops at Westminster Boulevard/Goldenwest Street and Westminster Boulevard/Beach Boulevard. This route operates Monday through Friday between 4:00AM to 1:30AM with 10 to 60 minute headways, Saturday between 4:00AM to 1:30PM with 20 to 60 minute headways, and Sunday and holidays between 4:00AM to 1:30AM with 30 to 60 minute headways. Route 60 is classified as an OCTA High Quality Transit Route. Route 560 BRAVO! Travels from 7th & Channel in Long Beach to the Santa Ana Metrolink Station in Santa Ana on weekdays and to Larwin Square on weekends. Route 560 has 20 to 30 minute headways on weekdays and 20 minute headways on weekends.

- Route 64 (Huntington Beach to Tustin) – Route 64 is in the east-west direction from Larwin Square in Tustin to Boeing in Huntington Beach. Route 64 travels along 1st Street/Bolsa Avenue and has stops at Beach Boulevard/Bolsa Avenue and Harbor Boulevard/1st Street. This route operates Monday through Friday between 4:30AM and 11:30PM with 10 to 20 minute headways, Saturday between 5:00AM and 11:00PM with 15 to 30 minute headways, and Sundays and holidays between 5:30AM and 11:00PM with 15 to 20 minute headways.

- Route 64X (Huntington Beach to Tustin) – Route 64X is an express route in the east-west direction from Larwin Square in Tustin to the Westminster Mall area in Westminster. Route 64X travels along 1st Street/Bolsa Avenue, and has stops at Beach Boulevard/Bolsa Avenue and Harbor Boulevard/1st Street. This route operates Monday through Friday between 6:00AM and 7:00PM with 45 minute headways, and does not operate on weekends or holidays.

- Route 66 (Huntington Beach to Irvine) – Route 66 is in the east-west direction from Irvine Valley College to Boeing in Huntington Beach. Route 66 goes through the southern portion of the study area via McFadden Avenue and has bus stops at McFadden Avenue/Euclid Street, McFadden Avenue/Beach Boulevard, and the Goldenwest Transportation Center Area/Park-and-Ride. This route operates Monday through Friday between 4:00AM to 12:00AM with 10 to 30 minute headways and Saturday, Sunday, and holidays between 5:00AM to 10:30PM with 30 to 60 minute headways. Route 66 is classified as an OCTA High Quality Transit Route.

- Route 70 (Sunset Beach to Tustin) – Route 70 is in the east-west direction from Tustin Station to Warner Loop at Pacific Coast Highway/Warner Avenue. Route 70 is along the southern portion of the study area via Edinger Avenue and has bus stops at the Goldenwest Transportation Center Area/Park-and-Ride and Edinger Avenue/Brookhurst Street. This route operates Monday through Friday between 4:30AM to 10:20PM with 20 to 60 minute headways, Saturday between 4:50PM to 10:30PM with 20 to 60 minute headways, and Sunday and holidays between 5:50AM to 8:30PM with 25 to 60 minute headways. Route 70 is classified as an OCTA High Quality Transit Route.

4.2.2 INTRACOUNTY EXPRESS BUS ROUTES

- Route 211 (Seal Beach to Irvine Express) – Route 211 is in the east-west direction from the Goldenwest Transportation Center to the Irvine Metrolink station. Route 211 is in the western portion of the study area via I-405 and stops at South Coast Plaza, Irvine Business Complex, and Irvine Spectrum. This route operates Monday to Friday between 5:30AM to 8:00AM and 4:00PM to 7:15PM with 20 to 30 minute headways.

4.2.3 INTERCOUNTY EXPRESS BUS ROUTES

- Route 701 (Huntington Beach to Los Angeles Express) – Route 701 is in the north-south direction from Patsaouras Transit Plaza/Union Station to Goldenwest Transportation Center Area/Park-and-Ride. Route 701 is in the western portion of the study area via I-405 and stops at the Goldenwest Transportation Center Area/Park-and-Ride. This route operates Monday to Friday between 5:30AM to 8:00AM and 4:00PM to 6:30PM with 20 to 30 minute headways.

4.2.4 PASSENGER RAIL

There is no direct access to passenger rail networks within the City of Westminster. The nearest passenger rail lines are operated by Metrolink, and include the Orange County Line and the Inland Empire-Orange County Line. These lines can be accessed at the Santa Ana Metrolink station, which is approximately 10 miles east of Westminster City Hall.

4.3 EXISTING BICYCLE FACILITIES

Bicycle facilities are classified as follows:

Class I - Bike Path or Bike Trail:

Class I bicycle facilities are bicycle trails or paths that are off-street and separated from automobiles. They are a minimum of eight feet in width for two-way travel and include bike lane signage and designated street crossings where needed. A Class I Bike Path may parallel a roadway (within the parkway) or may be a completely separate right-of-way that meanders through a neighborhood or along a flood control channel or utility right-of-way.

Graded Shoulders Recommended

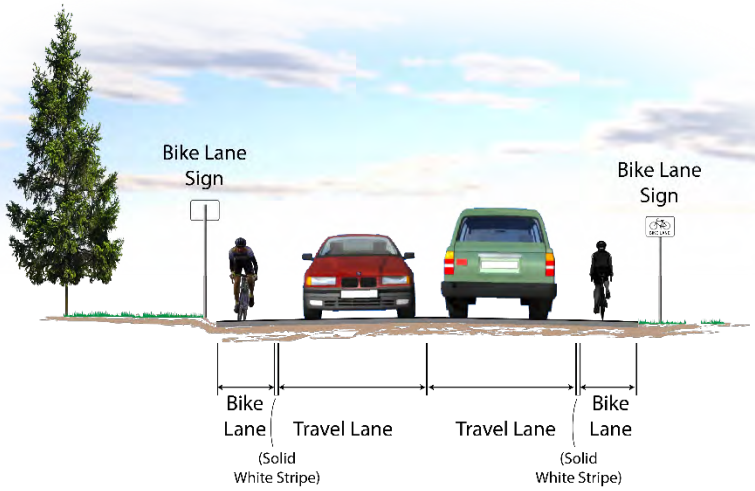
CLASS I - Multi-Use Path

Provides a completely separated right-of-way for exclusive use of bicycles and pedestrians with crossflow minimized.

MUTCD R44A (CA)

Class II - Bike Lane:

Class II bicycle facilities are striped lanes that provide bike travel and can be either located next to a curb or parking lane. If located next to a curb, a minimum width of five feet is recommended. However, a Bike Lane adjacent to a parking lane can be four feet in width. Bike Lanes are exclusively for the use of bicycles and include bike lane signage, special lane lines, and pavement markings.

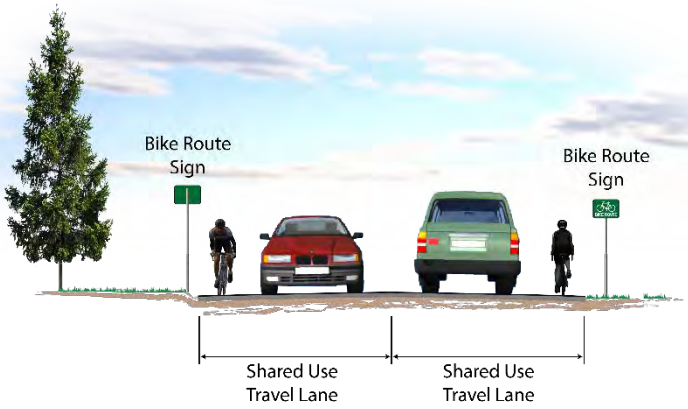


CLASS II - Bike Lane
Provides a striped lane for one-way bike travel on a street or highway.

MUTCD R81 (CA)

Class III – Bike Route:

Class III bicycle facilities are streets providing for shared use by motor vehicles and bicyclists. While bicyclists have no exclusive use or priority, signage – both by the side of the street and stenciled on



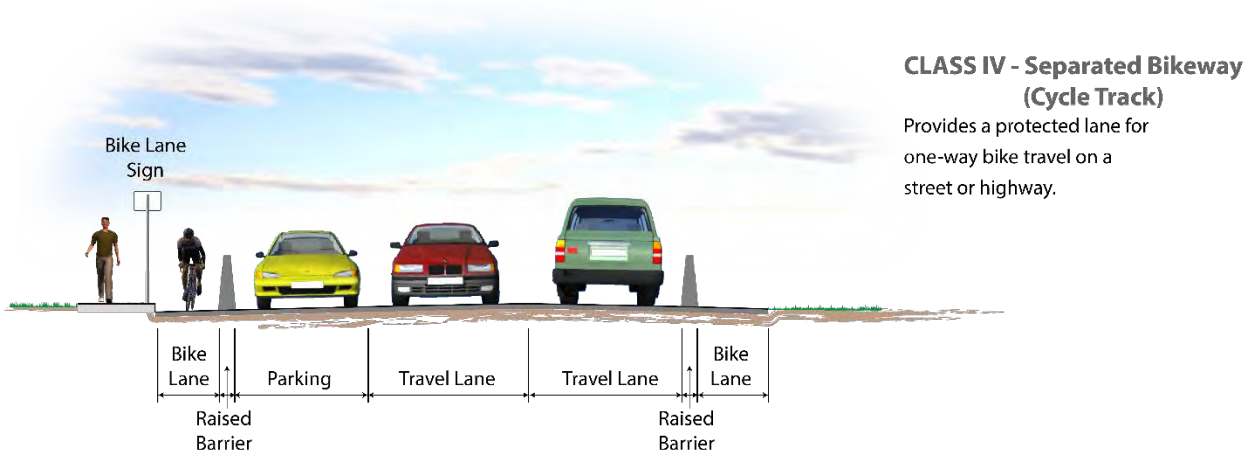
CLASS III - Bike Route
Provides a shared use with pedestrians or motor vehicle traffic, typically on lower volume roadways.

MUTCD D11-1

the roadway surface – alerts motorists to bicyclists sharing the roadway space and denotes that the street is an official bike route.

Class IV – Separated Bikeway:

Class IV bicycle facilities, sometimes called cycle tracks or separated bikeways, provide a right-of-way designated exclusively for bicycle travel adjacent to a roadway and are protected from vehicular traffic via separations (e.g. grade separation, flexible posts, inflexible physical barriers, on-street parking).



According to OCTA's Bikeways list updated January 2015 within the project study area, Class I Bike Lanes currently exist along:

- Hoover Street between Wyoming Street and Bolsa Avenue
- Rancho Road between Westminster Boulevard and Bolsa Chica Road

Within the project study area, Class I Bike Lanes are proposed along:

- Hoover Street between Garden Grove Boulevard and Wyoming Street (Sharrows currently exist).
- The railroad tracks to connect Hoover Street and Gothard Street

Within the project study area, Class II Bike Lanes currently exist along:

- Bushard Street between Edinger Avenue and Slater Avenue
- Bushard Street between Westminster Avenue and Hazard Avenue
- Edinger Avenue between Newland Street and Brookhurst Street
- Edwards Street between Homer Street and Bolsa Avenue

- Heil Avenue between Beach Boulevard and Newland Street
- Hoover Street between Garden Grove Boulevard and Wyoming Street (Sharrows currently exist).
- McFadden Avenue between Bolsa Chica Street and Gothard Street
- McFadden Avenue between Dalewood Lane and Ward Street
- Newland Street between Hazard Avenue and Bolsa Avenue
- Ward Street between Hazard Avenue and Edinger Avenue

Within the project study area, Class II Bike Lanes are proposed along:

- Bolsa Chica Avenue north of Westminster Boulevard
- Brookhurst Street between Trask Avenue and Hazard Avenue
- Bushard Street between Hazard Avenue and Madison Avenue
- Edinger Avenue between Beach Boulevard and Newland Street
- Edwards Street between Garden Grove Boulevard and Homer Street
- Hazard Street between Goldenwest Street and Ward Street
- Heil Avenue between Galaxy Drive and Magnolia Street
- Heil Avenue between Newland Street and Landau Lane
- McFadden Avenue between Gothard Street and Dalewood Lane
- Newland Street between Bolsa Avenue and Edinger Avenue
- Newland Street between Edinger Avenue and Heil Avenue
- Newland Street between Trask Avenue and Hazard Avenue
- Trask Avenue between Edwards Street and Newland Street
- Westminster Boulevard between Bolsa Chica Road and Euclid Street

Within the project study area, Class III Bike Lanes currently exist along:

- Trask Avenue between Edwards Street and Beach Boulevard

Within the project study area, Class III Bike Lanes are proposed along:

- Hazard Avenue between Cork Street and Ward Street

4.4 EXISTING PEDESTRIAN FACILITIES

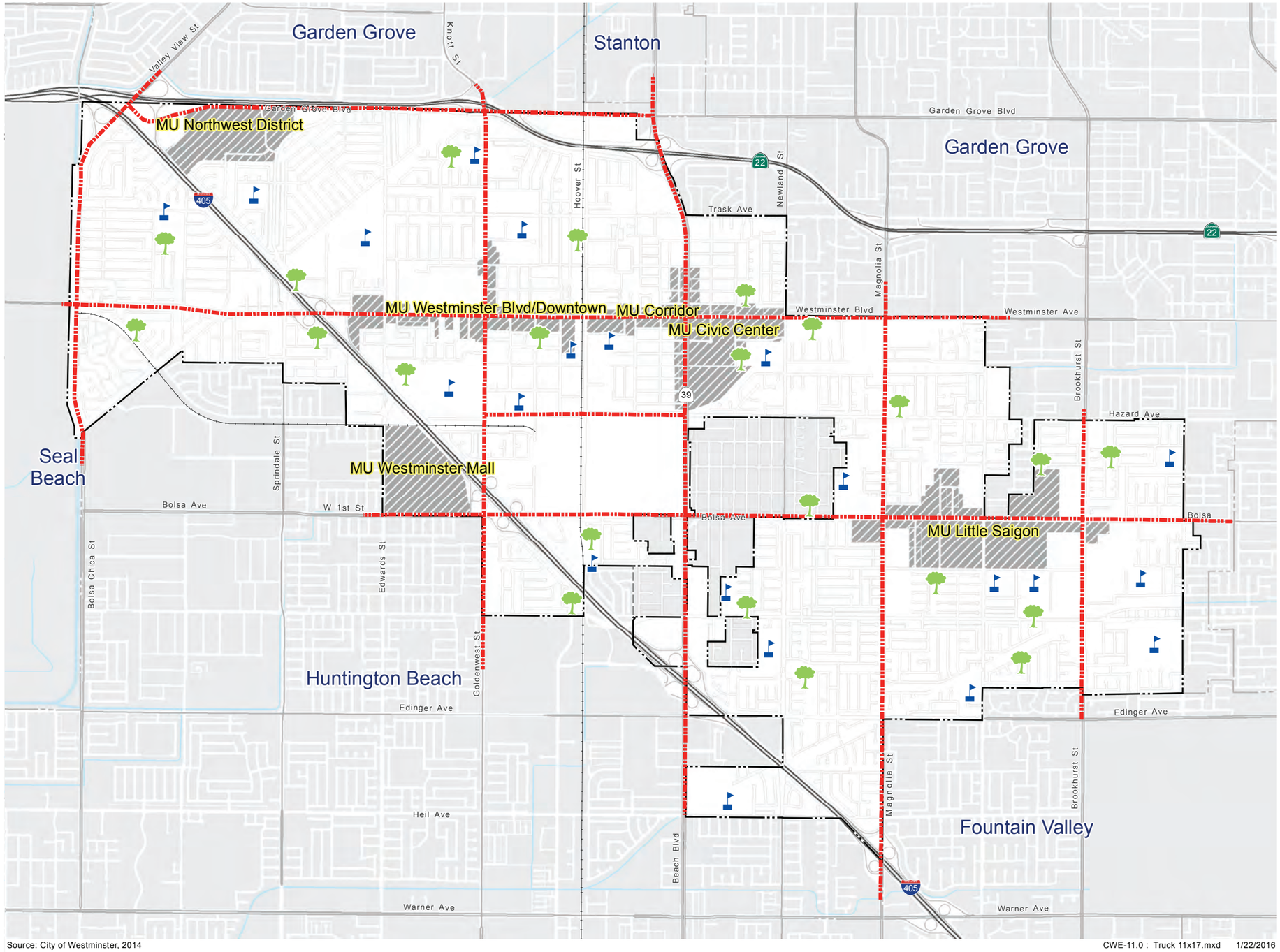
Throughout the City of Westminster, sidewalks are generally provided on both sides of the street, with the exception of roadways near freeways and interchanges. Sidewalks provide access to local activity centers

and are buffered in some neighborhood areas. Throughout the City, there is little shading and no slope on the sidewalks. The following roadways have portions of sidewalk missing from one side of the street:

- Trask Avenue
- Bolsa Avenue
- Garden Grove Boulevard
- Hoover Street
- Beach Boulevard
- Newland Street

4.5 EXISTING TRUCK ROUTES

The Surface Transportation Assistance Act (STAA) of 1982 defines a network of highways as truck routes. Large trucks are allowed to operate on these official routes. The STAA also encourages local governments to accommodate trucks on roadways beyond those designated by the Act. A map displaying truck routes in the City of Westminster is provided in Figure 4-1.



Source: City of Westminster, 2014

CWE-11.0 : Truck 11x17.mxd 1/22/2016

Truck Routes

- Truck Route
- Park
- School
- Proposed Mixed Use Area
- City of Westminster Boundary
- City of Westminster Sphere of Influence
- Other City Boundaries

WESTMINSTER General Plan Update
OPPORTUNITY. COMMUNITY. PROGRESS.
PLACEWORKS

Figure 4-1

Truck Routes in the City of Westminster

4.6 EXISTING TRAFFIC VOLUMES AND LANE CONFIGURATIONS

4.6.1 DATA COLLECTION

Existing morning (7:00am to 9:00am) and evening (4:00pm to 6:00pm) peak period intersection vehicle and bicycle and pedestrian counts were collected at 109 study intersections throughout the City of Westminster during April 2015. Daily roadway segment counts were collected at 16 locations throughout the City of Westminster during April 2015. All traffic counts were collected during typical weekdays with clear weather and when school was in session. Existing (2015) peak hour traffic volumes and lane configurations for the study intersections are shown in Figure 4-2. Roadway segment ADT volumes are shown in Figure 4-3.

The roadway segment counts, in conjunction with the intersection counts, were used to estimate daily roadway segment volumes for 69 other roadway segments in the City of Westminster. This estimation was done by using developing K-factors from the existing roadway segment counts and applying them to the peak hour intersection counts. Existing traffic count sheets are provided in Appendix A.

4.6.2 NEWLAND STREET CONSTRUCTION

As of the writing of this report, there is ongoing storm drain construction occurring on Newland Street from approximately south of Bolsa Avenue to south of Edinger Avenue. Because the construction is ongoing, it was not possible to collect traffic count data during "typical" roadway conditions. The construction on Newland Street directly affects the data quality at:

- Intersection count at Newland Street & Bolsa Avenue
- Intersection count at Newland Street & McFadden Avenue
- Intersection count at Newland Street & Palos Verdes Avenue
- Intersection count at Newland Street & Edinger Avenue
- Roadway segment count on Newland Street from McFadden Avenue to Bolsa Avenue

Data collected at these locations were not used in the analysis. Instead, a growth factor was applied to historical counts at these locations. The growth factor itself was derived from historical counts provided by the City of Westminster and existing counts collected as part of this project.

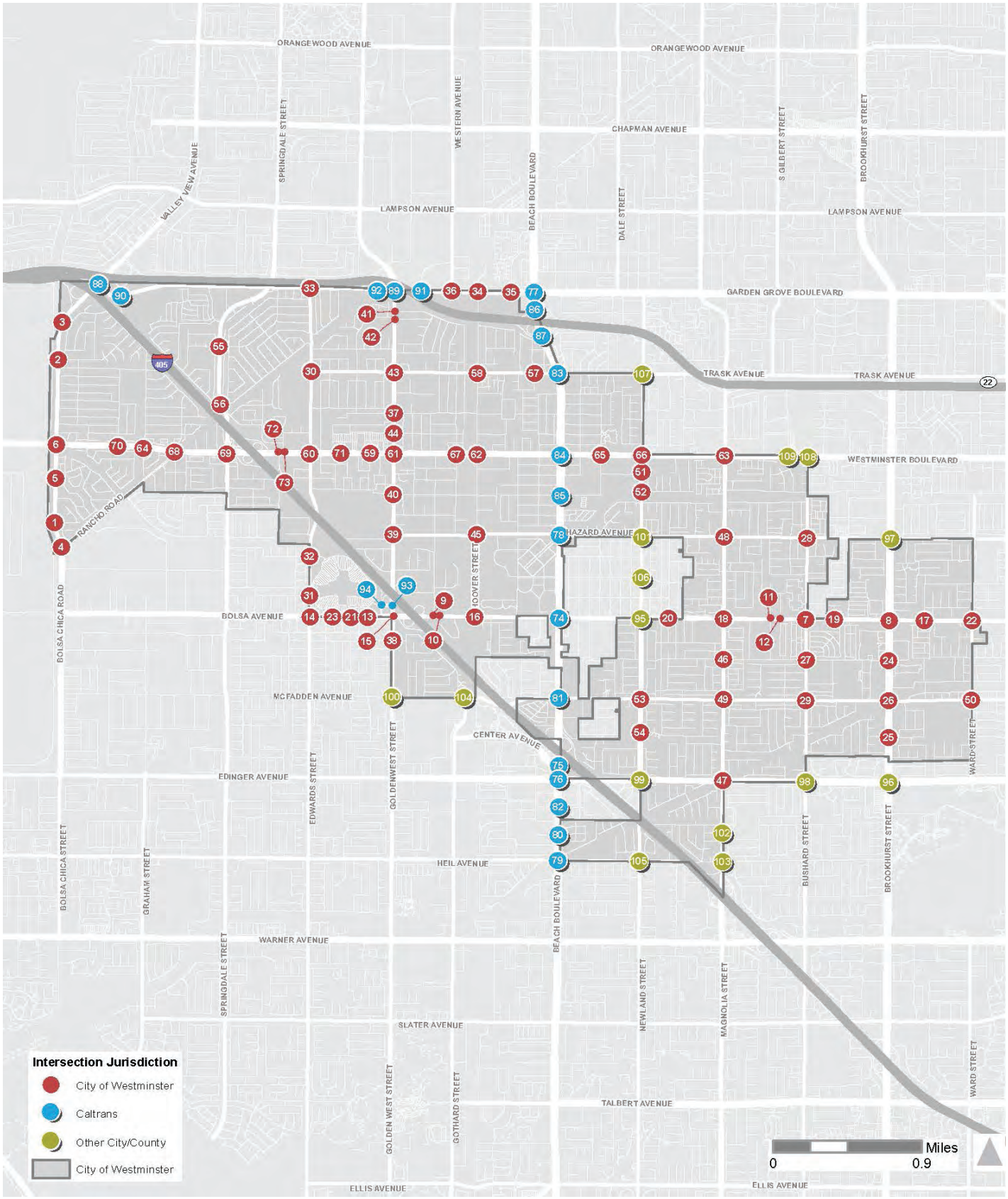


Figure 4-2

Peak Hour Traffic Volumes and Lane Configurations

Existing (2015) Conditions

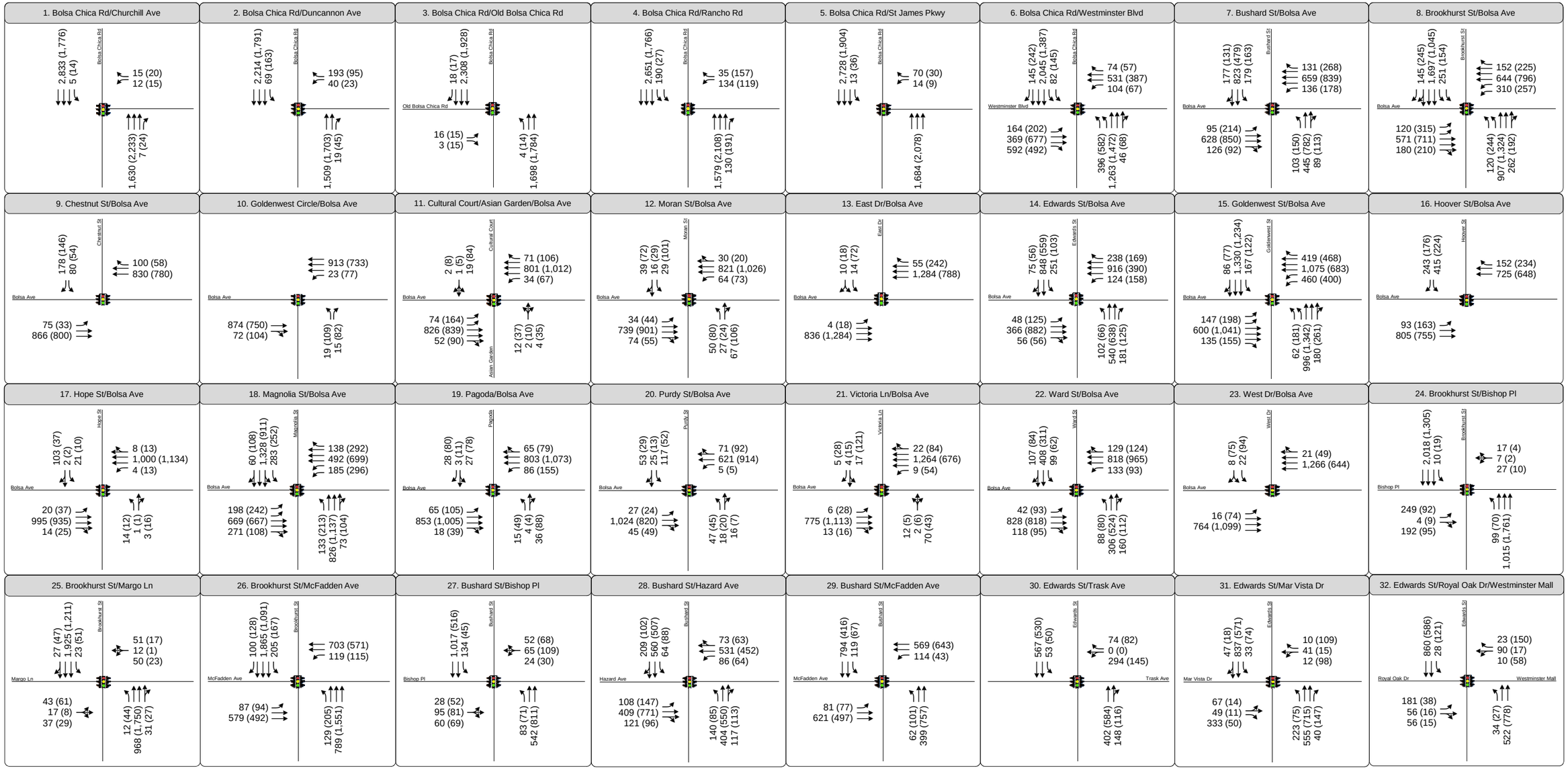


Figure 4-2

Peak Hour Traffic Volumes and Lane Configurations - Existing (2015) Conditions

FEHR PEERS

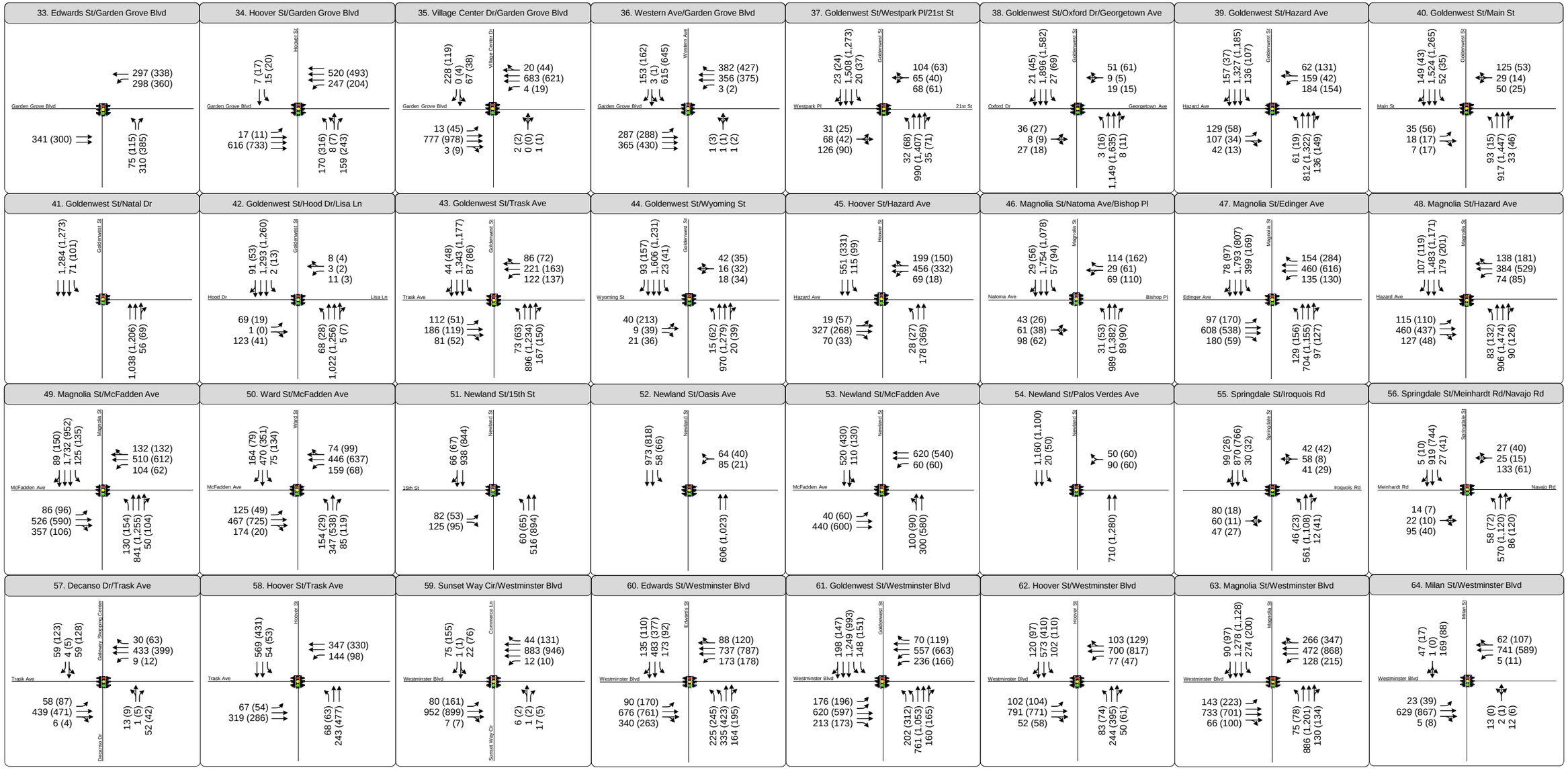


Figure 4-2

Peak Hour Traffic Volumes and Lane Configurations - Existing (2015) Conditions

FEHR PEERS

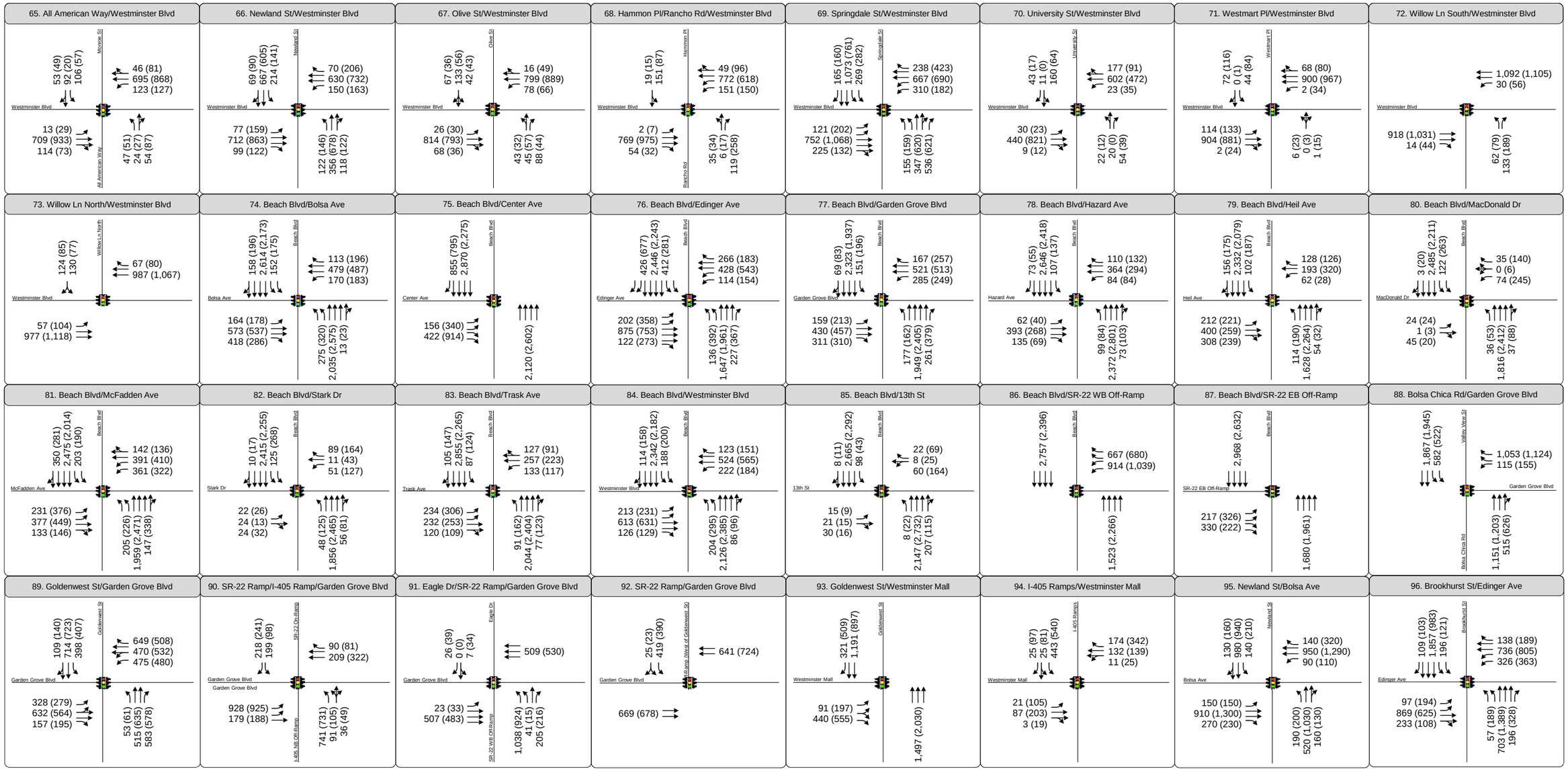


Figure 4-2

Peak Hour Traffic Volumes and Lane Configurations - Existing (2015) Conditions

FEHR PEERS

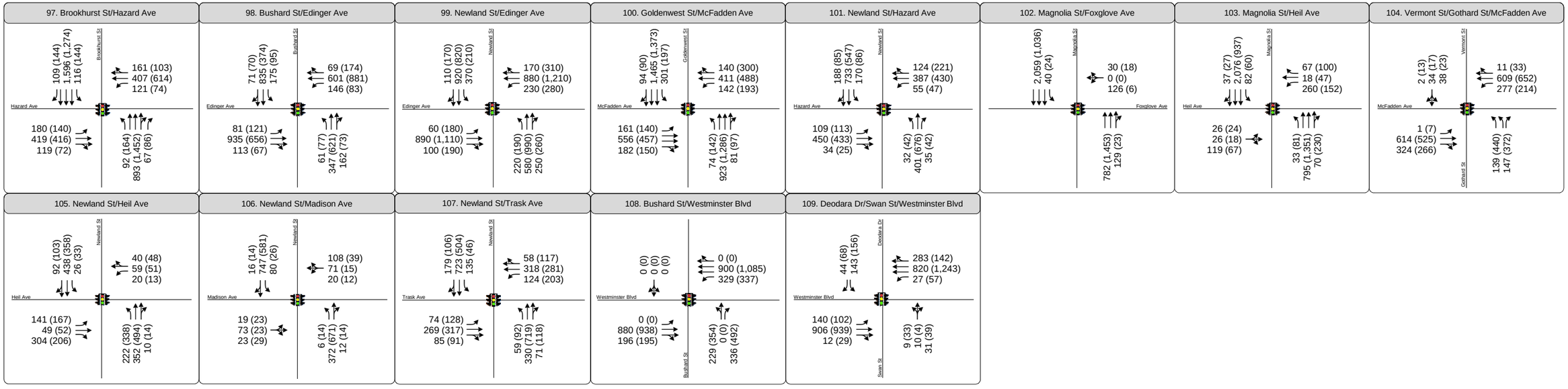
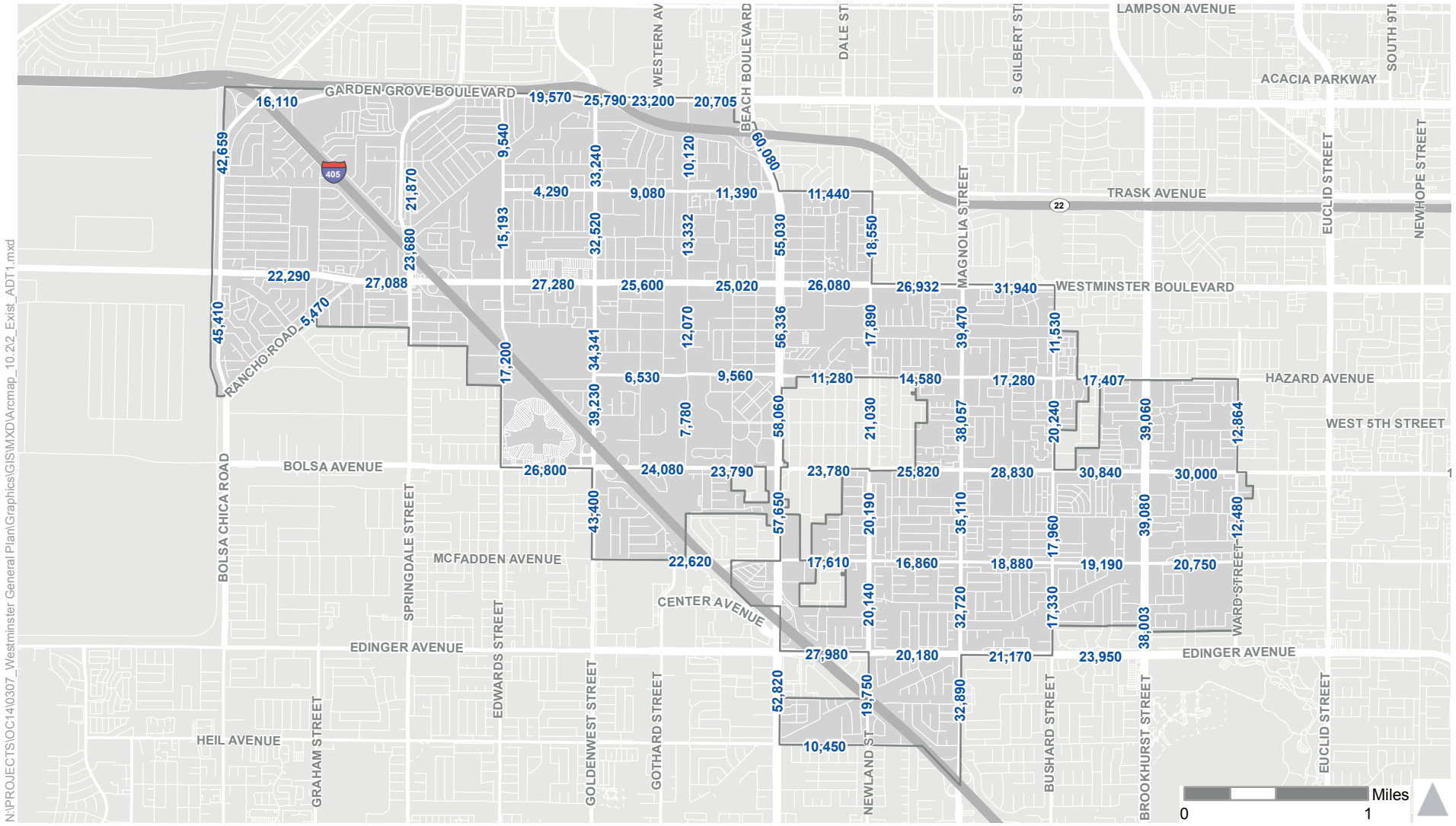


Figure 4-2

Peak Hour Traffic Volumes and Lane Configurations - Existing (2015) Conditions



City of Westminster

XX,XXX Average Daily Traffic

Figure 4-3

City of Westminster General Plan Update - Existing (2015) ADT

4.7 INTERSECTION OPERATION ANALYSIS

Intersection delay and level of service for the Existing (2015) Conditions is provided in Table 4-1, Table 4-2, and Table 4-3.

TABLE 4-1
EXISTING (2015) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
1	Bolsa Chica Road & Churchill Avenue	Signalized	AM	0.6	A
			PM	1.1	A
2	Bolsa Chica Road & Duncannon Avenue	Signalized	AM	2.0	A
			PM	5.3	A
3	Bolsa Chica Road & Old Bolsa Chica Road	Signalized	AM	3.0	A
			PM	3.1	A
4	Bolsa Chica Road & Rancho Road	Signalized	AM	6.7	A
			PM	8.8	A
5	Bolsa Chica Road & St. James Street	Signalized	AM	1.5	A
			PM	1.6	A
6	Bolsa Chica Road & Westminster Boulevard	Signalized	AM	57.2	**E**
			PM	42.7	D
7	Bolsa Avenue & Bushard Street	Signalized	AM	29.3	C
			PM	41.9	D
8	Bolsa Avenue & Brookhurst Street	Signalized	AM	26.3	C
			PM	40.0	D
9	Bolsa Avenue & Chestnut Street[1]	Signalized	AM	13.2	B
			PM	16.7	B
10	Bolsa Avenue & Goldenwest Circle[1]	Signalized	AM	9.5	A
			PM	15.1	B

11	Bolsa Avenue & Cultural Court/Asian Garden[1]	Signalized	AM	8.4	A
			PM	14.4	B
12	Bolsa Avenue & Moran Street[1]	Signalized	AM	9.9	A
			PM	15.3	B
13	Bolsa Avenue & East Drive	Signalized	AM	1.6	A
			PM	3.3	A
14	Bolsa Avenue & Edwards Street	Signalized	AM	38.4	D
			PM	39.4	D
15	Bolsa Avenue & Goldenwest Street	Signalized	AM	28.7	C
			PM	36.4	D
16	Bolsa Avenue & Hoover Street	Signalized	AM	9.7	A
			PM	6.3	A
17	Bolsa Avenue & Hope Street	Signalized	AM	13.3	B
			PM	4.3	A
18	Bolsa Avenue & Magnolia Street	Signalized	AM	46.0	D
			PM	48.6	D
19	Bolsa Avenue & Pagoda	Signalized	AM	16.5	B
			PM	24.8	C
20	Bolsa Avenue & Purdy Street	Signalized	AM	10.1	B
			PM	7.2	A
21	Bolsa Avenue & Victoria Lane	Signalized	AM	3.4	A
			PM	13.3	B
22	Bolsa Avenue & Ward Street	Signalized	AM	30.1	C
			PM	22.9	C
23	Bolsa Avenue & West Drive	Signalized	AM	1.4	A
			PM	6.5	A
24	Brookhurst Street & Bishop Place	Signalized	AM	6.5	A
			PM	7.3	A

25	Brookhurst Street & Margo Lane	Signalized	AM	9.9	A
			PM	4.4	A
26	Brookhurst Street & McFadden Avenue	Signalized	AM	46.8	D
			PM	30.7	C
27	Bushard Street & Bishop Place	Signalized	AM	16.8	B
			PM	8.9	A
28	Bushard Street & Hazard Avenue	Signalized	AM	25.6	C
			PM	31.2	C
29	Bushard Street & McFadden Avenue	Signalized	AM	32.1	C
			PM	27.3	C
30	Edwards Street & Trask Avenue[2]	Signalized	AM	17.2	B
			PM	10.4	B
31	Edwards Street & Mar Vista Street	Signalized	AM	33.7	C
			PM	12.5	B
32	Edwards Street & Royal Oak Drive	Signalized	AM	19.8	B
			PM	11.7	B
33	Garden Grove Boulevard & Edwards Street	Signalized	AM	22.1	C
			PM	31.6	C
34	Garden Grove Boulevard & Hoover Street	Signalized	AM	43.5	D
			PM	28.8	C
35	Garden Grove Boulevard & Village Center Drive	Signalized	AM	6.6	A
			PM	8.5	A
36	Garden Grove Boulevard & Western Avenue	Signalized	AM	55.4	**E**
			PM	63.8	**E**
37	Goldenwest Street & 21st Street	Signalized	AM	39.4	D
			PM	15.0	B
38	Goldenwest Street & Georgetown Avenue	Signalized	AM	3.7	A
			PM	6.1	A

39	Goldenwest Street & Hazard Avenue	Signalized	AM	46.5	D
			PM	29.8	C
40	Goldenwest Street & Main Street	Signalized	AM	15.4	B
			PM	9.6	A
41	Goldenwest Street & Natal Drive[1]	Signalized	AM	15.9	B
			PM	11.7	B
42	Goldenwest Street & Hood Drive/Lisa Lane[1]	Signalized	AM	10.2	B
			PM	6.5	A
43	Goldenwest Street & Trask Avenue	Signalized	AM	30.8	C
			PM	27.7	C
44	Goldenwest Street & Wyoming Street	Signalized	AM	4.2	A
			PM	18.5	B
45	Hoover Street & Hazard Avenue	Signalized	AM	31.2	C
			PM	30.5	C
46	Magnolia Street & Bishop Place/Natoma Avenue	Signalized	AM	20.0	B
			PM	23.5	C
47	Magnolia Street & Edinger Avenue	Signalized	AM	44.7	D
			PM	44.2	D
48	Magnolia Street & Hazard Avenue	Signalized	AM	49.5	D
			PM	47.1	D
49	Magnolia Street & McFadden Avenue	Signalized	AM	49.8	D
			PM	36.8	D
50	McFadden Avenue & Ward Street	Signalized	AM	36.8	D
			PM	31.3	C
51	Newland Street & 15th Street	Signalized	AM	8.9	A
			PM	7.3	A
52	Newland Street & Oasis Avenue	Signalized	AM	8.0	A
			PM	5.7	A

53	Newland Street & McFadden Avenue	Signalized	AM	43.1	D
			PM	52.0	D
54	Newland Street & Palos Verdes Avenue	Signalized	AM	12.4	B
			PM	8.9	A
55	Springdale Street & Iroquois Road	Signalized	AM	12.4	B
			PM	11.1	B
56	Springdale Street & Navajo Road/Meinhardt Road	Signalized	AM	12.2	B
			PM	11.7	B
57	Trask Avenue & Descanso Drive	Signalized	AM	9.0	A
			PM	41.1	D
58	Trask Avenue & Hoover Street	Signalized	AM	28.6	C
			PM	26.5	C
59	Westminster Boulevard & Commerce Way	Signalized	AM	26.5	C
			PM	26.5	C
60	Westminster Boulevard & Edwards Street	Signalized	AM	53.0	D
			PM	52.1	D
61	Westminster Boulevard & Goldenwest Street	Signalized	AM	29.0	C
			PM	25.0	C
62	Westminster Boulevard & Hoover Street	Signalized	AM	33.6	C
			PM	32.1	C
63	Westminster Boulevard & Magnolia Street	Signalized	AM	44.5	D
			PM	54.2	D
64	Westminster Boulevard & Milan Street	Signalized	AM	12.2	B
			PM	3.9	A
65	Westminster Boulevard & Monroe Street/All American Way	Signalized	AM	17.3	B
			PM	18.6	B
66	Westminster Boulevard & Newland Street	Signalized	AM	35.7	D
			PM	48.8	D

67	Westminster Boulevard & Olive Street	Signalized	AM	19.8	B
			PM	12.5	B
68	Westminster Boulevard & Rancho Road/Hammon Place	Signalized	AM	18.5	B
			PM	10.4	B
69	Westminster Boulevard & Springdale Street	Signalized	AM	47.0	D
			PM	33.9	C
70	Westminster Boulevard & University Street	Signalized	AM	40.8	D
			PM	10.6	B
71	Westminster Boulevard & Westmart Place	Signalized	AM	19.7	B
			PM	14.8	B
72	Westminster Boulevard & Willow Lane South[1]	Signalized	AM	13.7	B
			PM	14.0	B
73	Westminster Boulevard & Willow Lane North[1]	Signalized	AM	12.5	B
			PM	7.5	A

Notes:

1- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections in close proximity.
2- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections with an exclusive pedestrian phase.
3- **Bold** indicates an LOS below the acceptable threshold.
4- Highway Capacity Manual 2010 methodology cannot accurately estimate intersection delay greater than 80 seconds for signalized intersections.

Source: Fehr & Peers, 2016

TABLE 4-2
EXISTING (2015) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CALTRANS INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
74	Beach Boulevard & Bolsa Avenue	Signalized	AM	52.7	D
			PM	49.1	D
75	Beach Boulevard & Center Avenue	Signalized	AM	4.3	A
			PM	>80.0	**F**

TABLE 4-2
EXISTING (2015) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CALTRANS INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
76	Beach Boulevard & Edinger Avenue	Signalized	AM	34.7	C
			PM	32.0	C
77	Beach Boulevard & Garden Grove	Signalized	AM	50.2	D
			PM	34.9	C
78	Beach Boulevard & Hazard Avenue	Signalized	AM	36.4	D
			PM	11.6	B
79	Beach Boulevard & Heil Avenue	Signalized	AM	47.5	D
			PM	42.5	D
80	Beach Boulevard & McDonald Avenue	Signalized	AM	19.3	B
			PM	16.4	B
81	Beach Boulevard & McFadden Avenue	Signalized	AM	46.9	D
			PM	65.8	E
82	Beach Boulevard & Stark Street	Signalized	AM	15.8	B
			PM	11.7	B
83	Beach Boulevard & Trask Avenue	Signalized	AM	24.8	C
			PM	63.8	E
84	Beach Boulevard & Westminster Boulevard	Signalized	AM	59.9	E
			PM	46.9	D
85	Beach Boulevard & 13th Street	Signalized	AM	3.4	A
			PM	13.6	B
86	Beach Boulevard & SR-22 WB Off-Ramp	Signalized	AM	30.1	C
			PM	23.4	C
87	Beach Boulevard & SR-22 EB Off-Ramp	Signalized	AM	6.6	A
			PM	11.8	B
88	Bolsa Chica Road & Garden Grove Boulevard	Signalized	AM	35.5	**D**
			PM	43.3	**D**

TABLE 4-2
EXISTING (2015) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CALTRANS INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
89	Garden Grove Boulevard & Goldenwest Street	Signalized	AM	55.9	**E**
			PM	57.6	**E**
90	Garden Grove Boulevard & SR-22/I-405 Ramps	Signalized	AM	19.5	B
			PM	36.8	**D**
91	Garden Grove Boulevard & SR-22 WB Off-Ramp/Eagle Drive	Signalized	AM	75.4	**E**
			PM	37.7	**D**
92	Garden Grove Boulevard & SR-22 Off-Ramp (West of Golden West Street)	Signalized	AM	8.1	A
			PM	9.7	A
93	Goldenwest Street & I-405 Ramps	Signalized	AM	6.3	A
			PM	5.8	A
94	I-405 Ramps & Mall Ring Road	Signalized	AM	6.3	A
			PM	6.8	A

Notes:
1- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections in close proximity.
2- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections with an exclusive pedestrian phase.
3- **Bold** indicates an LOS below the acceptable threshold.
4- Caltrans Route Concept of Operations states the acceptable level of service for Beach Boulevard as LOS E.

Source: Fehr & Peers, 2016

TABLE 4-3
EXISTING (2015) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE OTHER JURISDICTION INTERSECTIONS

#	Intersection	Jurisdiction	Traffic Control	Peak Hour	V/C Ratio[1]	LOS
95	Bolsa Avenue & Newland Street	County of Orange	Signalized	AM	0.856	D
				PM	0.982	**E**

TABLE 4-3
EXISTING (2015) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE OTHER JURISDICTION INTERSECTIONS

#	Intersection	Jurisdiction	Traffic Control	Peak Hour	V/C Ratio[1]	LOS
96	Brookhurst Street & Edinger Avenue	Fountain Valley	Signalized	AM	0.872	D
				PM	0.680	B
97	Brookhurst Street & Hazard Avenue	Garden Grove	Signalized	AM	0.711	C
				PM	0.718	C
98	Bushard Street & Edinger Avenue	Fountain Valley	Signalized	AM	0.746	C
				PM	0.691	B
99	Edinger Avenue & Newland Street	Huntington Beach	Signalized	AM	0.938	**E**
				PM	1.094	**F**
100	Goldenwest Street & McFadden Avenue	Huntington Beach	Signalized	AM	0.725	C
				PM	0.751	C
101	Hazard Avenue & Newland Street	County of Orange	Signalized	AM	0.621	B
				PM	0.781	C
102	Magnolia Street & Foxglove Avenue	Fountain Valley	Signalized	AM	0.545	A
				PM	0.368	A
103	Magnolia Street & Heil Avenue	Fountain Valley	Signalized	AM	0.737	C
				PM	0.549	A
104	McFadden Avenue & Gothard Street/Vermont Street	Huntington Beach	Signalized	AM	0.619	B
				PM	0.659	B
105	Newland Street & Heil Avenue	Huntington Beach	Signalized	AM	0.527	A
				PM	0.541	A
106	Newland Street & Madison Avenue	County of Orange	Signalized	AM	0.631	B
				PM	0.521	A
107	Newland Street & Trask Avenue	Garden Grove	Signalized	AM	0.527	A
				PM	0.563	A

TABLE 4-3
EXISTING (2015) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE OTHER JURISDICTION INTERSECTIONS

#	Intersection	Jurisdiction	Traffic Control	Peak Hour	V/C Ratio[1]	LOS
108	Westminster Boulevard & Bushard Street	Garden Grove	Signalized	AM	0.671	B
				PM	0.747	C
109	Westminster Boulevard & Deodora Drive/Swan Street	Garden Grove	Signalized	AM	0.462	A
				PM	0.518	A

Notes:
1- V/C for signalized operations is based on application of Intersection Capacity Utilization methodology using Traffix software. V/C = Volume / Capacity ratio.
2- **Bold** indicates an LOS below the acceptable threshold.

Source: Fehr & Peers, 2016

4.8 ROADWAY SEGMENT OPERATION ANALYSIS

Roadway segment ADT and level of service for Existing (2015) Conditions is shown in Table 4-4.

TABLE 4-4
EXISTING (2015) CONDITIONS ROADWAY SEGMENT ADT AND LEVEL OF SERVICE

Location	Facility Type (# of lanes)	ADT	LOS
Beach Boulevard			
Westminster Boulevard-Hazard Avenue	Caltrans (8)	56,336	C or better
Heil Avenue-Edinger Avenue	Caltrans (8)	52,820	C or better
McFadden Avenue-Bolsa Avenue	Caltrans (8)	57,650	C or better
Bolsa Avenue-Hazard Avenue	Caltrans (8)	58,060	C or better
Westminster Boulevard-Trask Avenue	Caltrans (8)	55,030	C or better

TABLE 4-4
EXISTING (2015) CONDITIONS ROADWAY SEGMENT ADT AND LEVEL OF SERVICE

Location	Facility Type (# of lanes)	ADT	LOS
SR-22 Eastbound Off-Ramp-SR-22 Westbound Off-Ramp	Caltrans (8)	60,080	D
Bolsa Avenue			
Hoover Street-Beach Boulevard	Major Arterial (4U)	23,790	**E**
Chestnut Street-Hoover Street	Major Arterial (4D)	24,080	C or better
Edwards Street-Goldenwest Street	Major Arterial (6)	26,800	C or better
Beach Boulevard-Newland Street	Major Arterial (4D)	23,780	C or better
Newland Street-Magnolia Street	Major Arterial (4D)	25,820	C or better
Magnolia Street-Bushard Street	Major Arterial (6)	28,830	C or better
Bushard Street-Brookhurst Street	Major Arterial (6)	30,840	C or better
Brookhurst Street-Ward Street	Major Arterial (6)	30,000	C or better
Bolsa Chica Rd			
Duncannon Avenue-Old Bolsa Chica Road	Major Arterial (5)	42,659	**E**
Rancho Road-Westminster Boulevard	Major Arterial (6)	45,410	D
Brookhurst Street			
Edinger Avenue-Margo Lane	Major Arterial (6)	38,003	C or better
McFadden Avenue-Bolsa Avenue	Major Arterial (6)	39,080	C or better
Bolsa Avenue-Hazard Avenue	Major Arterial (6)	39,060	C or better
Bushard Street			
McFadden Avenue-Bishop Place	Secondary (4U)	17,960	C or better
Edinger Avenue-McFadden Avenue	Secondary (4U)	17,330	C or better

TABLE 4-4
EXISTING (2015) CONDITIONS ROADWAY SEGMENT ADT AND LEVEL OF SERVICE

Location	Facility Type (# of lanes)	ADT	LOS
Bolsa Avenue-Hazard Avenue	Secondary (4U)	20,240	D
Hazard Avenue-Westminster Boulevard	Secondary (4U)	11,530	C or better
Edinger Avenue			
Newland Street-Magnolia Street	Primary (4U)	20,180	D
Beach Boulevard-Newland Street	Primary (4U)	27,980	**F**
Magnolia Street-Bushard Street	Primary (4D)	21,170	C or better
Bushard Street-Brookhurst Street	Primary (4D)	23,950	C or better
Edwards Street			
Westminster Boulevard-Trask Avenue	Primary (4U)	15,193	C or better
Bolsa Avenue-Westminster Boulevard	Primary (4U)	17,200	C or better
Trask Avenue-Garden Grove Boulevard	Secondary (4U)	9,540	C or better
Garden Grove Boulevard			
Hoover Street-Beach Boulevard	Primary (6)	20,705	C or better
Bolsa Chica Road-22/405 Ramps	Primary (4D)	16,110	C or better
Edwards Street-Goldenwest Street	Primary (4D)	19,570	C or better
Goldenwest Street-22 WB Off Ramp/Eagle Drive	Major Arterial (6)	25,790	C or better
SR-22 WB Off Ramp/Eagle Drive-Hoover Street	Major Arterial (6)	23,200	C or better
Goldenwest Street			
Hazard Avenue-Main Street	Major Arterial (6)	34,341	C or better
McFadden Avenue-Bolsa Avenue	Major Arterial (6)	43,400	C or better

TABLE 4-4
EXISTING (2015) CONDITIONS ROADWAY SEGMENT ADT AND LEVEL OF SERVICE

Location	Facility Type (# of lanes)	ADT	LOS
I-405-Hazard Avenue	Major Arterial (6)	39,230	C or better
Westminster Boulevard-Trask Avenue	Major Arterial (6)	32,520	C or better
Trask Avenue-Garden Grove Boulevard	Major Arterial (6)	33,240	C or better
Hazard Avenue			
Bushard Street-Brookhurst Street	Secondary (4U)	17,407	C or better
Goldenwest Street-Hoover Street	Secondary (4U)	6,530	C or better
Hoover Street-Beach Boulevard	Secondary (4U)	9,560	C or better
Beach Boulevard-Newland Street	Secondary (4U)	11,280	C or better
Newland Street-Magnolia Street	Secondary (4U)	14,580	C or better
Magnolia Street-Bushard Street	Secondary (4U)	17,280	C or better
Heil Avenue			
Beach Boulevard-Newland Street	Secondary (2)	10,450	D
Hoover Street			
Westminster Boulevard-Trask Avenue	Secondary (4U)	13,332	C or better
Bolsa Avenue-Hazard Avenue	Secondary (4U)	7,780	C or better
Hazard Avenue-Westminster Boulevard	Secondary (4U)	12,070	C or better
Trask Avenue-Garden Grove Boulevard	Secondary (4U)	10,120	C or better
Magnolia Street			
Bolsa Avenue-Hazard Avenue	Primary (6)	38,057	C or better
Edinger Avenue-McFadden Avenue	Primary (6)	32,720	C or better

TABLE 4-4
EXISTING (2015) CONDITIONS ROADWAY SEGMENT ADT AND LEVEL OF SERVICE

Location	Facility Type (# of lanes)	ADT	LOS
Heil Avenue-Edinger Avenue	Primary (6)	32,890	C or better
McFadden Avenue-Bolsa Avenue	Primary (6)	35,110	C or better
Hazard Avenue-Westminster Boulevard	Primary (5)	39,470	D
McFadden Avenue			
Goldenwest Street-Beach Boulevard	Primary (4D)	22,620	C or better
Beach Boulevard-Newland Street	Primary (4D)	17,610	C or better
Newland Street-Magnolia Street	Primary (4D)	16,860	C or better
Magnolia Street-Bushard Street	Primary (4D)	18,880	C or better
Bushard Street-Brookhurst Street	Primary (4D)	19,190	C or better
Brookhurst Street-Ward Street	Primary (4D)	20,750	C or better
Newland Street			
McFadden Avenue-Bolsa Avenue	Primary (4D)	20,190	C or better
Heil Avenue-Edinger Avenue	Primary (2)	19,750	**F**
Edinger Avenue-McFadden Avenue	Primary (4D)	20,140	C or better
Bolsa Avenue-Hazard Avenue	Primary (2)	21,030	**F**
Hazard Avenue-Westminster Boulevard	Primary (4D)	17,890	C or better
Westminster Boulevard-Trask Avenue	Primary (4D)	18,550	C or better
Rancho Road			
Bolsa Chica Road-Westminster Boulevard	Secondary (2)	5,470	C or better
Springdale Street			

TABLE 4-4
EXISTING (2015) CONDITIONS ROADWAY SEGMENT ADT AND LEVEL OF SERVICE

Location	Facility Type (# of lanes)	ADT	LOS
Westminster Boulevard-Navajo Road	Primary (4U)	23,680	**E**
Navajo Road-Iroquois Road	Primary (4U)	21,870	D
Trask Avenue			
Edwards Street-Goldenwest Street	Secondary (4U)	4,290	C or better
Goldenwest Street-Hoover Street	Secondary (4U)	9,080	C or better
Hoover Street-Beach Boulevard	Primary (4U)	11,390	C or better
Beach Boulevard-Newland Street	Primary (4U)	11,440	C or better
Ward Street			
Bolsa Avenue-Hazard Avenue	Commuter (2)	12,864	**F**
McFadden Avenue-Bolsa Avenue	Commuter (4U)	12,480	C or better
Westminster Boulevard			
Newland Street-Magnolia Street	Primary (4D)	26,932	C or better
Hammon Plaza-Springdale Street	Primary (4D)	27,088	C or better
Bolsa Chica Road-Rancho Road	Primary (4D)	22,290	C or better
Edwards Street-Goldenwest Street	Primary (5)	27,280	C or better
Goldenwest Street-Hoover Street	Primary (4D)	25,600	C or better
Hoover Street-Beach Boulevard	Primary (4D)	25,020	C or better
Beach Boulevard-Newland Street	Primary (4D)	26,080	C or better
Magnolia Street-Bushard Street	Primary (5)	31,940	C or better

TABLE 4-4
EXISTING (2015) CONDITIONS ROADWAY SEGMENT ADT AND LEVEL OF SERVICE

Location	Facility Type (# of lanes)	ADT	LOS

Notes:
1- **Bold** indicates an LOS below the acceptable threshold.
2- 4U indicates a 4-lane undivided roadway; 4D indicates a 4-lane divided roadway.

Source: Fehr & Peers, 2016

4.9 FREEWAY OPERATION ANALYSIS

4.9.1 MAINLINE SEGMENT ANALYSIS

Table 4-5 and Table 4-5 present the results of the freeway basic assessment for the SR-22 and I-405 freeways. Existing freeway mainline volumes were obtained from PeMS, truck percentages were taken from the 2014 Annual Average Daily Truck Traffic published by Caltrans, the terrain was assumed to be level, free-flow speed is assumed to be 65 miles per hour, and a peak hour factor of 0.95 was assumed for the segments. Freeway reports are provided in Appendix C.

TABLE 4-5 SR-22 FREEWAY OPERATIONS-EXISTING (2015) CONDITIONS

Segment	Type	AM			PM		
		V/C	Density	LOS	V/C	Density	LOS
SR-22 Eastbound							
Seal Beach Boulevard to I-405 Diverge	Basic	0.59	21.31	C	0.65	23.51	C
I-405 Diverge to Valley View Street	Basic	0.54	19.41	C	0.51	18.32	C
Valley View Street to Goldenwest Street	Basic	0.52	18.70	C	0.52	18.84	C
Goldenwest Street to Beach Boulevard	Basic	**0.43**	**-**	**F**	0.46	16.57	B
Beach Boulevard to Magnolia Street	Basic	0.60	21.52	C	0.65	23.61	C
Magnolia Street to Brookhurst Street	Basic	0.50	17.97	B	0.57	20.78	C

Brookhurst Street to Euclid Street	Basic	0.52	18.92	C	0.57	20.44	C
SR-22 Westbound							
Euclid Street to Brookhurst Street	Basic	0.59	21.29	C	0.62	22.36	C
Brookhurst Street to Magnolia Street	Basic	0.59	21.27	C	0.62	22.34	C
Magnolia Street to Beach Boulevard	Basic	0.66	23.94	C	0.65	23.56	C
Beach Boulevard to Goldenwest Street	Basic	0.59	21.16	C	0.57	20.64	C
Goldenwest Street to Valley View Street	Basic	**0.72**	**26.70**	**D**	**0.74**	**27.64**	**D**
Valley View Street to I-405 Merge	Basic	**0.33**	**-**	**F**	**0.30**	**-**	**F**
I-405 Merge to Seal Beach Boulevard	Basic	0.61	21.88	C	0.63	22.79	C

Notes:
1. Calculated using methodologies consistent with the Highway Capacity Manual
2. Density reported as passenger cars per mile per lane
3. **Bold** indicates unacceptable operations

TABLE 4-6 I-405 FREEWAY OPERATIONS-EXISTING YEAR (2015) CONDITIONS

Segment	Type	AM			PM		
		V/C	Density	LOS	V/C	Density	LOS
I-405 Southbound							
Seal Beach Boulevard to SR-22	Basic	0.52	18.69	C	0.65	23.64	C
SR-22 to Bolsa Chica Road	Basic	0.52	18.62	C	0.53	18.98	C
Bolsa Chica Road to Westminster Boulevard	Basic	**0.37**	-	**F**	0.64	23.24	C
Westminster Boulevard to Bolsa Avenue	Basic	0.36	13.04	B	0.56	20.28	C
Bolsa Avenue to Beach Boulevard	Basic	0.31	11.06	B	0.68	24.80	C
Beach Boulevard to Magnolia Street	Basic	0.31	11.06	B	0.68	24.80	C
Magnolia Street to Warner Avenue	Basic	0.42	15.26	B	**0.75**	**27.70**	**D**
Warner Avenue to Brookhurst Street	Basic	0.60	21.59	C	**0.74**	**27.23**	**D**
Brookhurst Street to Euclid Street	Basic	0.55	19.83	C	0.52	18.72	C

I-405 Northbound

Euclid Street to Brookhurst Street	Basic	0.51	18.36	C	0.40	14.38	B
Brookhurst Street to Warner Avenue	Basic	**0.73**	**27.14**	**D**	0.63	22.85	C
Warner Avenue to Magnolia Street	Basic	0.64	23.32	C	0.52	18.83	C
Magnolia Street to Beach Boulevard	Basic	0.70	25.53	C	0.60	21.77	C
Beach Boulevard to Bolsa Avenue	Basic	**0.75**	**27.72**	**D**	0.68	24.72	C
Bolsa Avenue to Westminster Boulevard	Basic	**0.75**	**27.72**	**D**	0.68	24.72	C
Westminster Boulevard to Bolsa Chica Road	Basic	**0.63**	**-**	**F**	**0.64**	**-**	**F**
Bolsa Chica Road to SR-22	Basic	0.55	19.84	C	0.52	18.77	C
SR-22 to Seal Beach Boulevard	Basic	0.61	21.99	C	0.63	22.91	C

Notes:
1. Calculated using methodologies consistent with the Highway Capacity Manual
2. Density reported as passenger cars per mile per lane
3. **Bold** indicates unacceptable operations

As shown in Table 4-5 and Table 4-6, two freeway segments operate unacceptably (LOS D, LOS E, or LOS F) during the AM or PM Peak Hours:

- SR-22 Eastbound, between Goldenwest Street and Beach Boulevard
- SR-22 Westbound, between Goldenwest Street and Valley View Street
- SR-22 Westbound, between Valley View Street and I-405 Merge
- I-405 Southbound, between Bolsa Chica Road and Westminster Boulevard
- I-405 Southbound, between Magnolia Street and Warner Avenue
- I-405 Southbound, between Warner Avenue and Brookhurst Street
- I-405 Northbound, between Brookhurst Street to Warner Avenue
- I-405 Northbound, between Beach Boulevard and Bolsa Avenue
- I-405 Northbound, between Bolsa Avenue and Westminster Boulevard
- I-405 Northbound, between Westminster Boulevard and Bolsa Chica Road

4.9.2 OFF-RAMP QUEUING ANALYSIS

The table below presents the freeway off-ramp queueing analysis for Caltrans off-ramp facilities in the study area for informational purposes only. Please note that all locations have storage that exceeds the predicted 95th percentile queue at the ramps.

TABLE 4-7 CALTRANS OFF-RAMP QUEUING ANALYSIS EXISTING (2015) CONDITIONS

Off-Ramp Location	95th Percentile Queue (feet)		Available Storage (feet)
	AM	PM	
#86. Beach Boulevard & SR-22 WB Off-Ramp	639	684	1,600
#87. Beach Boulevard & SR-22 EB Off-Ramp	598	199	1,500
#90. Garden Grove Boulevard & SR-22 EB Off-Ramp	262	243	1,140
#90. Garden Grove Boulevard & I-405 NB Off-Ramp	524	462	1,030
#91. Garden Grove Boulevard & SR-22 WB Off-Ramp/Eagle Drive	373	260	1,030
#92. Garden Grove Boulevard & SR-22 Off-Ramp	111	110	970
#94. I-405 Ramps & Mall Ring Road	68	102	810

Source: Fehr & Peers (2016).

5.0 CUMULATIVE (2035) NO PROJECT CONDITIONS

This section provides the intersection, roadway segment, and freeway segment operation analysis for locations in the study area. Traffic volumes were developed based on the methodologies described in Section 3.

5.1 INTERSECTION OPERATION ANALYSIS

Intersection delay and level of service for the Cumulative (2035) No Project Conditions is provided in Table 5-1, Table 5-2, and Table 5-3. Synchro and Traffix reports are provided in Appendix B.

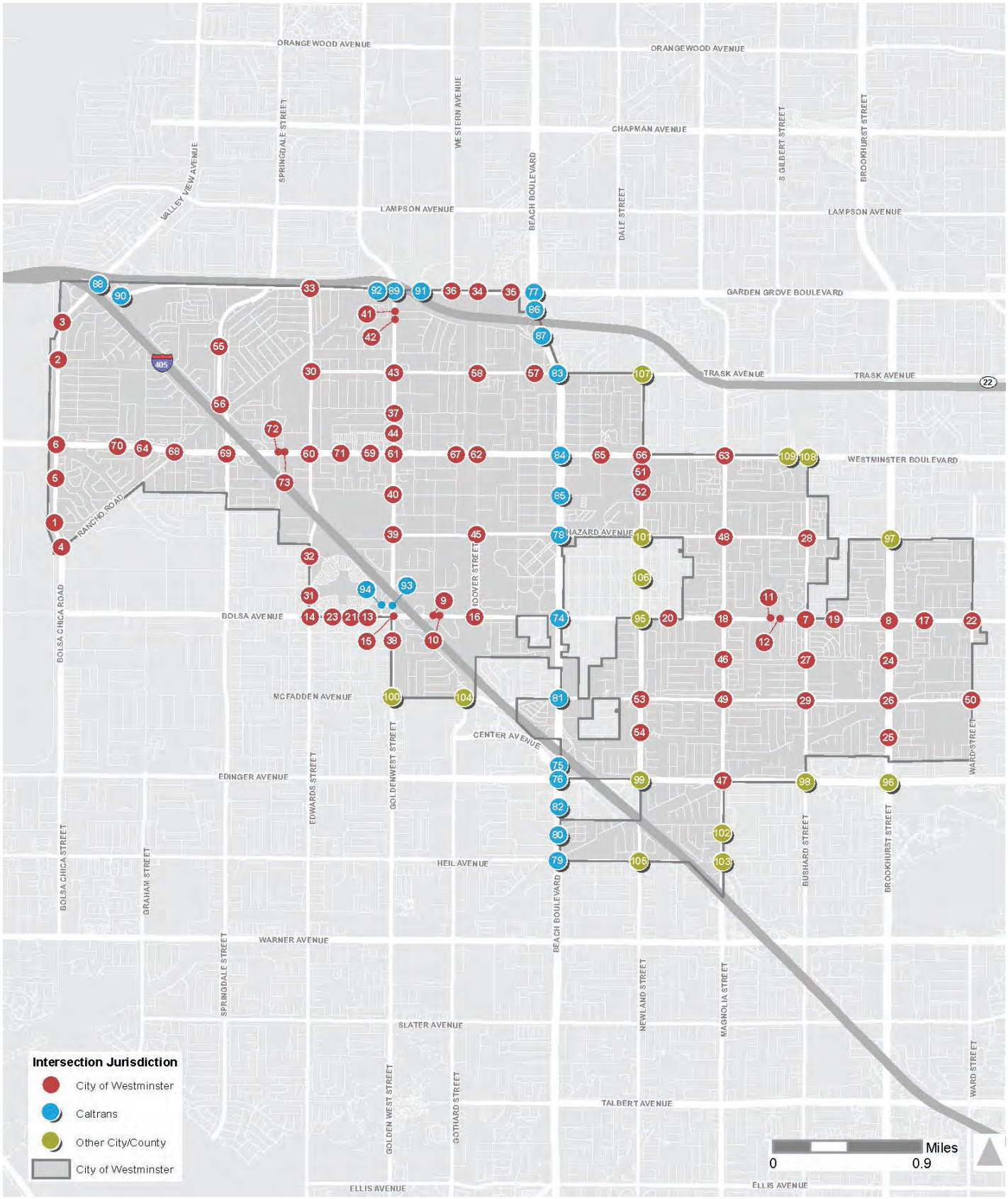


Figure 5-1

Peak Hour Traffic Volumes and Lane Configurations

Cumulative (2035) Conditions

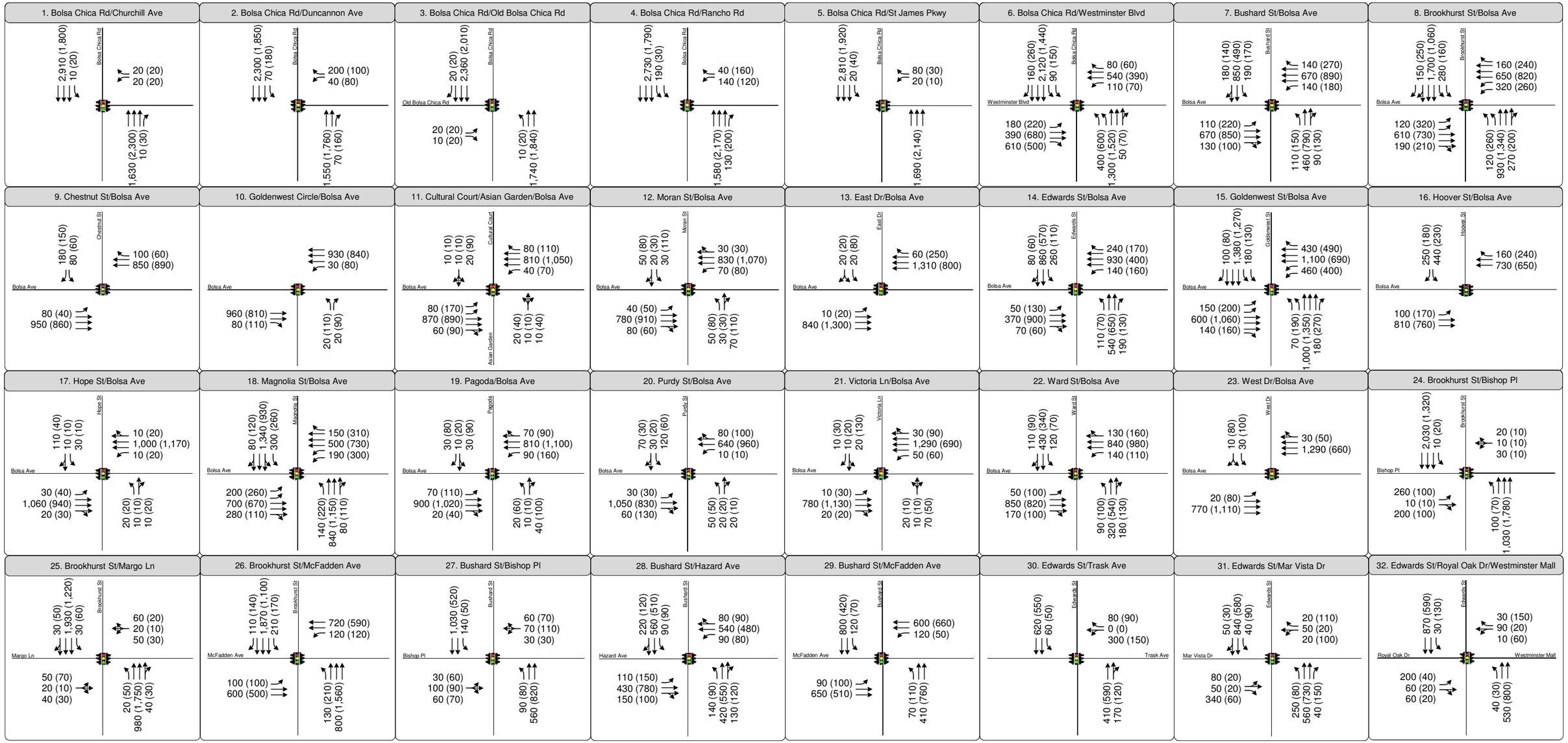


Figure 5-1

Peak Hour Traffic Volumes and Lane Configurations - Cumulative (2035) Conditions

FEHR PEERS

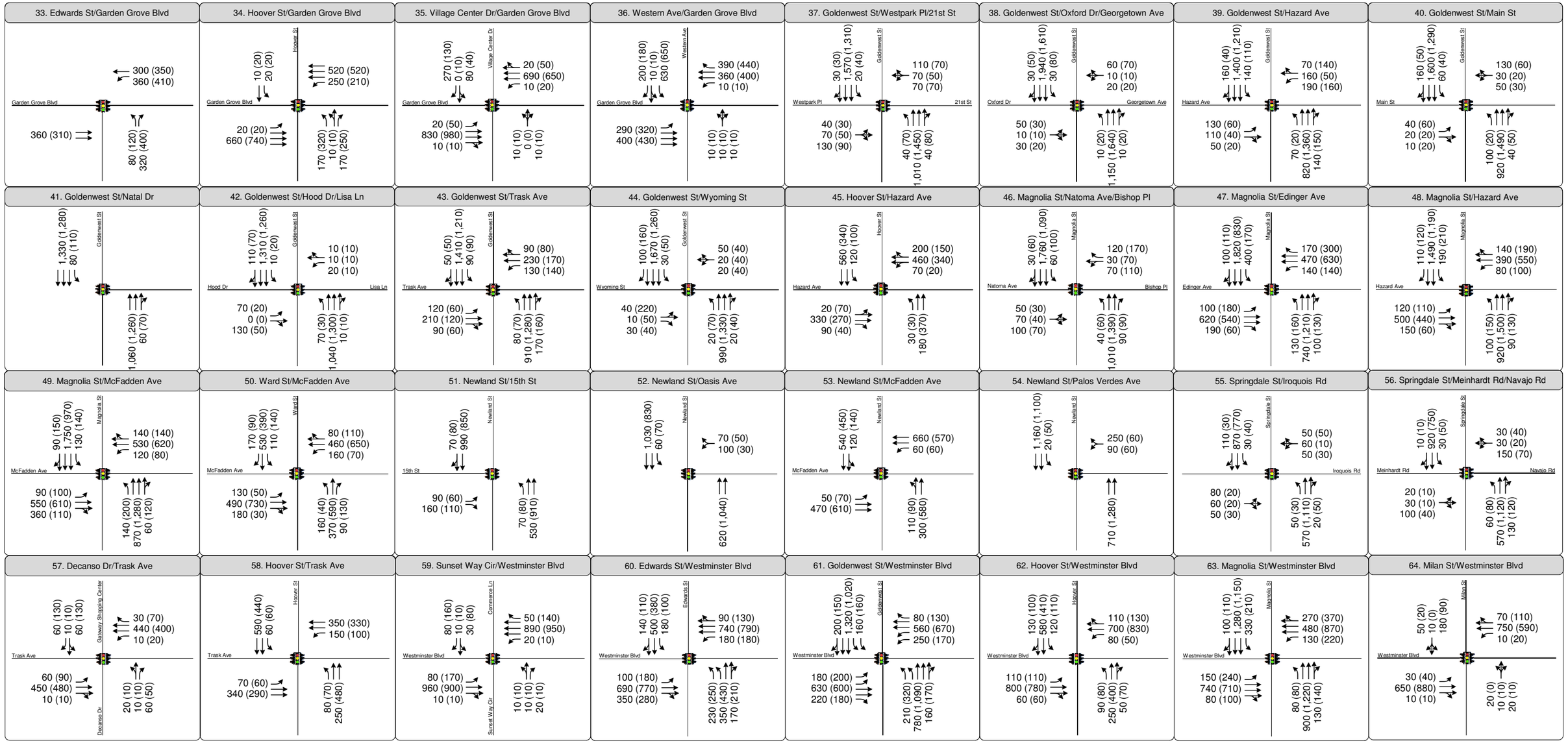


Figure 5-1

Peak Hour Traffic Volumes and Lane Configurations - Cumulative (2035) Conditions

FEHR & PEERS

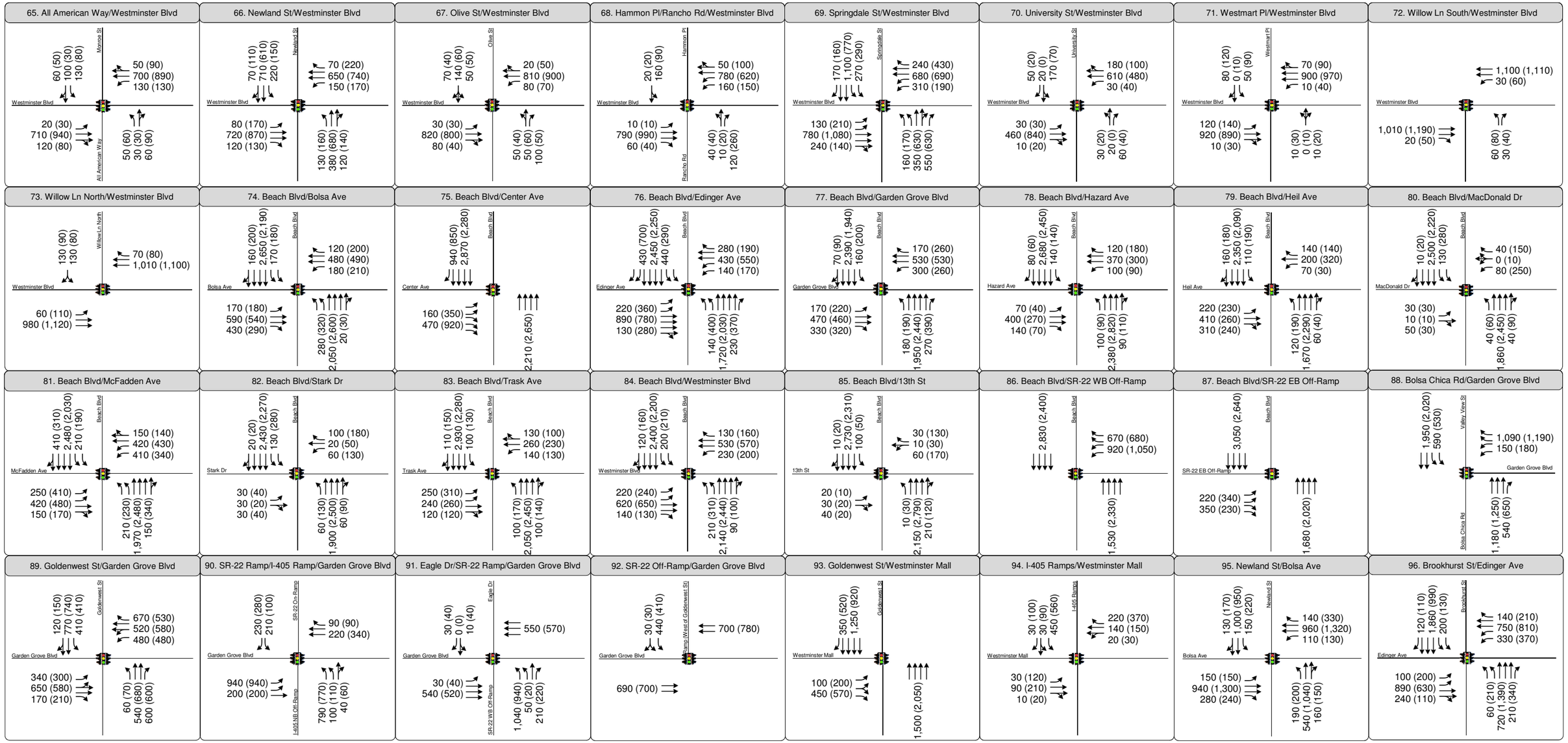


Figure 5-1

Peak Hour Traffic Volumes and Lane Configurations - Cumulative (2035) Conditions

FEHR & PEERS

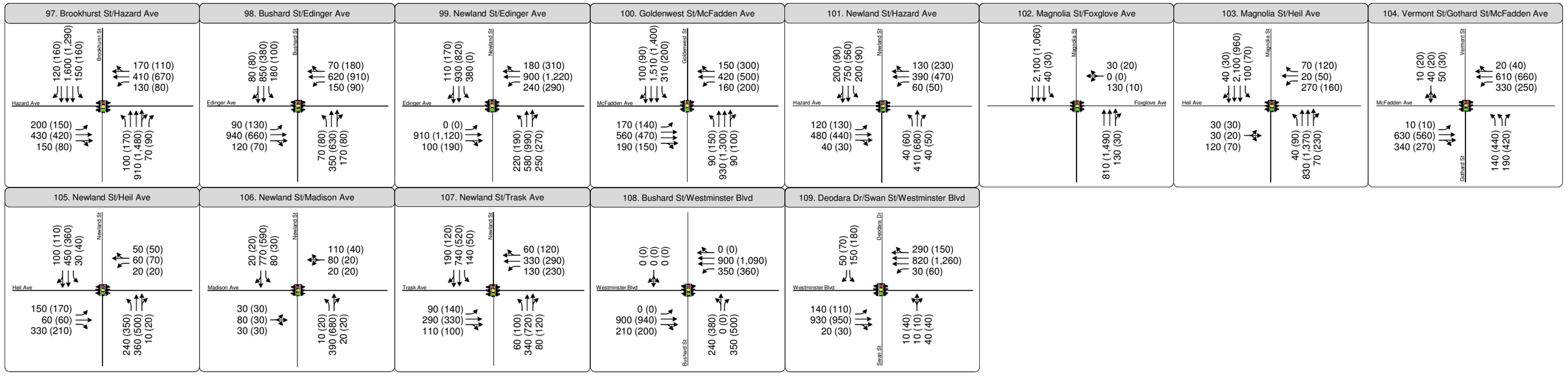
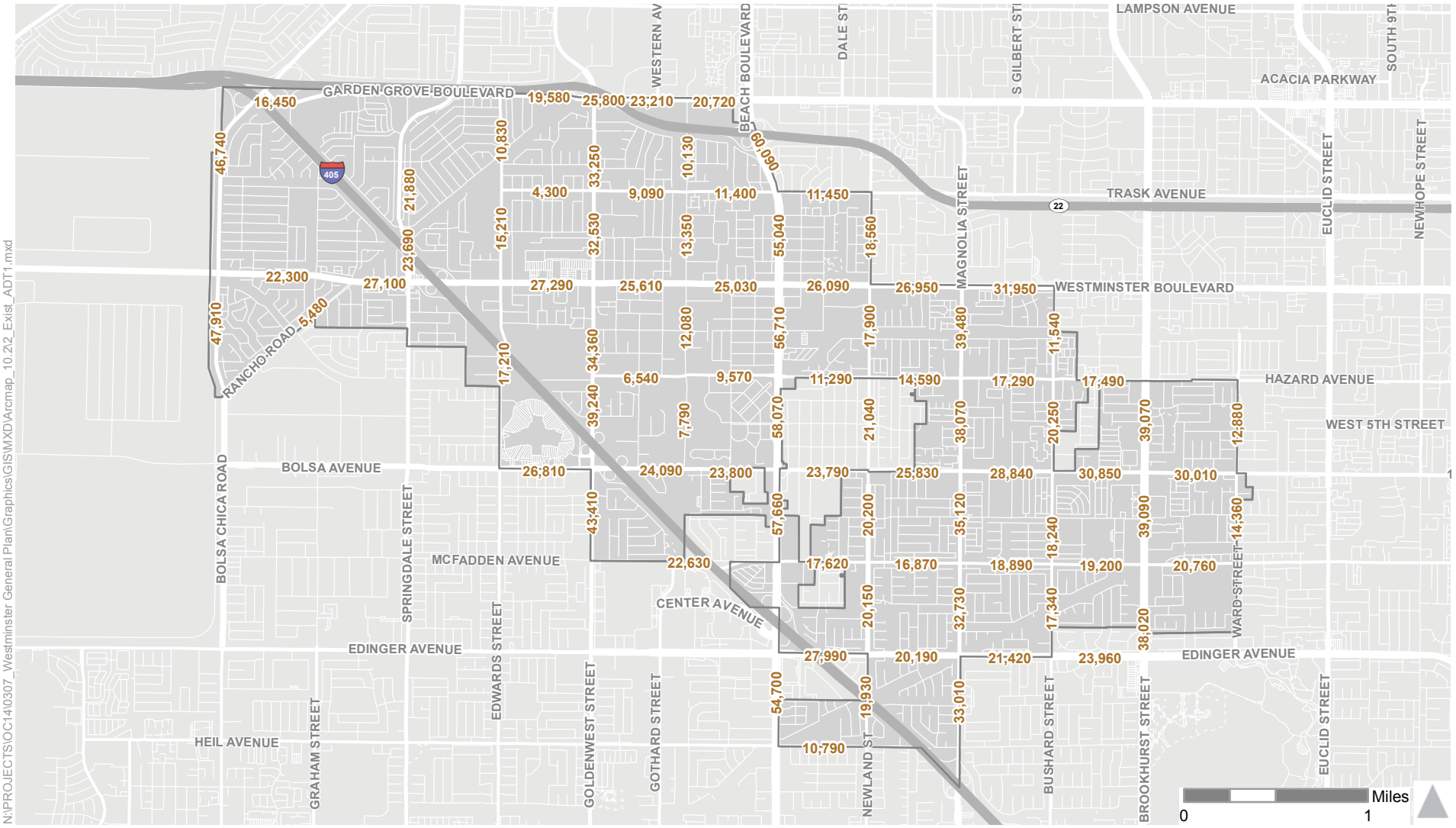


Figure 5-1
Peak Hour Traffic Volumes and Lane Configurations - Cumulative (2035) Conditions



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City of Westminster

XX,XXX Average Daily Traffic

Figure 5-2

City of Westminster General Plan Update - Cummulative (2035) ADT

TABLE 5-1
CUMULATIVE (2035) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
1	Bolsa Chica Road & Churchill Avenue	Signalized	AM	1.1	A
			PM	1.3	A
2	Bolsa Chica Road & Duncannon Avenue	Signalized	AM	2.0	A
			PM	6.4	A
3	Bolsa Chica Road & Old Bolsa Chica Road	Signalized	AM	3.5	A
			PM	3.2	A
4	Bolsa Chica Road & Rancho Road	Signalized	AM	7.2	A
			PM	9.1	A
5	Bolsa Chica Road & St. James Street	Signalized	AM	1.8	A
			PM	1.7	A
6	Bolsa Chica Road & Westminster Boulevard	Signalized	AM	63.4	**E**
			PM	45.8	D
7	Bolsa Avenue & Bushard Street	Signalized	AM	29.6	C
			PM	42.9	D
8	Bolsa Avenue & Brookhurst Street	Signalized	AM	27.0	C
			PM	43.9	D
9	Bolsa Avenue & Chestnut Street[1]	Signalized	AM	12.6	B
			PM	15.1	B
10	Bolsa Avenue & Goldenwest Circle[1]	Signalized	AM	9.7	A
			PM	15.4	B
11	Bolsa Avenue & Cultural Court/Asian Garden[1]	Signalized	AM	9.4	A
			PM	15.1	B
12	Bolsa Avenue & Moran Street[1]	Signalized	AM	10.4	B
			PM	15.8	B
13	Bolsa Avenue & East Drive	Signalized	AM	2.2	A
			PM	2.9	A

TABLE 5-1
CUMULATIVE (2035) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
14	Bolsa Avenue & Edwards Street	Signalized	AM	36.7	D
			PM	38.6	D
15	Bolsa Avenue & Goldenwest Street	Signalized	AM	24.7	C
			PM	35.0	D
16	Bolsa Avenue & Hoover Street	Signalized	AM	9.7	A
			PM	6.5	A
17	Bolsa Avenue & Hope Street	Signalized	AM	14.6	B
			PM	5.5	A
18	Bolsa Avenue & Magnolia Street	Signalized	AM	48.7	D
			PM	50.2	D
19	Bolsa Avenue & Pagoda	Signalized	AM	16.8	B
			PM	25.3	C
20	Bolsa Avenue & Purdy Street	Signalized	AM	10.7	B
			PM	8.0	A
21	Bolsa Avenue & Victoria Lane	Signalized	AM	4.9	A
			PM	12.9	B
22	Bolsa Avenue & Ward Street	Signalized	AM	30.5	C
			PM	24.1	C
23	Bolsa Avenue & West Drive	Signalized	AM	1.7	A
			PM	6.7	A
24	Brookhurst Street & Bishop Place	Signalized	AM	9.1	A
			PM	7.9	A
25	Brookhurst Street & Margo Lane	Signalized	AM	10.7	B
			PM	5.1	A
26	Brookhurst Street & McFadden Avenue	Signalized	AM	50.4	D
			PM	32.8	C

TABLE 5-1
CUMULATIVE (2035) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
27	Bushard Street & Bishop Place	Signalized	AM	17.4	B
			PM	9.2	A
28	Bushard Street & Hazard Avenue	Signalized	AM	25.4	C
			PM	31.0	C
29	Bushard Street & McFadden Avenue	Signalized	AM	33.0	C
			PM	28.8	C
30	Edwards Street & Trask Avenue[2]	Signalized	AM	15.3	B
			PM	11.0	B
31	Edwards Street & Mar Vista Street	Signalized	AM	33.9	C
			PM	15.1	B
32	Edwards Street & Royal Oak Drive	Signalized	AM	20.2	C
			PM	12.2	B
33	Garden Grove Boulevard & Edwards Street	Signalized	AM	26.1	C
			PM	33.8	C
34	Garden Grove Boulevard & Hoover Street	Signalized	AM	35.9	D
			PM	28.7	C
35	Garden Grove Boulevard & Village Center Drive	Signalized	AM	6.4	A
			PM	8.7	A
36	Garden Grove Boulevard & Western Avenue	Signalized	AM	53.0	D
			PM	67.0	**E**
37	Goldenwest Street & 21st Street	Signalized	AM	39.8	D
			PM	19.8	B
38	Goldenwest Street & Georgetown Avenue	Signalized	AM	4.5	A
			PM	7.1	A
39	Goldenwest Street & Hazard Avenue	Signalized	AM	29.1	C
			PM	31.2	C

TABLE 5-1
CUMULATIVE (2035) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
40	Goldenwest Street & Main Street	Signalized	AM	14.1	B
			PM	10.3	B
41	Goldenwest Street & Natal Drive[1]	Signalized	AM	15.5	B
			PM	12.6	B
42	Goldenwest Street & Hood Drive/Lisa Lane[1]	Signalized	AM	11.1	B
			PM	7.1	A
43	Goldenwest Street & Trask Avenue	Signalized	AM	30.6	C
			PM	28.9	C
44	Goldenwest Street & Wyoming Street	Signalized	AM	4.7	A
			PM	24.8	C
45	Hoover Street & Hazard Avenue	Signalized	AM	30.1	C
			PM	30.5	C
46	Magnolia Street & Bishop Place/Natoma Avenue	Signalized	AM	21.9	C
			PM	33.6	C
47	Magnolia Street & Edinger Avenue	Signalized	AM	41.6	D
			PM	44.9	D
48	Magnolia Street & Hazard Avenue	Signalized	AM	51.7	D
			PM	49.2	D
49	Magnolia Street & McFadden Avenue	Signalized	AM	56.2	**E**
			PM	39.9	D
50	McFadden Avenue & Ward Street	Signalized	AM	34.5	C
			PM	32.9	C
51	Newland Street & 15th Street	Signalized	AM	7.8	A
			PM	7.7	A
52	Newland Street & Oasis Avenue	Signalized	AM	7.9	A
			PM	6.2	A

TABLE 5-1
CUMULATIVE (2035) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
53	Newland Street & McFadden Avenue	Signalized	AM	43.3	D
			PM	53.5	D
54	Newland Street & Palos Verdes Avenue	Signalized	AM	24.4	C
			PM	8.7	A
55	Springdale Street & Iroquois Road	Signalized	AM	12.4	B
			PM	11.3	B
56	Springdale Street & Navajo Road/Meinhardt Road	Signalized	AM	12.7	B
			PM	12.1	B
57	Trask Avenue & Descanso Drive	Signalized	AM	4.8	A
			PM	43.9	D
58	Trask Avenue & Hoover Street	Signalized	AM	28.5	C
			PM	26.9	C
59	Westminster Boulevard & Commerce Way	Signalized	AM	26.5	C
			PM	31.6	C
60	Westminster Boulevard & Edwards Street	Signalized	AM	49.0	D
			PM	52.7	D
61	Westminster Boulevard & Goldenwest Street	Signalized	AM	28.7	C
			PM	25.4	C
62	Westminster Boulevard & Hoover Street	Signalized	AM	31.3	C
			PM	33.2	C
63	Westminster Boulevard & Magnolia Street	Signalized	AM	48.9	D
			PM	56.9	**E**
64	Westminster Boulevard & Milan Street	Signalized	AM	11.4	B
			PM	4.3	A
65	Westminster Boulevard & Monroe Street/All American Way	Signalized	AM	18.0	B
			PM	20.0	B

TABLE 5-1
CUMULATIVE (2035) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
66	Westminster Boulevard & Newland Street	Signalized	AM	36.7	D
			PM	51.4	D
67	Westminster Boulevard & Olive Street	Signalized	AM	18.3	B
			PM	13.1	B
68	Westminster Boulevard & Rancho Road/Hammon Place	Signalized	AM	18.8	B
			PM	10.6	B
69	Westminster Boulevard & Springdale Street	Signalized	AM	44.6	D
			PM	34.5	C
70	Westminster Boulevard & University Street	Signalized	AM	47.3	D
			PM	12.5	B
71	Westminster Boulevard & Westmart Place	Signalized	AM	22.1	C
			PM	15.6	B
72	Westminster Boulevard & Willow Lane South[1]	Signalized	AM	12.1	B
			PM	13.8	B
73	Westminster Boulevard & Willow Lane North[1]	Signalized	AM	12.6	B
			PM	8.6	A

Notes:
1- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections in close proximity.
2- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections with an exclusive pedestrian phase.
3- **Bold** indicates an LOS below the acceptable threshold.
4- Highway Capacity Manual 2010 methodology cannot accurately estimate intersection delay greater than 80 seconds for signalized intersections.

Source: Fehr & Peers, 2016

TABLE 5-2
CUMULATIVE (2035) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CALTRANS INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
74	Beach Boulevard & Bolsa Avenue	Signalized	AM	58.7	E
			PM	51.4	D
75	Beach Boulevard & Center Avenue	Signalized	AM	4.8	A
			PM	60.0	E
76	Beach Boulevard & Edinger Avenue	Signalized	AM	33.6	C
			PM	34.7	C
77	Beach Boulevard & Garden Grove	Signalized	AM	51.1	D
			PM	39.8	D
78	Beach Boulevard & Hazard Avenue	Signalized	AM	35.5	D
			PM	12.1	B
79	Beach Boulevard & Heil Avenue	Signalized	AM	50.7	D
			PM	45.6	D
80	Beach Boulevard & McDonald Avenue	Signalized	AM	20.6	C
			PM	17.0	B
81	Beach Boulevard & McFadden Avenue	Signalized	AM	53.5	D
			PM	66.0	E
82	Beach Boulevard & Stark Street	Signalized	AM	16.9	B
			PM	13.1	B
83	Beach Boulevard & Trask Avenue	Signalized	AM	26.4	C
			PM	69.1	E
84	Beach Boulevard & Westminster Boulevard	Signalized	AM	57.8	E
			PM	56.0	E
85	Beach Boulevard & 13th Street	Signalized	AM	3.7	A
			PM	15.4	B
86	Beach Boulevard & SR-22 WB Off-Ramp	Signalized	AM	27.5	C
			PM	27.3	C

TABLE 5-2
CUMULATIVE (2035) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CALTRANS INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
87	Beach Boulevard & SR-22 EB Off-Ramp	Signalized	AM	6.8	A
			PM	12.2	B
88	Bolsa Chica Road & Garden Grove Boulevard	Signalized	AM	27.2	C
			PM	36.3	**D**
89	Garden Grove Boulevard & Goldenwest Street	Signalized	AM	63.0	**E**
			PM	66.5	**E**
90	Garden Grove Boulevard & SR-22/I-405 Ramps	Signalized	AM	19.0	B
			PM	36.5	**D**
91	Garden Grove Boulevard & SR-22 WB Off-Ramp/Eagle Drive	Signalized	AM	71.2	**E**
			PM	40.4	**D**
92	Garden Grove Boulevard & SR-22 Off-Ramp (West of Golden West Street)	Signalized	AM	8.2	A
			PM	9.9	A
93	Goldenwest Street & I-405 Ramps	Signalized	AM	5.7	A
			PM	6.2	A
94	I-405 Ramps & Mall Ring Road	Signalized	AM	5.9	A
			PM	7.1	A

Notes:
1- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections in close proximity.
2- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections with an exclusive pedestrian phase.
3- **Bold** indicates an LOS below the acceptable threshold.
4- Highway Capacity Manual 2010 methodology cannot accurately estimate intersection delay greater than 80 seconds for signalized intersections.
5- Caltrans Route Concept of Operations states an acceptable LOS for Beach Boulevard as LOS E.

Source: Fehr & Peers, 2016

TABLE 5-3
CUMULATIVE (2035) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE OTHER JURISDICTION INTERSECTIONS

#	Intersection	Jurisdiction	Traffic Control	Peak Hour	V/C Ratio[1]	LOS
95	Bolsa Avenue & Newland Street	County of Orange	Signalized	AM	0.865	D
				PM	1.006	**F**
96	Brookhurst Street & Edinger Avenue	Fountain Valley	Signalized	AM	0.885	D
				PM	0.687	B
97	Brookhurst Street & Hazard Avenue	Garden Grove	Signalized	AM	0.734	C
				PM	0.770	C
98	Bushard Street & Edinger Avenue	Fountain Valley	Signalized	AM	0.765	C
				PM	0.715	C
99	Edinger Avenue & Newland Street	Huntington Beach	Signalized	AM	0.956	**E**
				PM	1.009	**F**
100	Goldenwest Street & McFadden Avenue	Huntington Beach	Signalized	AM	0.747	C
				PM	0.760	C
101	Hazard Avenue & Newland Street	County of Orange	Signalized	AM	0.656	B
				PM	0.815	D
102	Magnolia Street & Foxglove Avenue	Fountain Valley	Signalized	AM	0.556	A
				PM	0.383	A
103	Magnolia Street & Heil Avenue	Fountain Valley	Signalized	AM	0.758	C
				PM	0.570	A
104	McFadden Avenue & Gothard Street/Vermont Street	Huntington Beach	Signalized	AM	0.700	C
				PM	0.729	C
105	Newland Street & Heil Avenue	Huntington Beach	Signalized	AM	0.559	A
				PM	0.565	A
106	Newland Street & Madison Avenue	County of Orange	Signalized	AM	0.662	B
				PM	0.544	A

107	Newland Street & Trask Avenue	Garden Grove	Signalized	AM	0.553	A
				PM	0.588	A
108	Westminster Boulevard & Bushard Street	Garden Grove	Signalized	AM	0.698	B
				PM	0.770	C
109	Westminster Boulevard & Deodora Drive/Swan Street	Garden Grove	Signalized	AM	0.471	A
				PM	0.550	A

Notes:
1- V/C for signalized operations is based on application of Intersection Capacity Utilization methodology using Traffix software. V/C = Volume / Capacity ratio.
2- **Bold** indicates an LOS below the acceptable threshold.

Source: Fehr & Peers, 2016

5.2 ROADWAY SEGMENT OPERATION ANALYSIS

Roadway segment ADT and level of service for the Cumulative (2035) No Project Conditions is shown in Table 5-4. Freeway reports are provided Appendix C.

Table 5-4
Cumulative (2035) Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
Beach Boulevard			
Westminster Boulevard-Hazard Avenue	Caltrans (8)	56,710	C or better
Heil Avenue-Edinger Avenue	Caltrans (8)	54,700	C or better
McFadden Avenue-Bolsa Avenue	Caltrans (8)	57,660	C or better
Bolsa Avenue-Hazard Avenue	Caltrans (8)	58,070	C or better
Westminster Boulevard-Trask Avenue	Caltrans (8)	55,040	C or better
SR-22 Eastbound Off-Ramp-SR-22 Westbound Off-Ramp	Caltrans (8)	60,090	D

Table 5-4
Cumulative (2035) Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
Bolsa Avenue			
Hoover Street-Beach Boulevard	Major Arterial (4U)	23,800	**E**
Chestnut Street-Hoover Street	Major Arterial (4D)	24,090	C or better
Edwards Street-Goldenwest Street	Major Arterial (6)	26,810	C or better
Beach Boulevard-Newland Street	Major Arterial (4D)	23,790	C or better
Newland Street-Magnolia Street	Major Arterial (4D)	25,830	C or better
Magnolia Street-Bushard Street	Major Arterial (6)	28,840	C or better
Bushard Street-Brookhurst Street	Major Arterial (6)	30,850	C or better
Brookhurst Street-Ward Street	Major Arterial (6)	30,010	C or better
Bolsa Chica Road			
Duncannon Avenue-Old Bolsa Chica Road	Major Arterial (6)	46,740	D
Rancho Road-Westminster Boulevard	Major Arterial (6)	47,910	D
Brookhurst Street			
Edinger Avenue-Margo Lane	Major Arterial (6)	38,020	C or better
McFadden Avenue-Bolsa Avenue	Major Arterial (6)	39,090	C or better
Bolsa Avenue-Hazard Avenue	Major Arterial (6)	39,070	C or better
Bushard Street			
McFadden Avenue-Bishop Place	Secondary (4U)	18,240	C or better
Edinger Avenue-McFadden Avenue	Secondary (4U)	17,340	C or better
Bolsa Avenue-Hazard Avenue	Secondary (4U)	20,250	D

Table 5-4
Cumulative (2035) Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
Hazard Avenue-Westminster Boulevard	Secondary (4U)	11,540	C or better
Edinger Avenue			
Newland Street-Magnolia Street	Primary (4U)	20,190	D
Beach Boulevard-Newland Street	Primary (4U)	27,990	**F**
Magnolia Street-Bushard Street	Primary (4D)	21,420	C or better
Bushard Street-Brookhurst Street	Primary (4D)	23,960	C or better
Edwards Street			
Westminster Boulevard-Trask Avenue	Primary (4U)	15,210	C or better
Bolsa Avenue-Westminster Boulevard	Primary (4U)	17,210	C or better
Trask Avenue-Garden Grove Boulevard	Secondary (4U)	10,830	C or better
Garden Grove Boulevard			
Hoover Street-Beach Boulevard	Primary (6)	20,720	C or better
Bolsa Chica Road-22/405 Ramps	Primary (4D)	16,450	C or better
Edwards Street-Goldenwest Street	Primary (4D)	19,580	C or better
Goldenwest Street-22 WB Off Ramp/Eagle Drive	Major Arterial (6)	25,800	C or better
SR-22 WB Off Ramp/Eagle Drive-Hoover Street	Major Arterial (6)	23,210	C or better
Goldenwest Street			
Hazard Avenue-Main Street	Major Arterial (6)	34,360	C or better
McFadden Avenue-Bolsa Avenue	Major Arterial (6)	43,410	C or better
I-405-Hazard Avenue	Major Arterial (6)	39,240	C or better

Table 5-4
Cumulative (2035) Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
Westminster Boulevard-Trask Avenue	Major Arterial (6)	32,530	C or better
Trask Avenue-Garden Grove Boulevard	Major Arterial (6)	33,250	C or better
Hazard Avenue			
Bushard Street-Brookhurst Street	Secondary (4U)	17,490	C or better
Goldenwest Street-Hoover Street	Secondary (4U)	6,540	C or better
Hoover Street-Beach Boulevard	Secondary (4U)	9,570	C or better
Beach Boulevard-Newland Street	Secondary (4U)	11,290	C or better
Newland Street-Magnolia Street	Secondary (4U)	14,590	C or better
Magnolia Street-Bushard Street	Secondary (4U)	17,290	C or better
Heil Avenue			
Beach Boulevard-Newland Street	Secondary (2)	10,790	D
Hoover Street			
Westminster Boulevard-Trask Avenue	Secondary (4U)	13,350	C or better
Bolsa Avenue-Hazard Avenue	Secondary (4U)	7,790	C or better
Hazard Avenue-Westminster Boulevard	Secondary (4U)	12,080	C or better
Trask Avenue-Garden Grove Boulevard	Secondary (4U)	10,130	C or better
Magnolia Street			
Bolsa Avenue-Hazard Avenue	Primary (6)	38,070	C or better
Edinger Avenue-McFadden Avenue	Primary (6)	32,730	C or better
Heil Avenue-Edinger Avenue	Primary (6)	33,010	C or better

Table 5-4
Cumulative (2035) Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
McFadden Avenue-Bolsa Avenue	Primary (6)	35,120	C or better
Hazard Avenue-Westminster Boulevard	Primary (6)	39,480	C or better
McFadden Avenue			
Goldenwest Street-Beach Boulevard	Primary (4D)	22,630	C or better
Beach Boulevard-Newland Street	Primary (4D)	17,620	C or better
Newland Street-Magnolia Street	Primary (4D)	16,870	C or better
Magnolia Street-Bushard Street	Primary (4D)	18,890	C or better
Bushard Street-Brookhurst Street	Primary (4D)	19,200	C or better
Brookhurst Street-Ward Street	Primary (4D)	20,760	C or better
Newland Street			
McFadden Avenue-Bolsa Avenue	Primary (4D)	20,200	C or better
Heil Avenue-Edinger Avenue	Primary (2)	19,930	**F**
Edinger Avenue-McFadden Avenue	Primary (4D)	20,150	C or better
Bolsa Avenue-Hazard Avenue	Primary (2)	21,040	**F**
Hazard Avenue-Westminster Boulevard	Primary (4D)	17,900	C or better
Westminster Boulevard-Trask Avenue	Primary (4D)	18,560	C or better
Rancho Road			
Bolsa Chica Road-Westminster Boulevard	Secondary (2)	5,480	C or better
Springdale Street			
Westminster Boulevard-Navajo Road	Primary (4U)	23,690	**E**

Table 5-4
Cumulative (2035) Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
Navajo Road-Iroquois Road	Primary (4U)	21,880	D
Trask Avenue			
Edwards Street-Goldenwest Street	Secondary (4U)	4,300	C or better
Goldenwest Street-Hoover Street	Secondary (4U)	9,090	C or better
Hoover Street-Beach Boulevard	Primary (4U)	11,400	C or better
Beach Boulevard-Newland Street	Primary (4U)	11,450	C or better
Ward Street			
Bolsa Avenue-Hazard Avenue	Commuter (2)	12,880	**F**
McFadden Avenue-Bolsa Avenue	Commuter (4U)	14,360	C or better
Westminster Boulevard			
Newland Street-Magnolia Street	Primary (4D)	26,950	C or better
Hammon Plaza-Springdale Street	Primary (4D)	27,100	C or better
Bolsa Chica Road-Rancho Road	Primary (4D)	22,300	C or better
Edwards Street-Goldenwest Street	Primary (4D)	27,290	C or better
Goldenwest Street-Hoover Street	Primary (4D)	25,610	C or better
Hoover Street-Beach Boulevard	Primary (4D)	25,030	C or better
Beach Boulevard-Newland Street	Primary (4D)	26,090	C or better
Magnolia Street-Bushard Street	Primary (6)	31,950	C or better

Table 5-4
Cumulative (2035) Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS

Notes:
1- **Bold** indicates an LOS below the acceptable threshold.
2- 4U indicates a 4-lane undivided roadway; 4D indicates a 4-lane divided roadway.
Source: Fehr & Peers,

5.3 FREEWAY OPERATION ANALYSIS

5.3.1 MAINLINE SEGMENT ANALYSIS

Table 5-5 and Table 5-6 present the results of the freeway basic assessment for the SR-22 and I-405 freeways. Existing freeway mainline volumes were obtained from PeMS, truck percentages were taken from the 2014 Annual Average Daily Truck Traffic published by Caltrans, the terrain was assumed to be level, free-flow speed is assumed to be 65 miles per hour, and a peak hour factor of 0.95 was assumed for the segments. Additionally, the I-405 Design/Build Expansion project has been assumed for this scenario. This project adds a general purpose lane, converts the existing high-occupancy vehicle (HOV) lane into a high-occupancy toll (HOT) lane, and adds a HOT lane and in each direction. Freeway reports are provided in Appendix C.

TABLE 5-5 FREEWAY OPERATIONS-CUMULATIVE YEAR (2035) CONDITIONS

Segment	Type	AM			PM		
		V/C	Density	LOS	V/C	Density	LOS
SR-22 Eastbound							
Seal Beach Boulevard to I-405 Diverge	Basic	0.59	21.22	C	0.56	20.09	C
I-405 Diverge to Valley View Street	Basic	0.60	21.74	C	0.51	18.31	C

Valley View Street to Goldenwest Street	Basic	0.52	18.69	C	0.52	18.80	C
Goldenwest Street to Beach Boulevard	Basic	**0.33**	**-**	**F**	0.46	-	**F**
Beach Boulevard to Magnolia Street	Basic	0.53	-	**F**	0.64	23.33	C
Magnolia Street to Brookhurst Street	Basic	0.44	-	**F**	0.58	21.11	C
Brookhurst Street to Euclid Street	Basic	**0.47**	**-**	**F**	0.57	20.61	C
SR-22 Westbound							
Euclid Street to Brookhurst Street	Basic	0.60	21.74	C	**0.61**	**-**	**F**
Brookhurst Street to Magnolia Street	Basic	0.58	21.11	C	**0.60**	**-**	**F**
Magnolia Street to Beach Boulevard	Basic	0.65	23.60	C	0.61	21.99	C
Beach Boulevard to Goldenwest Street	Basic	0.59	21.40	C	0.52	18.91	C
Goldenwest Street to Valley View Street	Basic	0.72	26.68	**D**	0.74	27.68	**D**
Valley View Street to I-405 Merge	Basic	**0.33**	**-**	**F**	**0.31**	**-**	**F**
I-405 Merge to Seal Beach Boulevard	Basic	0.52	18.86	C	0.58	20.96	C

Notes:
1. Calculated using methodologies consistent with the Highway Capacity Manual
2. Density reported as passenger cars per mile per lane
3. **Bold** indicates unacceptable operations

TABLE 5-6 FREEWAY OPERATIONS-CUMULATIVE YEAR (2035) CONDITIONS

Segment	Type	AM			PM		
		V/C	Density	LOS	V/C	Density	LOS
I-405 Southbound							
Seal Beach Boulevard to SR-22	Basic	0.53	19.00	C	0.56	20.19	C
SR-22 to Bolsa Chica Road	Basic	0.51	18.45	C	0.45	16.15	B
Bolsa Chica Road to Westminster Boulevard	Basic	0.46	16.61	B	0.62	22.29	C
Westminster Boulevard to Bolsa Avenue	Basic	0.42	15.06	B	0.51	18.55	C

Bolsa Avenue to Beach Boulevard	Basic	0.33	11.83	B	0.57	20.47	C
Beach Boulevard to Magnolia Street	Basic	0.33	11.83	B	0.57	20.47	C
Magnolia Street to Warner Avenue	Basic	0.43	15.39	B	0.61	22.22	C
Warner Avenue to Brookhurst Street	Basic	0.56	20.37	C	0.61	21.99	C
Brookhurst Street to Euclid Street	Basic	0.51	18.56	C	0.44	15.79	B
I-405 Northbound							
Euclid Street to Brookhurst Street	Basic	0.44	15.76	B	0.37	13.46	B
Brookhurst Street to Warner Avenue	Basic	0.62	22.32	C	0.58	20.93	C
Warner Avenue to Magnolia Street	Basic	0.54	19.67	C	0.49	17.73	B
Magnolia Street to Beach Boulevard	Basic	0.54	19.51	C	0.51	18.39	C
Beach Boulevard to Bolsa Avenue	Basic	0.65	23.76	C	0.62	22.46	C
Bolsa Avenue to Westminster Boulevard	Basic	0.65	23.76	C	0.62	22.46	C
Westminster Boulevard to Bolsa Chica Road	Basic	0.58	21.02	C	0.64	23.08	C
Bolsa Chica Road to SR-22	Basic	0.50	17.99	B	0.52	18.88	C
SR-22 to Seal Beach Boulevard	Basic	0.52	18.95	C	0.58	21.06	C

Notes:
1. Calculated using methodologies consistent with the Highway Capacity Manual
2. Density reported as passenger cars per mile per lane
3. **Bold** indicates unacceptable operations

As shown in Table 4-5 and Table 4-6, several freeway segments operate unacceptably (LOS D, LOS E, or LOS F) during the AM or PM Peak Hours:

- SR-22 Eastbound, between Goldenwest Street and Beach Boulevard
- SR-22 Eastbound, between Beach Boulevard and Magnolia Street
- SR-22 Eastbound, between Magnolia Street and Brookhurst Street
- SR-22 Eastbound, between Brookhurst Street and Euclid Street
- SR-22 Westbound, between Euclid Street and Brookhurst Street
- SR-22 Westbound, between Brookhurst Street and Magnolia Street
- SR-22 Westbound, between Goldenwest Street and Valley View Street
- SR-22 Westbound, between Valley View Street and I-405 Merge

5.3.2 OFF-RAMP QUEUING ANALYSIS

The table below presents the freeway off-ramp queueing analysis for Caltrans off-ramp facilities in the study area.

TABLE 5-7
CALTRANS OFF-RAMP QUEUING ANALYSIS
CUMULATIVE (2035) NO PROJECT CONDITIONS

Off-Ramp Location	95th Percentile Queue (feet)		Available Storage (feet)
	AM	PM	
#86. Beach Boulevard & SR-22 WB Off-Ramp	604	740	1,600
#87. Beach Boulevard & SR-22 EB Off-Ramp	232	207	1,500
#90. Garden Grove Boulevard & SR-22 EB Off-Ramp	272	246	1,140
#90. Garden Grove Boulevard & I-405 NB Off-Ramp	569	495	1,030
#91. Garden Grove Boulevard & SR-22 WB Off-Ramp/Eagle Drive	370	275	1,030
#92. Garden Grove Boulevard & SR-22 Off-Ramp	110	117	970
#94. I-405 Ramps & Mall Ring Road	67	113	810

Source: Fehr & Peers (2016).

6.0 CUMULATIVE (2035) PLUS PROJECT CONDITIONS

6.1 INTERSECTION OPERATION ANALYSIS

Intersection delay and level of service for the Cumulative (2035) Plus Project Conditions is provided Table 6-1 below.

6.2 ROADWAY SEGMENT OPERATION ANALYSIS

Roadway segment ADT and level of service for the Cumulative (2035) Plus Project Conditions is shown in Table 6-1, Table 6-2, and Table 6-3. Synchro and Traffix reports are provided in Appendix B.

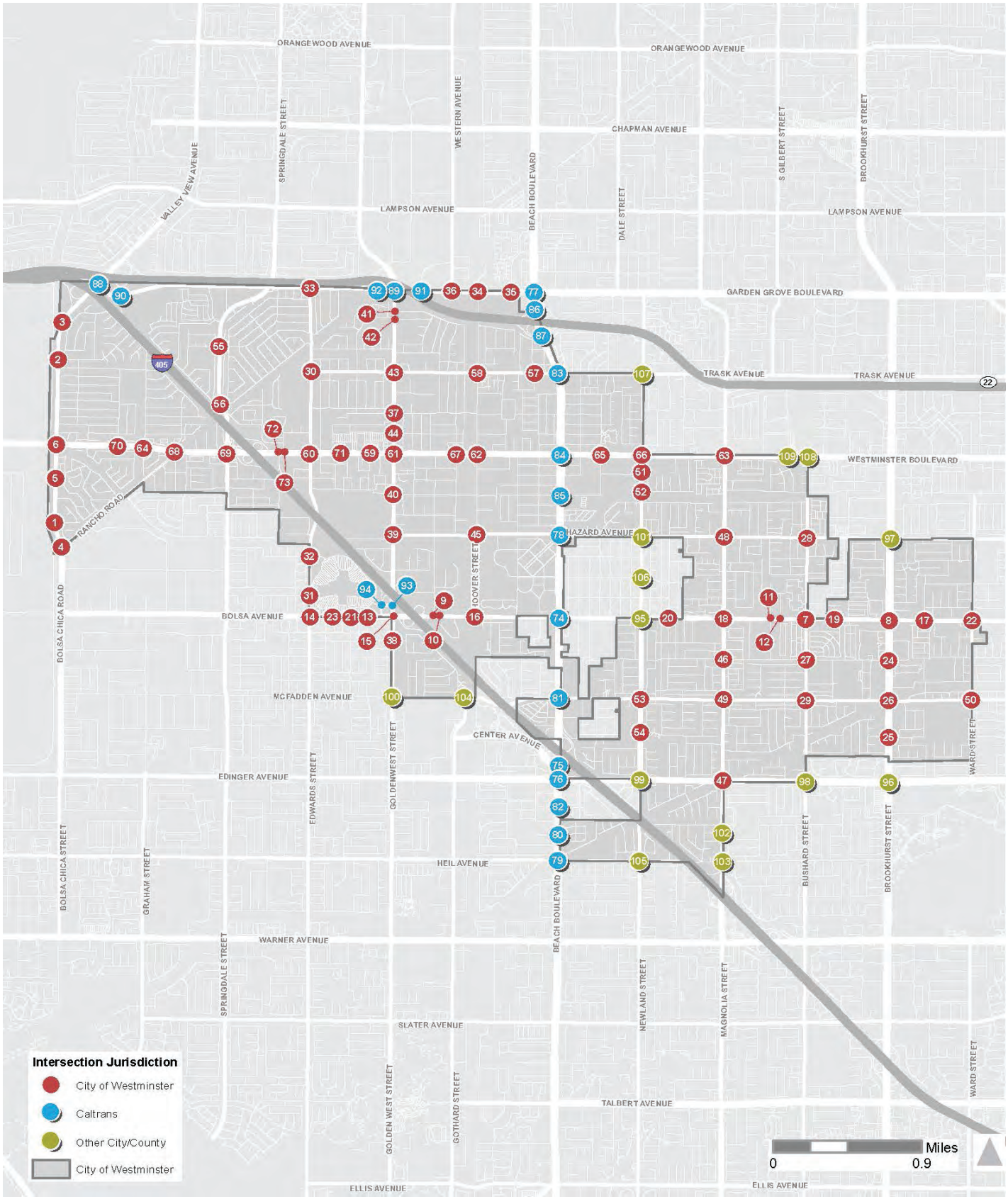


Figure 6-1
Peak Hour Traffic Volumes and Lane Configurations
Cumulative (2035) Plus Project Conditions

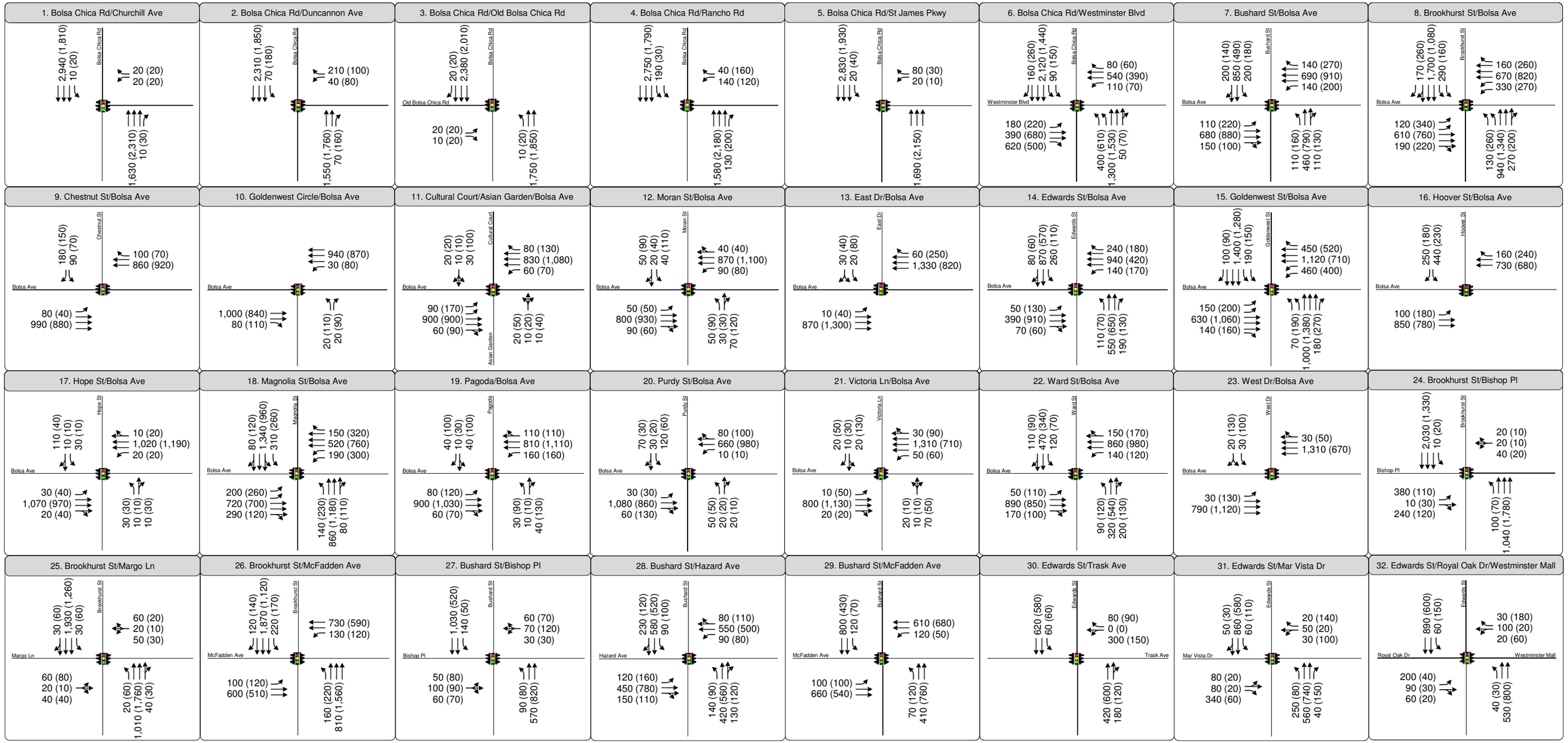
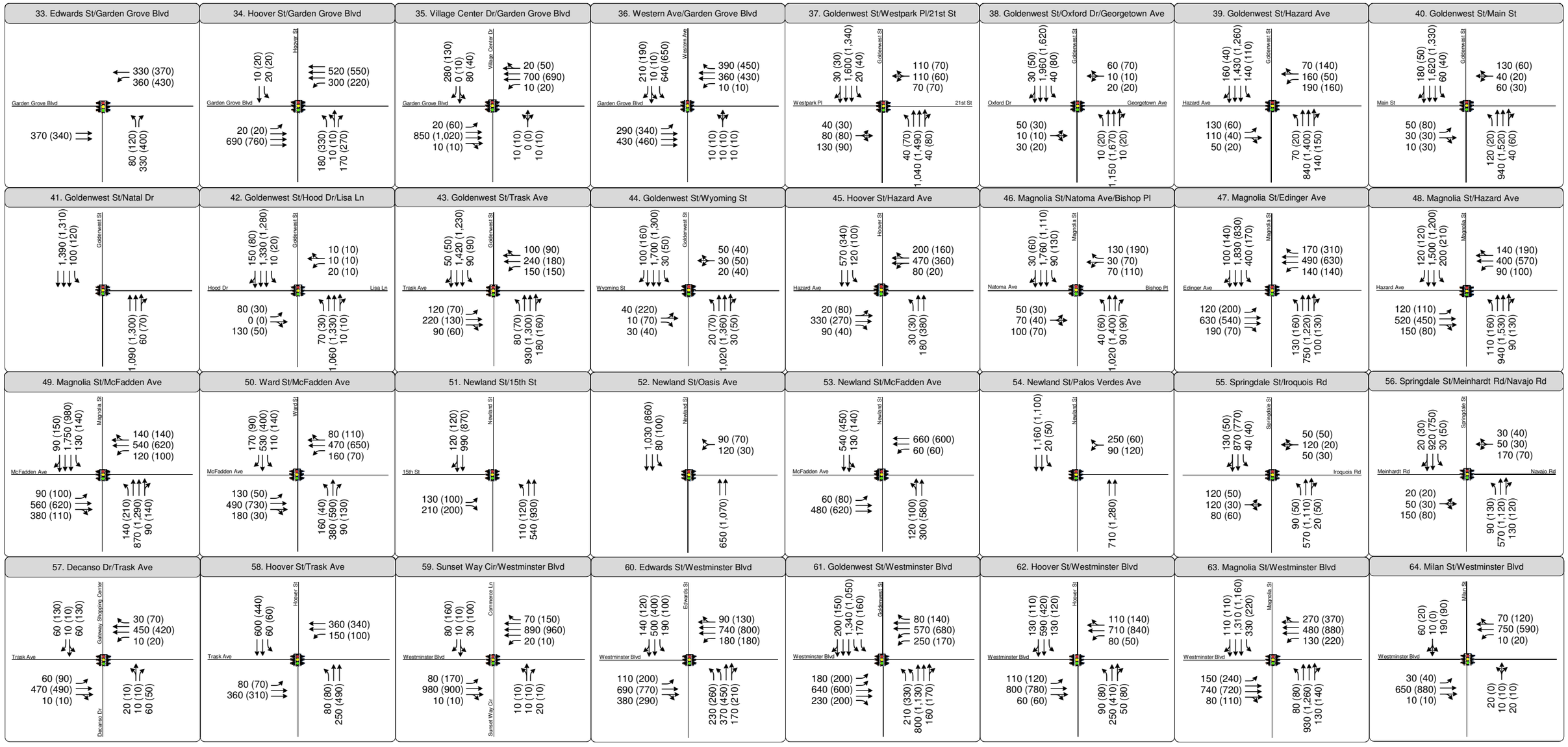


Figure 6-1

Peak Hour Traffic Volumes and Lane Configurations - Cumulative (2035) Plus Project Conditions

FEHR PEERS



FEHR PEERS

Figure 6-1

Peak Hour Traffic Volumes and Lane Configurations - Cumulative (2035) Plus Project Conditions

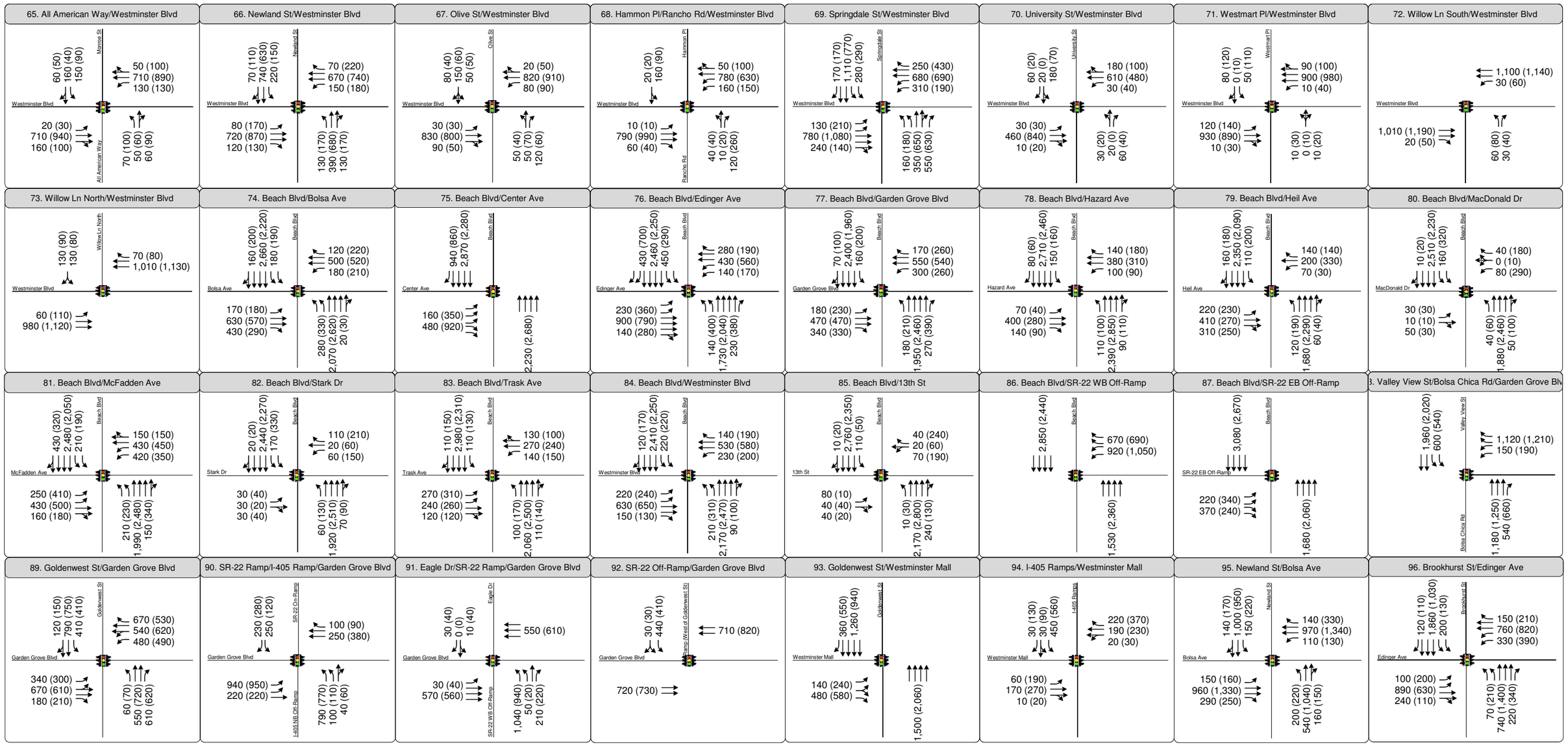


Figure 6-1

Peak Hour Traffic Volumes and Lane Configurations - Cumulative (2035) Plus Project Conditions

FEHR & PEERS

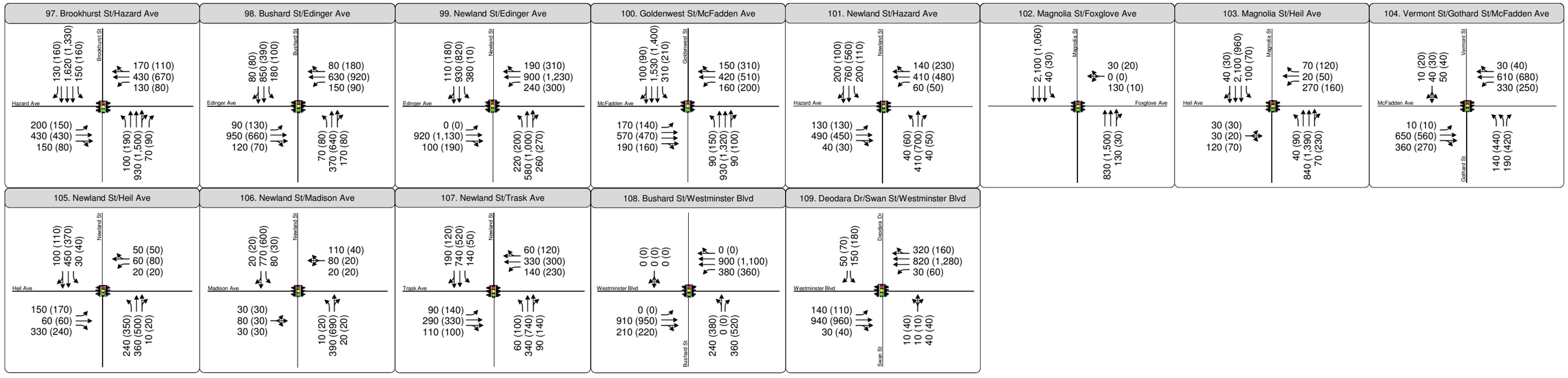
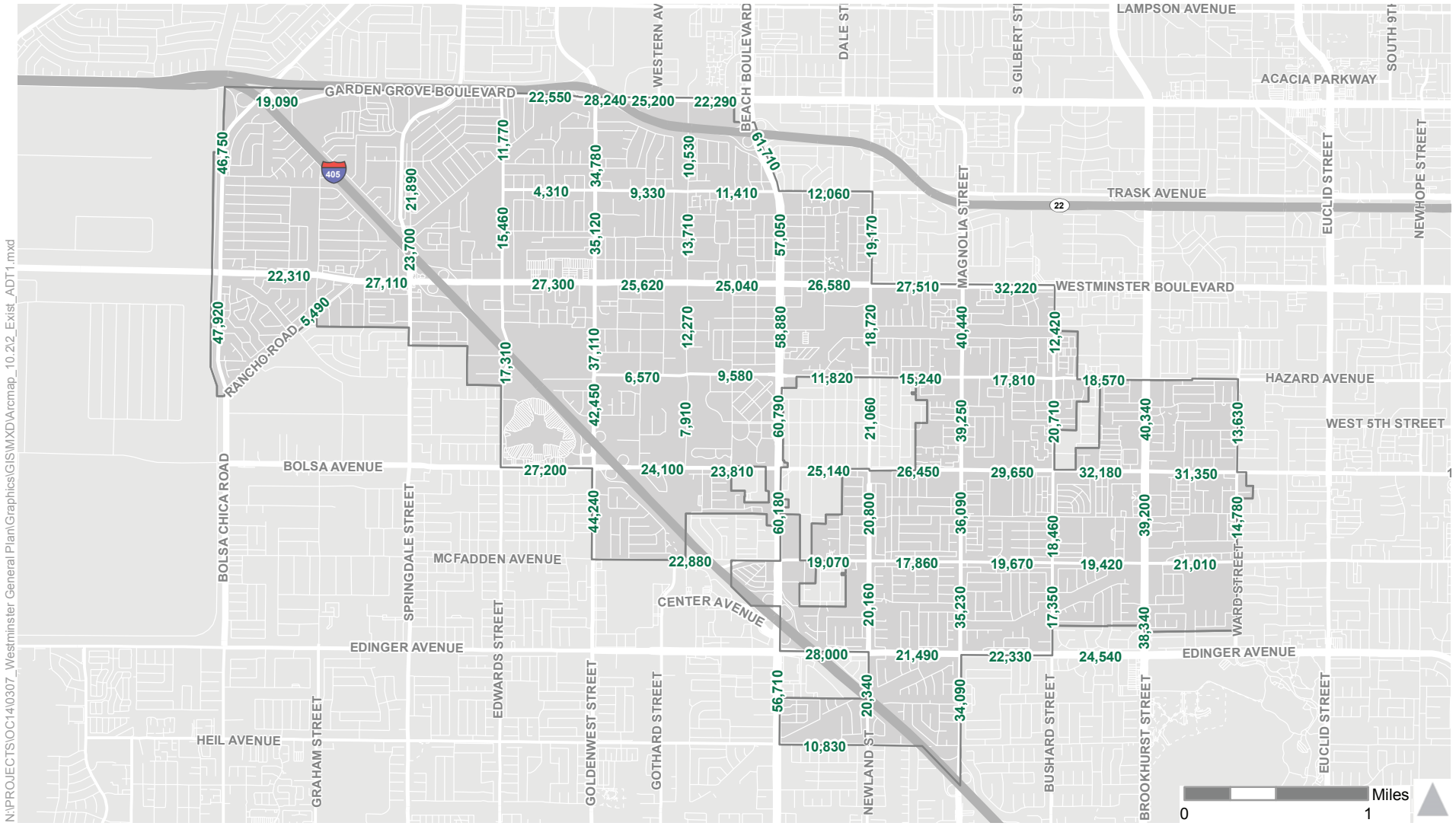


Figure 6-1

Peak Hour Traffic Volumes and Lane Configurations - Cumulative (2035) Plus Project Conditions



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City of Westminster

XX,XXX Average Daily Traffic

Figure 6-2

City of Westminster General Plan Update - Cummulative (2035) Plus Project ADT

TABLE 6-1
CUMULATIVE (2035) PLUS PROJECT CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE
CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Priority[5]	Peak Hour	Delay	LOS
1	Bolsa Chica Road & Churchill Avenue	Signalized	AUTO	AM	1.1	A
				PM	1.3	A
2	Bolsa Chica Road & Duncannon Avenue	Signalized	AUTO	AM	2.0	A
				PM	6.4	A
3	Bolsa Chica Road & Old Bolsa Chica Road	Signalized	AUTO	AM	3.5	A
				PM	3.2	A
4	Bolsa Chica Road & Rancho Road	Signalized	AUTO	AM	7.2	A
				PM	9.1	A
5	Bolsa Chica Road & St. James Street	Signalized	AUTO	AM	1.8	A
				PM	1.7	A
6	Bolsa Chica Road & Westminster Boulevard	Signalized	AUTO	AM	64.9	**E**
				PM	45.8	D
7	Bolsa Avenue & Bushard Street	Signalized	AUTO	AM	30.1	C
				PM	43.9	D
8	Bolsa Avenue & Brookhurst Street	Signalized	AUTO	AM	27.3	C
				PM	44.1	D
9	Bolsa Avenue & Chestnut Street[1]	Signalized	AUTO	AM	12.8	B
				PM	15.3	B
10	Bolsa Avenue & Goldenwest Circle[1]	Signalized	AUTO	AM	9.9	A
				PM	15.7	B
11	Bolsa Avenue & Cultural Court/Asian Garden[1]	Signalized	AUTO	AM	10.8	B
				PM	15.7	B
12	Bolsa Avenue & Moran Street[1]	Signalized	AUTO	AM	10.8	B
				PM	16.4	B
13	Bolsa Avenue & East Drive	Signalized	AUTO	AM	1.6	A
				PM	3.6	A

TABLE 6-1
CUMULATIVE (2035) PLUS PROJECT CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE
CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Priority[5]	Peak Hour	Delay	LOS
14	Bolsa Avenue & Edwards Street	Signalized	AUTO	AM	34.5	C
				PM	39.0	D
15	Bolsa Avenue & Goldenwest Street	Signalized	AUTO	AM	25.0	C
				PM	35.4	D
16	Bolsa Avenue & Hoover Street	Signalized	AUTO	AM	9.6	A
				PM	6.4	A
17	Bolsa Avenue & Hope Street	Signalized	AUTO	AM	15.3	B
				PM	5.9	A
18	Bolsa Avenue & Magnolia Street	Signalized	AUTO	AM	49.1	D
				PM	51.5	D
19	Bolsa Avenue & Pagoda	Signalized	AUTO	AM	18.9	B
				PM	26.3	C
20	Bolsa Avenue & Purdy Street	Signalized	AUTO	AM	10.6	B
				PM	7.9	A
21	Bolsa Avenue & Victoria Lane	Signalized	AUTO	AM	5.0	A
				PM	18.4	B
22	Bolsa Avenue & Ward Street	Signalized	AUTO	AM	30.8	C
				PM	24.4	C
23	Bolsa Avenue & West Drive	Signalized	AUTO	AM	2.2	A
				PM	8.6	A
24	Brookhurst Street & Bishop Place	Signalized	AUTO	AM	19.0	B
				PM	9.0	A
25	Brookhurst Street & Margo Lane	Signalized	AUTO	AM	11.1	B
				PM	5.4	A
26	Brookhurst Street & McFadden Avenue	Signalized	AUTO	AM	43.0	D
				PM	35.6	D

TABLE 6-1
CUMULATIVE (2035) PLUS PROJECT CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE
CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Priority[5]	Peak Hour	Delay	LOS
27	Bushard Street & Bishop Place	Signalized	NOT AUTO	AM	17.8	B
				PM	9.6	A
28	Bushard Street & Hazard Avenue	Signalized	AUTO	AM	28.3	C
				PM	32.1	C
29	Bushard Street & McFadden Avenue	Signalized	AUTO	AM	33.1	C
				PM	28.8	C
30	Edwards Street & Trask Avenue[2]	Signalized	NOT AUTO	AM	14.7	B
				PM	11.9	B
31	Edwards Street & Mar Vista Street	Signalized	AUTO	AM	35.8	D
				PM	16.4	B
32	Edwards Street & Royal Oak Drive	Signalized	AUTO	AM	26.3	C
				PM	13.3	B
33	Garden Grove Boulevard & Edwards Street	Signalized	AUTO	AM	25.7	C
				PM	35.4	D
34	Garden Grove Boulevard & Hoover Street	Signalized	NOT AUTO	AM	49.5	D
				PM	29.2	C
35	Garden Grove Boulevard & Village Center Drive	Signalized	NOT AUTO	AM	6.6	A
				PM	8.7	A
36	Garden Grove Boulevard & Western Avenue	Signalized	NOT AUTO	AM	54.8	D
				PM	65.8	**E**
37	Goldenwest Street & 21st Street	Signalized	AUTO	AM	40.7	D
				PM	20.2	C
38	Goldenwest Street & Georgetown Avenue	Signalized	AUTO	AM	4.6	A
				PM	7.0	A
39	Goldenwest Street & Hazard Avenue	Signalized	AUTO	AM	28.8	C
				PM	31.9	C

TABLE 6-1
CUMULATIVE (2035) PLUS PROJECT CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE
CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Priority[5]	Peak Hour	Delay	LOS
40	Goldenwest Street & Main Street	Signalized	AUTO	AM	17.5	B
				PM	10.7	B
41	Goldenwest Street & Natal Drive[1]	Signalized	AUTO	AM	16.5	B
				PM	13.2	B
42	Goldenwest Street & Hood Drive/Lisa Lane[1]	Signalized	AUTO	AM	11.3	B
				PM	7.8	A
43	Goldenwest Street & Trask Avenue	Signalized	AUTO	AM	31.7	C
				PM	32.8	C
44	Goldenwest Street & Wyoming Street	Signalized	AUTO	AM	4.7	A
				PM	29.7	C
45	Hoover Street & Hazard Avenue	Signalized	AUTO	AM	30.1	C
				PM	30.2	C
46	Magnolia Street & Bishop Place/Natoma Avenue	Signalized	AUTO	AM	22.4	C
				PM	28.2	C
47	Magnolia Street & Edinger Avenue	Signalized	AUTO	AM	43.2	D
				PM	46.5	D
48	Magnolia Street & Hazard Avenue	Signalized	AUTO	AM	53.1	D
				PM	50.2	D
49	Magnolia Street & McFadden Avenue	Signalized	NOT AUTO	AM	57.5	E
				PM	41.0	D
50	McFadden Avenue & Ward Street	Signalized	NOT AUTO	AM	34.1	C
				PM	32.8	C
51	Newland Street & 15th Street	Signalized	NOT AUTO	AM	9.9	A
				PM	8.1	A
52	Newland Street & Oasis Avenue	Signalized	NOT AUTO	AM	8.9	A
				PM	7.0	A

TABLE 6-1
CUMULATIVE (2035) PLUS PROJECT CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE
CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Priority[5]	Peak Hour	Delay	LOS
53	Newland Street & McFadden Avenue	Signalized	AUTO	AM	43.4	D
				PM	54.4	D
54	Newland Street & Palos Verdes Avenue	Signalized	AUTO	AM	24.3	C
				PM	11.0	B
55	Springdale Street & Iroquois Road	Signalized	AUTO	AM	17.7	B
				PM	12.3	B
56	Springdale Street & Navajo Road/Meinhardt Road	Signalized	AUTO	AM	15.9	B
				PM	13.2	B
57	Trask Avenue & Descanso Drive	Signalized	AUTO	AM	7.0	A
				PM	43.2	D
58	Trask Avenue & Hoover Street	Signalized	NOT AUTO	AM	28.7	C
				PM	27.4	C
59	Westminster Boulevard & Commerce Way	Signalized	AUTO	AM	26.5	C
				PM	40.8	D
60	Westminster Boulevard & Edwards Street	Signalized	AUTO	AM	51.3	D
				PM	53.6	D
61	Westminster Boulevard & Goldenwest Street	Signalized	AUTO	AM	28.8	C
				PM	25.1	C
62	Westminster Boulevard & Hoover Street	Signalized	AUTO	AM	32.0	C
				PM	34.6	C
63	Westminster Boulevard & Magnolia Street	Signalized	AUTO	AM	48.9	D
				PM	59.1	E
64	Westminster Boulevard & Milan Street	Signalized	AUTO	AM	11.4	B
				PM	4.3	A
65	Westminster Boulevard & Monroe Street/All American Way	Signalized	AUTO	AM	19.9	B
				PM	21.1	C

TABLE 6-1
CUMULATIVE (2035) PLUS PROJECT CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE
CITY OF WESTMINSTER INTERSECTIONS

#	Intersection	Traffic Control	Priority[5]	Peak Hour	Delay	LOS
66	Westminster Boulevard & Newland Street	Signalized	AUTO	AM	37.4	D
				PM	54.4	D
67	Westminster Boulevard & Olive Street	Signalized	AUTO	AM	19.3	B
				PM	14.5	B
68	Westminster Boulevard & Rancho Road/Hammon Place	Signalized	AUTO	AM	18.8	B
				PM	10.6	B
69	Westminster Boulevard & Springdale Street	Signalized	AUTO	AM	45.0	D
				PM	35.0	D
70	Westminster Boulevard & University Street	Signalized	AUTO	AM	53.1	D
				PM	12.5	B
71	Westminster Boulevard & Westmart Place	Signalized	AUTO	AM	22.1	C
				PM	15.7	B
72	Westminster Boulevard & Willow Lane South[1]	Signalized	AUTO	AM	12.1	B
				PM	13.8	B
73	Westminster Boulevard & Willow Lane North[1]	Signalized	AUTO	AM	12.6	B
				PM	9.0	A

Notes:
1- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections in close proximity.
2- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections with an exclusive pedestrian phase.
3- **Bold** indicates an LOS below the acceptable threshold.
4- Highway Capacity Manual 2010 methodology cannot accurately estimate intersection delay greater than 80 seconds for signalized intersections.
5- Auto/non-auto priority determined by proposed general plan roadway typology map. (Figure 2-1)

Source: Fehr & Peers, 2016

TABLE 6-2
CUMULATIVE (2035) PLUS PROJECT CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE
CALTRANS INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
74	Beach Boulevard & Bolsa Avenue	Signalized	AM	59.5	E
			PM	52.9	D
75	Beach Boulevard & Center Avenue	Signalized	AM	5.5	A
			PM	59.7	E
76	Beach Boulevard & Edinger Avenue	Signalized	AM	34.3	C
			PM	34.8	C
77	Beach Boulevard & Garden Grove	Signalized	AM	51.6	D
			PM	42.1	D
78	Beach Boulevard & Hazard Avenue	Signalized	AM	35.7	D
			PM	12.8	B
79	Beach Boulevard & Heil Avenue	Signalized	AM	50.7	D
			PM	46.2	D
80	Beach Boulevard & McDonald Avenue	Signalized	AM	20.9	C
			PM	21.7	C
81	Beach Boulevard & McFadden Avenue	Signalized	AM	55.6	E
			PM	66.8	E
82	Beach Boulevard & Stark Street	Signalized	AM	17.3	B
			PM	18.8	B
83	Beach Boulevard & Trask Avenue	Signalized	AM	28.2	C
			PM	71.6	E
84	Beach Boulevard & Westminster Boulevard	Signalized	AM	58.0	E
			PM	56.4	E
85	Beach Boulevard & 13th Street	Signalized	AM	5.8	A
			PM	18.2	B
86	Beach Boulevard & SR-22 WB Off-Ramp	Signalized	AM	27.4	C
			PM	27.3	C

TABLE 6-2
CUMULATIVE (2035) PLUS PROJECT CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE
CALTRANS INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	Delay	LOS
87	Beach Boulevard & SR-22 EB Off-Ramp	Signalized	AM	12.0	B
			PM	12.3	B
88	Bolsa Chica Road & Garden Grove Boulevard	Signalized	AM	27.3	C
			PM	32.9	C
89	Garden Grove Boulevard & Goldenwest Street	Signalized	AM	64.9	**E**
			PM	72.9	**E**
90	Garden Grove Boulevard & SR-22/I-405 Ramps	Signalized	AM	19.0	B
			PM	21.7	C
91	Garden Grove Boulevard & SR-22 WB Off-Ramp/Eagle Drive	Signalized	AM	70.5	**E**
			PM	40.3	**D**
92	Garden Grove Boulevard & SR-22 Off-Ramp (West of Golden West Street)	Signalized	AM	8.1	A
			PM	9.8	A
93	Goldenwest Street & I-405 Ramps	Signalized	AM	6.1	A
			PM	5.9	A
94	I-405 Ramps & Mall Ring Road	Signalized	AM	6.2	A
			PM	8.0	A

Notes:
1- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections in close proximity.
2- Intersections were analyzed using Highway Capacity Manual 2000 as Highway Capacity Manual 2010 does not analyze intersections with an exclusive pedestrian phase.
3- **Bold** indicates an LOS below the acceptable threshold.
4- Caltrans Route Concept of Operations states an acceptable LOS on Beach Boulevard as LOS E.

Source: Fehr & Peers, 2016

TABLE 6-3
CUMULATIVE (2035) PLUS PROJECT CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE
OTHER JURISDICTION INTERSECTIONS

#	Intersection	Jurisdiction	Traffic Control	Peak Hour	V/C Ratio[1]	LOS
95	Bolsa Avenue & Newland Street	County of Orange	Signalized	AM	0.876	D
				PM	1.018	**F**
96	Brookhurst Street & Edinger Avenue	Fountain Valley	Signalized	AM	0.888	D
				PM	0.695	B
97	Brookhurst Street & Hazard Avenue	Garden Grove	Signalized	AM	0.746	C
				PM	0.774	C
98	Bushard Street & Edinger Avenue	Fountain Valley	Signalized	AM	0.768	C
				PM	0.721	C
99	Edinger Avenue & Newland Street	Huntington Beach	Signalized	AM	0.962	**E**
				PM	1.026	**F**
100	Goldenwest Street & McFadden Avenue	Huntington Beach	Signalized	AM	0.750	C
				PM	0.775	C
101	Hazard Avenue & Newland Street	County of Orange	Signalized	AM	0.671	B
				PM	0.841	D
102	Magnolia Street & Foxglove Avenue	Fountain Valley	Signalized	AM	0.556	A
				PM	0.385	A
103	Magnolia Street & Heil Avenue	Fountain Valley	Signalized	AM	0.758	C
				PM	0.574	A
104	McFadden Avenue & Gothard Street/Vermont Street	Huntington Beach	Signalized	AM	0.712	C
				PM	0.741	C
105	Newland Street & Heil Avenue	Huntington Beach	Signalized	AM	0.559	A
				PM	0.574	A
106	Newland Street & Madison Avenue	County of Orange	Signalized	AM	0.662	B
				PM	0.550	A

TABLE 6-3
CUMULATIVE (2035) PLUS PROJECT CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE
OTHER JURISDICTION INTERSECTIONS

#	Intersection	Jurisdiction	Traffic Control	Peak Hour	V/C Ratio[1]	LOS
107	Newland Street & Trask Avenue	Garden Grove	Signalized	AM	0.559	A
				PM	0.600	A
108	Westminster Boulevard & Bushard Street	Garden Grove	Signalized	AM	0.721	C
				PM	0.782	C
109	Westminster Boulevard & Deodora Drive/Swan Street	Garden Grove	Signalized	AM	0.476	A
				PM	0.556	A

Notes:
1- V/C for signalized operations is based on application of Intersection Capacity Utilization methodology using Traffix software. V/C = Volume / Capacity ratio.
2- **Bold** indicates an LOS below an acceptable threshold.

Source: Fehr & Peers, 2016

Table 6-4
Cumulative (2035) Plus Project Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
Beach Boulevard			
Westminster Boulevard-Hazard Avenue	Arterial (8)	58,880	D
Heil Avenue-Edinger Avenue	Arterial (8)	56,710	D
McFadden Avenue-Bolsa Avenue	Arterial (8)	60,180	D
Bolsa Avenue-Hazard Avenue	Arterial (8)	60,790	D
Westminster Boulevard-Trask Avenue	Arterial (8)	57,050	D
SR-22 Eastbound Off-Ramp-SR-22 Westbound Off-Ramp	Arterial (8)	61,710	D

Table 6-4
Cumulative (2035) Plus Project Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
Bolsa Avenue			
Hoover Street-Beach Boulevard	Arterial (4)	23,810	D
Chestnut Street-Hoover Street	Arterial (4)	24,100	D
Edwards Street-Goldenwest Street	Arterial (6)	27,200	C or better
Beach Boulevard-Newland Street	Arterial (4)	25,140	D
Newland Street-Magnolia Street	Arterial (4)	26,450	D
Magnolia Street-Bushard Street	Multi-Way Boulevard (4)	29,650	D
Bushard Street-Brookhurst Street	Multi-Way Boulevard (4)	32,180	D
Brookhurst Street-Ward Street	Multi-Way Boulevard (4)	31,350	D
Bolsa Chica Road			
Duncannon Avenue-Old Bolsa Chica Road	Arterial (6)	46,750	D
Rancho Road-Westminster Boulevard	Arterial (6)	47,920	D
Brookhurst Street			
Edinger Avenue-Margo Lane	Arterial (6)	38,340	D
McFadden Avenue-Bolsa Avenue	Arterial (6)	39,200	D
Bolsa Avenue-Hazard Avenue	Arterial (6)	40,340	D
Bushard Street			
McFadden Avenue-Bishop Place	Bicycle Corridor (4)	18,460	C or better
Edinger Avenue-McFadden Avenue	Bicycle Corridor (4)	17,350	C or better

Table 6-4
Cumulative (2035) Plus Project Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
Bolsa Avenue-Hazard Avenue	Bicycle Corridor (4)	20,710	D
Hazard Avenue-Westminster Boulevard	Connector Street (4)	12,420	C or better
Edinger Avenue			
Newland Street-Magnolia Street	Arterial (4)	21,490	D
Beach Boulevard-Newland Street	Arterial (4)	28,000	D
Magnolia Street-Bushard Street	Arterial (4)	22,330	D
Bushard Street-Brookhurst Street	Arterial (4)	24,540	D
Edwards Street			
Westminster Boulevard-Trask Avenue	School Street (4)	15,460	C or better
Bolsa Avenue-Westminster Boulevard	Connector Street (4)	17,310	C or better
Trask Avenue-Garden Grove Boulevard	Bicycle Corridor (4)	11,770	C or better
Garden Grove Blvd			
Hoover Street-Beach Boulevard	Connector Street (6)	22,290	C or better
Bolsa Chica Road-22/405 Ramps	Connector Street (4)	19,090	C or better
Edwards Street-Goldenwest Street	Connector Street (4)	22,550	D
Goldenwest Street-22 WB Off Ramp/Eagle Drive	Connector Street (6)	28,240	C or better
SR-22 WB Off Ramp/Eagle Drive-Hoover Street	Connector Street (6)	25,200	C or better
Goldenwest St			
Hazard Avenue-Main Street	School Street (6)	37,110	D

Table 6-4
Cumulative (2035) Plus Project Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
McFadden Avenue-Bolsa Avenue	Arterial (6)	44,240	D
I-405-Hazard Avenue	Arterial (6)	42,450	D
Westminster Boulevard-Trask Avenue	Arterial (6)	35,120	D
Trask Avenue-Garden Grove Boulevard	Arterial (6)	34,780	D
Hazard Ave			
Bushard Street-Brookhurst Street	Bicycle Corridor (4)	18,570	C or better
Goldenwest Street-Hoover Street	Connector Street (4)	6,570	C or better
Hoover Street-Beach Boulevard	Bicycle Corridor (4)	9,580	C or better
Beach Boulevard-Newland Street	Bicycle Corridor (4)	11,820	C or better
Newland Street-Magnolia Street	Bicycle Corridor (4)	15,240	C or better
Magnolia Street-Bushard Street	Bicycle Corridor (4)	17,810	C or better
Heil Ave			
Beach Boulevard-Newland Street	School Street (2)	10,830	D
Hoover St			
Westminster Boulevard-Trask Avenue	Bicycle Corridor (4)	13,710	C or better
Bolsa Avenue-Hazard Avenue	Bicycle Corridor (4)	7,910	C or better
Hazard Avenue-Westminster Boulevard	Bicycle Corridor (4)	12,270	C or better
Trask Avenue-Garden Grove Boulevard	Bicycle Corridor (4)	10,530	C or better
Magnolia St			
Bolsa Avenue-Hazard Avenue	Arterial (6)	39,250	D

Table 6-4
Cumulative (2035) Plus Project Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
Edinger Avenue-McFadden Avenue	Arterial (6)	35,230	D
Heil Avenue-Edinger Avenue	Arterial (6)	34,090	D
McFadden Avenue-Bolsa Avenue	Arterial (6)	36,090	D
Hazard Avenue-Westminster Boulevard	Arterial (6)	40,440	D
McFadden Ave			
Goldenwest Street-Beach Boulevard	Connector Street (4)	22,880	D
Beach Boulevard-Newland Street	Connector Street (4)	19,070	C or better
Newland Street-Magnolia Street	Connector Street (4)	17,860	C or better
Magnolia Street-Bushard Street	Connector Street (4)	19,670	D
Bushard Street-Brookhurst Street	Connector Street (4)	19,420	D
Brookhurst Street-Ward Street	School Street (4)	21,010	D
Newland St			
McFadden Avenue-Bolsa Avenue	Bicycle Corridor (4)	20,800	D
Heil Avenue-Edinger Avenue	Bicycle Corridor (2)	20,340	**F**
Edinger Avenue-McFadden Avenue	Bicycle Corridor (4)	20,160	D
Bolsa Avenue-Hazard Avenue	Bicycle Corridor (2)	21,060	**F**
Hazard Avenue-Westminster Boulevard	Bicycle Corridor (4)	18,720	C or better
Westminster Boulevard-Trask Avenue	Bicycle Corridor (4)	19,170	C or better

Table 6-4
Cumulative (2035) Plus Project Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
Rancho Rd			
Bolsa Chica Road-Westminster Boulevard	Connector Street (2)	5,490	C or better
Springdale St			
Westminster Boulevard-Navajo Road	Bicycle Corridor (4)	23,700	D
Navajo Road-Iroquois Road	Bicycle Corridor (4)	21,890	D
Trask Ave			
Edwards Street-Goldenwest Street	Bicycle Corridor (4)	4,310	C or better
Goldenwest Street-Hoover Street	Bicycle Corridor (4)	9,330	C or better
Hoover Street-Beach Boulevard	School Street (4)	11,410	C or better
Beach Boulevard-Newland Street	Bicycle Corridor (4)	12,060	C or better
Ward St			
Bolsa Avenue-Hazard Avenue	Bicycle Corridor (2)	13,630	D
McFadden Avenue-Bolsa Avenue	Bicycle Corridor (4)	14,780	C or better
Westminster Blvd			
Newland Street-Magnolia Street	Arterial (4)	27,510	D
Hammon Plaza-Springdale Street	Arterial (4)	27,110	D
Bolsa Chica Road-Rancho Road	Arterial (4)	22,310	D
Edwards Street-Goldenwest Street	Arterial (5)	27,300	D
Goldenwest Street-Hoover Street	Arterial (4)	25,620	D

Table 6-4
Cumulative (2035) Plus Project Conditions
Roadway Segment ADT and Level of Service

Location	Facility Type (# of lanes)	ADT	LOS
Hoover Street-Beach Boulevard	Multi-Way Boulevard (4)	25,040	D
Beach Boulevard-Newland Street	Multi-Way Boulevard (4)	26,580	D
Magnolia Street-Bushard Street	Arterial (6)	32,220	D

Notes:
1- **Bold** indicates an LOS below the acceptable threshold.
2- 4U indicates a 4-lane undivided roadway; 4D indicates a 4-lane divided roadway.

Source: Fehr & Peers, 2016

6.3 FREEWAY SEGMENT ANALYSIS

6.3.1 MAINLINE SEGMENT ANALYSIS

Table 6-5 and Table 6-6 present the results of the freeway basic assessment for the SR-22 and I-405 freeways. Existing freeway mainline volumes were obtained from PeMS, truck percentages were taken from the 2014 Annual Average Daily Truck Traffic published by Caltrans, the terrain was assumed to be level, free-flow speed is assumed to be 65 miles per hour, and a peak hour factor of 0.95 was assumed for the segments. Additionally, the I-405 Design/Build Expansion project has been assumed for this scenario. This project adds a general purpose lane, converts the existing high-occupancy vehicle (HOV) lane into a high-occupancy toll (HOT) lane, and adds a HOT lane and in each direction. Freeway reports are provided Appendix C.

TABLE 6-5 SR-22 FREEWAY OPERATIONS-CUMULATIVE YEAR (2035) PLUS PROJECT CONDITIONS

Segment	Type	AM			PM		
		V/C	Density	LOS	V/C	Density	LOS
SR-22 Eastbound							
Seal Beach Boulevard to I-405 Diverge	Basic	0.59	21.50	C	0.56	20.38	C
I-405 Diverge to Valley View Street	Basic	0.56	20.30	C	0.51	18.31	C
Valley View Street to Goldenwest Street	Basic	0.60	21.62	C	0.52	18.80	C
Goldenwest Street to Beach Boulevard	Basic	**0.34**	**-**	**F**	0.48	-	**F**
Beach Boulevard to Magnolia Street	Basic	0.53	-	**F**	0.65	23.69	C
Magnolia Street to Brookhurst Street	Basic	0.44	-	**F**	0.59	21.28	C
Brookhurst Street to Euclid Street	Basic	**0.47**	**-**	**F**	0.57	20.78	C
SR-22 Westbound							
Euclid Street to Brookhurst Street	Basic	0.60	21.82	C	**0.61**	**-**	**F**
Brookhurst Street to Magnolia Street	Basic	0.58	21.03	C	**0.59**	**-**	**F**
Magnolia Street to Beach Boulevard	Basic	0.65	23.74	C	0.61	22.07	C
Beach Boulevard to Goldenwest Street	Basic	0.60	21.57	C	0.54	19.41	C
Goldenwest Street to Valley View Street	Basic	0.72	26.68	**D**	0.76	28.64	**D**
Valley View Street to I-405 Merge	Basic	**0.33**	-	**F**	**0.32**	**-**	**F**
I-405 Merge to Seal Beach Boulevard	Basic	0.53	19.00	C	0.59	21.19	C

Notes:
1. Calculated using methodologies consistent with the Highway Capacity Manual
2. Density reported as passenger cars per mile per lane
3. **Bold** indicates unacceptable operations

TABLE 6-6 I-405 FREEWAY OPERATIONS-CUMULATIVE YEAR (2035) PLUS PROJECT CONDITIONS

Segment	Type	AM			PM		
		V/C	Density	LOS	V/C	Density	LOS
I-405 Southbound							
Seal Beach Boulevard to SR-22	Basic	0.53	19.28	C	0.57	20.48	C
SR-22 to Bolsa Chica Road	Basic	0.51	18.36	C	0.45	16.25	B
Bolsa Chica Road to Westminster Boulevard	Basic	0.46	16.71	B	0.62	22.53	C
Westminster Boulevard to Bolsa Avenue	Basic	0.42	15.03	B	0.51	18.59	C
Bolsa Avenue to Beach Boulevard	Basic	0.32	11.73	B	0.57	20.50	C
Beach Boulevard to Magnolia Street	Basic	0.32	11.73	B	0.57	20.50	C
Magnolia Street to Warner Avenue	Basic	0.42	15.36	B	0.62	22.36	C
Warner Avenue to Brookhurst Street	Basic	0.56	20.33	C	0.61	22.09	C
Brookhurst Street to Euclid Street	Basic	0.51	18.54	C	0.44	15.82	B
I-405 Northbound							
Euclid Street to Brookhurst Street	Basic	0.45	16.09	B	0.37	13.46	B
Brookhurst Street to Warner Avenue	Basic	0.63	22.70	C	0.58	20.93	C
Warner Avenue to Magnolia Street	Basic	0.55	19.97	C	0.49	17.73	B
Magnolia Street to Beach Boulevard	Basic	0.54	19.57	C	0.51	18.39	C
Beach Boulevard to Bolsa Avenue	Basic	0.66	23.87	C	0.63	22.66	C
Bolsa Avenue to Westminster Boulevard	Basic	0.66	23.87	C	0.63	22.66	C
Westminster Boulevard to Bolsa Chica Road	Basic	0.59	21.16	C	0.64	23.29	C
Bolsa Chica Road to SR-22	Basic	0.50	18.06	C	0.53	19.05	C
SR-22 to Seal Beach Boulevard	Basic	0.53	19.09	C	0.59	21.42	C

Notes:
1. Calculated using methodologies consistent with the Highway Capacity Manual
2. Density reported as passenger cars per mile per lane
3. **Bold** indicates unacceptable operations

As shown in Table 6-5 and Table 6-6, several freeway segments operate unacceptably (LOS D, LOS E, or LOS F) during the AM or PM Peak Hours:

- SR-22 Eastbound, between Goldenwest Street and Beach Boulevard
- SR-22 Eastbound, between Beach Boulevard and Magnolia Street
- SR-22 Eastbound, between Magnolia Street and Brookhurst Street
- SR-22 Eastbound, between Brookhurst Street and Euclid Street
- SR-22 Westbound, between Euclid Street and Brookhurst Street
- SR-22 Westbound, between Brookhurst Street and Magnolia Street
- SR-22 Westbound, between Goldenwest Street and Valley View Street
- SR-22 Westbound, between Valley View Street and I-405 Merge

6.3.2 OFF-RAMP QUEUING ANALYSIS

The table below presents the freeway off-ramp queueing analysis for Caltrans off-ramp facilities in the study area.

TABLE 6-7 CALTRANS OFF-RAMP QUEUING ANALYSIS CUMULATIVE (2035) PLUS PROJECT CONDITIONS

Off-Ramp Location	95th Percentile Queue (feet)		Available Storage (feet)
	AM	PM	
#86. Beach Boulevard & SR-22 WB Off-Ramp	604	740	1,600
#87. Beach Boulevard & SR-22 EB Off-Ramp	246	207	1,500
#90. Garden Grove Boulevard & SR-22 EB Off-Ramp	322	292	1,140
#90. Garden Grove Boulevard & I-405 NB Off-Ramp	630	495	1,030
#91. Garden Grove Boulevard & SR-22 WB Off-Ramp/Eagle Drive	370	275	1,030
#92. Garden Grove Boulevard & SR-22 Off-Ramp	110	117	970
#94. I-405 Ramps & Mall Ring Road	67	153	810

Source: Fehr & Peers (2016).

7.0 ORANGE COUNTY CONGESTION MANAGEMENT PROGRAM (CMP)

This section presents an analysis of potential impacts on the regional transportation system. This analysis was conducted in accordance with the procedures outlined in the 2015 Orange County Congestion Management Program (November 2015). The CMP requires that, when an environmental impact report is prepared for a project, traffic and transit impact analyses be conducted for select regional facilities based on the quantity of project traffic expected to use those facilities. The CMP locations in the City of Westminster are the intersections of:

- Beach Boulevard & Bolsa Avenue
- Beach Boulevard & Edinger Avenue
- Beach Boulevard & SR-22 Westbound Off-Ramp
- Beach Boulevard & SR-22 Eastbound Off-Ramp
- Bolsa Chica Road & Garden Grove Boulevard

Since the Orange County CMP guidelines use the ICU methodology for assessing CMP locations, the volume-to-capacity (V/C) ratio was used as described in Chapter 3.

7.1 SIGNIFICANT TRAFFIC IMPACT CRITERIA

The CMP traffic impact analysis guidelines establish that a significant project impact occurs when a certain threshold is exceeded. If the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C ≥ 0.02), causing LOS F (V/C > 1.00), a significant impact would occur. If the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C ≥ 0.02).

7.2 CMP ASSESSMENT

The results indicate that all CMP intersections operate at an acceptable level during all analysis scenarios.

7.2.1 EXISTING (2015) CONDITIONS

TABLE 7-1
EXISTING (2015) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CMP INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	V/C Ratio[1]	LOS
74	Beach Boulevard & Bolsa Avenue	Signalized	AM	0.884	D
			PM	0.768	C
76	Beach Boulevard & Edinger Avenue	Signalized	AM	0.710	C
			PM	0.782	C
86	Beach Boulevard & SR-22 WB Off-Ramp	Signalized	AM	0.724	C
			PM	0.708	C
87	Beach Boulevard & SR-22 EB Off-Ramp	Signalized	AM	0.584	A
			PM	0.533	A
88	Bolsa Chica Road & Garden Grove Boulevard	Signalized	AM	0.738	C
			PM	0.799	C

Notes:
1- V/C for signalized operations is based on application of Intersection Capacity Utilization methodology using Traffix software. V/C = Volume / Capacity ratio.

Source: Fehr & Peers, 2016

7.2.2 CUMULATIVE (2035) NO PROJECT CONDITIONS

TABLE 7-2
CUMULATIVE (2035) CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CMP INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	V/C Ratio[1]	LOS
74	Beach Boulevard & Bolsa Avenue	Signalized	AM	0.904	E
			PM	0.784	C
76	Beach Boulevard & Edinger Avenue	Signalized	AM	0.681	B
			PM	0.766	C
86	Beach Boulevard & SR-22 WB Off-Ramp	Signalized	AM	0.737	C
			PM	0.712	C
87	Beach Boulevard & SR-22 EB Off-Ramp	Signalized	AM	0.601	B
			PM	0.538	A
88	Bolsa Chica Road & Garden Grove Boulevard	Signalized	AM	0.771	C
			PM	0.838	D

Notes:
1- V/C for signalized operations is based on application of Intersection Capacity Utilization methodology using Traffix software. V/C = Volume / Capacity ratio.

Source: Fehr & Peers, 2016

7.2.3 CUMULATIVE (2035) PLUS PROJECT CONDITIONS

TABLE 7-3
CUMULATIVE (2035) PLUS PROJECT CONDITIONS INTERSECTION DELAY AND LEVEL OF SERVICE CMP INTERSECTIONS

#	Intersection	Traffic Control	Peak Hour	V/C Ratio[1]	LOS
74	Beach Boulevard & Bolsa Avenue	Signalized	AM	0.906	E
			PM	0.794	C
76	Beach Boulevard & Edinger Avenue	Signalized	AM	0.685	B
			PM	0.769	C
86	Beach Boulevard & SR-22 WB Off-Ramp	Signalized	AM	0.740	C
			PM	0.718	C

87	Beach Boulevard & SR-22 EB Off-Ramp	Signalized	AM	0.612	B
			PM	0.543	A
88	Bolsa Chica Road & Garden Grove Boulevard	Signalized	AM	0.779	C
			PM	0.841	D

Notes:
1- V/C for signalized operations is based on application of Intersection Capacity Utilization methodology using Traffix software. V/C = Volume / Capacity ratio.

Source: Fehr & Peers, 2016

8.0 IMPACT ANALYSIS AND MITIGATION MEASURES

8.1 CEQA CHECKLIST REVIEW

The following significance criteria, included in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), will determine the significance of a traffic impact. Impacts to traffic resources would be significant if the proposed project would:

8.1.1 CHECKLIST ITEM A

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

8.1.1.1 Intersections

Although many intersection impacts would not occur when comparing the Cumulative Plus Project to the Cumulative No Project scenarios (e.g. regional growth accounts for most of the increased delay, not the General Plan land use assumptions), impacts were identified by comparing the Existing Condition to the Cumulative Plus Project Condition to provide a conservative assessment of transportation related impacts. Based on the criteria discussed in Section 3.2 of this study, the intersection analysis identifies significant impacts at the following locations:

- #6. Bolsa Chica Road & Westminster Boulevard (City of Wesminster, AM Peak Hour, LOS E)
- #36. Garden Grove Boulevard & Western Avenue (City of Wesminster, PM Peak Hour, LOS E)
- #63. Westminster Boulevard & Magnolia Avenue (City of Westminster, PM Peak Hour, LOS E)
- #89. Garden Grove Boulevard & Goldenwest Street (Caltrans, AM and PM Peak Hours, LOS E)
- #91. Garden Grove Boulevard & SR-22 Westbound Off-Ramp (Caltrans, AM and PM Peak Hours, LOS E)
- #95. Bolsa Avenue & Newland Street (County of Orange, PM Peak Hour, LOS F)
- #99. Edinger Avenue & Newland Street (Huntington Beach, AM and PM Peak Hours, LOS E and LOS F, respectively)

TABLE 8-1 CUMULATIVE (2035) PLUS PROJECT SIGNIFICANT IMPACTS CITY OF WESTMINSTER

Intersection	Traffic Control	Peak Hour	Cumulative (2035) No Project		Cumulative (2035) Plus Project			Significant Impact?
			Delay[1]	LOS	Delay[1]	LOS	Project Change	
6. Bolsa Chica Road & Westminster Boulevard	Signalized	AM	57.2	E	64.9	**E**	7.7	**Yes**
		PM	42.7	D	45.8	D	3.1	No
36. Garden Grove Boulevard & Western Avenue	Signalized	AM	55.4	E	54.8	D	-0.6	No
		PM	63.8	E	65.8	**E**	2.0	**Yes**
49. Magnolia Street & McFadden Avenue	Signalized	AM	49.8	D	57.5	E	7.7	No[4]
		PM	36.8	D	41.0	D	4.2	No
63. Westminster Boulevard & Magnolia Street	Signalized	AM	48.9	D	48.9	D	0.0	No
		PM	56.9	**E**	59.1	**E**	2.2	**Yes**
89. Garden Grove Boulevard & Goldenwest Street	Signalized	AM	63.0	**E**	64.9	**E**	1.9	**Yes**
		PM	66.5	**E**	72.9	**E**	6.4	**Yes**
91. Garden Grove Boulevard & SR-22 WB Off-Ramp/Eagle Drive	Signalized	AM	75.4	E	70.5	E	-4.9	No
		PM	37.7	D	40.3	**D**	2.6	**Yes**
95. Bolsa Avenue & Newland Street	Signalized	AM	0.856	D	0.876	D	0.020	No
		PM	0.982	E	1.018	**F**	0.036	**Yes**
99. Edinger Avenue & Newland Street	Signalized	AM	0.938	E	0.962	**E**	0.024	**Yes**
		PM	1.094	F	1.026	**F**	-0.068	No

Notes:

1. Delay is average intersection delay (seconds) based on application of the Highway Capacity Manual 2010 methodology using Synchro 8 Build 806 software.
2. **Bold** indicates an LOS below the acceptable threshold.
3. Highway Capacity Manual 2010 methodology cannot accurately estimate intersection delay greater than 80 seconds for signalized intersections.
4. LOS E is considered acceptable at this location as both roadways are prioritized for bicycles and pedestrians in the proposed General Plan.

Source: Fehr & Peers, 2016

Physical Improvements to Mitigate Project Impacts:

Physical improvements to mitigation the projects have been developed, as discussed below.

- #6. Bolsa Chica Road & Westminster Boulevard
  - Add an eastbound right-turn overlap phase
- #36. Garden Grove Boulevard & Western Avenue
  - Optimize the signal timing for anticipated traffic demand
- #63. Westminster Boulevard & Magnolia Avenue
  - Optimize the coordinated PM signal timing for anticipated traffic volume demand.
- #89. Garden Grove Boulevard & Goldenwest Street
  - Modify the eastbound approach from having one left turn lane, one shared through-left turn lane, one through lane, and one right turn lane, to having two left turn lanes, three through lanes, and one right turn lane.
- #91. Garden Grove Boulevard & SR 22 Westbound Off-Ramp/Eagle Drive
  - Optimize the signal timing for anticipated traffic demand
- #95. Bolsa Avenue & Newland Street
  - Add an eastbound and westbound through lane through restriping and minor roadway widening
- #99. Edinger Avenue & Newland Street
  - Add an eastbound and westbound through lane through restriping

General Plan Policies that Support Identified Physical Improvements

Mobility Element Policy P1.15 supports traffic signal timing coordination and improvements such as those identified above. With the implementation of the Mobility Element policy, the impact at intersections #6, #36, and #63 is considered *less-than-significant*.

Mobility Element Policy P1.15 supports traffic signal timing coordination and improvements such as those identified above. With the implementation of the Mobility Element policy, the operations at intersection #91 would be improved to an acceptable level. Given that signal timing updates is considered standard maintenance at Caltrans facilities, implementation of this measure is considered feasible (even though it is outside the City's control) and the impact would be reduced to a *less-than-significant* level.

Mobility Element Policy P1.8 supports developing a fee program for roadway improvements within the City. However, the impacts to intersections #89, #95, and #99, which are owned and operated by Caltrans, Orange County, or the City of Huntington Beach, is considered significant and unavoidable as the City cannot guarantee implementation of improvements to reduce impacts to a facility they do not control. Therefore, the impact to those locations is considered *significant and unavoidable*.

To minimize the impact to this location, it is recommended that the City to develop a TDM program (e.g., an incentive-based program that would promote the reduction of single-occupant vehicles (SOVs) to reduce the severity of these impacts. However, even with implementation of a TDM program, the impact would still be significant and unavoidable.

8.1.1.2 Roadway Segments

The following two segments are projected to operate at an unacceptable LOS F:

- Newland Street, Heil Avenue to Edinger Avenue– Regional growth plus buildout of the General Plan will increase the V/C ratio by 0.033
- Newland Street, McFadden Avenue to Bolsa Avenue - Regional growth plus buildout of the General Plan will increase the V/C ratio by 0.002

As noted in the significance criteria identified in Section 3.2, the V/C ratio needs to increase at a segment operating at an unacceptable level by more than 0.02. As such, the project results in a ***significant impact*** to the following roadway segment location:

- Newland Street, Heil Avenue to Edinger Avenue

To mitigate the impact noted above, the roadway should be monitored for widening into the future to four lanes. However, this could be in conflict with *General Plan Policy M_IP-4: Road Diets* since the projected ADT is less than 20,000. As such, the City should continue to monitor congestion and safety along this segment and either widen it to four lanes or add this segment to the list of protected locations as described in *General Plan Policy M_IP-2: Complete Street Exemptions*. With implementation of either measure, the impact is reduced to a *less-than-significant* level.

8.1.1.3 Bicycle Facilities

The Westminster Mobility Element provides a comprehensive system of bicycle lanes, trails, and pathways to enhance connectivity within the City. Additionally, the Mobility Element identifies a series of Goals, Policies, and Implementation Measures to ensure the integrity and service levels of these facilities are maintained. Mobility Element Goal 3 seeks to provide an Active Transportation Plan for the City which would improve bicycle connectivity throughout the community. Given this comprehensive planning effort, the project impact to bicycle travel is considered *less-than-significant*.

8.1.1.4 Transit Facilities

The Westminster Mobility Element provides a series of policies to enhance transit systems. Mobility Element Goal 2 includes several policies related to transit enhancement, including working to collaborate with relevant transit agencies (OCTA, AMTRAK, Metrolink, SCAG) and potential circulator routes in key

destinations within the City such as Little Saigon, the Civic Center, the Downtown, and the mall. Given this comprehensive planning effort, the project impact to transit travel is considered *less-than-significant*.

8.1.1.5 Freeway Segments

As identified in Section 6.3, the proposed project adds traffic to many of the freeway mainline segments which are forecast to operate at an unacceptable LOS. As such, there are project-level impacts to the freeway system near the project site. The impacted mainline segment under Cumulative Plus Project Conditions is Eastbound SR-22 between Goldenwest Street and Beach Boulevard.

To mitigate the impacts at the identified locations, freeway mainline widening and/or freeway ramp widening would be required. However, this type of infrastructure is extremely costly and is typically infeasible for one project to undertake. Mitigating the identified significant impacts to the freeway and mainline segments would require a complete reconstruction of the I-405 and SR-22 freeways to add travel lanes and upgrade each of the deficient ramp locations. Since the freeways in the study area are interconnected systems, it would not be possible, nor effective, to provide isolated spot improvements of one segment of the freeway where deficient operations are observed.

As discussed in this section, implementation of the proposed project would result in a significant impact to segments on I-405 and SR-22. However, as interstate highways are not controlled by the City; as such, they could not guarantee implementation of the identified mitigation measure. As such the identified impacts to the freeway system are considered *significant and unavoidable*.

It should be noted that the City of Westminster is committed to assisting Caltrans and other regional agencies in maintaining freeway operations in the study area. As such, although this impact is considered significant and unavoidable, the project applicant and the City are willing to coordinate with Caltrans to ensure that neither does anything that may prohibit planned improvements in the study area.

8.1.2 CHECKLIST ITEM B

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Based on the analysis presented in Section 7, implementation of the proposed project would not conflict with the Orange County Congestion Management Plan. As such, this impact is considered less than *less-than-significant*.

8.1.3 CHECKLIST ITEM C

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The proposed project is not expected to modify any air traffic patterns in the area given the location of surrounding airports. The nearest airports are Long Beach Airport, John Wayne Airport, and the Los Alamitos Army Airfield. As such, this impact is considered less than ***less-than-significant*.**

8.1.4 CHECKLIST ITEM D

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The General Plan was developed to minimize conflicts between incompatible uses. Additionally, Policy P1.14 specifically identifies that the City will develop and update a set of roadway standards that will ensure the safe and efficient movement for all modes of travel. Additionally, the Mobility Element includes pedestrian and bicycle crossing enhancements throughout the City and under freeways. As such, this impact is considered ***less-than-significant*.**

8.1.5 CHECKLIST ITEM E

e) Result in inadequate emergency access?

In general, the Mobility Element improves connectivity and mobility throughout the City. This improved connectivity and mobility will also improve emergency access throughout the City. Since emergency accessibility will improve with implementation of the plan, this impact is considered ***less-than-significant*.**

8.1.6 CHECKLIST ITEM F

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

As previously noted above, there are a series of policies and programs to enhance the performance and the safety of these facilities by enhancing service and improving conflict points for these systems. Additionally, the development of the City's Active Transportation Plan will ensure optimal multi-modal connectivity throughout the City and beyond. As such, this impact is considered ***less-than-significant*.**

APPENDIX A: TRAFFIC COUNT SHEETS

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-001 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Churchill Ave			Churchill Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 1	SL 1	ST 3	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
7:00 AM	0	407	1	0	655	0	0	0	0	0	0	3	1066
7:15 AM	0	434	2	2	701	0	0	0	0	8	0	1	1148
7:30 AM	0	383	2	2	729	0	0	0	0	2	0	4	1122
7:45 AM	0	406	2	1	748	0	0	0	0	2	0	7	1166
8:00 AM	0	375	1	1	660	0	0	0	0	6	0	5	1048
8:15 AM	0	393	2	2	592	0	0	0	0	1	0	3	993
8:30 AM	0	383	1	2	511	0	0	0	0	2	0	3	902
8:45 AM	0	335	3	2	425	0	0	0	0	0	0	4	769
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3116	14	12	5021	0	0	0	0	21	0	30	8214
APPROACH %'s :	0.00%	99.55%	0.45%	0.24%	99.76%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	41.18%	0.00%	58.82%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	0	1630	7	5	2833	0	0	0	0	12	0	15	4502
PEAK HR FACTOR :		0.939			0.947			0.000			0.750		0.965

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	1	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	1	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	2	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-001 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Churchill Ave			Churchill Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 1	SL 1	ST 3	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
4:00 PM	0	518	8	5	391	0	0	0	0	4	0	6	932
4:15 PM	0	541	7	3	402	0	0	0	0	3	0	2	958
4:30 PM	0	580	6	3	416	0	0	0	0	3	0	8	1016
4:45 PM	1	524	3	7	449	0	0	0	0	5	0	7	996
5:00 PM	0	599	9	2	451	0	0	0	0	5	0	1	1067
5:15 PM	0	530	6	2	460	0	0	0	0	2	0	4	1004
5:30 PM	0	488	0	4	484	0	0	0	0	3	0	3	982
5:45 PM	0	408	6	3	421	0	0	0	0	1	0	2	841
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	4188	45	29	3474	0	0	0	0	26	0	33	7796
APPROACH %'s :	0.02%	98.91%	1.06%	0.83%	99.17%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	44.07%	0.00%	55.93%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	1	2233	24	14	1776	0	0	0	0	15	0	20	4083
PEAK HR FACTOR :		0.928			0.969			0.000			0.729		0.957

UTURNS	NB	SB	EB	WB
	0	1	0	0
	0	0	0	0
	0	0	0	0
	1	0	0	0
	0	1	0	0
	0	1	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	1	3	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-002 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Duncannon Ave			Duncannon Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 2	NR 1	SL 1	ST 3	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
7:00 AM	0	373	3	10	474	0	0	0	0	6	0	49	915
7:15 AM	0	397	4	12	587	0	0	0	0	10	0	47	1057
7:30 AM	0	375	3	19	621	0	0	0	0	14	0	43	1075
7:45 AM	0	364	9	28	532	0	0	0	0	10	0	54	997
8:00 AM	0	324	7	16	450	0	0	0	0	17	0	40	854
8:15 AM	0	377	10	14	463	0	0	0	0	9	0	35	908
8:30 AM	0	329	5	15	394	0	0	0	0	12	0	22	777
8:45 AM	0	320	3	16	364	0	0	0	0	9	0	32	744
TOTAL VOLUMES :	NL 0	NT 2859	NR 44	SL 130	ST 3885	SR 0	EL 0	ET 0	ER 0	WL 87	WT 0	WR 322	TOTAL 7327
APPROACH %'s :	0.00%	98.48%	1.52%	3.24%	96.76%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	21.27%	0.00%	78.73%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	0	1509	19	69	2214	0	0	0	0	40	0	193	4044
PEAK HR FACTOR :		0.953			0.892			0.000			0.910		0.940

UTURNS	NB	SB	EB	WB
	0	1	0	0
	0	2	0	0
	0	1	0	0
	0	1	0	0
	0	2	0	0
	0	1	0	0
	0	0	0	0
	0	2	0	0
	NB 0	SB 10	EB 0	WB 0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-002 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Duncannon Ave			Duncannon Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 2	NR 1	SL 1	ST 3	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
4:00 PM	0	489	10	31	347	0	0	0	0	7	0	28	912
4:15 PM	0	393	13	29	377	0	0	0	0	1	0	16	829
4:30 PM	0	460	7	32	380	0	0	0	0	9	0	12	900
4:45 PM	0	393	10	49	419	0	0	0	0	6	0	19	896
5:00 PM	0	457	8	40	418	0	0	0	0	11	0	26	960
5:15 PM	0	462	13	45	455	0	0	0	0	3	0	19	997
5:30 PM	0	391	14	29	499	0	0	0	0	3	0	31	967
5:45 PM	0	324	12	39	406	0	0	0	0	10	0	25	816
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3369	87	294	3301	0	0	0	0	50	0	176	7277
APPROACH %'s :	0.00%	97.48%	2.52%	8.18%	91.82%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	22.12%	0.00%	77.88%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	1703	45	163	1791	0	0	0	0	23	0	95	3820
PEAK HR FACTOR :		0.920			0.925			0.000			0.797		0.958

UTURNS	NB	SB	EB	WB
	0	3	0	0
	0	2	0	0
	0	2	0	0
	0	3	0	0
	0	5	0	0
	0	2	0	0
	0	4	0	0
	0	1	0	0
	NB	SB	EB	WB
	0	22	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-003 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Old Bolsa Chica Rd			Old Bolsa Chica Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 3	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
7:00 AM	1	409	0	0	501	5	1	0	0	0	0	0	917
7:15 AM	2	454	0	0	587	9	6	0	2	0	0	0	1060
7:30 AM	1	409	0	0	652	2	7	0	1	0	0	0	1072
7:45 AM	0	426	0	0	568	2	2	0	0	0	0	0	998
8:00 AM	1	357	0	0	460	2	1	0	0	0	0	0	821
8:15 AM	2	418	0	0	461	1	0	0	1	0	0	0	883
8:30 AM	2	343	0	0	409	1	2	0	2	0	0	0	759
8:45 AM	1	355	0	0	378	2	1	0	1	0	0	0	738
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	10	3171	0	0	4016	24	20	0	7	0	0	0	7248
APPROACH %'s :	0.31%	99.69%	0.00%	0.00%	99.41%	0.59%	74.07%	0.00%	25.93%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	4	1698	0	0	2308	18	16	0	3	0	0	0	4047
PEAK HR FACTOR :		0.933			0.889			0.594			0.000		0.944

UTURNS			
NB	SB	EB	WB
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
1	0	0	0
2	0	0	0
0	0	0	0
NB	SB	EB	WB
5	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-003 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Old Bolsa Chica Rd			Old Bolsa Chica Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 3	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
4:00 PM	0	512	0	0	368	2	2	0	2	0	0	0	886
4:15 PM	3	401	0	0	411	2	3	0	1	0	0	0	821
4:30 PM	3	479	0	0	412	2	2	0	1	0	0	0	899
4:45 PM	8	409	0	0	466	4	2	0	3	0	0	0	892
5:00 PM	2	472	0	0	442	10	8	0	7	0	0	0	941
5:15 PM	3	490	0	0	486	1	2	0	2	0	0	0	984
5:30 PM	1	413	0	0	534	2	3	0	3	0	0	0	956
5:45 PM	4	350	0	0	435	2	1	0	1	0	0	0	793
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	24	3526	0	0	3554	25	23	0	20	0	0	0	7172
APPROACH %'s :	0.68%	99.32%	0.00%	0.00%	99.30%	0.70%	53.49%	0.00%	46.51%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	14	1784	0	0	1928	17	15	0	15	0	0	0	3773
PEAK HR FACTOR :		0.912			0.907			0.500			0.000		0.959

UTURNS	NB	SB	EB	WB
	0	0	0	0
	1	0	0	0
	2	0	0	0
	1	0	0	0
	1	0	0	0
	2	0	0	0
	1	0	0	0
	3	0	0	0
	NB	SB	EB	WB
	11	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-004 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Rancho Rd			Rancho Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	3	1	2	3	0	0	0	0	1	0	1	
7:00 AM	0	391	39	43	631	0	0	0	0	26	0	9	1139
7:15 AM	0	419	30	44	650	0	0	0	0	24	0	10	1177
7:30 AM	0	393	35	53	693	0	0	0	0	32	0	8	1214
7:45 AM	0	385	35	49	672	0	0	0	0	31	0	11	1183
8:00 AM	0	382	30	44	636	0	0	0	0	47	0	6	1145
8:15 AM	0	374	31	43	561	0	0	0	0	43	0	14	1066
8:30 AM	0	388	29	36	470	0	0	0	0	31	0	10	964
8:45 AM	0	321	40	33	397	0	0	0	0	33	0	13	837
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3053	269	345	4710	0	0	0	0	267	0	81	8725
APPROACH %'s :	0.00%	91.90%	8.10%	6.82%	93.18%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	76.72%	0.00%	23.28%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	1579	130	190	2651	0	0	0	0	134	0	35	4719
PEAK HR FACTOR :		0.952			0.952			0.000			0.797		0.972

UTURNS				
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-004 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Rancho Rd			Rancho Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 1	SL 2	ST 3	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
4:00 PM	0	493	50	7	378	0	0	0	0	31	0	51	1010
4:15 PM	0	496	54	3	417	0	0	0	0	37	0	31	1038
4:30 PM	0	573	55	12	402	0	0	0	0	29	0	43	1114
4:45 PM	0	470	39	6	453	0	0	0	0	31	0	40	1039
5:00 PM	0	582	52	6	435	0	0	0	0	26	0	40	1141
5:15 PM	0	483	45	3	476	0	0	0	0	33	0	34	1074
5:30 PM	0	449	48	5	475	0	0	0	0	30	0	43	1050
5:45 PM	0	393	41	6	424	0	0	0	0	34	0	26	924
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3939	384	48	3460	0	0	0	0	251	0	308	8390
APPROACH %'s :	0.00%	91.12%	8.88%	1.37%	98.63%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	44.90%	0.00%	55.10%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	2108	191	27	1766	0	0	0	0	119	0	157	4368
PEAK HR FACTOR :		0.907			0.936			0.000			0.958		0.957

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-005 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			St. James St			St. James St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	3	0	1	3	0	0	0	0	1	0	1	
7:00 AM	0	432	0	2	639	0	0	0	0	2	0	20	1095
7:15 AM	0	422	2	3	677	0	0	0	0	3	0	18	1125
7:30 AM	0	407	0	2	689	0	0	0	0	3	0	11	1112
7:45 AM	0	423	1	6	723	0	0	0	0	6	0	21	1180
8:00 AM	1	354	2	11	610	0	0	0	0	5	0	10	993
8:15 AM	0	418	6	2	555	0	0	0	0	3	0	12	996
8:30 AM	0	402	2	5	495	0	0	0	0	3	0	8	915
8:45 AM	0	353	1	5	437	0	0	0	0	3	0	14	813
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	3211	14	36	4825	0	0	0	0	28	0	114	8229
APPROACH %'s :	0.03%	99.54%	0.43%	0.74%	99.26%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	19.72%	0.00%	80.28%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	0	1684	3	13	2728	0	0	0	0	14	0	70	4512
PEAK HR FACTOR :		0.976			0.940			0.000			0.778		0.956

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	1	0	0	
0	1	0	0	
1	1	0	0	
0	1	0	0	
0	0	0	0	
0	0	0	0	
NB	SB	EB	WB	
1	4	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-005 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			St. James St			St. James St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
4:00 PM	0	545	3	11	382	0	0	0	0	4	0	6	951
4:15 PM	0	507	1	14	429	0	0	0	0	4	0	8	963
4:30 PM	0	596	2	14	380	0	0	0	0	1	0	8	1001
4:45 PM	0	467	4	5	487	0	0	0	0	5	0	6	974
5:00 PM	0	624	3	4	418	0	0	0	0	3	0	4	1056
5:15 PM	0	519	2	14	487	0	0	0	0	0	0	6	1028
5:30 PM	1	468	1	13	512	0	0	0	0	1	0	14	1010
5:45 PM	0	371	3	6	403	0	0	0	0	4	0	6	793
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	4097	19	81	3498	0	0	0	0	22	0	58	7776
APPROACH %'s :	0.02%	99.51%	0.46%	2.26%	97.74%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	27.50%	0.00%	72.50%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	1	2078	10	36	1904	0	0	0	0	9	0	30	4068
PEAK HR FACTOR :		0.833			0.924			0.000			0.650		0.963

UTURNS	NB	SB	EB	WB
	0	1	0	0
	0	1	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	1	0	0
	1	1	0	0
	0	0	0	0
TOTAL VOLUMES :	1	4	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-006 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 0	SL 2	ST 3	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
7:00 AM	87	327	10	17	450	36	35	97	150	20	129	15	1373
7:15 AM	90	329	7	18	529	38	40	119	160	25	151	17	1523
7:30 AM	109	322	9	16	533	39	39	67	113	28	127	13	1415
7:45 AM	110	285	20	31	533	32	50	86	169	31	124	29	1500
8:00 AM	97	277	12	20	470	32	29	70	120	39	122	11	1299
8:15 AM	105	292	12	25	392	25	42	86	137	25	110	13	1264
8:30 AM	90	287	8	27	379	26	26	78	115	13	114	11	1174
8:45 AM	98	280	13	25	316	20	36	73	101	22	86	13	1083
TOTAL VOLUMES :	NL 786	NT 2399	NR 91	SL 179	ST 3602	SR 248	EL 297	ET 676	ER 1065	WL 203	WT 963	WR 122	TOTAL 10631
APPROACH %'s :	23.99%	73.23%	2.78%	4.44%	89.40%	6.16%	14.57%	33.17%	52.26%	15.76%	74.77%	9.47%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	396	1263	46	82	2045	145	164	369	592	104	531	74	5811
PEAK HR FACTOR :		0.969			0.953			0.882			0.918		0.954

UTURNS	NB	SB	EB	WB
7:00 AM	0	0	0	1
7:15 AM	0	4	0	2
7:30 AM	0	2	0	0
7:45 AM	0	3	0	0
8:00 AM	0	3	0	3
8:15 AM	1	4	0	5
8:30 AM	1	5	0	2
8:45 AM	0	3	1	4
TOTAL VOLUMES :	NB 2	SB 24	EB 1	WB 17

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-006 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 0	SL 2	ST 3	SR 1	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
4:00 PM	127	437	11	21	301	20	55	120	81	19	65	17	1274
4:15 PM	139	384	12	27	303	52	26	138	108	24	82	11	1306
4:30 PM	152	413	12	31	281	42	47	166	102	19	93	19	1377
4:45 PM	149	342	12	35	355	44	45	155	119	19	80	12	1367
5:00 PM	173	409	13	34	285	60	51	195	127	12	114	16	1489
5:15 PM	133	372	21	32	340	70	59	167	146	19	90	18	1467
5:30 PM	127	349	22	44	407	68	47	160	100	17	103	11	1455
5:45 PM	123	270	15	31	282	71	37	131	116	18	98	19	1211
TOTAL VOLUMES :	NL 1123	NT 2976	NR 118	SL 255	ST 2554	SR 427	EL 367	ET 1232	ER 899	WL 147	WT 725	WR 123	TOTAL 10946
APPROACH %'s :	26.63%	70.57%	2.80%	7.88%	78.92%	13.20%	14.69%	49.32%	35.99%	14.77%	72.86%	12.36%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	582	1472	68	145	1387	242	202	677	492	67	387	57	5778
PEAK HR FACTOR :		0.892			0.855			0.919			0.900		0.970

UTURNS	NB	SB	EB	WB
	0	2	0	2
	2	1	0	1
	0	2	0	2
	0	1	0	0
	1	3	1	1
	1	0	0	1
	1	7	0	4
	0	5	0	3
TOTAL VOLUMES :	NB 5	SB 21	EB 1	WB 14

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-007 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Bushard Ave			Bushard Ave			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 1	TOTAL
7:00 AM	6	57	10	12	99	10	5	94	16	16	70	7	402
7:15 AM	8	53	16	14	176	14	9	99	15	12	116	12	544
7:30 AM	13	115	17	34	282	29	12	146	39	29	151	27	894
7:45 AM	25	106	16	38	181	33	25	133	33	25	171	32	818
8:00 AM	20	121	29	54	203	51	31	160	29	49	175	47	969
8:15 AM	45	103	27	53	157	64	27	189	25	33	162	25	910
8:30 AM	28	97	33	37	153	45	19	160	16	11	143	20	762
8:45 AM	18	71	17	38	134	48	30	153	18	22	152	15	716
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	163	723	165	280	1385	294	158	1134	191	197	1140	185	6015
APPROACH %'s :	15.51%	68.79%	15.70%	14.29%	70.70%	15.01%	10.65%	76.47%	12.88%	12.94%	74.90%	12.16%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	103	445	89	179	823	177	95	628	126	136	659	131	3591
PEAK HR FACTOR :		0.910			0.854			0.881			0.854		0.926

UTURNS	NB	SB	EB	WB
	0	0	1	2
	0	0	1	1
	0	0	0	0
	0	0	3	1
	0	0	4	1
	0	0	7	3
	0	0	4	0
	0	0	6	2
	NB	SB	EB	WB
TOTAL VOLUMES :	0	0	26	10

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-007 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Bushard Ave			Bushard Ave			Bolsa Ave			Bolsa Ave				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 1	TOTAL	NB	SB	EB	WB
4:00 PM	26	149	23	32	92	47	28	197	27	36	225	39	921	0	0	5	5
4:15 PM	34	145	24	33	100	45	51	194	21	36	241	50	974	0	0	6	5
4:30 PM	34	135	20	33	111	39	40	203	19	28	206	51	919	0	0	4	3
4:45 PM	41	178	32	37	84	47	45	209	20	40	238	58	1029	1	0	8	7
5:00 PM	28	189	27	39	102	31	58	206	32	38	182	50	982	0	0	6	8
5:15 PM	32	194	32	37	129	28	55	200	16	49	203	66	1041	0	0	8	8
5:30 PM	46	217	31	39	133	37	49	222	23	41	224	75	1137	0	0	4	5
5:45 PM	44	182	23	48	115	35	52	222	21	50	230	77	1099	0	0	3	3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	285	1389	212	298	866	309	378	1653	179	318	1749	466	8102	1	0	44	44
APPROACH %'s :	15.11%	73.65%	11.24%	20.23%	58.79%	20.98%	17.10%	74.80%	8.10%	12.55%	69.05%	18.40%					
PEAK HR START TIME :	500 PM												TOTAL				
PEAK HR VOL :	150	782	113	163	479	131	214	850	92	178	839	268	4259				
PEAK HR FACTOR :		0.889			0.925			0.976			0.900		0.936				

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-008 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Brookhurst St			Brookhurst St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 0	SL 2	ST 2.5	SR 1.5	EL 2	ET 3	ER 0	WL 2	WT 3	WR 1	TOTAL
7:00 AM	14	102	24	26	436	17	8	76	30	21	84	27	865
7:15 AM	14	173	27	39	446	23	15	105	32	30	93	20	1017
7:30 AM	26	194	47	48	429	19	30	130	65	68	164	33	1253
7:45 AM	30	255	72	68	463	36	22	132	37	82	177	49	1423
8:00 AM	35	201	73	57	373	45	33	152	44	92	170	32	1307
8:15 AM	29	257	70	78	432	45	35	157	34	68	133	38	1376
8:30 AM	19	175	51	59	328	40	35	151	44	30	136	35	1103
8:45 AM	43	185	56	52	300	40	49	122	30	47	149	28	1101
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	210	1542	420	427	3207	265	227	1025	316	438	1106	262	9445
APPROACH %'s :	9.67%	70.99%	19.34%	10.95%	82.25%	6.80%	14.48%	65.37%	20.15%	24.25%	61.24%	14.51%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	120	907	262	251	1697	145	120	571	180	310	644	152	5359
PEAK HR FACTOR :		0.903			0.923			0.951			0.898		0.941

UTURNS	NB	SB	EB	WB
	2	0	0	0
	0	0	1	0
	1	0	0	1
	0	1	0	1
	3	0	0	3
	1	0	0	3
	2	0	0	0
	4	0	0	0
	NB	SB	EB	WB
	13	1	1	8

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-008 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Brookhurst St			Brookhurst St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 0	SL 2	ST 2.5	SR 1.5	EL 2	ET 3	ER 0	WL 2	WT 3	WR 1	TOTAL
4:00 PM	58	302	51	50	219	80	78	179	46	69	158	42	1332
4:15 PM	77	326	55	28	271	60	93	170	50	57	170	56	1413
4:30 PM	62	285	52	46	233	68	68	142	47	56	165	32	1256
4:45 PM	67	326	42	46	238	67	80	194	51	66	174	51	1402
5:00 PM	52	306	51	36	262	53	86	158	52	47	215	63	1381
5:15 PM	60	360	55	39	265	66	77	181	54	78	209	51	1495
5:30 PM	65	332	44	33	280	59	72	178	53	66	198	60	1440
5:45 PM	70	312	54	48	260	54	67	167	42	62	195	52	1383
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	511	2549	404	326	2028	507	621	1369	395	501	1484	407	11102
APPROACH %'s :	14.75%	73.59%	11.66%	11.39%	70.88%	17.72%	26.04%	57.40%	16.56%	20.94%	62.04%	17.02%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	244	1324	192	154	1045	245	315	711	210	257	796	225	5718
PEAK HR FACTOR :		0.926			0.970			0.951			0.945		0.956

UTURNS

NB	SB	EB	WB
3	1	2	4
11	0	3	2
7	0	2	3
4	0	2	4
3	0	3	4
8	0	6	2
6	0	4	4
5	1	5	4
NB	SB	EB	WB
47	2	27	27

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-009 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Chestnut St			Chestnut St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 1	ST 0	SR 1	EL 1	ET 2	ER 0	WL 0	WT 2	WR 1	TOTAL
7:00 AM	0	0	0	8	0	16	11	126	0	0	104	14	279
7:15 AM	0	0	0	16	0	28	9	163	0	0	185	24	425
7:30 AM	0	0	0	26	0	52	21	191	0	0	232	33	555
7:45 AM	0	0	0	25	0	60	31	242	0	0	240	28	626
8:00 AM	0	0	0	13	0	38	14	270	0	0	173	15	523
8:15 AM	0	0	0	8	0	20	19	174	0	0	150	11	382
8:30 AM	0	0	0	11	0	13	12	165	0	0	135	11	347
8:45 AM	0	0	0	4	0	10	17	135	0	0	157	17	340
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	111	0	237	134	1466	0	0	1376	153	3477
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	31.90%	0.00%	68.10%	8.38%	91.63%	0.00%	0.00%	89.99%	10.01%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	0	80	0	178	75	866	0	0	830	100	2129
PEAK HR FACTOR :	0.000			0.759			0.828			0.868			0.850

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	1	0
	0	0	0	0
	0	0	0	0
	0	0	2	0
	0	0	2	0
	0	0	0	0
TOTAL VOLUMES :	0	0	5	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-009 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Chestnut St			Chestnut St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 1	ST 0	SR 1	EL 1	ET 2	ER 0	WL 0	WT 2	WR 1	TOTAL
4:00 PM	0	0	0	13	0	24	10	206	0	0	179	17	449
4:15 PM	0	0	0	11	0	37	5	162	0	0	177	14	406
4:30 PM	0	0	0	11	0	37	13	237	0	0	215	17	530
4:45 PM	0	0	0	22	0	34	9	167	0	0	195	11	438
5:00 PM	0	0	0	10	0	38	6	234	0	0	193	16	497
5:15 PM	0	0	0	8	0	25	9	149	0	0	173	12	376
5:30 PM	0	0	0	2	0	19	3	219	0	0	165	11	419
5:45 PM	0	0	0	5	0	14	6	156	0	0	159	12	352
TOTAL VOLUMES :	0	0	0	82	0	228	61	1530	0	0	1456	110	3467
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	26.45%	0.00%	73.55%	3.83%	96.17%	0.00%	0.00%	92.98%	7.02%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	0	0	0	54	0	146	33	800	0	0	780	58	1871
PEAK HR FACTOR :		0.000			0.893			0.833			0.903		0.883

UTURNS	NB	SB	EB	WB
	0	0	1	0
	0	0	2	0
	0	0	1	0
	0	0	0	0
	0	0	1	0
	0	0	0	0
	0	0	1	0
	0	0	0	0
TOTAL VOLUMES :	0	0	6	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-010 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Goldenwest Cir			Goldenwest Cir			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 0	NR 1	SL 0	ST 0	SR 0	EL 0	ET 2	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM	3	0	2	0	0	0	0	129	8	2	115	0	259
7:15 AM	8	0	1	0	0	0	0	162	14	6	200	0	391
7:30 AM	0	0	5	0	0	0	0	206	13	7	266	0	497
7:45 AM	4	0	6	0	0	0	0	233	33	6	264	0	546
8:00 AM	7	0	3	0	0	0	0	273	12	4	183	0	482
8:15 AM	11	0	9	0	0	0	0	164	16	4	148	0	352
8:30 AM	9	0	8	0	0	0	0	155	23	10	137	0	342
8:45 AM	7	0	9	0	0	0	0	120	17	9	167	0	329
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	49	0	43	0	0	0	0	1442	136	48	1480	0	3198
APPROACH %'s :	53.26%	0.00%	46.74%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	91.38%	8.62%	3.14%	96.86%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	19	0	15	0	0	0	0	874	72	23	913	0	1916
PEAK HR FACTOR :		0.850			0.000			0.830			0.857		0.877

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
NB	SB	EB	WB
0	0	0	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-010 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Goldenwest Cir			Goldenwest Cir			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0	1	0	0	0	0	2	0	1	3	0	
4:00 PM	29	0	19	0	0	0	0	192	28	16	168	0	452
4:15 PM	20	0	16	0	0	0	0	151	22	19	169	0	397
4:30 PM	32	0	31	0	0	0	0	209	39	21	201	0	533
4:45 PM	29	0	18	0	0	0	0	169	21	17	179	0	433
5:00 PM	28	0	17	0	0	0	0	221	22	20	184	0	492
5:15 PM	20	0	26	0	0	0	0	141	16	15	167	0	385
5:30 PM	12	0	17	0	0	0	0	209	12	7	162	0	419
5:45 PM	11	0	6	0	0	0	0	151	11	2	162	0	343
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	181	0	150	0	0	0	0	1443	171	117	1392	0	3454
APPROACH %'s :	54.68%	0.00%	45.32%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	89.41%	10.59%	7.75%	92.25%	0.00%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	109	0	82	0	0	0	0	750	104	77	733	0	1855
PEAK HR FACTOR :		0.758			0.000			0.861			0.912		0.870

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	1
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-011 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Cultural Ct/Asian Garden			Cultural Ct/Asian Garden			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0.3	NT 0.3	NR 0.3	SL 0	ST 1	SR 0	EL 2	ET 2.5	ER 0.5	WL 1	WT 3	WR 1	TOTAL
7:00 AM	0	0	1	1	0	0	3	113	8	3	79	1	209
7:15 AM	1	1	1	0	0	0	4	138	14	11	123	5	298
7:30 AM	1	0	1	2	0	0	9	191	10	2	168	8	392
7:45 AM	1	0	0	2	0	1	8	205	15	6	211	9	458
8:00 AM	4	0	0	5	0	1	17	223	16	6	187	16	475
8:15 AM	3	1	3	9	0	0	25	202	11	7	221	23	505
8:30 AM	4	1	1	3	0	0	24	196	10	15	182	23	459
8:45 AM	4	1	2	11	1	0	41	166	10	14	168	21	439
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	18	4	9	33	1	2	131	1434	94	64	1339	106	3235
APPROACH %'s :	58.06%	12.90%	29.03%	91.67%	2.78%	5.56%	7.90%	86.44%	5.67%	4.24%	88.73%	7.02%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	12	2	4	19	0	2	74	826	52	34	801	71	1897
PEAK HR FACTOR :		0.643			0.583			0.930			0.902		0.939

UTURNS	NB	SB	EB	WB
	0	0	0	1
	0	0	2	1
	0	0	2	0
	0	0	4	1
	0	0	6	3
	0	0	7	2
	0	0	18	5
	0	0	16	3
TOTAL VOLUMES :	0	0	55	16

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-011 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Cultural Ct/Asian Garden			Cultural Ct/Asian Garden			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0.3	NT 0.3	NR 0.3	SL 0	ST 1	SR 0	EL 2	ET 2.5	ER 0.5	WL 1	WT 3	WR 1	TOTAL
4:00 PM	10	1	7	22	1	1	38	212	35	20	242	19	608
4:15 PM	14	3	11	17	1	2	43	199	15	13	283	29	630
4:30 PM	9	2	12	19	1	5	40	216	20	11	229	27	591
4:45 PM	4	4	5	26	2	0	43	212	20	23	258	31	628
5:00 PM	11	0	11	27	3	3	35	213	14	14	223	22	576
5:15 PM	6	1	6	16	2	0	44	226	14	9	245	29	598
5:30 PM	7	1	8	15	1	1	34	205	14	18	287	31	622
5:45 PM	3	1	14	30	0	3	29	213	13	13	265	23	607
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	13	74	172	11	15	306	1696	145	121	2032	211	4860
APPROACH %'s :	42.38%	8.61%	49.01%	86.87%	5.56%	7.58%	14.25%	78.99%	6.75%	5.12%	85.96%	8.93%	
PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	37	10	35	84	5	8	164	839	90	67	1012	106	2457
PEAK HR FACTOR :		0.732			0.866			0.959			0.912		0.975

CONTROL : Signalized

UTURNS

NB	SB	EB	WB
0	0	19	1
0	0	19	6
0	0	18	2
0	0	14	6
0	0	18	5
0	0	23	3
0	0	15	5
0	0	14	3
NB	SB	EB	WB
0	0	140	31

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-012 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Moran St			Moran St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM	2	2	4	3	0	1	6	106	5	1	81	1	212
7:15 AM	8	1	9	1	1	3	1	122	9	8	129	1	293
7:30 AM	4	1	8	4	2	5	6	177	15	13	165	3	403
7:45 AM	5	5	18	1	4	7	5	188	19	14	220	4	490
8:00 AM	10	9	21	7	4	4	5	187	22	16	190	10	485
8:15 AM	19	4	18	13	2	15	16	200	17	19	226	11	560
8:30 AM	16	9	10	8	6	13	8	164	16	15	185	5	455
8:45 AM	9	6	18	16	1	12	14	164	23	17	188	10	478
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	73	37	106	53	20	60	61	1308	126	103	1384	45	3376
APPROACH %'s :	33.80%	17.13%	49.07%	39.85%	15.04%	45.11%	4.08%	87.49%	8.43%	6.72%	90.34%	2.94%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	50	27	67	29	16	39	34	739	74	64	821	30	1990
PEAK HR FACTOR :		0.878			0.700			0.909			0.894		0.888

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	1	1
	0	0	0	1
	0	0	0	0
	NB	SB	EB	WB
	0	0	1	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-012 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Moran St			Moran St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	15	5	23	26	5	16	18	205	20	22	243	11	609
4:15 PM	23	8	19	26	4	18	16	205	18	23	288	14	662
4:30 PM	19	4	28	19	7	22	11	220	9	27	221	6	593
4:45 PM	14	9	29	16	4	21	12	226	17	19	281	4	652
5:00 PM	21	7	29	22	5	10	9	229	14	18	228	0	592
5:15 PM	20	6	32	22	6	18	15	226	14	21	247	6	633
5:30 PM	19	5	20	32	8	18	11	206	14	11	295	7	646
5:45 PM	20	6	25	25	10	26	9	240	13	23	256	7	660
TOTAL VOLUMES :	NL 151	NT 50	NR 205	SL 188	ST 49	SR 149	EL 101	ET 1757	ER 119	WL 164	WT 2059	WR 55	TOTAL 5047
APPROACH %'s :	37.19%	12.32%	50.49%	48.70%	12.69%	38.60%	5.11%	88.87%	6.02%	7.20%	90.39%	2.41%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	80	24	106	101	29	72	44	901	55	73	1026	20	2531
PEAK HR FACTOR :		0.905			0.828			0.954			0.894		0.959

UTURNS	NB	SB	EB	WB
	0	0	1	1
	0	0	0	5
	0	0	0	1
	0	0	0	3
	0	0	0	3
	0	0	0	1
	0	0	0	0
	0	0	0	1
TOTAL VOLUMES :	NB 0	SB 0	EB 1	WB 15

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-013 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	East Dr			East Dr			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 1.5	ST 0	SR 0.5	EL 1	ET 3	ER 0	WL 0	WT 3	WR 1	TOTAL
7:00 AM	0	0	0	0	0	2	0	143	0	0	178	7	330
7:15 AM	0	0	0	2	0	2	1	146	0	0	236	11	398
7:30 AM	0	0	0	3	0	3	1	191	0	0	369	12	579
7:45 AM	0	0	0	1	0	4	2	240	0	0	360	15	622
8:00 AM	0	0	0	4	0	2	0	226	0	0	295	15	542
8:15 AM	0	0	0	6	0	1	1	179	0	0	260	13	460
8:30 AM	0	0	0	2	0	1	2	160	0	0	222	18	405
8:45 AM	0	0	0	2	0	2	1	124	0	0	192	16	337
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	20	0	17	8	1409	0	0	2112	107	3673
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	54.05%	0.00%	45.95%	0.56%	99.44%	0.00%	0.00%	95.18%	4.82%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	0	0	14	0	10	4	836	0	0	1284	55	2203
PEAK HR FACTOR :	0.000			0.857			0.868			0.879			0.885

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
TOTAL VOLUMES :	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-013 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	East Dr			East Dr			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	0.5	1	3	0	0	3	1	
4:00 PM	0	0	0	28	0	6	5	308	0	0	180	58	585
4:15 PM	0	0	0	15	0	4	4	311	0	0	194	49	577
4:30 PM	0	0	0	17	0	4	5	331	0	0	202	71	630
4:45 PM	0	0	0	13	0	5	6	281	0	0	182	41	528
5:00 PM	0	0	0	22	0	5	6	349	0	0	188	67	637
5:15 PM	0	0	0	20	0	4	1	323	0	0	216	63	627
5:30 PM	0	0	0	16	0	4	1	303	0	0	207	58	589
5:45 PM	0	0	0	22	0	3	0	239	0	0	165	59	488
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	153	0	35	28	2445	0	0	1534	466	4661
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	81.38%	0.00%	18.62%	1.13%	98.87%	0.00%	0.00%	76.70%	23.30%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	0	0	72	0	18	18	1284	0	0	788	242	2422
PEAK HR FACTOR :		0.000			0.833			0.917			0.923		0.951

UTURNS

NB	SB	EB	WB
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
NB	SB	EB	WB
0	0	2	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-014 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Edwards St			Edwards St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 1	TOTAL
7:00 AM	19	80	18	34	93	14	12	63	11	18	136	23	521
7:15 AM	13	99	24	38	179	14	5	61	8	12	186	32	671
7:30 AM	22	152	26	78	225	26	12	88	16	29	226	68	968
7:45 AM	35	133	54	63	252	17	8	113	16	38	312	81	1122
8:00 AM	29	135	46	69	233	17	7	79	11	34	183	56	899
8:15 AM	16	120	55	41	138	15	21	86	13	23	195	33	756
8:30 AM	21	96	13	33	136	12	4	68	13	25	146	23	590
8:45 AM	14	84	36	36	100	4	9	62	11	23	170	17	566
TOTAL VOLUMES :	169	899	272	392	1356	119	78	620	99	202	1554	333	6093
APPROACH %'s :	12.61%	67.09%	20.30%	21.00%	72.63%	6.37%	9.79%	77.79%	12.42%	9.67%	74.39%	15.94%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	102	540	181	251	848	75	48	366	56	124	916	238	3745
PEAK HR FACTOR :		0.927			0.884			0.858			0.741		0.834

UTURNS	NB	SB	EB	WB
	0	0	1	7
	0	0	0	4
	0	0	0	7
	0	0	0	7
	0	0	1	5
	0	0	1	6
	0	0	0	8
	0	0	1	4
TOTAL VOLUMES :	0	0	4	48

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-014 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Edwards St			Edwards St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 1	TOTAL
4:00 PM	13	120	36	33	115	12	35	201	20	38	102	38	763
4:15 PM	6	139	35	35	115	19	13	190	20	40	105	53	770
4:30 PM	13	149	26	34	121	17	48	218	14	43	101	51	835
4:45 PM	14	144	34	32	146	11	31	186	9	40	89	39	775
5:00 PM	17	150	25	32	126	22	25	268	9	31	89	45	839
5:15 PM	19	177	35	25	128	17	33	192	21	51	101	46	845
5:30 PM	16	167	31	14	159	6	36	236	17	36	111	39	868
5:45 PM	13	142	32	17	128	10	17	140	10	33	82	61	685
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	111	1188	254	222	1038	114	238	1631	120	312	780	372	6380
APPROACH %'s :	7.15%	76.50%	16.36%	16.16%	75.55%	8.30%	11.97%	82.00%	6.03%	21.31%	53.28%	25.41%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	66	638	125	103	559	56	125	882	56	158	390	169	3327
PEAK HR FACTOR :		0.897			0.950			0.880			0.905		0.958

UTURNS	NB	SB	EB	WB
	0	0	2	3
	0	0	0	2
	0	0	0	1
	0	0	0	1
	0	0	0	1
	0	0	0	4
	0	0	0	1
	0	0	0	3
	NB	SB	EB	WB
	0	0	2	16

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-015 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Goldenwest St			Goldenwest St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 0	SL 1	ST 2.5	SR 0.5	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL
7:00 AM	15	242	34	42	245	19	28	122	18	58	180	76	1079
7:15 AM	18	271	42	48	280	16	29	116	23	98	238	100	1279
7:30 AM	14	265	45	39	334	21	37	142	44	132	334	110	1517
7:45 AM	11	252	52	46	389	29	41	161	28	138	287	105	1539
8:00 AM	19	208	41	34	327	20	40	181	40	92	216	104	1322
8:15 AM	18	235	42	35	330	15	30	98	26	72	190	91	1182
8:30 AM	14	219	51	42	323	13	28	112	30	94	183	96	1205
8:45 AM	17	208	34	31	325	28	31	68	22	88	184	84	1120
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	126	1900	341	317	2553	161	264	1000	231	772	1812	766	10243
APPROACH %'s :	5.32%	80.27%	14.41%	10.46%	84.23%	5.31%	17.66%	66.89%	15.45%	23.04%	54.09%	22.87%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	62	996	180	167	1330	86	147	600	135	460	1075	419	5657
PEAK HR FACTOR :		0.935			0.853			0.845			0.848		0.919

UTURNS	NB	SB	EB	WB
	0	4	0	14
	0	1	0	10
	0	4	0	9
	0	4	1	26
	0	2	1	11
	0	2	1	12
	0	6	0	11
	0	3	0	10
	NB	SB	EB	WB
	0	26	3	103

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-015 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Goldenwest St			Goldenwest St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 0	SL 1	ST 2.5	SR 0.5	EL 2	ET 3	ER 1	WL 2	WT 3	WR 1	TOTAL
4:00 PM	42	330	56	33	310	14	51	234	63	82	143	88	1446
4:15 PM	59	296	74	32	299	21	43	182	38	81	156	99	1380
4:30 PM	45	320	75	33	308	26	52	301	35	98	183	123	1599
4:45 PM	36	334	77	28	296	14	34	211	40	110	165	108	1453
5:00 PM	45	334	55	30	312	10	58	302	37	86	172	120	1561
5:15 PM	55	354	54	31	318	27	54	227	43	106	163	117	1549
5:30 PM	54	324	64	21	344	10	46	268	37	85	170	101	1524
5:45 PM	48	337	43	33	293	20	46	166	50	90	149	115	1390
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	384	2629	498	241	2480	142	384	1891	343	738	1301	871	11902
APPROACH %'s :	10.94%	74.88%	14.18%	8.42%	86.62%	4.96%	14.67%	72.23%	13.10%	25.36%	44.71%	29.93%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	181	1342	261	122	1234	77	198	1041	155	400	683	468	6162
PEAK HR FACTOR :		0.963			0.953			0.878			0.960		0.963

UTURNS

	NB	SB	EB	WB
	0	4	2	26
	2	3	2	27
	0	5	2	21
	0	5	3	22
	0	1	2	16
	1	9	1	23
	1	4	0	12
	0	7	0	12
	NB	SB	EB	WB
	4	38	12	159

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-016 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Hoover St			Hoover St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 1	ST 0	SR 1	EL 1	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL
7:00 AM	0	0	0	72	0	24	17	118	0	0	87	22	340
7:15 AM	0	0	0	87	0	52	18	140	0	0	135	29	461
7:30 AM	0	0	0	101	0	74	21	193	0	0	195	53	637
7:45 AM	0	0	0	112	0	82	26	185	0	0	221	47	673
8:00 AM	0	0	0	115	0	50	23	264	0	0	161	19	632
8:15 AM	0	0	0	87	0	37	23	163	0	0	148	33	491
8:30 AM	0	0	0	61	0	34	18	145	0	0	114	28	400
8:45 AM	0	0	0	66	0	46	17	111	0	0	145	27	412
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	701	0	399	163	1319	0	0	1206	258	4046
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	63.73%	0.00%	36.27%	11.00%	89.00%	0.00%	0.00%	82.38%	17.62%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	0	0	415	0	243	93	805	0	0	725	152	2433
PEAK HR FACTOR :		0.000			0.848			0.782			0.818		0.904

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
NB	SB	EB	WB
0	0	1	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-016 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Hoover St			Hoover St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 1	ST 0	SR 1	EL 1	ET 2	ER 0	WL 0	WT 2	WR 0	TOTAL
4:00 PM	0	0	0	67	0	35	33	169	0	0	140	44	488
4:15 PM	0	0	0	46	0	47	30	166	0	0	159	61	509
4:30 PM	0	0	0	60	0	41	44	195	0	0	167	46	553
4:45 PM	0	0	0	59	0	50	41	177	0	0	152	46	525
5:00 PM	0	0	0	59	0	46	42	186	0	0	168	57	558
5:15 PM	0	0	0	46	0	39	36	197	0	0	161	85	564
5:30 PM	0	0	0	50	0	47	40	184	0	0	150	67	538
5:45 PM	0	0	0	57	0	34	30	137	0	0	153	53	464
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	444	0	339	296	1411	0	0	1250	459	4199
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	56.70%	0.00%	43.30%	17.34%	82.66%	0.00%	0.00%	73.14%	26.86%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	0	0	224	0	176	163	755	0	0	648	234	2200
PEAK HR FACTOR :		0.000			0.917			0.960			0.896		0.975

UTURNS

	NB	SB	EB	WB
4:00 PM	0	0	0	0
4:15 PM	0	0	1	0
4:30 PM	0	0	0	0
4:45 PM	0	0	1	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	0	0	0	0
5:45 PM	0	0	0	0
TOTAL VOLUMES :	0	0	2	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-017 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Hope St			Hope St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0.5	0.5	1	1	0	1	3	0	1	3	0	
7:00 AM	4	0	2	2	1	12	1	126	1	1	104	1	255
7:15 AM	8	1	2	2	0	26	2	146	0	2	150	1	340
7:30 AM	3	0	1	5	0	25	1	227	4	0	244	3	513
7:45 AM	3	0	0	6	2	25	2	236	4	1	286	3	568
8:00 AM	4	0	1	7	0	31	8	269	4	2	281	2	609
8:15 AM	4	0	1	3	0	22	9	263	2	1	189	0	494
8:30 AM	4	0	3	4	0	20	6	227	4	1	168	1	438
8:45 AM	6	0	6	4	0	24	7	164	6	0	185	5	407
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	36	1	16	33	3	185	36	1658	25	8	1607	16	3624
APPROACH %'s :	67.92%	1.89%	30.19%	14.93%	1.36%	83.71%	2.09%	96.45%	1.45%	0.49%	98.53%	0.98%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	14	0	3	21	2	103	20	995	14	4	1000	8	2184
PEAK HR FACTOR :	0.850			0.829			0.915			0.872			0.897

UTURNS				
NB	SB	EB	WB
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	2	0
0	0	2	0
0	0	0	0
0	0	2	0
NB	SB	EB	WB
0	0	7	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-017 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Hope St			Hope St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 0.5	NR 0.5	SL 1	ST 1	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	4	0	4	2	0	13	12	212	6	2	225	3	483
4:15 PM	6	0	2	1	0	17	12	237	5	0	254	3	537
4:30 PM	5	0	3	2	0	10	14	230	4	5	262	3	538
4:45 PM	4	0	4	1	0	11	9	217	5	5	276	4	536
5:00 PM	2	0	6	5	1	3	12	245	9	2	280	1	566
5:15 PM	4	0	1	2	0	13	10	239	4	2	288	4	567
5:30 PM	2	0	5	2	1	10	6	234	7	4	290	4	565
5:45 PM	6	0	3	2	0	10	6	218	6	8	255	10	524
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	33	0	28	17	2	87	81	1832	46	28	2130	32	4316
APPROACH %'s :	54.10%	0.00%	45.90%	16.04%	1.89%	82.08%	4.13%	93.52%	2.35%	1.28%	97.26%	1.46%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	12	0	16	10	2	37	37	935	25	13	1134	13	2234
PEAK HR FACTOR :		0.875			0.817			0.937			0.973		0.985

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	2	0
0	0	2	1
0	0	4	0
0	0	2	1
0	0	2	1
0	0	0	0
0	0	0	0
NB	SB	EB	WB
0	0	12	3

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-018 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Magnolia St			Magnolia St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1.5	ST 2.5	SR 0	EL 2	ET 3	ER 0	WL 2	WT 3	WR 1	TOTAL
7:00 AM	18	147	7	32	410	17	22	86	57	33	73	10	912
7:15 AM	38	162	11	55	394	16	40	144	76	32	74	19	1061
7:30 AM	37	205	8	74	355	22	45	139	63	38	152	41	1179
7:45 AM	30	208	22	68	331	16	30	182	65	43	127	30	1152
8:00 AM	34	220	20	75	325	5	59	182	74	56	104	41	1195
8:15 AM	32	193	23	66	317	17	64	166	69	48	109	26	1130
8:30 AM	29	171	17	87	335	20	50	145	46	44	113	25	1082
8:45 AM	29	173	23	99	289	26	38	145	44	63	114	54	1097
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	247	1479	131	556	2756	139	348	1189	494	357	866	246	8808
APPROACH %'s :	13.30%	79.64%	7.05%	16.11%	79.86%	4.03%	17.13%	58.54%	24.32%	24.30%	58.95%	16.75%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	133	826	73	283	1328	60	198	669	271	185	492	138	4656
PEAK HR FACTOR :		0.942			0.926			0.903			0.882		0.974

UTURNS	NB	SB	EB	WB
	1	0	3	7
	0	0	0	1
	0	0	2	8
	0	0	4	10
	2	0	2	12
	0	1	6	7
	1	0	2	12
	0	0	2	16
	NB	SB	EB	WB
	4	1	21	73

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-018 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Magnolia St			Magnolia St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1.5	ST 2.5	SR 0	EL 2	ET 3	ER 0	WL 2	WT 3	WR 1	TOTAL
4:00 PM	53	260	19	64	201	28	57	155	28	84	157	68	1174
4:15 PM	59	284	20	65	214	34	52	171	22	53	171	64	1209
4:30 PM	43	248	27	73	178	18	72	161	21	62	165	68	1136
4:45 PM	54	265	25	57	218	29	43	149	21	64	173	59	1157
5:00 PM	65	304	25	75	205	21	72	189	23	74	171	77	1301
5:15 PM	46	282	30	77	238	24	57	174	21	80	168	69	1266
5:30 PM	46	280	26	44	230	24	53	142	29	75	180	69	1198
5:45 PM	56	271	23	56	238	39	60	162	35	67	180	77	1264
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	422	2194	195	511	1722	217	466	1303	200	559	1365	551	9705
APPROACH %'s :	15.01%	78.05%	6.94%	20.86%	70.29%	8.86%	23.67%	66.18%	10.16%	22.59%	55.15%	22.26%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	213	1137	104	252	911	108	242	667	108	296	699	292	5029
PEAK HR FACTOR :		0.923			0.937			0.895			0.993		0.966

UTURNS

NB	SB	EB	WB
0	0	2	20
3	0	6	9
2	0	0	24
1	0	5	16
0	0	3	19
0	0	3	13
0	0	0	14
0	0	3	12
NB	SB	EB	WB
6	0	22	127

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-019 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Pagoda			Pagoda			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 0.5	NR 0.5	SL 0.5	ST 0.5	SR 1	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM	1	0	3	2	0	0	2	116	1	11	105	3	244
7:15 AM	1	1	5	1	0	1	2	133	2	11	123	3	283
7:30 AM	2	0	6	2	0	1	9	188	4	8	206	10	436
7:45 AM	2	2	5	4	1	5	15	180	4	14	214	16	462
8:00 AM	4	0	10	3	0	11	16	216	5	22	230	10	527
8:15 AM	5	1	10	11	1	5	17	245	3	20	167	20	505
8:30 AM	4	1	11	9	1	7	17	212	6	30	192	19	509
8:45 AM	2	0	11	13	2	7	16	171	7	32	183	14	458
TOTAL VOLUMES :	NL 21	NT 5	NR 61	SL 45	ST 5	SR 37	EL 94	ET 1461	ER 32	WL 148	WT 1420	WR 95	TOTAL 3424
APPROACH %'s :	24.14%	5.75%	70.11%	51.72%	5.75%	42.53%	5.92%	92.06%	2.02%	8.90%	85.39%	5.71%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	15	4	36	27	3	28	65	853	18	86	803	65	2003
PEAK HR FACTOR :		0.859			0.853			0.883			0.910		0.950

UTURNS

NB	SB	EB	WB
0	0	1	1
0	0	1	3
0	0	1	4
0	0	5	4
0	0	4	6
0	0	5	7
0	0	2	10
0	0	4	12
NB 0	SB 0	EB 23	WB 47

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-019 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Pagoda			Pagoda			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0.5	0.5	0.5	0.5	1	1	3	0	1	3	0	
4:00 PM	8	5	16	20	2	17	29	231	11	31	243	26	639
4:15 PM	9	5	14	20	0	12	26	235	12	31	254	19	637
4:30 PM	11	2	23	22	3	24	26	222	8	29	248	25	643
4:45 PM	11	3	22	13	2	17	24	239	4	48	252	14	649
5:00 PM	12	2	21	15	2	20	21	271	12	47	253	17	693
5:15 PM	15	0	18	23	5	24	31	248	6	36	275	16	697
5:30 PM	13	1	24	22	3	18	26	240	8	29	280	33	697
5:45 PM	9	1	25	18	1	18	27	246	13	43	265	13	679
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	88	19	163	153	18	150	210	1932	74	294	2070	163	5334
APPROACH %'s :	32.59%	7.04%	60.37%	47.66%	5.61%	46.73%	9.48%	87.18%	3.34%	11.63%	81.92%	6.45%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	49	4	88	78	11	80	105	1005	39	155	1073	79	2766
PEAK HR FACTOR :		0.928			0.813			0.945			0.955		0.992

UTURNS				
NB	SB	EB	WB	
0	0	9	13	
0	0	4	12	
0	0	14	9	
0	0	4	21	
0	0	1	12	
0	0	11	12	
0	0	9	13	
0	0	17	20	
NB	SB	EB	WB	
0	0	69	112	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-020 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Purdy St			Purdy St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	1	0	1	1	0	1	2	0	1	2	0	
7:00 AM	3	0	1	17	1	12	1	176	1	0	102	3	317
7:15 AM	6	5	1	30	4	12	4	210	8	0	118	21	419
7:30 AM	14	10	5	42	6	21	17	239	8	1	182	31	576
7:45 AM	15	3	3	45	12	20	5	253	18	1	140	23	538
8:00 AM	5	1	3	16	4	8	0	282	10	2	156	10	497
8:15 AM	13	4	5	14	3	4	5	250	9	1	143	7	458
8:30 AM	11	1	4	17	2	4	3	206	3	3	162	5	421
8:45 AM	7	1	6	18	6	8	1	189	10	3	142	18	409
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	74	25	28	199	38	89	36	1805	67	11	1145	118	3635
APPROACH %'s :	58.27%	19.69%	22.05%	61.04%	11.66%	27.30%	1.89%	94.60%	3.51%	0.86%	89.87%	9.26%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	47	18	16	117	25	53	27	1024	45	5	621	71	2069
PEAK HR FACTOR :		0.698			0.633			0.938			0.814		0.898

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	1	
0	0	0	0	
0	0	0	0	
NB	SB	EB	WB	
0	0	0	1	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-020 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Purdy St			Purdy St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	10	4	6	18	3	8	7	202	6	6	200	21	491
4:15 PM	16	4	1	11	2	14	8	180	11	6	214	29	496
4:30 PM	13	2	4	13	3	8	8	216	8	3	182	24	484
4:45 PM	20	2	0	6	2	10	5	212	7	2	196	14	476
5:00 PM	7	3	0	8	2	7	4	237	14	2	211	23	518
5:15 PM	18	8	2	12	5	4	5	210	9	2	234	18	527
5:30 PM	8	7	4	11	2	9	8	187	11	0	244	26	517
5:45 PM	12	2	1	21	4	9	7	186	15	1	225	25	508
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	104	32	18	100	23	69	52	1630	81	22	1706	180	4017
APPROACH %'s :	67.53%	20.78%	11.69%	52.08%	11.98%	35.94%	2.95%	92.46%	4.59%	1.15%	89.41%	9.43%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	45	20	7	52	13	29	24	820	49	5	914	92	2070
PEAK HR FACTOR :		0.643			0.691			0.875			0.936		0.982

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	1	1	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	1	1	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-021 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Victoria Ln			Victoria Ln			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0.5	ST 0.5	SR 1	EL 1	ET 3	ER 0	WL 1	WT 4	WR 0	TOTAL
7:00 AM	1	0	22	1	0	0	1	112	0	0	190	1	328
7:15 AM	1	0	25	2	1	0	0	125	0	1	216	2	373
7:30 AM	5	0	21	1	2	3	1	186	4	2	361	2	588
7:45 AM	6	0	17	1	1	1	0	209	3	3	381	5	627
8:00 AM	0	1	15	10	0	1	2	196	2	2	287	6	522
8:15 AM	1	1	17	5	1	0	3	184	4	2	235	9	462
8:30 AM	1	0	19	8	0	1	1	106	0	4	230	6	376
8:45 AM	3	0	7	11	3	0	5	117	1	7	175	5	334
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	18	2	143	39	8	6	13	1235	14	21	2075	36	3610
APPROACH %'s :	11.04%	1.23%	87.73%	73.58%	15.09%	11.32%	1.03%	97.86%	1.11%	0.98%	97.33%	1.69%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	12	2	70	17	4	5	6	775	13	9	1264	22	2199
PEAK HR FACTOR :		0.808			0.591			0.936			0.832		0.877

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
1	0	0	1
0	0	0	1
0	0	0	2
NB	SB	EB	WB
1	0	0	4

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-021 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Victoria Ln			Victoria Ln			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0.5	0.5	1	1	3	0	1	4	0	
4:00 PM	1	1	11	23	5	10	6	265	1	8	155	29	515
4:15 PM	2	2	14	27	1	10	9	289	3	12	174	16	559
4:30 PM	1	3	11	26	1	12	6	279	0	11	171	20	541
4:45 PM	2	0	13	25	2	5	8	255	4	9	152	18	493
5:00 PM	1	2	8	24	4	4	7	310	1	21	162	20	564
5:15 PM	0	1	11	40	8	9	8	283	5	9	181	23	578
5:30 PM	2	3	11	32	1	10	5	265	6	15	181	23	554
5:45 PM	2	4	8	22	2	10	10	203	2	8	143	15	429
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	11	16	87	219	24	70	59	2149	22	93	1319	164	4233
APPROACH %'s :	9.65%	14.04%	76.32%	69.97%	7.67%	22.36%	2.65%	96.37%	0.99%	5.90%	83.69%	10.41%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	5	6	43	121	15	28	28	1113	16	54	676	84	2189
PEAK HR FACTOR :		0.844			0.719			0.910			0.929		0.947

UTURNS

NB	SB	EB	WB
0	0	0	1
0	0	0	2
0	0	1	0
0	0	0	2
0	0	0	3
0	0	0	1
0	0	0	0
0	0	0	0
NB	SB	EB	WB
0	0	1	9

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-022 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Ward St			Ward St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2.5	ER 0.5	WL 1	WT 3	WR 0	TOTAL
7:00 AM	11	28	24	8	63	9	6	114	6	15	86	6	376
7:15 AM	4	45	24	18	117	16	9	132	13	16	130	10	534
7:30 AM	22	85	49	22	138	25	6	197	40	65	203	20	872
7:45 AM	31	121	59	16	114	26	5	191	36	30	231	44	904
8:00 AM	21	51	30	26	77	28	20	232	21	21	238	45	810
8:15 AM	14	49	22	35	79	28	11	208	21	17	146	20	650
8:30 AM	14	24	27	16	46	17	7	206	13	15	146	8	539
8:45 AM	16	58	22	19	60	21	9	122	16	12	165	14	534
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	133	461	257	160	694	170	73	1402	166	191	1345	167	5219
APPROACH %'s :	15.63%	54.17%	30.20%	15.63%	67.77%	16.60%	4.45%	85.44%	10.12%	11.22%	78.98%	9.81%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	88	306	160	99	408	107	42	828	118	133	818	129	3236
PEAK HR FACTOR :		0.656			0.830			0.905			0.885		0.895

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	1	0
	0	0	1	1
	0	0	0	0
	0	0	1	0
	0	0	0	0
	0	0	1	3
	0	0	1	0
	NB	SB	EB	WB
	0	0	5	4

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-022 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Ward St			Ward St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2.5	ER 0.5	WL 1	WT 3	WR 0	TOTAL
4:00 PM	24	97	22	11	75	15	21	156	17	24	170	20	652
4:15 PM	26	109	22	13	64	18	28	188	15	17	215	18	733
4:30 PM	19	92	21	18	75	21	12	181	15	26	229	28	737
4:45 PM	25	113	25	17	61	23	20	183	18	22	235	34	776
5:00 PM	17	120	31	20	84	20	23	212	20	21	253	21	842
5:15 PM	25	135	35	13	65	18	24	212	21	21	241	32	842
5:30 PM	21	135	17	14	84	24	21	212	35	28	254	27	872
5:45 PM	17	134	29	15	78	22	25	182	19	23	217	44	805
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	174	935	202	121	586	161	174	1526	160	182	1814	224	6259
APPROACH %'s :	13.27%	71.32%	15.41%	13.94%	67.51%	18.55%	9.35%	82.04%	8.60%	8.20%	81.71%	10.09%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	80	524	112	62	311	84	93	818	95	93	965	124	3361
PEAK HR FACTOR :		0.918			0.921			0.938			0.956		0.964

UTURNS	NB	SB	EB	WB
	0	0	1	1
	0	0	3	0
	1	0	0	1
	0	0	0	0
	0	0	1	2
	0	2	1	0
	0	0	0	0
	0	0	1	0
	NB	SB	EB	WB
	1	2	7	4

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-023 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	West Dr			West Dr			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 0	NR 0	SL 1.5	ST 0	SR 0.5	EL 1	ET 3	ER 0	WL 0	WT 4	WR 0	TOTAL
7:00 AM	0	0	0	1	0	1	2	110	0	0	174	2	290
7:15 AM	0	0	0	3	0	0	1	128	0	0	231	3	366
7:30 AM	0	0	0	5	0	1	1	184	0	0	322	7	520
7:45 AM	0	0	0	0	0	1	3	217	0	0	428	9	658
8:00 AM	0	0	0	12	0	3	7	185	0	0	274	1	482
8:15 AM	0	0	0	5	0	3	5	178	0	0	242	4	437
8:30 AM	0	0	0	0	0	6	6	115	0	0	197	5	329
8:45 AM	0	0	0	2	0	7	7	123	0	0	200	4	343
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	28	0	22	32	1240	0	0	2068	35	3425
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	56.00%	0.00%	44.00%	2.52%	97.48%	0.00%	0.00%	98.34%	1.66%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	0	0	22	0	8	16	764	0	0	1266	21	2097
PEAK HR FACTOR :	0.000			0.500			0.886			0.736			0.797

UTURNS

NB	SB	EB	WB
0	0	1	0
0	0	1	0
0	0	0	0
0	0	3	0
0	0	0	0
0	0	1	0
0	0	1	0
0	0	0	0
NB	SB	EB	WB
0	0	7	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-023 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	West Dr			West Dr			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	0.5	1	3	0	0	4	0	
4:00 PM	0	0	0	27	0	13	11	255	0	0	154	9	469
4:15 PM	0	0	0	29	0	17	16	258	0	0	182	9	511
4:30 PM	0	0	0	24	0	21	19	282	0	0	169	14	529
4:45 PM	0	0	0	15	0	20	26	234	0	0	153	11	459
5:00 PM	0	0	0	26	0	17	13	325	0	0	140	15	536
5:15 PM	0	0	0	19	0	22	23	245	0	0	181	17	507
5:30 PM	0	0	0	21	0	25	17	269	0	0	156	20	508
5:45 PM	0	0	0	22	0	21	9	186	0	0	164	8	410
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	183	0	156	134	2054	0	0	1299	103	3929
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	53.98%	0.00%	46.02%	6.12%	93.88%	0.00%	0.00%	92.65%	7.35%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	0	0	0	94	0	75	74	1099	0	0	644	49	2035
PEAK HR FACTOR :		0.000			0.918			0.868			0.907		0.949

UTURNS				
NB	SB	EB	WB	
0	0	1	0	
0	0	3	0	
0	0	2	0	
0	0	1	0	
0	0	1	0	
0	0	2	0	
0	0	0	0	
0	0	0	0	
NB	SB	EB	WB	
0	0	10	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-024 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Brookhurst St			Brookhurst St			Bishop Pl			Bishop Pl			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	3	133	1	2	468	11	19	0	18	8	2	1	666
7:15 AM	12	170	0	1	485	12	11	0	17	10	2	5	725
7:30 AM	8	227	1	1	572	25	32	0	50	9	2	2	929
7:45 AM	41	290	4	3	549	41	50	2	41	10	2	8	1041
8:00 AM	24	226	3	3	434	72	87	0	50	4	2	5	910
8:15 AM	26	272	4	3	463	57	80	2	51	4	1	2	965
8:30 AM	5	225	1	4	400	16	39	0	37	10	0	3	740
8:45 AM	7	239	2	0	370	13	20	0	24	3	0	2	680
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	126	1782	16	17	3741	247	338	4	288	58	11	28	6656
APPROACH %'s :	6.55%	92.62%	0.83%	0.42%	93.41%	6.17%	53.65%	0.63%	45.71%	59.79%	11.34%	28.87%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	99	1015	12	10	2018	195	249	4	192	27	7	17	3845
PEAK HR FACTOR :		0.840			0.929			0.812			0.638		0.923

UTURNS	NB	SB	EB	WB
7:00 AM	0	1	0	0
7:15 AM	1	0	0	0
7:30 AM	0	1	0	0
7:45 AM	0	1	0	0
8:00 AM	1	0	0	0
8:15 AM	0	2	0	0
8:30 AM	0	2	0	0
8:45 AM	2	0	0	0
TOTAL VOLUMES :	4	7	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-024 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Brookhurst St			Brookhurst St			Bishop Pl			Bishop Pl			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	26	396	2	3	313	29	30	1	34	2	0	1	837
4:15 PM	28	428	2	5	317	28	23	1	24	0	0	1	857
4:30 PM	12	390	2	7	315	26	15	0	24	1	1	0	793
4:45 PM	16	413	4	4	309	30	23	0	26	2	0	1	828
5:00 PM	18	437	3	5	326	34	21	4	23	2	1	1	875
5:15 PM	11	446	8	4	320	47	27	2	21	3	0	1	890
5:30 PM	25	465	5	6	350	41	21	3	25	3	1	1	946
5:45 PM	23	381	2	3	315	28	35	0	30	2	1	3	823
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	159	3356	28	37	2565	263	195	11	207	15	4	9	6849
APPROACH %'s :	4.49%	94.72%	0.79%	1.29%	89.53%	9.18%	47.22%	2.66%	50.12%	53.57%	14.29%	32.14%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	70	1761	20	19	1305	152	92	9	95	10	2	4	3539
PEAK HR FACTOR :		0.935			0.929			0.980			0.800		0.935

UTURNS	NB	SB	EB	WB
	2	2	0	0
	2	4	0	0
	0	3	0	0
	0	2	0	0
	1	2	0	0
	0	2	0	0
	1	3	0	0
	3	1	0	0
	NB	SB	EB	WB
	9	19	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-025 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Brookhurst St			Brookhurst St			Margo Ln			Margo Ln			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	2	123	2	1	386	3	8	0	6	9	1	5	546
7:15 AM	3	180	2	0	511	4	10	1	8	16	0	8	743
7:30 AM	1	232	7	3	498	4	11	4	14	18	0	9	801
7:45 AM	3	246	13	10	506	8	11	10	6	15	8	21	857
8:00 AM	6	242	4	6	475	6	14	2	9	8	1	15	788
8:15 AM	2	248	7	4	446	9	7	1	8	9	3	6	750
8:30 AM	3	197	10	10	455	7	15	0	7	14	3	13	734
8:45 AM	7	218	3	6	416	14	10	1	2	7	1	6	691
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	27	1686	48	40	3693	55	86	19	60	96	17	83	5910
APPROACH %'s :	1.53%	95.74%	2.73%	1.06%	97.49%	1.45%	52.12%	11.52%	36.36%	48.98%	8.67%	42.35%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	12	968	31	23	1925	27	43	17	37	50	12	51	3196
PEAK HR FACTOR :		0.965			0.942			0.836			0.642		0.932

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
TOTAL VOLUMES :	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-025 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Brookhurst St			Brookhurst St			Margo Ln			Margo Ln			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	3	381	10	4	311	10	5	2	8	5	0	4	743
4:15 PM	11	409	12	10	301	4	9	2	4	4	1	6	773
4:30 PM	12	394	5	3	269	7	10	1	6	3	1	2	713
4:45 PM	10	409	7	10	279	15	9	3	5	6	1	6	760
5:00 PM	8	455	9	10	292	9	10	1	9	3	0	3	809
5:15 PM	8	436	7	11	297	16	16	5	7	10	1	3	817
5:30 PM	19	437	7	13	294	9	18	1	8	6	0	6	818
5:45 PM	9	422	4	17	328	13	17	1	5	4	0	5	825
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	80	3343	61	78	2371	83	94	16	52	41	4	35	6258
APPROACH %'s :	2.30%	95.95%	1.75%	3.08%	93.64%	3.28%	58.02%	9.88%	32.10%	51.25%	5.00%	43.75%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	44	1750	27	51	1211	47	61	8	29	23	1	17	3269
PEAK HR FACTOR :		0.965			0.914			0.875			0.732		0.991

UTURNS	NB	SB	EB	WB
	0	1	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	1	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-026 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Brookhurst St			Brookhurst St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	12	114	10	25	420	13	7	72	29	10	74	13	799
7:15 AM	13	162	18	41	439	12	12	126	28	23	97	12	983
7:30 AM	20	164	33	69	512	27	17	193	44	29	185	33	1326
7:45 AM	49	239	40	66	488	28	9	163	47	33	219	45	1426
8:00 AM	32	183	10	31	424	19	23	111	56	36	176	33	1134
8:15 AM	28	203	22	39	441	26	38	112	54	21	123	20	1127
8:30 AM	28	171	21	36	381	23	28	117	52	28	90	11	986
8:45 AM	27	197	16	21	299	29	17	77	33	31	101	25	873
TOTAL VOLUMES :	209	1433	170	328	3404	177	151	971	343	211	1065	192	8654
APPROACH %'s :	11.53%	79.08%	9.38%	8.39%	87.08%	4.53%	10.31%	66.28%	23.41%	14.37%	72.55%	13.08%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	129	789	105	205	1865	100	87	579	201	119	703	131	5013
PEAK HR FACTOR :		0.780			0.892			0.853			0.802		0.879

UTURNS	NB	SB	EB	WB
7:00 AM	1	0	0	0
7:15 AM	1	1	0	0
7:30 AM	1	0	0	0
7:45 AM	0	0	0	0
8:00 AM	2	0	0	0
8:15 AM	2	2	0	0
8:30 AM	3	1	0	0
8:45 AM	4	1	0	0
TOTAL VOLUMES :	14	5	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-026 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Brookhurst St			Brookhurst St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	43	336	30	44	267	22	21	110	28	25	128	21	1075
4:15 PM	43	346	20	34	259	34	24	134	28	28	155	31	1136
4:30 PM	55	362	36	44	264	29	29	112	27	23	118	22	1121
4:45 PM	48	388	22	42	238	30	16	143	33	32	152	28	1172
5:00 PM	58	408	33	47	269	28	19	132	23	25	123	19	1184
5:15 PM	38	365	39	35	259	29	30	125	42	28	159	37	1186
5:30 PM	60	423	41	33	283	31	15	96	37	31	136	30	1216
5:45 PM	49	355	48	52	280	40	30	139	46	31	153	33	1256
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	394	2983	269	331	2119	243	184	991	264	223	1124	221	9346
APPROACH %'s :	10.81%	81.82%	7.38%	12.29%	78.69%	9.02%	12.79%	68.87%	18.35%	14.22%	71.68%	14.09%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	205	1551	161	167	1091	128	94	492	148	115	571	119	4842
PEAK HR FACTOR :		0.915			0.931			0.853			0.898		0.964

UTURNS	NB	SB	EB	WB
	3	1	0	0
	4	3	0	0
	3	0	0	0
	3	5	0	0
	3	0	0	1
	1	1	0	0
	3	1	0	0
	4	2	0	0
	NB	SB	EB	WB
TOTAL VOLUMES :	24	13	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-027 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Bushard St			Bushard St			Bishop Pl			Bishop Pl			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	8	86	4	11	183	2	1	10	12	3	11	3	334
7:15 AM	10	107	8	25	301	7	4	21	11	9	16	9	528
7:30 AM	14	141	12	41	227	7	8	29	12	4	18	15	528
7:45 AM	27	139	11	29	263	13	13	23	13	6	16	20	573
8:00 AM	32	155	9	39	226	10	3	22	24	5	15	8	548
8:15 AM	25	150	1	10	182	15	11	13	21	5	29	11	473
8:30 AM	12	106	2	6	162	10	10	21	17	4	10	9	369
8:45 AM	16	89	1	7	150	15	8	11	6	4	17	8	332
TOTAL VOLUMES :	NL 144	NT 973	NR 48	SL 168	ST 1694	SR 79	EL 58	ET 150	ER 116	WL 40	WT 132	WR 83	TOTAL 3685
APPROACH %'s :	12.36%	83.52%	4.12%	8.66%	87.27%	4.07%	17.90%	46.30%	35.80%	15.69%	51.76%	32.55%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	83	542	40	134	1017	37	28	95	60	24	65	52	2177
PEAK HR FACTOR :		0.848			0.892			0.934			0.839		0.950

UTURNS

	NB	SB	EB	WB
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	1
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL VOLUMES :	0	0	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-027 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Bushard St			Bushard St			Bishop Pl			Bishop Pl			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	20	188	4	7	117	8	7	22	13	7	22	8	423
4:15 PM	12	195	0	13	121	15	22	13	13	7	34	19	464
4:30 PM	17	212	4	11	98	10	15	29	13	7	24	5	445
4:45 PM	16	179	10	11	111	11	19	24	19	4	26	15	445
5:00 PM	18	197	2	18	136	15	16	22	13	7	24	13	481
5:15 PM	18	218	4	11	109	17	15	12	21	11	18	16	470
5:30 PM	14	223	11	10	132	10	10	24	21	7	33	17	512
5:45 PM	21	173	3	6	139	13	11	23	14	5	34	22	464
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	136	1585	38	87	963	99	115	169	127	55	215	115	3704
APPROACH %'s :	7.73%	90.11%	2.16%	7.57%	83.81%	8.62%	27.98%	41.12%	30.90%	14.29%	55.84%	29.87%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	71	811	20	45	516	55	52	81	69	30	109	68	1927
PEAK HR FACTOR :		0.909			0.911			0.918			0.848		0.941

UTURNS

	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-028 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Bushard St			Bushard St			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	9	55	7	6	86	35	5	46	9	6	62	5	331
7:15 AM	22	76	5	3	77	45	19	46	12	9	121	5	440
7:30 AM	22	98	5	14	116	54	21	83	33	7	150	12	615
7:45 AM	36	104	26	20	145	58	27	87	30	16	149	18	716
8:00 AM	32	92	19	20	166	66	30	110	34	20	134	18	741
8:15 AM	30	102	33	15	96	46	35	127	37	32	139	27	719
8:30 AM	42	106	39	9	153	39	16	85	20	18	109	10	646
8:45 AM	20	94	31	22	96	54	18	105	12	22	126	9	609
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	213	727	165	109	935	397	171	689	187	130	990	104	4817
APPROACH %'s :	19.28%	65.79%	14.93%	7.56%	64.89%	27.55%	16.33%	65.81%	17.86%	10.62%	80.88%	8.50%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	140	404	117	64	560	209	108	409	121	86	531	73	2822
PEAK HR FACTOR :		0.884			0.826			0.802			0.871		0.952

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-028 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Bushard St			Bushard St			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	24	138	30	23	104	25	31	130	27	11	100	14	657
4:15 PM	18	113	27	23	126	34	26	163	26	14	91	17	678
4:30 PM	26	126	19	16	121	22	24	115	21	10	102	16	618
4:45 PM	18	140	25	20	107	30	41	166	29	9	82	11	678
5:00 PM	23	121	26	23	113	23	40	185	21	10	101	11	697
5:15 PM	24	141	28	25	124	25	30	175	21	15	98	16	722
5:30 PM	22	157	19	24	133	34	48	200	22	16	141	17	833
5:45 PM	16	131	40	16	137	20	29	211	32	23	112	19	786
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	171	1067	214	170	965	213	269	1345	199	108	827	121	5669
APPROACH %'s :	11.78%	73.48%	14.74%	12.61%	71.59%	15.80%	14.84%	74.19%	10.98%	10.23%	78.31%	11.46%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	85	550	113	88	507	102	147	771	96	64	452	63	3038
PEAK HR FACTOR :		0.944			0.912			0.932			0.832		0.912

UTURNS				
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-029 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Bushard St			Bushard St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	7	62	5	10	103	8	8	78	19	6	71	6	383
7:15 AM	9	73	8	31	182	7	8	116	32	4	110	17	597
7:30 AM	11	89	11	57	239	29	19	189	46	13	121	35	859
7:45 AM	14	95	14	28	172	23	17	138	40	23	124	49	737
8:00 AM	14	104	31	15	196	23	27	138	32	41	143	68	832
8:15 AM	23	111	28	19	187	23	18	156	29	37	181	45	857
8:30 AM	16	94	17	19	140	24	12	154	32	8	89	20	625
8:45 AM	16	78	6	22	157	24	22	124	20	6	127	27	629
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	110	706	120	201	1376	161	131	1093	250	138	966	267	5519
APPROACH %'s :	11.75%	75.43%	12.82%	11.57%	79.17%	9.26%	8.89%	74.15%	16.96%	10.07%	70.46%	19.47%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	62	399	84	119	794	98	81	621	147	114	569	197	3285
PEAK HR FACTOR :		0.841			0.778			0.836			0.837		0.956

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-029 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Bushard St			Bushard St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	28	178	10	14	107	23	22	124	14	13	110	33	676
4:15 PM	23	180	7	9	80	20	11	138	15	13	125	25	646
4:30 PM	17	153	15	9	75	22	20	123	17	15	146	22	634
4:45 PM	28	173	15	13	79	31	16	141	17	20	124	30	687
5:00 PM	27	187	14	18	96	12	21	132	22	11	149	44	733
5:15 PM	19	196	13	13	104	17	22	151	24	7	166	24	756
5:30 PM	27	192	17	21	115	26	16	117	22	15	159	31	758
5:45 PM	28	182	20	15	101	37	18	97	17	10	169	29	723
TOTAL VOLUMES :	NL 197	NT 1441	NR 111	SL 112	ST 757	SR 188	EL 146	ET 1023	ER 148	WL 104	WT 1148	WR 238	TOTAL 5613
APPROACH %'s :	11.26%	82.39%	6.35%	10.60%	71.62%	17.79%	11.09%	77.68%	11.24%	6.98%	77.05%	15.97%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	101	757	64	67	416	92	77	497	85	43	643	128	2970
PEAK HR FACTOR :		0.977			0.887			0.836			0.978		0.980

UTURNS	NB	SB	EB	WB
	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-030 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Edwards St			Edwards St			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
7:00 AM	0	85	18	16	115	4	0	0	0	34	4	8	284
7:15 AM	0	81	28	10	143	2	0	0	0	75	5	12	356
7:30 AM	0	102	47	19	170	5	0	0	0	97	11	21	472
7:45 AM	0	113	45	12	124	7	0	0	0	69	5	31	406
8:00 AM	0	106	28	12	115	1	0	0	0	27	5	10	304
8:15 AM	0	89	13	7	83	1	0	0	0	19	3	6	221
8:30 AM	0	74	10	10	88	1	0	0	0	18	1	8	210
8:45 AM	0	70	13	4	77	0	0	0	0	26	0	6	196
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	720	202	90	915	21	0	0	0	365	34	102	2449
APPROACH %'s :	0.00%	78.09%	21.91%	8.77%	89.18%	2.05%	#DIV/0!	#DIV/0!	#DIV/0!	72.85%	6.79%	20.36%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	402	148	53	552	15	0	0	0	268	26	74	1538
PEAK HR FACTOR :		0.870			0.799			0.000			0.713		0.815

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	1	0	0
	0	0	0	0
TOTAL VOLUMES :	0	1	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-030 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Edwards St			Edwards St			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
4:00 PM	0	149	25	11	126	0	0	0	0	21	0	21	353
4:15 PM	0	136	37	10	126	0	0	0	0	27	0	15	351
4:30 PM	0	134	19	6	115	0	0	0	0	30	1	20	325
4:45 PM	0	113	28	14	123	0	0	0	0	17	0	13	308
5:00 PM	0	150	27	11	111	0	0	0	0	27	2	22	350
5:15 PM	0	149	33	8	143	1	0	0	0	38	2	22	396
5:30 PM	0	160	32	13	137	4	0	0	0	42	3	17	408
5:45 PM	0	125	24	18	134	0	0	0	0	31	0	21	353
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1116	225	91	1015	5	0	0	0	233	8	151	2844
APPROACH %'s :	0.00%	83.22%	16.78%	8.19%	91.36%	0.45%	#DIV/0!	#DIV/0!	#DIV/0!	59.44%	2.04%	38.52%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	584	116	50	525	5	0	0	0	138	7	82	1507
PEAK HR FACTOR :		0.911			0.942			0.000			0.915		0.923

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-031 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Edwards St			Edwards St			Mar Vista St			Mar Vista St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL
7:00 AM	16	89	10	2	116	0	7	0	20	1	1	1	263
7:15 AM	32	102	1	2	191	6	9	1	45	3	4	0	396
7:30 AM	74	135	10	4	252	9	11	9	78	3	16	0	601
7:45 AM	82	122	7	5	220	24	31	20	114	4	14	1	644
8:00 AM	57	144	12	12	192	11	22	20	111	3	11	4	599
8:15 AM	10	154	11	12	173	3	3	0	30	2	0	5	403
8:30 AM	12	99	9	8	155	1	4	3	13	2	2	5	313
8:45 AM	6	95	11	9	112	2	1	3	28	0	0	6	273
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	289	940	71	54	1411	56	88	56	439	18	48	22	3492
APPROACH %'s :	22.23%	72.71%	5.46%	3.55%	92.77%	3.68%	15.09%	9.61%	75.30%	20.45%	54.55%	25.00%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	223	555	40	33	837	47	67	49	333	12	41	10	2247
PEAK HR FACTOR :		0.934			0.865			0.680			0.829		0.872

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-031 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Edwards St			Edwards St			Mar Vista St			Mar Vista St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL
4:00 PM	20	146	30	14	120	4	4	2	25	20	2	22	409
4:15 PM	19	158	31	12	143	2	3	3	14	14	1	16	416
4:30 PM	13	188	43	14	125	7	0	2	16	21	2	23	454
4:45 PM	16	173	27	20	156	4	3	2	11	22	4	20	458
5:00 PM	24	168	31	11	140	3	4	6	15	29	3	24	458
5:15 PM	11	190	40	21	134	4	5	1	10	25	7	44	492
5:30 PM	24	184	49	22	141	7	2	2	14	22	1	21	489
5:45 PM	12	172	33	25	128	3	4	2	14	19	4	29	445
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	139	1379	284	139	1087	34	25	20	119	172	24	199	3621
APPROACH %'s :	7.71%	76.53%	15.76%	11.03%	86.27%	2.70%	15.24%	12.20%	72.56%	43.54%	6.08%	50.38%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	75	715	147	74	571	18	14	11	50	98	15	109	1897
PEAK HR FACTOR :		0.911			0.921			0.750			0.730		0.964

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	1	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
TOTAL VOLUMES :	1	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-032 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Edwards St			Edwards St			Royal Oak Dr			Royal Oak Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL
7:00 AM	5	94	3	3	118	7	14	3	4	0	2	2	255
7:15 AM	1	101	2	3	188	42	24	9	10	1	11	3	395
7:30 AM	21	112	2	9	261	70	38	10	13	5	32	7	580
7:45 AM	8	148	2	6	233	100	61	20	19	1	32	8	638
8:00 AM	4	161	4	10	178	34	58	17	14	3	15	5	503
8:15 AM	5	150	3	16	172	5	13	4	6	0	3	7	384
8:30 AM	2	104	1	12	152	3	4	3	9	0	1	7	298
8:45 AM	1	99	3	17	118	3	12	3	3	2	0	5	266
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	47	969	20	76	1420	264	224	69	78	12	96	44	3319
APPROACH %'s :	4.54%	93.53%	1.93%	4.32%	80.68%	15.00%	60.38%	18.60%	21.02%	7.89%	63.16%	28.95%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	34	522	10	28	860	246	181	56	56	10	90	23	2116
PEAK HR FACTOR :		0.837			0.834			0.733			0.699		0.829

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	2
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	0	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-032 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Edwards St			Edwards St			Royal Oak Dr			Royal Oak Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL
4:00 PM	9	157	10	24	123	21	6	5	5	10	8	37	415
4:15 PM	5	159	9	24	143	12	15	6	3	15	3	21	415
4:30 PM	4	174	17	31	126	11	14	9	5	17	8	40	456
4:45 PM	8	187	11	39	160	8	6	5	5	13	3	36	481
5:00 PM	7	180	13	31	147	14	11	1	3	12	4	41	464
5:15 PM	5	222	9	25	137	8	14	2	4	15	3	39	483
5:30 PM	7	189	7	26	142	8	7	8	3	18	7	34	456
5:45 PM	8	187	13	41	144	2	7	6	4	9	2	30	453
TOTAL VOLUMES :	53	1455	89	241	1122	84	80	42	32	109	38	278	3623
APPROACH %'s :	3.32%	91.11%	5.57%	16.66%	77.54%	5.81%	51.95%	27.27%	20.78%	25.65%	8.94%	65.41%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	27	778	40	121	586	38	38	16	15	58	17	150	1884
PEAK HR FACTOR :		0.895			0.900			0.863			0.953		0.975

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
TOTAL VOLUMES :	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-033 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Edwards St			Edwards St			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 0	NR 1	SL 0	ST 0	SR 0	EL 0	ET 2	ER 0	WL 1	WT 1	WR 0	TOTAL
7:00 AM	9	0	74	0	0	0	0	82	17	40	55	0	277
7:15 AM	12	0	83	0	0	0	0	105	33	61	64	0	358
7:30 AM	16	0	72	0	0	0	0	102	47	66	63	0	366
7:45 AM	24	0	85	0	0	0	0	67	37	81	87	0	381
8:00 AM	23	0	70	0	0	0	0	67	20	90	83	0	353
8:15 AM	15	0	65	0	0	0	0	78	21	59	79	0	317
8:30 AM	22	0	65	0	0	0	0	63	15	46	76	0	287
8:45 AM	11	0	65	0	0	0	0	62	16	60	71	0	285
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	132	0	579	0	0	0	0	626	206	503	578	0	2624
APPROACH %'s :	18.57%	0.00%	81.43%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	75.24%	24.76%	46.53%	53.47%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	75	0	310	0	0	0	0	341	137	298	297	0	1458
PEAK HR FACTOR :		0.883			0.000			0.802			0.860		0.957

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-033 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Edwards St			Edwards St			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 0	NR 1	SL 0	ST 0	SR 0	EL 0	ET 2	ER 0	WL 1	WT 1	WR 0	TOTAL
4:00 PM	21	0	89	0	0	0	0	65	21	74	78	0	348
4:15 PM	25	0	83	0	0	0	0	51	25	89	79	0	352
4:30 PM	26	0	98	0	0	0	0	77	23	75	101	0	400
4:45 PM	27	0	89	0	0	0	0	73	24	92	73	0	378
5:00 PM	23	0	116	0	0	0	0	81	25	98	80	0	423
5:15 PM	39	0	82	0	0	0	0	69	34	95	84	0	403
5:30 PM	21	0	107	0	0	0	0	59	28	92	70	0	377
5:45 PM	23	0	89	0	0	0	0	65	24	78	83	0	362
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	205	0	753	0	0	0	0	540	204	693	648	0	3043
APPROACH %'s :	21.40%	0.00%	78.60%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	72.58%	27.42%	51.68%	48.32%	0.00%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	115	0	385	0	0	0	0	300	106	360	338	0	1604
PEAK HR FACTOR :		0.899			0.000			0.958			0.975		0.948

UTURNS

	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	1	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	1	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-034 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Hoover St			Hoover St			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1.5	0.5	1	1	1	0	1	3	0	1	3	0	
7:00 AM	36	3	28	9	3	3	5	126	76	24	70	30	413
7:15 AM	36	0	42	2	3	3	3	163	100	57	90	8	507
7:30 AM	52	1	43	3	1	0	3	173	91	89	195	8	659
7:45 AM	46	4	46	1	0	3	6	154	84	77	165	3	589
8:00 AM	33	2	34	2	0	2	5	106	70	34	114	8	410
8:15 AM	38	6	28	1	1	3	1	116	82	38	98	16	428
8:30 AM	35	4	30	5	3	5	3	104	67	42	79	14	391
8:45 AM	39	5	44	4	2	2	13	111	70	35	96	18	439
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	315	25	295	27	13	21	39	1053	640	396	907	105	3836
APPROACH %'s :	49.61%	3.94%	46.46%	44.26%	21.31%	34.43%	2.25%	60.80%	36.95%	28.13%	64.42%	7.46%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	170	8	159	15	7	9	17	616	351	247	520	49	2168
PEAK HR FACTOR :		0.878			0.517			0.921			0.699		0.822

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-034 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Hoover St			Hoover St			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1.5	NT 0.5	NR 1	SL 1	ST 1	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	75	4	57	48	12	24	6	162	107	32	105	14	646
4:15 PM	79	2	59	12	8	10	9	142	78	37	88	8	532
4:30 PM	74	3	47	10	4	11	7	204	93	47	132	4	636
4:45 PM	78	0	56	9	5	3	4	146	77	45	96	5	524
5:00 PM	77	2	69	3	4	6	3	205	94	44	112	3	622
5:15 PM	79	1	66	3	5	3	2	177	71	56	120	1	584
5:30 PM	75	2	62	10	5	9	2	193	84	51	149	4	646
5:45 PM	85	2	46	4	3	6	4	158	81	53	112	6	560
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	622	16	462	99	46	72	37	1387	685	365	914	45	4750
APPROACH %'s :	56.55%	1.45%	42.00%	45.62%	21.20%	33.18%	1.75%	65.77%	32.48%	27.57%	69.03%	3.40%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	316	7	243	20	17	24	11	733	330	204	493	14	2412
PEAK HR FACTOR :		0.956			0.635			0.889			0.871		0.933

UTURNS

NB	SB	EB	WB
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	1
0	0	0	0
NB	SB	EB	WB
1	0	1	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-035 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Village Center Dr			Village Center Dr			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	2	0	1	3	0	1	3	0	
7:00 AM	0	0	0	25	0	18	2	167	0	3	109	2	326
7:15 AM	1	0	0	20	0	40	5	201	0	1	125	1	394
7:30 AM	0	0	0	17	0	88	7	230	0	0	232	4	578
7:45 AM	0	0	0	16	0	64	0	195	0	2	189	9	475
8:00 AM	1	0	0	14	0	36	1	151	3	1	137	6	350
8:15 AM	0	0	0	25	0	31	5	126	1	2	134	9	333
8:30 AM	0	0	0	18	0	28	6	135	1	1	122	6	317
8:45 AM	0	0	0	10	0	29	3	142	0	1	123	9	317
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	0	0	145	0	334	29	1347	5	11	1171	46	3090
APPROACH %'s :	100.00%	0.00%	0.00%	30.27%	0.00%	69.73%	2.10%	97.54%	0.36%	0.90%	95.36%	3.75%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	2	0	0	67	0	228	13	777	3	4	683	20	1797
PEAK HR FACTOR :	0.500			0.702			0.836			0.749			0.777

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-035 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Village Center Dr			Village Center Dr			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 2	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	0	0	1	6	0	9	13	271	0	5	149	6	460
4:15 PM	0	0	1	9	1	19	10	210	1	2	127	8	388
4:30 PM	0	0	1	5	0	28	9	259	0	5	159	11	477
4:45 PM	1	0	1	5	0	21	10	208	2	4	126	10	388
5:00 PM	1	0	0	5	1	31	10	265	2	2	126	12	455
5:15 PM	1	0	1	7	0	22	10	253	2	5	156	10	467
5:30 PM	0	0	0	11	0	34	14	252	2	4	189	9	515
5:45 PM	0	0	0	15	3	32	11	208	3	8	150	13	443
TOTAL VOLUMES :	3	0	5	63	5	196	87	1926	12	35	1182	79	3593
APPROACH %'s :	37.50%	0.00%	62.50%	23.86%	1.89%	74.24%	4.30%	95.11%	0.59%	2.70%	91.20%	6.10%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	2	0	1	38	4	119	45	978	9	19	621	44	1880
PEAK HR FACTOR :	0.375			0.805			0.931			0.847			0.913

UTURNS			
NB	SB	EB	WB
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
NB	SB	EB	WB
0	0	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-036 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Western Ave			Western Ave			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1.5	0.5	1	1	3	0	1	2	1	
7:00 AM	0	0	0	140	0	33	52	70	0	1	49	61	406
7:15 AM	0	0	0	171	0	31	59	119	2	0	66	70	518
7:30 AM	0	0	0	147	0	43	57	98	1	3	121	106	576
7:45 AM	1	0	0	169	1	41	89	77	2	0	104	115	599
8:00 AM	0	0	0	128	2	38	82	71	1	0	65	91	478
8:15 AM	1	1	0	125	0	47	62	76	2	0	69	71	454
8:30 AM	1	1	2	106	0	31	69	82	1	1	62	60	416
8:45 AM	2	1	0	110	0	34	70	84	0	0	69	63	433
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	5	3	2	1096	3	298	540	677	9	5	605	637	3880
APPROACH %'s :	50.00%	30.00%	20.00%	78.45%	0.21%	21.33%	44.05%	55.22%	0.73%	0.40%	48.52%	51.08%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	1	0	0	615	3	153	287	365	6	3	356	382	2171
PEAK HR FACTOR :	0.250			0.914			0.914			0.805			0.906

CONTROL : Signalized

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	0	2
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
NB	SB	EB	WB
0	0	0	2

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-036 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Western Ave			Western Ave			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 1.5	ST 0.5	SR 1	EL 1	ET 3	ER 0	WL 1	WT 2	WR 1	TOTAL
4:00 PM	0	0	0	153	1	58	71	118	2	0	88	106	597
4:15 PM	1	0	1	122	0	42	64	97	1	0	90	100	518
4:30 PM	1	1	1	204	0	35	72	94	1	0	89	118	616
4:45 PM	0	0	1	140	0	46	79	95	0	0	95	94	550
5:00 PM	1	0	0	165	0	41	53	119	0	1	90	111	581
5:15 PM	1	0	0	136	0	40	84	122	0	1	101	104	589
5:30 PM	0	0	0	160	0	31	70	111	0	0	102	122	596
5:45 PM	0	0	0	131	1	40	61	111	0	0	109	110	563
TOTAL VOLUMES :	NL 4	NT 1	NR 3	SL 1211	ST 2	SR 333	EL 554	ET 867	ER 4	WL 2	WT 764	WR 865	TOTAL 4610
APPROACH %'s :	50.00%	12.50%	37.50%	78.33%	0.13%	21.54%	38.88%	60.84%	0.28%	0.12%	46.84%	53.03%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	3	1	2	645	0	162	288	430	1	2	375	427	2336
PEAK HR FACTOR :		0.500			0.844			0.873			0.971		0.948

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	1
	0	0	0	1
	0	0	0	0
	0	0	0	0
TOTAL VOLUMES :	NB 0	SB 0	EB 0	WB 2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-037 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Goldenwest St			Goldenwest St			21st St			21st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	2	197	7	2	285	8	8	9	14	5	2	10	549
7:15 AM	7	214	6	1	350	5	10	8	21	18	10	13	663
7:30 AM	6	249	11	5	423	5	7	20	41	21	19	33	840
7:45 AM	8	266	12	6	384	4	9	19	41	16	19	37	821
8:00 AM	11	261	6	8	351	9	5	21	23	13	17	21	746
8:15 AM	11	195	9	7	305	7	9	5	27	16	8	15	614
8:30 AM	7	212	4	9	330	5	5	7	18	12	5	14	628
8:45 AM	11	201	4	7	286	4	11	2	17	13	1	13	570
TOTAL VOLUMES :	63	1795	59	45	2714	47	64	91	202	114	81	156	5431
APPROACH %'s :	3.29%	93.64%	3.08%	1.60%	96.72%	1.67%	17.93%	25.49%	56.58%	32.48%	23.08%	44.44%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	32	990	35	20	1508	23	31	68	126	68	65	104	3070
PEAK HR FACTOR :		0.924			0.895			0.815			0.812		0.914

UTURNS

	NB	SB	EB	WB
7:00 AM	0	0	0	0
7:15 AM	1	1	0	0
7:30 AM	1	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	1	0	0
8:45 AM	2	0	0	0
TOTAL VOLUMES :	4	2	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-037 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Goldenwest St			Goldenwest St			21st St			21st St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	13	297	19	4	269	6	12	11	20	15	10	15	691
4:15 PM	26	332	7	5	294	8	8	8	18	7	5	28	746
4:30 PM	14	315	15	7	299	6	9	9	17	18	13	9	731
4:45 PM	21	337	24	10	306	4	11	9	22	16	7	29	796
5:00 PM	16	347	15	7	356	4	4	7	18	17	7	13	811
5:15 PM	12	355	15	8	304	6	3	18	20	15	13	8	777
5:30 PM	19	368	17	12	307	10	7	8	30	13	13	13	817
5:45 PM	33	304	13	12	295	4	8	15	21	22	13	17	757
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	154	2655	125	65	2430	48	62	85	166	123	81	132	6126
APPROACH %'s :	5.25%	90.49%	4.26%	2.56%	95.56%	1.89%	19.81%	27.16%	53.04%	36.61%	24.11%	39.29%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	68	1407	71	37	1273	24	25	42	90	61	40	63	3201
PEAK HR FACTOR :		0.957			0.909			0.872			0.788		0.979

UTURNS	NB	SB	EB	WB
	2	0	0	0
	2	0	0	0
	2	1	0	0
	4	1	0	0
	2	0	0	0
	1	0	0	0
	1	2	0	0
	3	2	0	0
	NB	SB	EB	WB
	17	6	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-038 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Goldenwest St			Goldenwest St			Georgetown Ave			Georgetown Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	1	250	2	3	273	5	8	1	7	1	0	5	556
7:15 AM	0	295	1	1	364	1	12	0	4	1	2	6	687
7:30 AM	1	277	1	6	473	2	12	0	6	5	1	14	798
7:45 AM	0	306	0	5	531	6	7	1	3	5	4	15	883
8:00 AM	1	277	3	9	455	6	11	5	8	6	4	12	797
8:15 AM	1	289	4	7	437	7	6	2	10	3	0	10	776
8:30 AM	0	295	1	7	457	2	8	1	5	5	1	7	789
8:45 AM	2	278	3	4	405	4	9	1	7	2	2	10	727
TOTAL VOLUMES :	6	2267	15	42	3395	33	73	11	50	28	14	79	6013
APPROACH %'s :	0.26%	99.08%	0.66%	1.21%	97.84%	0.95%	54.48%	8.21%	37.31%	23.14%	11.57%	65.29%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	3	1149	8	27	1896	21	36	8	27	19	9	51	3254
PEAK HR FACTOR :		0.948			0.897			0.740			0.823		0.921

UTURNS	NB	SB	EB	WB
	0	1	0	0
	0	0	0	0
	0	0	0	0
	0	1	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	1	0	0	0
TOTAL VOLUMES :	1	2	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-038 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Goldenwest St			Goldenwest St			Georgetown Ave			Georgetown Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	3	424	3	13	390	10	1	0	4	4	0	11	863
4:15 PM	10	424	3	13	355	8	3	3	3	6	4	14	846
4:30 PM	1	454	3	14	364	8	6	3	0	6	1	16	876
4:45 PM	1	380	4	14	382	10	5	8	4	6	1	25	840
5:00 PM	1	429	2	5	386	8	6	4	4	4	0	17	866
5:15 PM	4	416	4	24	373	10	11	2	5	3	1	12	865
5:30 PM	6	409	4	22	426	17	7	0	5	5	1	19	921
5:45 PM	5	381	1	18	397	10	3	3	4	3	3	13	841
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	31	3317	24	123	3073	81	42	23	29	37	11	127	6918
APPROACH %'s :	0.92%	98.37%	0.71%	3.75%	93.77%	2.47%	44.68%	24.47%	30.85%	21.14%	6.29%	72.57%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	16	1635	11	69	1582	45	27	9	18	15	5	61	3493
PEAK HR FACTOR :		0.962			0.912			0.750			0.810		0.948

UTURNS

NB	SB	EB	WB
0	3	0	0
3	0	0	0
0	3	0	0
0	4	0	0
0	2	0	0
1	0	0	0
0	0	0	0
1	2	0	0
NB	SB	EB	WB
5	14	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-039 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Goldenwest St			Goldenwest St			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 0.5	ER 0.5	WL 1	WT 0.5	WR 0.5	TOTAL
7:00 AM	6	142	13	24	253	16	29	26	11	18	17	8	563
7:15 AM	7	185	20	25	324	30	14	9	8	28	25	17	692
7:30 AM	10	180	31	29	355	48	43	41	8	53	59	12	869
7:45 AM	34	244	55	51	357	65	52	40	19	57	63	16	1053
8:00 AM	10	203	30	31	291	14	20	17	7	46	12	17	698
8:15 AM	3	201	29	24	298	11	2	1	0	17	11	14	611
8:30 AM	3	162	16	15	268	12	2	2	2	34	6	16	538
8:45 AM	1	177	22	19	239	4	1	1	1	18	5	18	506
TOTAL VOLUMES :	74	1494	216	218	2385	200	163	137	56	271	198	118	5530
APPROACH %'s :	4.15%	83.74%	12.11%	7.78%	85.09%	7.14%	45.79%	38.48%	15.73%	46.17%	33.73%	20.10%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	61	812	136	136	1327	157	129	107	42	184	159	62	3312
PEAK HR FACTOR :		0.758			0.856			0.626			0.744		0.786

UTURNS				
	NB	SB	EB	WB
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	2
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL VOLUMES :	0	0	0	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-039 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Goldenwest St			Goldenwest St			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 0.5	ER 0.5	WL 1	WT 0.5	WR 0.5	TOTAL
4:00 PM	4	298	29	29	257	7	10	10	6	37	7	31	725
4:15 PM	5	329	34	16	258	14	18	5	1	33	7	13	733
4:30 PM	6	323	49	27	306	9	13	13	9	25	8	27	815
4:45 PM	5	333	25	13	297	12	15	7	2	35	9	35	788
5:00 PM	6	297	47	25	304	8	10	6	3	50	14	33	803
5:15 PM	4	347	35	29	288	6	24	12	3	37	11	35	831
5:30 PM	3	348	34	28	293	9	13	10	3	35	7	28	811
5:45 PM	6	330	33	25	300	14	11	6	4	32	10	35	806
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	39	2605	286	192	2303	79	114	69	31	284	73	237	6312
APPROACH %'s :	1.33%	88.91%	9.76%	7.46%	89.47%	3.07%	53.27%	32.24%	14.49%	47.81%	12.29%	39.90%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	19	1322	149	107	1185	37	58	34	13	154	42	131	3251
PEAK HR FACTOR :		0.965			0.980			0.673			0.843		0.978

UTURNS

NB	SB	EB	WB
1	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
2	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
NB	SB	EB	WB
4	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-040 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Goldenwest St			Goldenwest St			Main St			Main St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	12	186	7	9	272	36	23	7	0	6	11	14	583
7:15 AM	8	204	3	8	359	28	4	0	0	8	1	18	641
7:30 AM	26	211	8	11	428	45	8	7	3	16	11	38	812
7:45 AM	43	278	10	18	429	54	9	5	2	19	11	56	934
8:00 AM	16	224	12	15	308	22	14	6	2	7	6	13	645
8:15 AM	6	208	6	8	318	13	4	1	3	2	3	6	578
8:30 AM	8	181	5	7	293	2	4	1	2	4	1	6	514
8:45 AM	5	198	5	3	276	7	0	0	2	6	0	17	519
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	124	1690	56	79	2683	207	66	27	14	68	44	168	5226
APPROACH %'s :	6.63%	90.37%	2.99%	2.66%	90.37%	6.97%	61.68%	25.23%	13.08%	24.29%	15.71%	60.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	93	917	33	52	1524	149	35	18	7	50	29	125	3032
PEAK HR FACTOR :		0.788			0.861			0.682			0.593		0.812

UTURNS	NB	SB	EB	WB
	0	0	1	0
	0	0	0	0
	0	0	0	0
	0	1	0	0
	0	0	0	1
	0	1	0	0
	0	1	1	0
	0	1	0	0
TOTAL VOLUMES :	0	4	2	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-040 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Goldenwest St			Goldenwest St			Main St			Main St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	4	320	11	5	280	7	12	7	10	13	6	9	684
4:15 PM	6	340	10	6	289	9	10	4	3	5	4	16	702
4:30 PM	1	330	12	10	301	6	9	4	2	12	2	6	695
4:45 PM	8	360	13	9	310	15	19	3	7	6	3	16	769
5:00 PM	1	318	10	12	330	13	16	5	5	7	5	12	734
5:15 PM	2	397	17	9	323	11	13	3	2	9	4	11	801
5:30 PM	4	372	6	5	302	4	8	6	3	3	2	14	729
5:45 PM	7	344	12	12	321	8	5	1	1	12	4	10	737
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	33	2781	91	68	2456	73	92	33	33	67	30	94	5851
APPROACH %'s :	1.14%	95.73%	3.13%	2.62%	94.57%	2.81%	58.23%	20.89%	20.89%	35.08%	15.71%	49.21%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	15	1447	46	35	1265	43	56	17	17	25	14	53	3033
PEAK HR FACTOR :		0.906			0.946			0.776			0.920		0.947

UTURNS

NB	SB	EB	WB
1	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	3	0	0
0	1	0	0
0	0	0	0
0	4	0	0
NB	SB	EB	WB
2	8	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-041 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Goldenwest St			Goldenwest St			Natal Dr			Natal Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 0	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	0	225	11	16	259	0	0	0	0	17	0	17	545
7:15 AM	0	234	12	15	319	0	0	0	0	18	0	27	625
7:30 AM	0	269	11	14	366	0	0	0	0	31	0	26	717
7:45 AM	0	241	13	21	277	0	0	0	0	37	0	19	608
8:00 AM	0	294	20	21	322	0	0	0	0	14	0	21	692
8:15 AM	0	216	19	22	317	0	0	0	0	19	0	26	619
8:30 AM	0	240	11	25	276	0	0	0	0	18	0	36	606
8:45 AM	0	210	10	15	252	0	0	0	0	22	0	27	536
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1929	107	149	2388	0	0	0	0	176	0	199	4948
APPROACH %'s :	0.00%	94.74%	5.26%	5.87%	94.13%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	46.93%	0.00%	53.07%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	1038	56	71	1284	0	0	0	0	100	0	93	2642
PEAK HR FACTOR :		0.871			0.891			0.000			0.846		0.921

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	2	0	0
	0	1	0	0
	0	6	0	0
	0	3	0	0
	0	3	0	0
	0	3	0	0
	0	4	0	0
TOTAL VOLUMES :	0	22	0	0

CONTROL : signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-041 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Goldenwest St			Goldenwest St			Natal Dr			Natal Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 0	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	0	272	9	27	279	0	0	0	0	15	0	15	617
4:15 PM	0	307	11	21	297	0	0	0	0	10	0	23	669
4:30 PM	0	287	17	26	329	0	0	0	0	9	0	14	682
4:45 PM	0	293	12	23	303	0	0	0	0	18	0	17	666
5:00 PM	0	294	18	25	339	0	0	0	0	14	0	15	705
5:15 PM	0	304	10	29	308	0	0	0	0	20	0	12	683
5:30 PM	0	328	19	25	318	0	0	0	0	11	0	19	720
5:45 PM	0	280	22	22	308	0	0	0	0	16	0	24	672
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2365	118	198	2481	0	0	0	0	113	0	139	5414
APPROACH %'s :	0.00%	95.25%	4.75%	7.39%	92.61%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	44.84%	0.00%	55.16%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	1206	69	101	1273	0	0	0	0	61	0	70	2780
PEAK HR FACTOR :		0.919			0.944			0.000			0.819		0.965

UTURNS	NB	SB	EB	WB
	0	3	0	0
	0	3	0	0
	0	5	0	0
	0	4	0	0
	0	7	0	0
	0	3	0	0
	0	3	0	0
	0	3	0	0
	NB	SB	EB	WB
	0	31	0	0

CONTROL : signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-042 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Goldenwest St			Goldenwest St			Hood Dr/Lisa Ln			Hood Dr/Lisa Ln			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	6	225	1	0	277	6	9	0	5	1	1	1	532
7:15 AM	8	231	1	0	321	11	11	0	9	3	1	5	601
7:30 AM	22	263	3	1	370	27	12	0	26	4	0	2	730
7:45 AM	31	235	0	1	274	40	26	0	63	3	2	1	676
8:00 AM	7	293	1	0	328	13	20	1	25	1	0	0	689
8:15 AM	2	225	1	2	315	14	6	0	3	2	0	2	572
8:30 AM	0	226	1	3	293	1	15	0	9	1	0	3	552
8:45 AM	2	210	1	1	263	10	6	0	8	1	0	1	503
TOTAL VOLUMES :	78	1908	9	8	2441	122	105	1	148	16	4	15	4855
APPROACH %'s :	3.91%	95.64%	0.45%	0.31%	94.94%	4.75%	41.34%	0.39%	58.27%	45.71%	11.43%	42.86%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	68	1022	5	2	1293	91	69	1	123	11	3	8	2696
PEAK HR FACTOR :		0.909			0.871			0.542			0.611		0.923

UTURNS	NB	SB	EB	WB
	0	0	0	0
	1	0	0	0
	0	1	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	2	0	0
	0	0	0	0
TOTAL	1	3	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-042 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Goldenwest St			Goldenwest St			Hood Dr/Lisa Ln			Hood Dr/Lisa Ln			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	2	269	0	0	286	4	8	0	6	4	0	2	581
4:15 PM	13	299	1	3	305	5	5	0	3	0	0	0	634
4:30 PM	6	291	3	2	320	13	7	1	13	2	0	0	658
4:45 PM	13	307	2	4	309	8	4	0	6	0	0	0	653
5:00 PM	2	295	2	2	339	16	4	0	12	2	2	2	678
5:15 PM	4	318	0	4	304	14	6	0	13	0	0	1	664
5:30 PM	9	336	3	3	308	15	5	0	10	1	0	1	691
5:45 PM	6	279	4	2	307	9	16	0	12	3	0	0	638
TOTAL VOLUMES :	55	2394	15	20	2478	84	55	1	75	12	2	6	5197
APPROACH %'s :	2.23%	97.16%	0.61%	0.77%	95.97%	3.25%	41.98%	0.76%	57.25%	60.00%	10.00%	30.00%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	28	1256	7	13	1260	53	19	0	41	3	2	4	2686
PEAK HR FACTOR :		0.927			0.929			0.789			0.375		0.972

UTURNS	NB	SB	EB	WB
	0	0	0	0
	1	1	0	0
	0	0	0	0
	0	0	0	0
	0	1	0	0
	0	1	0	0
	0	1	0	0
	0	0	0	0
TOTAL	1	4	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-043 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Goldenwest St			Goldenwest St			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	8	176	15	13	277	5	14	19	6	16	20	11	580
7:15 AM	13	215	32	16	314	6	21	40	14	21	41	18	751
7:30 AM	20	208	38	21	400	13	31	32	10	36	64	23	896
7:45 AM	26	233	64	25	316	16	30	63	33	37	77	31	951
8:00 AM	14	240	33	25	313	9	30	51	24	28	39	14	820
8:15 AM	7	206	24	20	281	12	19	27	10	11	16	11	644
8:30 AM	3	195	12	15	311	4	17	19	13	12	12	12	625
8:45 AM	5	202	22	12	266	8	11	10	8	20	20	12	596
TOTAL VOLUMES :	96	1675	240	147	2478	73	173	261	118	181	289	132	5863
APPROACH %'s :	4.77%	83.29%	11.93%	5.45%	91.85%	2.71%	31.34%	47.28%	21.38%	30.07%	48.01%	21.93%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	73	896	167	87	1343	44	112	186	81	122	221	86	3418
PEAK HR FACTOR :		0.879			0.849			0.752			0.740		0.899

UTURNS	NB	SB	EB	WB
	1	3	0	0
	0	2	0	0
	0	1	0	0
	1	3	0	0
	0	0	0	0
	0	2	0	0
	0	3	0	0
	0	0	0	0
TOTAL VOLUMES :	2	14	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-043 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Goldenwest St			Goldenwest St			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	10	270	39	13	261	12	11	18	11	25	34	15	719
4:15 PM	19	302	27	17	286	18	8	27	10	18	37	17	786
4:30 PM	16	281	31	19	281	9	11	32	11	28	44	18	781
4:45 PM	21	329	42	28	289	14	14	25	12	27	31	19	851
5:00 PM	10	290	36	12	315	8	11	40	13	40	34	11	820
5:15 PM	15	310	30	26	277	10	12	19	21	34	42	24	820
5:30 PM	17	305	42	20	296	16	14	35	6	36	56	18	861
5:45 PM	16	283	39	21	290	15	19	35	14	28	45	17	822
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	124	2370	286	156	2295	102	100	231	98	236	323	139	6460
APPROACH %'s :	4.46%	85.25%	10.29%	6.11%	89.89%	4.00%	23.31%	53.85%	22.84%	33.81%	46.28%	19.91%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	63	1234	150	86	1177	48	51	119	52	137	163	72	3352
PEAK HR FACTOR :		0.923			0.978			0.867			0.845		0.973

UTURNS

NB	SB	EB	WB
1	4	0	1
1	1	0	0
0	3	0	1
0	4	0	0
1	1	0	0
2	2	0	0
0	0	0	0
1	2	0	0
NB	SB	EB	WB
6	17	0	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-044 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Goldenwest St			Goldenwest St			Wyoming St			Wyoming St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 1	EL 0.5	ET 0.5	ER 1	WL 0	WT 1	WR 0	TOTAL
7:00 AM	5	190	5	3	284	8	6	3	1	2	1	8	516
7:15 AM	2	215	7	5	363	24	10	5	6	3	2	9	651
7:30 AM	2	234	4	7	481	18	8	0	7	5	4	17	787
7:45 AM	5	262	6	2	413	30	10	1	2	2	6	10	749
8:00 AM	6	259	3	9	349	21	12	3	6	8	4	6	686
8:15 AM	3	200	7	0	311	28	15	6	8	4	4	7	593
8:30 AM	5	196	5	3	334	25	17	1	2	6	5	4	603
8:45 AM	7	191	6	1	274	26	19	1	5	7	5	7	549
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	35	1747	43	30	2809	180	97	20	37	37	31	68	5134
APPROACH %'s :	1.92%	95.73%	2.36%	0.99%	93.04%	5.96%	62.99%	12.99%	24.03%	27.21%	22.79%	50.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	15	970	20	23	1606	93	40	9	21	18	16	42	2873
PEAK HR FACTOR :		0.920			0.851			0.833			0.731		0.913

UTURNS	NB	SB	EB	WB
	0	0	0	0
	1	0	0	0
	0	0	0	0
	2	0	0	0
	0	2	0	0
	1	0	0	0
	0	0	0	0
	1	0	0	0
TOTAL VOLUMES :	5	2	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-044 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Goldenwest St			Goldenwest St			Wyoming St			Wyoming St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 1	EL 0.5	ET 0.5	ER 1	WL 0	WT 1	WR 0	TOTAL
4:00 PM	13	269	8	7	268	37	55	6	9	8	7	6	693
4:15 PM	16	289	5	9	266	33	49	6	13	6	8	11	711
4:30 PM	20	287	11	10	295	30	42	8	16	3	4	11	737
4:45 PM	15	323	13	8	298	33	55	12	6	7	8	9	787
5:00 PM	13	303	7	14	326	36	48	6	16	10	10	13	802
5:15 PM	20	340	12	11	303	52	53	11	7	8	11	6	834
5:30 PM	14	313	7	8	304	36	57	10	7	9	3	7	775
5:45 PM	13	281	12	9	298	36	54	8	8	15	6	16	756
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	124	2405	75	76	2358	293	413	67	82	66	57	79	6095
APPROACH %'s :	4.76%	92.36%	2.88%	2.79%	86.47%	10.74%	73.49%	11.92%	14.59%	32.67%	28.22%	39.11%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	62	1279	39	41	1231	157	213	39	36	34	32	35	3198
PEAK HR FACTOR :		0.927			0.950			0.973			0.765		0.959

UTURNS	NB	SB	EB	WB
	1	2	0	0
	0	2	0	0
	3	3	0	0
	1	2	0	0
	2	2	1	0
	2	4	0	0
	1	2	1	0
	1	2	0	0
	NB	SB	EB	WB
	11	19	2	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-045 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Hoover St			Hoover St			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0.5	0.5	1	0.5	1.5	0	
7:00 AM	5	34	3	12	81	12	6	53	13	13	45	16	293
7:15 AM	5	33	6	25	114	14	3	46	13	15	78	35	387
7:30 AM	13	53	9	27	139	18	3	75	12	24	169	71	613
7:45 AM	8	60	6	36	158	18	5	134	30	19	149	66	689
8:00 AM	2	32	9	27	140	10	8	72	15	11	60	27	413
8:15 AM	4	38	11	31	98	7	6	39	13	13	45	25	330
8:30 AM	3	40	8	25	89	8	4	31	6	9	48	26	297
8:45 AM	4	35	11	21	97	7	6	34	5	15	55	21	311
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	44	325	63	204	916	94	41	484	107	119	649	287	3333
APPROACH %'s :	10.19%	75.23%	14.58%	16.80%	75.45%	7.74%	6.49%	76.58%	16.93%	11.28%	61.52%	27.20%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	28	178	30	115	551	60	19	327	70	69	456	199	2102
PEAK HR FACTOR :		0.787			0.856			0.615			0.686		0.763

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-045 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Hoover St			Hoover St			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 1.5	WR 0	TOTAL
4:00 PM	6	64	11	25	80	11	11	66	9	14	65	35	397
4:15 PM	4	79	8	23	66	10	16	58	8	8	51	27	358
4:30 PM	9	80	16	32	94	10	12	64	10	6	61	31	425
4:45 PM	2	71	20	19	88	13	8	44	4	9	66	24	368
5:00 PM	5	105	7	26	96	18	20	82	8	3	95	37	502
5:15 PM	8	97	8	29	77	8	19	64	6	7	67	34	424
5:30 PM	5	103	15	24	82	6	6	65	6	5	71	44	432
5:45 PM	9	64	8	20	76	8	12	57	13	3	99	35	404
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	48	663	93	198	659	84	104	500	64	55	575	267	3310
APPROACH %'s :	5.97%	82.46%	11.57%	21.04%	70.03%	8.93%	15.57%	74.85%	9.58%	6.13%	64.10%	29.77%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	27	369	38	99	331	40	57	268	33	18	332	150	1762
PEAK HR FACTOR :		0.882			0.839			0.814			0.912		0.877

UTURNS	NB	SB	EB	WB
	0	0	0	1
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-046 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Magnolia St			Magnolia St			Bishop Pl/Natoma Ave			Bishop Pl/Natoma Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 3	SR 0	EL 0	ET 2	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL
7:00 AM	5	195	9	9	507	3	10	5	21	13	0	13	790
7:15 AM	1	183	9	2	499	3	12	20	38	13	5	20	805
7:30 AM	8	229	16	11	458	2	7	22	16	13	7	23	812
7:45 AM	10	235	31	17	410	11	9	13	26	20	6	26	814
8:00 AM	7	277	21	20	436	9	10	14	28	19	6	30	877
8:15 AM	6	248	21	9	450	7	17	12	28	17	10	35	860
8:30 AM	4	213	22	23	410	8	8	18	20	23	9	27	785
8:45 AM	5	219	21	14	348	6	8	7	14	16	8	22	688
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	46	1799	150	105	3518	49	81	111	191	134	51	196	6431
APPROACH %'s :	2.31%	90.18%	7.52%	2.86%	95.81%	1.33%	21.15%	28.98%	49.87%	35.17%	13.39%	51.44%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	31	989	89	57	1754	29	43	61	98	69	29	114	3363
PEAK HR FACTOR :		0.909			0.977			0.886			0.855		0.959

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	1	0	0
	0	0	0	0
	1	0	0	0
	0	1	0	0
	0	0	0	0
	NB	SB	EB	WB
	1	2	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-046 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Magnolia St			Magnolia St			Bishop Pl/Natoma Ave			Bishop Pl/Natoma Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 3	SR 0	EL 0	ET 2	ER 0	WL 0.5	WT 0.5	WR 1	TOTAL
4:00 PM	10	311	29	25	253	11	4	7	9	25	16	34	734
4:15 PM	14	338	17	10	242	19	9	5	11	16	13	31	725
4:30 PM	15	303	16	16	217	11	7	14	13	19	12	32	675
4:45 PM	11	361	33	32	246	13	3	10	16	20	12	43	800
5:00 PM	13	357	20	22	241	14	10	12	13	26	18	39	785
5:15 PM	12	329	19	24	297	13	9	8	15	31	16	39	812
5:30 PM	17	335	18	16	294	16	4	8	18	33	15	41	815
5:45 PM	15	321	19	15	275	21	13	10	8	33	14	43	787
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	107	2655	171	160	2065	118	59	74	103	203	116	302	6133
APPROACH %'s :	3.65%	90.52%	5.83%	6.83%	88.13%	5.04%	25.00%	31.36%	43.64%	32.69%	18.68%	48.63%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	53	1382	90	94	1078	56	26	38	62	110	61	162	3212
PEAK HR FACTOR :		0.941			0.919			0.900			0.935		0.985

UTURNS	NB	SB	EB	WB
	0	1	0	0
	0	0	0	0
	0	1	0	0
	0	1	0	0
	0	3	0	0
	0	3	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	9	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-047 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Magnolia St			Magnolia St			Edinger Ave			Edinger Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	15	109	13	57	502	10	26	106	37	19	81	18	993
7:15 AM	24	146	11	80	515	13	19	145	50	31	73	24	1131
7:30 AM	56	176	27	99	510	19	26	136	70	28	114	28	1289
7:45 AM	36	178	35	110	421	20	19	136	39	29	120	42	1185
8:00 AM	15	188	19	101	423	19	22	166	43	33	109	37	1175
8:15 AM	22	162	16	89	439	20	30	170	28	45	117	47	1185
8:30 AM	16	147	15	70	467	13	29	156	53	24	117	36	1143
8:45 AM	24	160	11	69	387	32	29	103	31	38	121	36	1041
TOTAL VOLUMES :	208	1266	147	675	3664	146	200	1118	351	247	852	268	9142
APPROACH %'s :	12.83%	78.10%	9.07%	15.05%	81.69%	3.26%	11.98%	66.99%	21.03%	18.07%	62.33%	19.60%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	129	704	97	399	1793	78	97	608	180	135	460	154	4834
PEAK HR FACTOR :		0.898			0.904			0.954			0.896		0.938

UTURNS	NB	SB	EB	WB
7:00 AM	1	1	1	0
7:15 AM	0	0	1	0
7:30 AM	1	0	1	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	2	0	2	0
8:30 AM	1	0	0	0
8:45 AM	4	0	1	0
TOTAL VOLUMES :	9	1	6	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-047 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Magnolia St			Magnolia St			Edinger Ave			Edinger Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	22	272	22	50	181	19	33	101	17	32	111	56	916
4:15 PM	39	270	31	46	187	19	25	108	21	37	147	50	980
4:30 PM	41	259	29	49	179	22	28	110	25	26	168	52	988
4:45 PM	40	312	29	43	183	19	43	129	15	42	176	83	1114
5:00 PM	35	271	33	37	195	28	32	142	15	17	129	62	996
5:15 PM	39	296	37	45	221	21	41	147	18	35	166	62	1128
5:30 PM	42	276	28	44	208	29	54	120	11	36	145	77	1070
5:45 PM	44	267	27	62	223	18	27	140	27	40	160	61	1096
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	302	2223	236	376	1577	175	283	997	149	265	1202	503	8288
APPROACH %'s :	10.94%	80.51%	8.55%	17.67%	74.11%	8.22%	19.80%	69.77%	10.43%	13.45%	61.02%	25.53%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	156	1155	127	169	807	97	170	538	59	130	616	284	4308
PEAK HR FACTOR :		0.944			0.935			0.931			0.855		0.955

UTURNS

	NB	SB	EB	WB
4:00 PM	2	1	2	1
4:15 PM	0	1	0	0
4:30 PM	2	1	1	3
4:45 PM	1	2	0	1
5:00 PM	3	1	3	0
5:15 PM	1	2	3	0
5:30 PM	2	0	0	2
5:45 PM	4	1	1	1
	NB	SB	EB	WB
TOTAL VOLUMES :	15	9	10	8

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-048 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Magnolia St			Magnolia St			Hazard St			Hazard St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	5	159	7	31	370	11	22	91	28	11	53	22	810
7:15 AM	13	192	16	41	449	22	26	85	25	14	81	23	987
7:30 AM	34	240	21	44	361	49	42	92	28	17	100	39	1067
7:45 AM	17	215	21	56	364	30	29	137	39	24	109	38	1079
8:00 AM	20	223	30	41	367	10	25	139	31	14	72	23	995
8:15 AM	12	228	18	38	391	18	19	92	29	19	103	38	1005
8:30 AM	16	216	22	43	397	17	30	121	42	20	78	28	1030
8:45 AM	12	217	25	37	342	18	27	101	33	20	92	43	967
TOTAL VOLUMES :	129	1690	160	331	3041	175	220	858	255	139	688	254	7940
APPROACH %'s :	6.52%	85.40%	8.08%	9.33%	85.73%	4.93%	16.50%	64.37%	19.13%	12.86%	63.64%	23.50%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	83	906	90	179	1483	107	115	460	127	74	384	138	4146
PEAK HR FACTOR :		0.914			0.974			0.856			0.871		0.961

UTURNS	NB	SB	EB	WB
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	2	1	0	0
7:45 AM	1	1	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	1	0	0	0
8:45 AM	5	0	0	0
TOTAL VOLUMES :	9	2	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-048 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Magnolia St			Magnolia St			Hazard St			Hazard St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	24	363	29	47	277	31	12	74	22	20	106	50	1055
4:15 PM	26	356	31	35	277	26	24	105	14	23	106	27	1050
4:30 PM	30	362	33	45	288	26	19	97	16	22	91	43	1072
4:45 PM	28	331	29	33	309	30	16	100	17	20	123	41	1077
5:00 PM	26	347	34	42	269	31	20	111	11	21	116	43	1071
5:15 PM	30	370	25	57	316	21	31	109	9	21	128	44	1161
5:30 PM	36	375	30	50	315	36	33	101	13	25	146	48	1208
5:45 PM	40	382	37	52	271	31	26	116	15	18	139	46	1173
TOTAL VOLUMES :	240	2886	248	361	2322	232	181	813	117	170	955	342	8867
APPROACH %'s :	7.11%	85.54%	7.35%	12.38%	79.66%	7.96%	16.29%	73.18%	10.53%	11.59%	65.10%	23.31%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	132	1474	126	201	1171	119	110	437	48	85	529	181	4613
PEAK HR FACTOR :		0.943			0.930			0.947			0.908		0.955

UTURNS

	NB	SB	EB	WB
4:00 PM	1	1	0	0
4:15 PM	0	0	0	0
4:30 PM	0	0	0	0
4:45 PM	1	0	0	0
5:00 PM	0	0	0	0
5:15 PM	0	0	0	0
5:30 PM	2	0	0	0
5:45 PM	0	0	0	0
TOTAL VOLUMES :	4	1	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-049 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Magnolia St			Magnolia St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	5	140	5	12	454	9	11	66	46	12	51	12	823
7:15 AM	19	174	14	31	472	19	23	108	69	16	99	9	1053
7:30 AM	37	193	6	42	465	17	18	136	98	23	124	15	1174
7:45 AM	42	202	12	27	418	20	19	135	70	26	132	35	1138
8:00 AM	28	226	18	34	430	28	25	137	87	27	111	44	1195
8:15 AM	23	220	14	22	419	24	24	118	102	28	143	38	1175
8:30 AM	12	211	9	31	439	27	26	151	69	19	122	29	1145
8:45 AM	12	195	17	21	386	20	28	115	67	15	125	35	1036
TOTAL VOLUMES :	NL 178	NT 1561	NR 95	SL 220	ST 3483	SR 164	EL 174	ET 966	ER 608	WL 166	WT 907	WR 217	TOTAL 8739
APPROACH %'s :	9.71%	85.11%	5.18%	5.69%	90.07%	4.24%	9.95%	55.26%	34.78%	12.87%	70.31%	16.82%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	130	841	50	125	1732	89	86	526	357	104	510	132	4682
PEAK HR FACTOR :		0.938			0.928			0.961			0.892		0.979

UTURNS

	NB	SB	EB	WB
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	1	0	0
8:00 AM	0	1	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	0
TOTAL VOLUMES :	NB 0	SB 2	EB 0	WB 0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-049 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Magnolia St			Magnolia St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	37	283	20	27	220	39	30	123	29	16	117	28	969
4:15 PM	29	305	19	32	218	33	15	123	23	20	115	30	962
4:30 PM	23	284	23	32	213	19	17	124	23	19	129	35	941
4:45 PM	32	343	22	19	215	22	22	127	21	14	155	34	1026
5:00 PM	34	310	31	26	216	26	26	123	21	14	150	38	1015
5:15 PM	37	317	27	41	242	42	27	173	31	16	160	23	1136
5:30 PM	48	325	21	32	252	40	19	153	24	16	152	34	1116
5:45 PM	35	303	25	36	242	42	24	141	30	16	150	37	1081
TOTAL VOLUMES :	275	2470	188	245	1818	263	180	1087	202	131	1128	259	8246
APPROACH %'s :	9.38%	84.21%	6.41%	10.53%	78.16%	11.31%	12.25%	74.00%	13.75%	8.63%	74.31%	17.06%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	154	1255	104	135	952	150	96	590	106	62	612	132	4348
PEAK HR FACTOR :		0.960			0.952			0.857			0.993		0.957

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	1	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	1	0	0
	NB	SB	EB	WB
	1	1	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-050 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Ward St			Ward St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	11	32	7	8	65	11	14	73	18	11	66	11	327
7:15 AM	23	55	12	14	112	33	9	87	36	27	89	12	509
7:30 AM	51	112	22	13	137	56	37	104	54	62	100	17	765
7:45 AM	48	89	32	20	121	54	45	140	62	54	146	28	839
8:00 AM	32	91	19	28	100	21	34	136	22	16	111	17	627
8:15 AM	14	38	3	20	88	25	15	134	26	9	114	10	496
8:30 AM	13	54	5	14	75	27	10	119	16	5	75	10	423
8:45 AM	10	40	5	7	76	44	18	106	10	6	112	9	443
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	202	511	105	124	774	271	182	899	244	190	813	114	4429
APPROACH %'s :	24.69%	62.47%	12.84%	10.61%	66.21%	23.18%	13.74%	67.85%	18.42%	17.01%	72.78%	10.21%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	154	347	85	75	470	164	125	467	174	159	446	74	2740
PEAK HR FACTOR :		0.792			0.860			0.775			0.745		0.816

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	1
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-050 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Ward St			Ward St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 1	SL 1	ST 1	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	7	108	16	39	70	18	23	155	7	13	140	21	617
4:15 PM	7	115	19	17	67	20	19	138	4	7	160	21	594
4:30 PM	5	128	44	23	100	15	16	170	9	14	158	12	694
4:45 PM	7	116	21	36	71	7	16	162	5	12	159	26	638
5:00 PM	8	148	30	32	88	18	11	205	2	10	164	24	740
5:15 PM	6	130	29	27	85	17	12	157	4	23	153	19	662
5:30 PM	5	141	38	37	101	27	15	165	11	14	130	25	709
5:45 PM	10	119	22	38	77	17	11	198	3	21	190	31	737
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	55	1005	219	249	659	139	123	1350	45	114	1254	179	5391
APPROACH %'s :	4.30%	78.58%	17.12%	23.78%	62.94%	13.28%	8.10%	88.93%	2.96%	7.37%	81.06%	11.57%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	29	538	119	134	351	79	49	725	20	68	637	99	2848
PEAK HR FACTOR :		0.922			0.855			0.911			0.831		0.962

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-051 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Newland St			Newland St			15th St			15th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 0	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
7:00 AM	2	69	0	0	151	7	8	0	16	0	0	0	253
7:15 AM	6	105	0	0	269	9	11	0	28	0	0	0	428
7:30 AM	18	135	0	0	241	11	36	0	46	0	0	0	487
7:45 AM	17	147	0	0	224	21	26	0	41	0	0	0	476
8:00 AM	19	129	0	0	204	25	9	0	10	0	0	0	396
8:15 AM	16	112	0	0	206	12	5	0	20	0	0	0	371
8:30 AM	13	126	0	0	190	16	6	0	13	0	0	0	364
8:45 AM	16	116	0	0	180	13	9	0	20	0	0	0	354
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	107	939	0	0	1665	114	110	0	194	0	0	0	3129
APPROACH %'s :	10.23%	89.77%	0.00%	0.00%	93.59%	6.41%	36.18%	0.00%	63.82%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	60	516	0	0	938	66	82	0	125	0	0	0	1787
PEAK HR FACTOR :		0.878			0.903			0.631			0.000		0.917

UTURNS				
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-051 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Newland St			Newland St			15th St			15th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 0	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
4:00 PM	17	175	0	0	164	16	9	0	16	0	0	0	397
4:15 PM	17	193	0	0	193	12	7	0	21	0	0	0	443
4:30 PM	22	201	0	0	201	9	1	0	36	0	0	0	470
4:45 PM	15	234	0	0	165	16	11	0	30	0	0	0	471
5:00 PM	15	203	0	0	190	18	11	0	21	0	0	0	458
5:15 PM	19	243	0	0	203	18	16	0	22	0	0	0	521
5:30 PM	16	217	0	0	241	16	13	0	28	0	0	0	531
5:45 PM	15	231	0	0	210	15	13	0	24	0	0	0	508
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	136	1697	0	0	1567	120	81	0	198	0	0	0	3799
APPROACH %'s :	7.42%	92.58%	0.00%	0.00%	92.89%	7.11%	29.03%	0.00%	70.97%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	65	894	0	0	844	67	53	0	95	0	0	0	2018
PEAK HR FACTOR :		0.915			0.886			0.902			0.000		0.950

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-052 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Newland St			Newland St			Oasis Ave			Oasis Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 0	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	0	75	2	2	173	0	0	0	0	7	0	4	263
7:15 AM	0	123	19	9	244	0	0	0	0	12	0	13	420
7:30 AM	0	177	42	27	260	0	0	0	0	47	0	25	578
7:45 AM	1	158	13	15	270	0	0	0	0	16	0	18	491
8:00 AM	0	147	8	7	199	0	0	0	0	10	0	8	379
8:15 AM	0	137	0	3	212	0	0	0	0	9	0	4	365
8:30 AM	0	128	2	4	198	0	0	0	0	8	0	6	346
8:45 AM	0	136	3	3	197	0	0	0	0	9	0	6	354
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	1081	89	70	1753	0	0	0	0	118	0	84	3196
APPROACH %'s :	0.09%	92.31%	7.60%	3.84%	96.16%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	58.42%	0.00%	41.58%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	1	605	82	58	973	0	0	0	0	85	0	64	1868
PEAK HR FACTOR :		0.785			0.898			0.000			0.517		0.808

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	1	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	1	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-052 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Newland St			Newland St			Oasis Ave			Oasis Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 0	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	0	200	5	3	175	0	0	0	0	4	0	3	390
4:15 PM	0	219	9	16	183	0	0	0	0	8	0	18	453
4:30 PM	0	201	5	25	222	0	0	0	0	4	0	28	485
4:45 PM	0	246	7	12	186	0	0	0	0	7	0	15	473
5:00 PM	0	228	8	14	184	0	0	0	0	3	0	11	448
5:15 PM	0	276	11	13	190	0	0	0	0	6	0	3	499
5:30 PM	0	259	10	11	236	0	0	0	0	6	0	7	529
5:45 PM	0	260	16	28	208	0	0	0	0	6	0	19	537
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1889	71	122	1584	0	0	0	0	44	0	104	3814
APPROACH %'s :	0.00%	96.38%	3.62%	7.15%	92.85%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	29.73%	0.00%	70.27%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	1023	45	66	818	0	0	0	0	21	0	40	2013
PEAK HR FACTOR :		0.930			0.895			0.000			0.610		0.937

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-053 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Newland St			Newland St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0.5	NT 1.5	NR 0	SL 0.5	ST 1.5	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	7	29	4	30	65	19	7	94	4	4	79	7	349
7:15 AM	7	29	3	38	84	15	7	172	9	7	125	5	501
7:30 AM	20	31	5	39	72	14	9	138	11	8	183	14	544
7:45 AM	20	29	4	46	68	15	5	180	12	15	218	9	621
8:00 AM	17	35	10	50	67	17	10	206	6	14	144	14	590
8:15 AM	23	48	6	49	47	24	10	174	9	12	181	12	595
8:30 AM	18	38	9	38	50	20	22	195	7	9	130	25	561
8:45 AM	21	27	6	25	59	25	9	105	7	11	147	18	460
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	133	266	47	315	512	149	79	1264	65	80	1207	104	4221
APPROACH %'s :	29.82%	59.64%	10.54%	32.27%	52.46%	15.27%	5.61%	89.77%	4.62%	5.75%	86.77%	7.48%	
PEAK HR START TIME :	745 AM												TOTAL
PEAK HR VOL :	78	150	29	183	232	76	47	755	34	50	673	60	2367
PEAK HR FACTOR :		0.834			0.916			0.933			0.809		0.953

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
4	0	0	0
0	0	0	0
1	0	0	0
4	0	0	0
6	0	0	0
0	0	0	0
NB	SB	EB	WB
15	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-053 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Newland St			Newland St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0.5	NT 1.5	NR 0	SL 0.5	ST 1.5	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	16	62	6	22	64	17	19	168	9	6	118	20	527
4:15 PM	7	69	4	15	61	12	16	165	12	10	157	36	564
4:30 PM	21	70	10	19	63	18	15	145	9	17	152	17	556
4:45 PM	7	90	6	36	56	17	13	153	13	20	161	21	593
5:00 PM	11	74	9	14	46	18	27	169	21	13	163	31	596
5:15 PM	12	63	11	23	59	11	29	168	15	25	160	45	621
5:30 PM	13	70	6	24	57	23	21	188	15	20	184	29	650
5:45 PM	9	69	9	34	84	16	25	169	14	18	168	23	638
TOTAL VOLUMES :	96	567	61	187	490	132	165	1325	108	129	1263	222	4745
APPROACH %'s :	13.26%	78.31%	8.43%	23.11%	60.57%	16.32%	10.33%	82.92%	6.76%	7.99%	78.25%	13.75%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	45	276	35	95	246	68	102	694	65	76	675	128	2505
PEAK HR FACTOR :		0.947			0.763			0.961			0.943		0.963

UTURNS

NB	SB	EB	WB
1	0	0	0
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
2	0	0	0
0	0	0	0
0	0	0	0
4	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-054 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Newland St			Newland St			Palos Verdes Ave			Palos Verdes Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 0	ER 0	WL 0	WT 0	WR 0	TOTAL
7:00 AM	0	35	0	0	74	0	0	0	0	7	0	4	120
7:15 AM	0	37	8	0	93	0	0	0	0	4	0	6	148
7:30 AM	1	39	3	0	100	0	0	0	0	5	0	10	158
7:45 AM	2	50	3	1	96	0	0	0	0	5	0	6	163
8:00 AM	5	45	8	0	60	0	0	0	0	1	0	8	127
8:15 AM	4	61	9	0	79	0	0	0	0	0	0	7	160
8:30 AM	1	56	5	0	59	0	0	0	0	0	0	14	135
8:45 AM	1	28	3	5	89	0	0	0	0	0	0	12	138
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	14	351	39	6	650	0	0	0	0	22	0	67	1149
APPROACH %'s :	3.47%	86.88%	9.65%	0.91%	99.09%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	24.72%	0.00%	75.28%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	12	195	23	1	335	0	0	0	0	11	0	31	608
PEAK HR FACTOR :		0.777			0.840			0.000			0.700		0.933

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	1	0	0	0
	2	0	0	0
	5	0	0	0
	4	0	0	0
	1	0	0	0
	1	4	0	0
	NB	SB	EB	WB
	14	4	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-054 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Newland St			Newland St			Palos Verdes Ave			Palos Verdes Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 0	ER 0	WL 0	WT 0	WR 0	TOTAL
4:00 PM	0	65	9	0	82	0	0	0	0	11	0	3	170
4:15 PM	0	94	9	0	83	0	0	0	0	8	0	6	200
4:30 PM	1	80	9	0	86	0	0	0	0	17	0	6	199
4:45 PM	0	93	8	0	90	0	0	0	0	9	0	4	204
5:00 PM	0	96	6	1	77	0	0	0	0	9	0	4	193
5:15 PM	1	85	13	1	94	0	0	0	0	14	0	1	209
5:30 PM	2	92	12	0	96	0	0	0	0	18	0	3	223
5:45 PM	2	94	7	1	113	0	0	0	0	17	0	5	239
TOTAL VOLUMES :	NL 6	NT 699	NR 73	SL 3	ST 721	SR 0	EL 0	ET 0	ER 0	WL 103	WT 0	WR 32	TOTAL 1637
APPROACH %'s :	0.77%	89.85%	9.38%	0.41%	99.59%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	76.30%	0.00%	23.70%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	5	367	38	3	380	0	0	0	0	58	0	13	864
PEAK HR FACTOR :		0.967			0.840			0.000			0.807		0.904

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	1	0	0	0
	0	0	0	0
	0	0	0	0
	1	1	0	0
	2	0	0	0
	2	1	0	0
TOTAL VOLUMES :	NB 6	SB 2	EB 0	WB 0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-055 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Sringdale St			Sringdale St			Iroquois Rd			Iroquois Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	1	131	1	4	188	5	2	1	5	8	2	11	359
7:15 AM	4	125	3	8	218	2	4	3	8	10	4	11	400
7:30 AM	11	151	4	8	261	14	11	4	12	14	8	12	510
7:45 AM	14	164	3	8	213	25	18	8	10	11	19	12	505
8:00 AM	17	121	2	6	178	58	47	45	17	6	27	7	531
8:15 AM	10	113	5	5	135	3	21	11	10	10	1	13	337
8:30 AM	3	104	3	6	157	1	4	1	3	7	0	9	298
8:45 AM	4	112	2	5	121	6	3	3	8	11	0	8	283
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	1021	23	50	1471	114	110	76	73	77	61	83	3223
APPROACH %'s :	5.78%	92.15%	2.08%	3.06%	89.97%	6.97%	42.47%	29.34%	28.19%	34.84%	27.60%	37.56%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	46	561	12	30	870	99	80	60	47	41	58	42	1946
PEAK HR FACTOR :		0.855			0.883			0.429			0.839		0.916

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	1	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	1	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-055 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Sringdale St			Sringdale St			Iroquois Rd			Iroquois Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	6	243	13	12	131	7	4	1	9	5	2	9	442
4:15 PM	5	228	7	5	153	2	5	5	7	13	2	11	443
4:30 PM	4	273	14	11	194	5	7	2	7	4	3	9	533
4:45 PM	5	246	10	10	172	7	2	1	2	1	1	7	464
5:00 PM	9	285	9	7	175	12	2	1	12	2	2	11	527
5:15 PM	1	315	14	7	228	2	3	3	4	9	4	11	601
5:30 PM	3	291	4	6	168	6	8	2	2	9	1	10	510
5:45 PM	10	217	14	12	195	6	5	5	9	9	1	10	493
TOTAL VOLUMES :	43	2098	85	70	1416	47	36	20	52	52	16	78	4013
APPROACH %'s :	1.93%	94.25%	3.82%	4.57%	92.37%	3.07%	33.33%	18.52%	48.15%	35.62%	10.96%	53.42%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	23	1108	41	32	766	26	18	11	27	29	8	42	2131
PEAK HR FACTOR :		0.888			0.869			0.737			0.823		0.886

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
TOTAL VOLUMES :	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-056 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Sringdale St			Sringdale St			Navajo Rd/Meinhardt Rd			Navajo Rd/Meinhardt Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
7:00 AM	6	120	8	3	196	1	3	1	20	21	0	3	382
7:15 AM	7	126	12	6	235	2	2	4	19	30	1	8	452
7:30 AM	6	147	16	6	246	0	6	7	19	41	2	9	505
7:45 AM	17	169	26	6	247	1	3	4	25	39	6	4	547
8:00 AM	28	128	32	9	191	2	3	7	32	23	16	6	477
8:15 AM	8	122	13	5	164	2	1	2	17	21	4	2	361
8:30 AM	2	105	11	5	153	1	1	1	16	13	1	3	312
8:45 AM	5	114	14	6	138	0	1	0	17	16	0	5	316
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	79	1031	132	46	1570	9	20	26	165	204	30	40	3352
APPROACH %'s :	6.36%	83.01%	10.63%	2.83%	96.62%	0.55%	9.48%	12.32%	78.20%	74.45%	10.95%	14.60%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	58	570	86	27	919	5	14	22	95	133	25	27	1981
PEAK HR FACTOR :		0.842			0.936			0.780			0.889		0.905

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-056 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Sringdale St			Sringdale St			Navajo Rd/Meinhardt Rd			Navajo Rd/Meinhardt Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
4:00 PM	9	244	33	12	130	1	5	1	11	16	1	8	471
4:15 PM	18	235	22	5	161	0	1	1	10	18	2	9	482
4:30 PM	18	277	34	13	196	0	0	4	7	18	4	13	584
4:45 PM	10	244	29	12	158	4	2	2	12	16	4	6	499
5:00 PM	19	308	33	5	185	2	2	3	8	19	4	9	597
5:15 PM	25	291	24	11	205	4	3	1	13	8	3	12	600
5:30 PM	26	300	16	8	180	2	3	1	10	12	1	17	576
5:45 PM	21	212	22	10	179	4	1	2	7	12	1	11	482
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	146	2111	213	76	1394	17	17	15	78	119	20	85	4291
APPROACH %'s :	5.91%	85.47%	8.62%	5.11%	93.75%	1.14%	15.45%	13.64%	70.91%	53.13%	8.93%	37.95%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	72	1120	120	41	744	10	7	10	40	61	15	40	2280
PEAK HR FACTOR :		0.911			0.903			0.838			0.829		0.950

UTURNS	NB	SB	EB	WB
	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-057 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Descanso Dr			Descanso Dr			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 1	ST 0	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	2	0	8	13	0	14	12	85	1	4	58	5	202
7:15 AM	5	0	13	19	0	15	8	112	0	0	91	3	266
7:30 AM	2	0	20	11	2	13	11	99	1	2	139	5	305
7:45 AM	4	1	5	12	0	14	15	112	1	5	122	10	301
8:00 AM	2	0	14	17	2	17	24	116	4	2	81	12	291
8:15 AM	2	2	12	15	0	18	20	79	0	1	86	6	241
8:30 AM	3	0	9	16	2	12	14	92	3	0	56	9	216
8:45 AM	2	1	12	9	1	16	12	82	0	0	61	10	206
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	22	4	93	112	7	119	116	777	10	14	694	60	2028
APPROACH %'s :	18.49%	3.36%	78.15%	47.06%	2.94%	50.00%	12.85%	86.05%	1.11%	1.82%	90.36%	7.81%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	13	1	52	59	4	59	58	439	6	9	433	30	1163
PEAK HR FACTOR :		0.750			0.847			0.873			0.808		0.953

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
NB	SB	EB	WB
0	0	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-057 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Descanso Dr			Descanso Dr			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 1	ST 0	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	3	0	6	26	0	25	19	94	1	4	99	14	291
4:15 PM	3	1	12	31	0	28	18	121	2	2	96	16	330
4:30 PM	2	0	15	39	2	28	25	121	0	3	100	17	352
4:45 PM	1	1	6	26	2	28	26	106	1	3	97	16	313
5:00 PM	3	3	9	32	1	39	18	123	1	4	106	14	353
5:15 PM	3	1	5	24	0	33	26	108	0	2	111	16	329
5:30 PM	2	0	9	23	1	41	19	96	0	6	102	19	318
5:45 PM	2	3	7	26	1	20	26	83	0	1	87	17	273
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	19	9	69	227	7	242	177	852	5	25	798	129	2559
APPROACH %'s :	19.59%	9.28%	71.13%	47.69%	1.47%	50.84%	17.12%	82.40%	0.48%	2.63%	83.82%	13.55%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	9	5	42	128	5	123	87	471	4	12	399	63	1348
PEAK HR FACTOR :		0.824			0.889			0.962			0.956		0.955

UTURNS				
	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	1
	0	0	0	0
	0	0	0	0
	0	0	0	1
	0	0	0	0
TOTAL VOLUMES :	0	0	0	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-058 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Hoover St			Hoover St			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	4	42	14	11	96	8	10	42	12	20	32	11	302
7:15 AM	13	50	18	14	147	15	13	54	19	24	70	15	452
7:30 AM	28	64	16	12	160	35	12	69	14	37	125	12	584
7:45 AM	24	75	22	9	156	35	24	96	23	48	109	12	633
8:00 AM	3	54	18	19	106	10	18	100	22	35	43	13	441
8:15 AM	7	51	34	9	110	9	8	58	14	33	41	19	393
8:30 AM	4	40	28	9	110	12	14	49	21	24	26	8	345
8:45 AM	8	66	20	11	97	12	10	41	10	20	33	8	336
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	91	442	170	94	982	136	109	509	135	241	479	98	3486
APPROACH %'s :	12.94%	62.87%	24.18%	7.76%	81.02%	11.22%	14.48%	67.60%	17.93%	29.46%	58.56%	11.98%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	68	243	74	54	569	95	67	319	78	144	347	52	2110
PEAK HR FACTOR :		0.795			0.867			0.811			0.780		0.833

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
1	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
NB	SB	EB	WB
1	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-058 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Hoover St			Hoover St			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	10	104	31	13	110	11	13	60	6	16	73	22	469
4:15 PM	17	109	39	14	105	8	10	64	10	23	69	24	492
4:30 PM	17	111	39	11	105	19	8	76	11	33	66	17	513
4:45 PM	18	108	44	13	115	17	15	72	10	25	70	14	521
5:00 PM	11	132	40	11	114	21	12	69	11	22	72	25	540
5:15 PM	20	105	30	13	102	20	13	74	12	28	87	21	525
5:30 PM	14	132	25	16	100	22	14	71	5	23	101	21	544
5:45 PM	17	105	29	17	108	18	16	70	10	20	77	13	500
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	124	906	277	108	859	136	101	556	75	190	615	157	4104
APPROACH %'s :	9.49%	69.32%	21.19%	9.79%	77.88%	12.33%	13.80%	75.96%	10.25%	19.75%	63.93%	16.32%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	63	477	139	53	431	80	54	286	38	98	330	81	2130
PEAK HR FACTOR :		0.928			0.966			0.955			0.878		0.979

UTURNS	NB	SB	EB	WB
	1	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
TOTAL VOLUMES :	1	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-059 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Commerce Wy			Commerce Wy			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0.5	ST 0.5	SR 1	EL 1	ET 2	ER 0	WL 1	WT 3	WR 1	TOTAL
7:00 AM	2	0	3	3	0	13	11	162	0	0	174	9	377
7:15 AM	2	0	5	3	0	20	14	231	1	1	176	10	463
7:30 AM	4	0	4	8	0	22	10	241	2	1	270	10	572
7:45 AM	0	0	5	5	0	15	23	266	3	5	256	12	590
8:00 AM	0	0	3	6	0	18	33	214	1	5	181	12	473
8:15 AM	0	0	4	9	0	17	19	176	1	1	183	10	420
8:30 AM	2	0	4	9	0	20	14	165	0	3	167	21	405
8:45 AM	1	0	4	3	0	13	16	162	2	0	158	25	384
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	11	0	32	46	0	138	140	1617	10	16	1565	109	3684
APPROACH %'s :	25.58%	0.00%	74.42%	25.00%	0.00%	75.00%	7.92%	91.51%	0.57%	0.95%	92.60%	6.45%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	6	0	17	22	0	75	80	952	7	12	883	44	2098
PEAK HR FACTOR :		0.719			0.808			0.890			0.835		0.889

UTURNS	NB	SB	EB	WB
	0	0	1	0
	0	0	4	0
	0	0	0	0
	0	0	5	2
	0	0	7	2
	0	0	3	1
	0	0	3	1
	0	0	0	0
	NB	SB	EB	WB
	0	0	23	6

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-059 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Commerce Wy			Commerce Wy			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0.5	0.5	1	1	2	0	1	3	1	
4:00 PM	1	0	0	34	0	42	37	194	4	5	200	33	550
4:15 PM	0	0	0	20	0	45	44	217	1	4	227	24	582
4:30 PM	0	2	2	15	1	43	46	206	2	1	223	33	574
4:45 PM	0	0	1	16	0	31	34	223	1	2	262	38	608
5:00 PM	2	0	2	25	0	36	37	253	3	3	234	36	631
5:15 PM	0	0	1	21	0	37	37	205	1	3	209	31	545
5:30 PM	1	1	4	19	1	41	39	197	1	3	230	39	576
5:45 PM	0	0	2	13	0	40	44	221	1	4	233	29	587
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	4	3	12	163	2	315	318	1716	14	25	1818	263	4653
APPROACH %'s :	21.05%	15.79%	63.16%	33.96%	0.42%	65.63%	15.53%	83.79%	0.68%	1.19%	86.32%	12.49%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	2	2	5	76	1	155	161	899	7	10	946	131	2395
PEAK HR FACTOR :		0.563			0.892			0.910			0.900		0.949

UTURNS				
NB	SB	EB	WB	
0	0	5	1	
0	0	4	3	
0	0	3	1	
0	0	5	0	
0	0	5	1	
0	0	8	0	
0	0	2	0	
0	0	4	1	
NB	SB	EB	WB	
0	0	36	7	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-060 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Edwards St			Edwards St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM	47	86	29	19	85	28	31	140	60	37	151	6	719
7:15 AM	49	62	22	34	114	28	21	178	94	40	179	14	835
7:30 AM	63	91	47	58	154	43	27	164	106	57	208	24	1042
7:45 AM	46	95	59	57	132	33	23	183	89	45	197	29	988
8:00 AM	67	87	36	24	83	31	19	151	51	31	153	21	754
8:15 AM	53	60	19	14	56	40	12	119	46	33	165	12	629
8:30 AM	51	61	26	18	79	24	20	134	35	24	168	6	646
8:45 AM	38	58	17	24	55	26	26	121	35	15	148	13	576
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	414	600	255	248	758	253	179	1190	516	282	1369	125	6189
APPROACH %'s :	32.62%	47.28%	20.09%	19.70%	60.21%	20.10%	9.50%	63.13%	27.37%	15.88%	77.08%	7.04%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	225	335	164	173	483	135	90	676	340	173	737	88	3619
PEAK HR FACTOR :		0.900			0.775			0.931			0.863		0.868

UTURNS	NB	SB	EB	WB
	0	0	2	1
	0	0	2	1
	0	0	2	0
	0	0	3	0
	0	0	4	1
	0	0	0	1
	0	0	5	2
	0	0	6	0
	NB	SB	EB	WB
	0	0	24	6

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-060 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Edwards St			Edwards St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	65	113	47	26	95	23	43	178	51	47	183	31	902
4:15 PM	66	106	46	23	99	24	53	202	72	40	218	36	985
4:30 PM	49	108	48	28	107	24	39	168	64	44	202	26	907
4:45 PM	62	85	41	23	83	34	45	218	71	45	196	24	927
5:00 PM	68	124	60	18	88	28	33	173	56	49	171	34	902
5:15 PM	66	111	40	22	106	27	50	173	57	23	174	34	883
5:30 PM	74	131	52	34	112	36	32	151	43	48	206	46	965
5:45 PM	59	89	38	32	86	38	37	209	41	36	188	27	880
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	509	867	372	206	776	234	332	1472	455	332	1538	258	7351
APPROACH %'s :	29.12%	49.60%	21.28%	16.94%	63.82%	19.24%	14.70%	65.16%	20.14%	15.60%	72.27%	12.12%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	245	423	195	92	377	110	170	761	263	178	787	120	3721
PEAK HR FACTOR :		0.856			0.910			0.894			0.923		0.944

UTURNS				
NB	SB	EB	WB	
0	0	4	3	
0	0	2	0	
0	0	4	1	
0	0	8	2	
0	0	2	2	
0	0	5	1	
0	0	5	1	
0	0	2	2	
NB	SB	EB	WB	
0	0	32	12	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-061 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Goldenwest St			Goldenwest St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 0	SL 2	ST 3	SR 0	EL 2	ET 2	ER 1	WL 2	WT 2	WR 1	TOTAL
7:00 AM	26	157	18	34	250	33	29	119	31	39	105	10	851
7:15 AM	46	181	29	41	340	47	35	160	43	48	107	14	1091
7:30 AM	58	192	56	34	360	50	49	155	57	88	181	21	1301
7:45 AM	56	220	48	43	306	58	50	168	72	68	153	15	1257
8:00 AM	42	168	27	30	243	43	42	137	41	32	116	20	941
8:15 AM	33	161	21	46	270	34	33	131	33	30	123	26	941
8:30 AM	33	150	15	33	242	32	35	100	34	32	124	19	849
8:45 AM	48	119	23	24	213	26	45	89	33	46	99	25	790
TOTAL VOLUMES :	342	1348	237	285	2224	323	318	1059	344	383	1008	150	8021
APPROACH %'s :	17.75%	69.95%	12.30%	10.06%	78.53%	11.41%	18.48%	61.53%	19.99%	24.85%	65.41%	9.73%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	202	761	160	148	1249	198	176	620	213	236	557	70	4590
PEAK HR FACTOR :		0.867			0.898			0.870			0.744		0.882

UTURNS	NB	SB	EB	WB
7:00 AM	1	0	0	0
7:15 AM	0	1	1	0
7:30 AM	1	1	2	0
7:45 AM	0	0	1	0
8:00 AM	0	0	0	0
8:15 AM	0	3	1	0
8:30 AM	1	1	2	1
8:45 AM	0	0	6	0
TOTAL VOLUMES :	3	6	13	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-061 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Goldenwest St			Goldenwest St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 0	SL 2	ST 3	SR 0	EL 2	ET 2	ER 1	WL 2	WT 2	WR 1	TOTAL
4:00 PM	67	238	27	46	204	32	45	152	45	39	150	36	1081
4:15 PM	75	248	32	43	230	34	45	139	45	41	157	30	1119
4:30 PM	72	258	33	47	228	33	49	139	46	26	169	38	1138
4:45 PM	77	253	28	44	247	41	42	137	45	45	171	31	1161
5:00 PM	78	278	43	38	258	31	50	181	57	45	168	26	1253
5:15 PM	74	272	46	30	237	43	62	128	32	40	145	31	1140
5:30 PM	83	250	48	39	251	32	42	151	39	36	179	31	1181
5:45 PM	77	234	30	31	266	40	58	136	38	47	156	25	1138
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	603	2031	287	318	1921	286	393	1163	347	319	1295	248	9211
APPROACH %'s :	20.64%	69.53%	9.83%	12.59%	76.08%	11.33%	20.65%	61.11%	18.23%	17.13%	69.55%	13.32%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	312	1053	165	151	993	147	196	597	173	166	663	119	4735
PEAK HR FACTOR :		0.959			0.972			0.839			0.960		0.945

UTURNS	NB	SB	EB	WB
	0	0	6	0
	0	1	5	1
	1	2	9	0
	1	1	3	0
	1	0	3	0
	2	5	7	0
	1	2	3	2
	2	1	4	1
	NB	SB	EB	WB
	8	12	40	4

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-062 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Hoover St			Hoover St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	8	36	9	18	100	14	5	173	10	10	126	18	527
7:15 AM	17	49	5	36	154	26	24	184	15	16	153	20	699
7:30 AM	23	68	10	25	166	47	26	227	11	30	248	31	912
7:45 AM	32	74	16	27	141	30	31	206	15	16	154	21	763
8:00 AM	11	53	19	14	112	17	21	174	11	15	145	31	623
8:15 AM	15	47	15	29	96	7	21	180	11	9	145	26	601
8:30 AM	10	49	15	16	85	18	11	163	18	18	140	31	574
8:45 AM	18	49	11	37	101	25	23	134	8	13	131	31	581
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	134	425	100	202	955	184	162	1441	99	127	1242	209	5280
APPROACH %'s :	20.33%	64.49%	15.17%	15.06%	71.22%	13.72%	9.52%	84.67%	5.82%	8.05%	78.71%	13.24%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	83	244	50	102	573	120	102	791	52	77	700	103	2997
PEAK HR FACTOR :		0.773			0.835			0.895			0.712		0.822

UTURNS	NB	SB	EB	WB
	0	0	0	2
	0	0	0	3
	0	0	2	2
	0	0	1	1
	0	0	1	1
	0	0	1	2
	0	0	0	2
	0	0	0	1
	NB	SB	EB	WB
	0	0	5	14

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-062 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Hoover St			Hoover St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	33	81	15	34	95	23	24	179	13	12	189	34	732
4:15 PM	17	108	13	25	91	24	27	200	15	12	192	24	748
4:30 PM	24	88	14	33	98	23	19	183	14	14	203	39	752
4:45 PM	16	95	15	25	96	26	35	171	10	11	227	34	761
5:00 PM	17	104	19	27	125	24	23	217	19	10	195	32	812
5:15 PM	26	133	21	17	72	24	23	160	12	12	168	25	693
5:30 PM	26	94	9	23	97	25	19	182	13	7	236	25	756
5:45 PM	12	73	10	10	86	20	17	191	6	21	203	28	677
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	171	776	116	194	760	189	187	1483	102	99	1613	241	5931
APPROACH %'s :	16.09%	73.00%	10.91%	16.97%	66.49%	16.54%	10.55%	83.69%	5.76%	5.07%	82.59%	12.34%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	74	395	61	110	410	97	104	771	58	47	817	129	3073
PEAK HR FACTOR :		0.946			0.876			0.901			0.913		0.946

UTURNS	NB	SB	EB	WB
	0	0	1	3
	0	0	1	0
	0	0	0	2
	0	0	2	2
	0	0	2	2
	0	0	2	2
	0	0	1	2
	0	0	1	1
	0	0	1	4
	NB	SB	EB	WB
TOTAL VOLUMES :	0	0	9	16

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-063 **Day:** Thursday

City: Westminster **Date:** 5/28/2015

AM

NS/EW Streets:	Magnolia St			Magnolia St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM	26	163	21	48	323	15	40	107	12	12	66	38	871
7:15 AM	21	204	28	46	324	23	17	134	19	12	63	36	927
7:30 AM	18	289	38	78	243	33	39	206	17	26	114	54	1155
7:45 AM	22	218	31	62	308	19	38	225	21	30	106	85	1165
8:00 AM	21	191	25	75	254	23	30	137	13	39	139	61	1008
8:15 AM	14	188	36	59	473	15	36	165	15	33	113	66	1213
8:30 AM	11	265	45	59	220	18	35	160	21	33	95	77	1039
8:45 AM	16	197	34	74	269	15	55	125	12	44	183	63	1087
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	149	1715	258	501	2414	161	290	1259	130	229	879	480	8465
APPROACH %'s :	7.02%	80.82%	12.16%	16.29%	78.48%	5.23%	17.27%	74.99%	7.74%	14.42%	55.35%	30.23%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	75	886	130	274	1278	90	143	733	66	128	472	266	4541
PEAK HR FACTOR :		0.791			0.750			0.829			0.906		0.936

UTURNS	NB	SB	EB	WB
	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-063 **Day:** Thursday

City: Westminster **Date:** 5/28/2015

PM

NS/EW Streets:	Magnolia St			Magnolia St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 3	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	19	318	24	49	260	31	49	145	32	64	214	85	1290
4:15 PM	23	264	29	47	254	33	49	136	25	41	170	73	1144
4:30 PM	21	322	27	57	314	10	44	158	28	32	164	93	1270
4:45 PM	16	331	24	45	346	17	42	133	28	56	232	93	1363
5:00 PM	25	279	33	50	280	31	50	141	31	43	217	83	1263
5:15 PM	21	277	33	64	279	23	65	200	24	60	219	82	1347
5:30 PM	14	335	40	29	266	21	55	163	26	59	222	89	1319
5:45 PM	18	310	28	57	303	22	53	197	19	53	210	93	1363
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	157	2436	238	398	2302	188	407	1273	213	408	1648	691	10359
APPROACH %'s :	5.55%	86.05%	8.41%	13.78%	79.71%	6.51%	21.50%	67.25%	11.25%	14.85%	59.99%	25.15%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	78	1201	134	200	1128	97	223	701	100	215	868	347	5292
PEAK HR FACTOR :		0.908			0.933			0.886			0.966		0.971

UTURNS	NB	SB	EB	WB
	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-064 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Milan St			Milan St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	0	1	0	1	2	0	1	2	0	
7:00 AM	3	0	4	35	1	7	7	139	1	1	178	11	387
7:15 AM	5	1	3	34	0	10	5	140	0	2	176	10	386
7:30 AM	3	1	3	51	0	16	6	184	1	1	223	17	506
7:45 AM	2	0	2	49	0	14	5	166	3	1	164	24	430
8:00 AM	0	0	2	15	0	4	2	140	0	1	121	10	295
8:15 AM	2	0	1	15	0	7	7	106	0	0	132	9	279
8:30 AM	1	0	1	33	0	4	10	120	0	2	132	5	308
8:45 AM	0	0	1	20	0	3	8	126	0	1	116	7	282
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	16	2	17	252	1	65	50	1121	5	9	1242	93	2873
APPROACH %'s :	45.71%	5.71%	48.57%	79.25%	0.31%	20.44%	4.25%	95.32%	0.43%	0.67%	92.41%	6.92%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	13	2	12	169	1	47	23	629	5	5	741	62	1709
PEAK HR FACTOR :		0.750			0.810			0.860			0.838		0.844

UTURNS				
NB	SB	EB	WB	
0	0	1	0	
0	0	0	2	
0	0	2	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	1	0	
NB	SB	EB	WB	
0	0	4	2	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-064 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Milan St			Milan St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	0	0	2	19	0	8	3	165	1	0	124	20	342
4:15 PM	0	0	0	17	0	2	5	225	5	1	126	14	395
4:30 PM	0	0	1	18	0	3	17	211	2	2	139	20	413
4:45 PM	0	0	3	26	0	6	11	217	1	5	141	24	434
5:00 PM	0	0	1	29	0	4	5	252	0	2	141	25	459
5:15 PM	0	0	1	16	0	3	12	212	2	2	135	22	405
5:30 PM	0	1	1	17	0	4	11	186	5	2	172	36	435
5:45 PM	1	0	4	25	0	2	12	148	3	2	160	19	376
TOTAL VOLUMES :	1	1	13	167	0	32	76	1616	19	16	1138	180	3259
APPROACH %'s :	6.67%	6.67%	86.67%	83.92%	0.00%	16.08%	4.44%	94.45%	1.11%	1.20%	85.31%	13.49%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	1	6	88	0	17	39	867	8	11	589	107	1733
PEAK HR FACTOR :		0.583			0.795			0.889			0.842		0.944

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	1	0	
0	0	0	1	
0	0	0	0	
0	0	0	0	
0	0	0	1	
0	0	1	0	
NB	SB	EB	WB	
0	0	2	2	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-065 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Monroe St/All American Wy			Monroe St/All American Wy			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	0.5	0.5	1	0.5	0.5	1	2	0	1	2	0	
7:00 AM	9	2	3	16	15	9	2	155	15	12	103	4	345
7:15 AM	12	10	17	36	33	19	3	199	48	21	177	7	582
7:30 AM	19	12	13	34	40	17	8	185	28	47	182	15	600
7:45 AM	7	0	8	14	8	10	2	173	24	31	168	17	462
8:00 AM	9	2	16	22	11	7	0	152	14	24	168	7	432
8:15 AM	6	5	20	16	5	10	2	168	29	19	167	6	453
8:30 AM	18	2	11	15	5	4	7	161	21	12	175	10	441
8:45 AM	21	5	10	6	7	2	5	146	12	19	171	10	414
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	101	38	98	159	124	78	29	1339	191	185	1311	76	3729
APPROACH %'s :	42.62%	16.03%	41.35%	44.04%	34.35%	21.61%	1.86%	85.89%	12.25%	11.77%	83.40%	4.83%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	47	24	54	106	92	53	13	709	114	123	695	46	2076
PEAK HR FACTOR :		0.710			0.690			0.836			0.885		0.865

UTURNS	NB	SB	EB	WB
	0	0	0	1
	0	0	0	3
	0	0	2	10
	0	0	0	5
	0	0	0	6
	0	0	0	4
	0	0	1	2
	0	0	2	9
	NB	SB	EB	WB
TOTAL VOLUMES :	0	0	5	40

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-065 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Monroe St/All American Wy			Monroe St/All American Wy			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 0.5	NR 0.5	SL 1	ST 0.5	SR 0.5	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	11	11	18	17	1	10	7	207	21	25	226	19	573
4:15 PM	10	9	21	17	1	14	8	220	24	17	193	18	552
4:30 PM	1	5	13	8	3	20	11	230	22	23	220	22	578
4:45 PM	15	4	22	11	3	17	6	244	18	27	208	16	591
5:00 PM	12	7	25	13	7	6	8	229	21	45	211	27	611
5:15 PM	23	11	27	25	7	6	4	230	12	32	229	16	622
5:30 PM	7	5	17	22	4	9	17	195	13	37	188	23	537
5:45 PM	11	8	16	17	2	8	4	200	17	18	196	15	512
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	90	60	159	130	28	90	65	1755	148	224	1671	156	4576
APPROACH %'s :	29.13%	19.42%	51.46%	52.42%	11.29%	36.29%	3.30%	89.18%	7.52%	10.92%	81.47%	7.61%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	51	27	87	57	20	49	29	933	73	127	868	81	2402
PEAK HR FACTOR :		0.676			0.829			0.965			0.951		0.965

UTURNS	NB	SB	EB	WB
	0	0	0	14
	0	1	1	10
	0	0	0	12
	0	0	0	17
	0	0	1	17
	0	0	1	14
	0	0	2	22
	0	0	0	8
	NB	SB	EB	WB
	0	1	5	114

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-066 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Newland St			Newland St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	22	41	14	28	144	12	15	127	11	13	67	6	500
7:15 AM	18	66	25	42	200	10	9	151	25	26	100	9	681
7:30 AM	31	87	36	49	174	10	15	176	41	58	174	14	865
7:45 AM	33	110	37	53	171	15	21	213	23	33	151	16	876
8:00 AM	29	79	29	48	166	19	21	170	19	36	154	23	793
8:15 AM	29	80	16	64	156	25	20	153	16	23	151	17	750
8:30 AM	36	78	24	34	173	23	13	179	12	12	119	21	724
8:45 AM	26	73	20	59	158	19	17	188	16	24	154	27	781
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	224	614	201	377	1342	133	131	1357	163	225	1070	133	5970
APPROACH %'s :	21.56%	59.10%	19.35%	20.36%	72.46%	7.18%	7.93%	82.19%	9.87%	15.76%	74.93%	9.31%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	122	356	118	214	667	69	77	712	99	150	630	70	3284
PEAK HR FACTOR :		0.828			0.969			0.864			0.864		0.937

UTURNS	NB	SB	EB	WB
	0	0	2	1
	0	0	0	1
	0	1	1	7
	0	0	2	2
	0	0	1	2
	0	1	2	3
	1	0	2	1
	0	0	3	0
	NB	SB	EB	WB
	1	2	13	17

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-066 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Newland St			Newland St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	36	139	26	33	126	23	26	215	16	31	169	29	869
4:15 PM	38	126	24	38	126	15	31	192	32	45	170	32	869
4:30 PM	34	125	27	30	118	17	45	201	30	40	170	37	874
4:45 PM	50	174	20	45	108	22	29	189	32	22	193	36	920
5:00 PM	30	159	25	31	129	23	39	208	29	38	189	41	941
5:15 PM	41	184	34	33	166	24	36	205	22	33	197	53	1028
5:30 PM	36	153	28	39	154	11	41	243	33	40	170	57	1005
5:45 PM	39	182	35	38	156	32	43	207	38	52	176	55	1053
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	304	1242	219	287	1083	167	290	1660	232	301	1434	340	7559
APPROACH %'s :	17.22%	70.37%	12.41%	18.67%	70.46%	10.87%	13.29%	76.08%	10.63%	14.51%	69.11%	16.39%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	146	678	122	141	605	90	159	863	122	163	732	206	4027
PEAK HR FACTOR :		0.913			0.925			0.902			0.973		0.956

UTURNS	NB	SB	EB	WB
	0	0	1	1
	0	0	6	2
	0	0	6	3
	0	0	5	5
	0	0	6	4
	0	0	6	4
	0	0	0	1
	0	0	7	3
	NB	SB	EB	WB
TOTAL VOLUMES :	0	0	37	23

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-067 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Olive St			Olive St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 1	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	4	3	8	11	14	10	3	158	9	4	139	4	367
7:15 AM	10	9	25	16	47	18	7	197	22	27	169	3	550
7:30 AM	20	22	35	12	39	28	6	212	19	22	289	7	711
7:45 AM	7	12	13	5	36	11	7	235	16	13	186	3	544
8:00 AM	6	2	15	9	11	10	6	170	11	16	155	3	414
8:15 AM	17	21	32	7	14	7	2	168	8	8	146	5	435
8:30 AM	9	6	21	11	4	4	3	150	7	9	159	3	386
8:45 AM	13	5	13	10	13	6	1	129	10	9	155	8	372
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	86	80	162	81	178	94	35	1419	102	108	1398	36	3779
APPROACH %'s :	26.22%	24.39%	49.39%	22.95%	50.42%	26.63%	2.25%	91.20%	6.56%	7.00%	90.66%	2.33%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	43	45	88	42	133	67	26	814	68	78	799	16	2219
PEAK HR FACTOR :		0.571			0.747			0.880			0.702		0.780

UTURNS				
NB	SB	EB	WB	
0	0	1	0	
0	0	1	0	
0	0	1	2	
0	0	2	2	
0	0	3	0	
0	0	0	1	
0	0	2	1	
0	0	0	4	
NB	SB	EB	WB	
0	0	10	10	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-067 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Olive St			Olive St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 1	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	4	9	12	10	7	3	5	198	6	14	223	8	499
4:15 PM	8	10	21	10	8	3	6	202	12	11	216	12	519
4:30 PM	8	11	12	10	14	8	5	192	7	8	225	9	509
4:45 PM	12	11	13	11	12	8	6	194	11	15	232	16	541
5:00 PM	6	14	16	10	13	10	8	224	7	14	211	6	539
5:15 PM	5	20	7	10	17	5	12	171	2	15	212	10	486
5:30 PM	9	12	8	12	14	13	4	204	16	22	234	17	565
5:45 PM	6	9	12	10	14	8	4	174	6	19	207	8	477
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	58	96	101	83	99	58	50	1559	67	118	1760	86	4135
APPROACH %'s :	22.75%	37.65%	39.61%	34.58%	41.25%	24.17%	2.98%	93.02%	4.00%	6.01%	89.61%	4.38%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	32	57	44	43	56	36	30	793	36	66	889	49	2131
PEAK HR FACTOR :		0.924			0.865			0.899			0.919		0.943

UTURNS	NB	SB	EB	WB
	0	0	1	4
	0	0	3	3
	0	0	1	0
	0	0	3	3
	0	0	2	1
	0	0	3	2
	0	0	2	0
	0	0	2	1
	NB	SB	EB	WB
	0	0	17	14

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-068 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Rancho Rd/Hammon Pl			Rancho Rd/Hammon Pl			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0.5	NT 0.5	NR 1	SL 0	ST 1	SR 0	EL 1	ET 2	ER 1	WL 2	WT 2	WR 0	TOTAL
7:00 AM	6	1	25	38	0	2	0	158	7	38	190	16	481
7:15 AM	1	1	28	35	4	4	1	195	8	26	174	7	484
7:30 AM	20	2	36	40	8	3	1	197	15	41	217	9	589
7:45 AM	8	2	30	38	7	0	0	219	24	46	191	17	582
8:00 AM	4	3	22	16	4	0	2	143	12	41	129	9	385
8:15 AM	6	1	38	19	4	3	4	100	9	38	130	11	363
8:30 AM	6	0	25	19	6	0	1	138	11	37	136	7	386
8:45 AM	4	2	25	21	1	0	0	157	6	36	113	9	374
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	55	12	229	226	34	12	9	1307	92	303	1280	85	3644
APPROACH %'s :	18.58%	4.05%	77.36%	83.09%	12.50%	4.41%	0.64%	92.83%	6.53%	18.17%	76.74%	5.10%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	35	6	119	151	19	9	2	769	54	151	772	49	2136
PEAK HR FACTOR :		0.690			0.877			0.849			0.910		0.907

UTURNS				
NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	1	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
NB	SB	EB	WB
0	0	1	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-068 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Rancho Rd/Hammon Pl			Rancho Rd/Hammon Pl			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0.5	NT 0.5	NR 1	SL 0	ST 1	SR 0	EL 1	ET 2	ER 1	WL 2	WT 2	WR 0	TOTAL
4:00 PM	6	0	54	18	2	1	0	186	6	18	135	24	450
4:15 PM	8	2	72	22	4	3	3	216	7	43	142	22	544
4:30 PM	11	6	56	19	3	1	2	233	8	37	152	26	554
4:45 PM	7	5	59	20	5	0	2	243	9	38	161	22	571
5:00 PM	8	4	71	26	3	1	0	283	8	32	163	26	625
5:15 PM	8	4	57	18	1	3	2	215	8	33	150	21	520
5:30 PM	9	4	53	19	3	0	0	203	4	27	187	27	536
5:45 PM	2	8	43	17	1	1	1	177	4	23	194	27	498
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	59	33	465	159	22	10	10	1756	54	251	1284	195	4298
APPROACH %'s :	10.59%	5.92%	83.48%	83.25%	11.52%	5.24%	0.55%	96.48%	2.97%	14.51%	74.22%	11.27%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	34	17	258	87	15	5	7	975	32	150	618	96	2294
PEAK HR FACTOR :		0.931			0.892			0.871			0.977		0.918

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	3	1	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	1	
0	0	0	0	
NB	SB	EB	WB	
0	0	3	2	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-069 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Sringdale St			Sringdale St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 1.5	NR 1.5	SL 2	ST 2	SR 1	EL 2	ET 2.5	ER 0.5	WL 2	WT 2	WR 1	TOTAL
7:00 AM	28	58	109	72	223	37	24	172	40	41	166	36	1006
7:15 AM	32	88	135	57	297	27	19	194	55	60	168	63	1195
7:30 AM	39	91	136	72	293	51	32	177	78	94	167	74	1304
7:45 AM	56	110	156	68	260	50	46	209	52	115	166	65	1353
8:00 AM	41	71	131	84	181	27	22	161	34	67	139	42	1000
8:15 AM	19	50	103	46	167	37	16	135	34	70	155	39	871
8:30 AM	25	61	90	60	137	39	31	144	40	56	129	45	857
8:45 AM	18	29	105	59	144	28	13	149	30	61	128	39	803
TOTAL VOLUMES :	258	558	965	518	1702	296	203	1341	363	564	1218	403	8389
APPROACH %'s :	14.49%	31.33%	54.18%	20.59%	67.65%	11.76%	10.64%	70.32%	19.04%	25.81%	55.74%	18.44%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	155	347	536	269	1073	165	121	752	225	310	667	238	4858
PEAK HR FACTOR :		0.806			0.906			0.894			0.878		0.898

UTURNS	NB	SB	EB	WB
7:00 AM	0	0	0	1
7:15 AM	1	0	0	0
7:30 AM	0	0	0	2
7:45 AM	0	0	0	1
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	0	0	0	3
TOTAL VOLUMES :	1	0	0	7

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-069 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Sringdale St			Sringdale St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 1.5	NR 1.5	SL 2	ST 2	SR 1	EL 2	ET 2.5	ER 0.5	WL 2	WT 2	WR 1	TOTAL
4:00 PM	33	142	158	69	155	34	40	239	26	42	147	90	1175
4:15 PM	30	101	147	68	133	36	38	254	49	56	173	111	1196
4:30 PM	28	180	194	72	181	37	59	242	39	41	174	87	1334
4:45 PM	43	131	130	60	155	39	42	274	42	44	176	90	1226
5:00 PM	40	182	151	87	186	43	65	307	31	37	163	100	1392
5:15 PM	35	135	171	74	203	38	44	257	27	44	160	127	1315
5:30 PM	41	172	169	61	217	40	51	230	32	57	191	106	1367
5:45 PM	24	76	108	90	155	44	32	203	31	61	211	112	1147
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	274	1119	1228	581	1385	311	371	2006	277	382	1395	823	10152
APPROACH %'s :	10.45%	42.69%	46.85%	25.52%	60.83%	13.66%	13.98%	75.58%	10.44%	14.69%	53.65%	31.65%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	159	620	621	282	761	160	202	1068	132	182	690	423	5300
PEAK HR FACTOR :		0.916			0.946			0.870			0.915		0.952

UTURNS	NB	SB	EB	WB
	0	0	1	3
	0	0	0	1
	0	0	0	0
	0	0	0	3
	0	0	0	2
	0	0	0	2
	0	0	0	2
	0	0	0	2
	NB	SB	EB	WB
	0	0	1	15

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-070 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	University St			University St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0.5	NT 0.5	NR 1	SL 0.5	ST 0.5	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	4	0	12	10	1	4	6	114	2	5	167	13	338
7:15 AM	14	4	19	29	1	9	3	116	3	6	160	21	385
7:30 AM	2	10	12	58	3	9	11	98	2	4	131	93	433
7:45 AM	2	6	11	63	6	21	10	112	2	8	144	50	435
8:00 AM	6	1	10	28	0	4	5	102	0	6	124	10	296
8:15 AM	5	1	8	9	0	4	8	100	3	8	116	15	277
8:30 AM	4	0	8	17	0	6	4	98	2	6	118	15	278
8:45 AM	2	1	12	24	1	3	2	103	1	3	100	14	266
TOTAL VOLUMES :	39	23	92	238	12	60	49	843	15	46	1060	231	2708
APPROACH %'s :	25.32%	14.94%	59.74%	76.77%	3.87%	19.35%	5.40%	92.94%	1.65%	3.44%	79.28%	17.28%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	22	20	54	160	11	43	30	440	9	23	602	177	1591
PEAK HR FACTOR :		0.649			0.594			0.966			0.879		0.914

UTURNS	NB	SB	EB	WB
	0	0	1	0
	0	0	0	1
	0	0	0	0
	0	0	0	0
	0	0	1	0
	0	0	0	1
	0	0	0	0
	0	0	1	0
TOTAL VOLUMES :	0	0	3	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-070 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	University St			University St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0.5	NT 0.5	NR 1	SL 0.5	ST 0.5	SR 1	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	2	0	12	16	1	2	6	160	4	17	88	26	334
4:15 PM	1	0	10	28	2	5	6	182	6	11	87	24	362
4:30 PM	2	3	4	24	2	8	2	196	3	13	111	29	397
4:45 PM	5	0	14	20	0	4	5	201	3	8	110	24	394
5:00 PM	2	0	12	15	0	4	9	234	3	12	119	20	430
5:15 PM	2	0	9	13	0	4	5	197	2	6	103	24	365
5:30 PM	3	0	4	16	0	5	4	189	4	9	140	23	397
5:45 PM	1	0	10	21	2	7	7	130	6	12	123	20	339
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	18	3	75	153	7	39	44	1489	31	88	881	190	3018
APPROACH %'s :	18.75%	3.13%	78.13%	76.88%	3.52%	19.60%	2.81%	95.20%	1.98%	7.59%	76.01%	16.39%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	12	0	39	64	0	17	23	821	12	35	472	91	1586
PEAK HR FACTOR :		0.671			0.844			0.870			0.869		0.922

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	1	1
	0	0	0	0
	0	0	0	0
	0	0	0	0
TOTAL VOLUMES :	0	0	1	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-071 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Westmart Pl			Westmart Pl			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	1	0	1	0.5	0.5	1	2	0	1	3	0	
7:00 AM	1	0	1	7	0	12	16	154	1	0	171	7	370
7:15 AM	0	0	0	8	0	14	17	227	0	0	192	16	474
7:30 AM	5	0	0	4	0	14	30	224	1	1	270	15	564
7:45 AM	0	0	0	13	0	21	35	257	1	1	244	17	589
8:00 AM	1	0	1	19	0	23	32	196	0	0	194	20	486
8:15 AM	4	1	4	14	0	32	22	149	1	1	175	19	422
8:30 AM	2	1	2	18	1	24	37	138	2	1	169	16	411
8:45 AM	0	0	0	20	0	20	24	145	1	1	151	18	380
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	13	2	8	103	1	160	213	1490	7	5	1566	128	3696
APPROACH %'s :	56.52%	8.70%	34.78%	39.02%	0.38%	60.61%	12.46%	87.13%	0.41%	0.29%	92.17%	7.53%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	6	0	1	44	0	72	114	904	2	2	900	68	2113
PEAK HR FACTOR :	0.350			0.690			0.870			0.848			0.897

UTURNS				
NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
0	0	0	0
0	0	0	0
0	0	1	0
NB	SB	EB	WB
0	0	1	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-071 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Westmart Pl			Westmart Pl			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 1	ST 0.5	SR 0.5	EL 1	ET 2	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	7	1	1	21	1	26	38	192	5	9	232	21	554
4:15 PM	5	0	2	23	0	37	36	214	7	7	237	18	586
4:30 PM	5	0	3	17	1	21	22	211	6	9	249	21	565
4:45 PM	10	2	4	17	0	27	39	220	6	7	242	18	592
5:00 PM	3	1	6	27	0	31	36	236	5	11	239	23	618
5:15 PM	1	2	4	19	0	26	39	202	4	7	214	13	531
5:30 PM	2	0	4	23	2	35	31	191	7	4	276	14	589
5:45 PM	7	1	3	22	1	24	29	232	3	8	218	11	559
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	40	7	27	169	5	227	270	1698	43	62	1907	139	4594
APPROACH %'s :	54.05%	9.46%	36.49%	42.14%	1.25%	56.61%	13.43%	84.44%	2.14%	2.94%	90.46%	6.59%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	23	3	15	84	1	116	133	881	24	34	967	80	2361
PEAK HR FACTOR :		0.641			0.838			0.937			0.969		0.955

UTURNS	NB	SB	EB	WB
	0	0	1	2
	0	0	2	0
	0	0	1	0
	0	0	3	0
	0	0	1	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
TOTAL VOLUMES :	0	0	8	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-072 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Willow Ln (South)			Willow Ln (South)			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 0	NR 1	SL 0	ST 1	SR 0	EL 0	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	14	2	25	0	0	7	0	204	3	4	237	0	496
7:15 AM	12	0	32	0	0	4	0	250	4	6	265	0	573
7:30 AM	24	1	45	0	0	5	0	243	4	4	318	0	644
7:45 AM	11	0	32	0	0	6	0	232	3	11	268	0	563
8:00 AM	15	0	24	0	0	11	0	193	3	9	241	0	496
8:15 AM	18	0	40	0	0	10	0	150	4	8	256	0	486
8:30 AM	10	1	25	0	0	11	0	171	1	8	234	0	461
8:45 AM	15	0	32	0	0	10	0	157	7	10	249	1	481
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	119	4	255	0	0	64	0	1600	29	60	2068	1	4200
APPROACH %'s :	31.48%	1.06%	67.46%	0.00%	0.00%	100.00%	0.00%	98.22%	1.78%	2.82%	97.13%	0.05%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	62	1	133	0	0	26	0	918	14	30	1092	0	2276
PEAK HR FACTOR :	0.700			0.591			0.917			0.871			0.884

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
NB	SB	EB	WB
0	0	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-072 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Willow Ln (South)			Willow Ln (South)			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 0	NR 1	SL 0	ST 1	SR 0	EL 0	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	33	0	44	0	0	7	0	254	4	13	234	0	589
4:15 PM	18	1	58	0	0	7	0	249	11	15	293	0	652
4:30 PM	23	0	51	0	0	6	0	255	8	12	282	0	637
4:45 PM	22	0	39	0	1	5	0	262	10	15	258	0	612
5:00 PM	16	0	41	0	0	11	0	265	15	14	272	1	635
5:15 PM	17	1	62	0	0	8	0	250	13	12	249	0	612
5:30 PM	21	1	43	0	0	8	0	225	12	22	282	1	615
5:45 PM	23	0	49	0	0	12	0	237	7	17	263	0	608
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	173	3	387	0	1	64	0	1997	80	120	2133	2	4960
APPROACH %'s :	30.73%	0.53%	68.74%	0.00%	1.54%	98.46%	0.00%	96.15%	3.85%	5.32%	94.59%	0.09%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	79	1	189	0	1	29	0	1031	44	56	1105	1	2536
PEAK HR FACTOR :		0.873			0.682			0.960			0.943		0.972

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	1
	0	0	0	0
	0	0	0	0
	0	0	0	1
	0	0	0	1
TOTAL VOLUMES :	0	0	0	3

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-073 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Willow Ln (North)			Willow Ln (North)			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 0	WT 2	WR 1	TOTAL
7:00 AM	0	0	6	18	1	30	26	204	1	0	210	8	504
7:15 AM	0	0	5	31	2	35	18	256	3	0	224	8	582
7:30 AM	0	0	7	34	1	39	15	264	2	0	278	15	655
7:45 AM	0	0	5	36	0	27	16	249	1	0	259	27	620
8:00 AM	0	0	1	29	1	23	8	208	1	0	226	17	514
8:15 AM	0	0	4	20	1	25	19	176	2	0	229	15	491
8:30 AM	0	0	0	14	0	19	23	177	2	0	239	17	491
8:45 AM	0	0	0	20	0	31	22	158	1	0	211	10	453
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	28	202	6	229	147	1692	13	0	1876	117	4310
APPROACH %'s :	0.00%	0.00%	100.00%	46.22%	1.37%	52.40%	7.94%	91.36%	0.70%	0.00%	94.13%	5.87%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	18	130	4	124	57	977	7	0	987	67	2371
PEAK HR FACTOR :	0.643			0.872			0.926			0.899			0.905

UTURNS				
NB	SB	EB	WB	
0	0	3	0	
0	0	4	0	
0	0	1	0	
0	0	2	0	
0	0	2	0	
0	0	1	0	
0	0	1	0	
0	0	0	0	
NB	SB	EB	WB	
0	0	14	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-073 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Willow Ln (North)			Willow Ln (North)			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 0	WT 2	WR 1	TOTAL
4:00 PM	0	0	3	24	1	20	28	255	1	0	233	30	595
4:15 PM	0	0	3	19	2	28	36	281	0	0	261	18	648
4:30 PM	0	0	2	11	0	25	21	292	1	0	277	21	650
4:45 PM	0	0	5	34	0	11	29	264	0	0	246	18	607
5:00 PM	0	0	4	13	1	21	18	281	0	0	283	23	644
5:15 PM	0	0	4	18	0	16	42	280	1	0	228	29	618
5:30 PM	0	0	4	20	0	21	28	228	0	0	273	30	604
5:45 PM	0	0	2	24	1	25	25	271	0	0	257	24	629
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	27	163	5	167	227	2152	3	0	2058	193	4995
APPROACH %'s :	0.00%	0.00%	100.00%	48.66%	1.49%	49.85%	9.53%	90.34%	0.13%	0.00%	91.43%	8.57%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	0	0	14	77	3	85	104	1118	1	0	1067	80	2549
PEAK HR FACTOR :		0.700			0.842			0.965			0.937		0.980

UTURNS

NB	SB	EB	WB
0	0	4	0
0	0	7	0
0	0	3	0
0	0	2	0
0	0	2	0
0	0	7	0
0	0	6	0
0	0	3	0
NB	SB	EB	WB
0	0	34	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-074 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 4	NR 0	SL 2	ST 4	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
7:00 AM	29	424	2	28	522	19	40	83	74	25	49	16	1311
7:15 AM	47	528	3	39	681	24	35	100	85	35	84	33	1694
7:30 AM	72	513	2	29	621	41	43	151	102	37	130	21	1762
7:45 AM	81	517	3	38	653	43	46	141	108	59	150	27	1866
8:00 AM	75	477	5	46	659	50	40	181	123	39	115	32	1842
8:15 AM	31	438	6	50	486	26	50	178	92	54	99	31	1541
8:30 AM	42	486	5	36	684	28	37	95	73	36	101	45	1668
8:45 AM	48	361	7	38	606	35	43	106	101	48	94	42	1529
TOTAL VOLUMES :	425	3744	33	304	4912	266	334	1035	758	333	822	247	13213
APPROACH %'s :	10.11%	89.10%	0.79%	5.55%	89.60%	4.85%	15.70%	48.66%	35.64%	23.75%	58.63%	17.62%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	275	2035	13	152	2614	158	164	573	418	170	479	113	7164
PEAK HR FACTOR :		0.966			0.968			0.839			0.807		0.960

UTURNS

	NB	SB	EB	WB
7:00 AM	0	0	0	1
7:15 AM	0	0	0	0
7:30 AM	1	0	0	0
7:45 AM	0	0	0	0
8:00 AM	4	1	0	1
8:15 AM	0	0	1	2
8:30 AM	0	0	0	0
8:45 AM	3	1	0	0
TOTAL VOLUMES :	8	2	1	4

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-074 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 4	NR 0	SL 2	ST 4	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
4:00 PM	82	607	9	28	456	31	40	120	63	50	115	46	1647
4:15 PM	74	546	9	49	575	33	58	127	70	27	106	49	1723
4:30 PM	87	643	12	35	521	44	35	115	93	38	135	43	1801
4:45 PM	79	556	5	42	477	44	54	163	72	35	109	37	1673
5:00 PM	89	664	9	54	560	54	49	131	67	38	104	45	1864
5:15 PM	86	662	7	40	453	53	49	129	79	50	138	48	1794
5:30 PM	66	648	4	45	620	50	48	141	59	47	118	47	1893
5:45 PM	79	601	3	36	540	39	32	136	81	48	127	56	1778
TOTAL VOLUMES :	642	4927	58	329	4202	348	365	1062	584	333	952	371	14173
APPROACH %'s :	11.41%	87.56%	1.03%	6.74%	86.12%	7.13%	18.15%	52.81%	29.04%	20.11%	57.49%	22.40%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	320	2575	23	175	2173	196	178	537	286	183	487	196	7329
PEAK HR FACTOR :		0.957			0.890			0.974			0.917		0.968

UTURNS

NB	SB	EB	WB
1	2	0	0
4	1	0	0
1	1	0	1
2	5	0	1
5	5	0	0
0	0	1	0
2	6	1	0
2	0	2	2
17	20	4	4

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-075 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			Center Ave			Center Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4	0	0	4	1	2	0	2	0	0	0	
7:00 AM	0	557	0	0	652	321	37	0	73	0	0	0	1640
7:15 AM	0	521	0	0	528	192	36	0	85	0	0	0	1362
7:30 AM	0	551	0	0	739	222	23	0	78	0	0	0	1613
7:45 AM	0	547	0	0	692	200	48	0	113	0	0	0	1600
8:00 AM	0	494	0	0	759	223	40	0	129	0	0	0	1645
8:15 AM	0	528	0	0	680	210	45	0	102	0	0	0	1565
8:30 AM	0	503	0	0	662	189	35	0	116	0	0	0	1505
8:45 AM	0	508	0	0	735	210	63	0	139	0	0	0	1655
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	4209	0	0	5447	1767	327	0	835	0	0	0	12585
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	75.51%	24.49%	28.14%	0.00%	71.86%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	2120	0	0	2870	855	156	0	422	0	0	0	6423
PEAK HR FACTOR :		0.962			0.948			0.855			0.000		0.976

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-075 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			Center Ave			Center Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4	0	0	4	1	2	0	2	0	0	0	
4:00 PM	0	632	0	0	611	211	71	0	222	0	0	0	1747
4:15 PM	0	587	0	0	506	213	51	0	239	0	0	0	1596
4:30 PM	0	612	0	0	551	184	79	0	227	0	0	0	1653
4:45 PM	0	673	0	0	569	211	67	0	222	0	0	0	1742
5:00 PM	0	649	0	0	506	179	108	0	240	0	0	0	1682
5:15 PM	0	732	0	0	608	210	81	0	197	0	0	0	1828
5:30 PM	0	578	0	0	503	200	86	0	231	0	0	0	1598
5:45 PM	0	643	0	0	658	206	65	0	246	0	0	0	1818
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	5106	0	0	4512	1614	608	0	1824	0	0	0	13664
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	73.65%	26.35%	25.00%	0.00%	75.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	2602	0	0	2275	795	340	0	914	0	0	0	6926
PEAK HR FACTOR :		0.889			0.888			0.901			0.000		0.947

UTURNS				
NB	SB	EB	WB	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-076 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			Edinger Ave			Edinger Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 1	SL 2	ST 4	SR 2	EL 2	ET 3	ER 1	WL 2	WT 2	WR 1	TOTAL
7:00 AM	2	459	49	93	559	87	21	209	21	19	40	47	1606
7:15 AM	0	412	65	90	431	87	37	255	23	25	60	70	1555
7:30 AM	18	456	68	95	630	99	39	198	14	24	108	64	1813
7:45 AM	40	400	47	95	578	114	63	250	31	35	132	76	1861
8:00 AM	40	381	54	140	660	103	53	214	34	27	77	65	1848
8:15 AM	38	410	58	82	578	110	47	213	43	28	111	61	1779
8:30 AM	55	361	47	124	563	102	60	200	47	21	73	66	1719
8:45 AM	57	378	47	96	641	126	50	138	41	22	103	53	1752
TOTAL VOLUMES :	250	3257	435	815	4640	828	370	1677	254	201	704	502	13933
APPROACH %'s :	6.34%	82.62%	11.04%	12.97%	73.85%	13.18%	16.08%	72.88%	11.04%	14.29%	50.04%	35.68%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	136	1647	227	412	2446	426	202	875	122	114	428	266	7301
PEAK HR FACTOR :		0.927			0.909			0.871			0.831		0.981

UTURNS	NB	SB	EB	WB
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	1
8:15 AM	0	0	0	0
8:30 AM	0	0	0	0
8:45 AM	2	0	0	0
TOTAL VOLUMES :	2	0	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-076 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			Edinger Ave			Edinger Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 1	SL 2	ST 4	SR 2	EL 2	ET 3	ER 1	WL 2	WT 2	WR 1	TOTAL
4:00 PM	78	493	96	84	624	128	75	181	79	29	86	35	1988
4:15 PM	90	461	103	60	529	144	62	191	70	28	119	41	1898
4:30 PM	70	459	106	68	580	139	94	186	73	31	118	52	1976
4:45 PM	100	529	92	53	582	151	66	164	65	46	132	52	2032
5:00 PM	93	478	110	81	520	153	90	234	66	35	147	48	2055
5:15 PM	102	564	95	61	571	173	99	179	74	34	123	45	2120
5:30 PM	102	466	89	55	514	160	78	166	71	53	161	45	1960
5:45 PM	95	453	73	84	638	191	91	174	62	32	112	45	2050
TOTAL VOLUMES :	730	3903	764	546	4558	1239	655	1475	560	288	998	363	16079
APPROACH %'s :	13.53%	72.32%	14.16%	8.61%	71.86%	19.53%	24.35%	54.83%	20.82%	17.47%	60.52%	22.01%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	392	1961	367	281	2243	677	358	753	273	154	543	183	8185
PEAK HR FACTOR :		0.894			0.877			0.887			0.849		0.965

UTURNS

NB	SB	EB	WB
0	1	0	0
0	0	0	0
0	0	0	0
2	0	0	0
2	0	1	0
1	0	0	0
2	0	0	0
0	0	0	0
7	1	1	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-077 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 1	ST 4	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
7:00 AM	53	440	37	26	599	9	25	59	77	73	62	33	1493
7:15 AM	25	435	49	32	628	13	35	98	98	64	110	36	1623
7:30 AM	50	582	54	26	599	21	29	107	86	84	184	32	1854
7:45 AM	44	487	72	52	583	23	46	115	67	64	126	50	1729
8:00 AM	58	445	86	41	513	12	49	110	60	73	101	49	1597
8:15 AM	35	478	59	57	579	25	36	68	65	72	83	54	1611
8:30 AM	40	425	60	48	510	25	33	98	80	63	84	41	1507
8:45 AM	49	471	57	48	532	16	36	64	59	53	88	46	1519
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	354	3763	474	330	4543	144	289	719	592	546	838	341	12933
APPROACH %'s :	7.71%	81.96%	10.32%	6.58%	90.55%	2.87%	18.06%	44.94%	37.00%	31.65%	48.58%	19.77%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	177	1949	261	151	2323	69	159	430	311	285	521	167	6803
PEAK HR FACTOR :		0.870			0.945			0.974			0.811		0.917

UTURNS

NB	SB	EB	WB
0	1	0	0
2	0	0	0
2	0	0	0
2	0	1	0
2	6	0	0
0	1	0	0
0	1	0	0
1	0	0	0
NB	SB	EB	WB
9	9	1	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-077 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 1	SL 1	ST 4	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
4:00 PM	44	610	95	39	428	24	45	101	105	59	90	50	1690
4:15 PM	37	540	85	61	457	22	65	109	92	65	105	62	1700
4:30 PM	49	580	93	51	455	13	48	117	89	59	115	53	1722
4:45 PM	34	596	115	51	465	33	58	116	86	56	95	51	1756
5:00 PM	42	567	103	40	491	24	54	129	87	63	130	77	1807
5:15 PM	40	637	88	41	493	21	61	112	81	57	112	49	1792
5:30 PM	42	542	92	65	506	22	66	102	85	57	143	69	1791
5:45 PM	38	659	96	50	447	16	32	114	57	72	128	62	1771
TOTAL VOLUMES :	326	4731	767	398	3742	175	429	900	682	488	918	473	14029
APPROACH %'s :	5.60%	81.23%	13.17%	9.22%	86.72%	4.06%	21.33%	44.75%	33.91%	25.97%	48.86%	25.17%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	162	2405	379	196	1937	83	213	457	310	249	513	257	7161
PEAK HR FACTOR :		0.929			0.934			0.907			0.944		0.991

UTURNS	NB	SB	EB	WB
	4	1	0	0
	0	6	0	0
	5	2	0	0
	0	3	0	0
	3	2	0	0
	5	1	0	0
	2	0	0	0
	0	3	0	1
TOTAL	19	18	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-078 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 1	ST 4	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
7:00 AM	7	561	9	14	612	16	9	52	17	7	41	11	1356
7:15 AM	16	589	19	17	686	19	11	54	24	21	82	19	1557
7:30 AM	29	683	23	32	576	16	24	143	41	14	79	30	1690
7:45 AM	35	579	17	38	757	19	12	116	32	23	126	39	1793
8:00 AM	19	521	14	20	627	19	15	80	38	26	77	22	1478
8:15 AM	4	564	17	22	628	8	6	40	21	20	40	30	1400
8:30 AM	9	505	14	20	591	7	9	57	22	26	50	27	1337
8:45 AM	16	552	22	35	713	14	9	40	17	21	40	32	1511
TOTAL VOLUMES :	NL 135	NT 4554	NR 135	SL 198	ST 5190	SR 118	EL 95	ET 582	ER 212	WL 158	WT 535	WR 210	TOTAL 12122
APPROACH %'s :	2.80%	94.40%	2.80%	3.60%	94.26%	2.14%	10.69%	65.47%	23.85%	17.50%	59.25%	23.26%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	99	2372	73	107	2646	73	62	393	135	84	364	110	6518
PEAK HR FACTOR :		0.865			0.868			0.709			0.742		0.909

UTURNS	NB	SB	EB	WB
	0	2	0	0
	0	0	0	0
	0	1	4	0
	0	5	0	0
	3	6	1	0
	0	2	0	0
	0	3	0	0
	2	3	0	0
TOTAL VOLUMES :	5	22	5	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-078 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 1	ST 4	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 0	TOTAL
4:00 PM	23	665	36	30	542	16	8	66	15	14	61	36	1512
4:15 PM	10	647	21	31	598	16	17	82	14	28	74	30	1568
4:30 PM	16	627	18	37	599	22	7	76	16	18	73	41	1550
4:45 PM	20	708	27	29	617	17	13	48	19	18	79	31	1626
5:00 PM	25	626	18	32	560	11	8	95	30	18	77	40	1540
5:15 PM	17	764	21	28	581	14	14	62	12	21	60	26	1620
5:30 PM	17	692	34	36	633	19	12	60	12	24	90	31	1660
5:45 PM	25	719	30	41	644	11	6	51	15	21	67	35	1665
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	153	5448	205	264	4774	126	85	540	133	162	581	270	12741
APPROACH %'s :	2.64%	93.83%	3.53%	5.11%	92.45%	2.44%	11.21%	71.24%	17.55%	15.99%	57.35%	26.65%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	84	2801	103	137	2418	55	40	268	69	84	294	132	6485
PEAK HR FACTOR :		0.931			0.938			0.709			0.879		0.974

UTURNS	NB	SB	EB	WB
	4	1	1	0
	2	1	0	1
	0	1	0	0
	1	5	0	0
	1	2	0	0
	1	2	0	0
	0	1	0	0
	1	7	0	1
	NB	SB	EB	WB
	10	20	1	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-079 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			Heil Ave			Heil Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 1	ST 4	SR 0	EL 1	ET 2	ER 0	WL 1	WT 1.5	WR 0.5	TOTAL
7:00 AM	17	367	6	20	601	44	40	84	29	2	29	19	1258
7:15 AM	21	422	4	10	457	25	45	92	59	4	38	31	1208
7:30 AM	34	416	7	15	577	44	57	109	77	12	47	27	1422
7:45 AM	44	427	7	20	621	42	53	89	69	7	71	22	1472
8:00 AM	15	378	23	29	582	33	51	104	90	12	38	30	1385
8:15 AM	21	407	17	38	552	37	51	98	72	31	37	49	1410
8:30 AM	39	377	12	22	495	29	48	96	69	24	39	48	1298
8:45 AM	27	396	5	21	578	48	57	74	53	8	36	39	1342
TOTAL VOLUMES :	218	3190	81	175	4463	302	402	746	518	100	335	265	10795
APPROACH %'s :	6.25%	91.43%	2.32%	3.54%	90.34%	6.11%	24.13%	44.78%	31.09%	14.29%	47.86%	37.86%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	114	1628	54	102	2332	156	212	400	308	62	193	128	5689
PEAK HR FACTOR :		0.939			0.948			0.939			0.818		0.966

UTURNS	NB	SB	EB	WB
	0	5	0	0
	0	0	0	0
	3	1	0	0
	3	0	0	0
	1	3	0	0
	2	2	0	0
	2	6	0	0
	2	4	0	0
TOTAL VOLUMES :	13	21	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-079 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			Heil Ave			Heil Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 1	ST 4	SR 0	EL 1	ET 2	ER 0	WL 1	WT 1.5	WR 0.5	TOTAL
4:00 PM	32	504	10	44	541	55	50	59	46	13	60	43	1457
4:15 PM	44	561	9	20	547	47	57	48	52	5	34	24	1448
4:30 PM	38	526	7	44	544	45	54	50	51	5	63	28	1455
4:45 PM	43	560	7	36	529	47	57	71	63	9	68	34	1524
5:00 PM	37	591	10	45	538	53	59	66	64	8	72	31	1574
5:15 PM	55	521	6	52	471	37	53	63	55	7	90	33	1443
5:30 PM	55	592	9	54	541	38	52	59	57	4	90	28	1579
5:45 PM	45	488	7	33	556	56	41	84	42	14	92	50	1508
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	349	4343	65	328	4267	378	423	500	430	65	569	271	11988
APPROACH %'s :	7.34%	91.30%	1.37%	6.60%	85.80%	7.60%	31.26%	36.95%	31.78%	7.18%	62.87%	29.94%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	190	2264	32	187	2079	175	221	259	239	28	320	126	6120
PEAK HR FACTOR :		0.947			0.960			0.941			0.912		0.969

UTURNS	NB	SB	EB	WB
	5	7	0	0
	4	2	0	0
	4	9	0	0
	0	4	0	0
	1	8	0	0
	4	10	0	0
	6	9	0	0
	3	4	0	0
	NB	SB	EB	WB
	27	53	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-080 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			McDonald Ave			McDonald Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 2	ST 4	SR 0	EL 1	ET 1	ER 0	WL 1.3	WT 0.3	WR 1.3	TOTAL
7:00 AM	5	480	2	22	614	4	5	0	5	11	0	7	1155
7:15 AM	5	479	5	16	506	2	7	0	14	10	0	3	1047
7:30 AM	5	442	4	16	625	0	6	0	12	20	0	6	1136
7:45 AM	9	485	9	27	637	0	7	1	10	13	0	11	1209
8:00 AM	7	425	13	37	673	3	5	0	15	13	0	6	1197
8:15 AM	15	464	11	42	550	0	6	0	8	28	0	12	1136
8:30 AM	9	429	10	47	568	1	4	0	9	28	1	9	1115
8:45 AM	9	415	13	43	553	2	5	0	10	36	0	15	1101
TOTAL VOLUMES :	64	3619	67	250	4726	12	45	1	83	159	1	69	9096
APPROACH %'s :	1.71%	96.51%	1.79%	5.01%	94.75%	0.24%	34.88%	0.78%	64.34%	69.43%	0.44%	30.13%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	36	1816	37	122	2485	3	24	1	45	74	0	35	4678
PEAK HR FACTOR :		0.939			0.915			0.875			0.681		0.967

UTURNS				
NB	SB	EB	WB	
2	6	0	0	
3	9	0	0	
3	5	0	0	
4	11	0	0	
4	11	0	0	
9	12	0	0	
3	11	0	0	
4	13	0	0	
32	78	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-080 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			McDonald Ave			McDonald Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 2	ST 4	SR 0	EL 1	ET 1	ER 0	WL 1.3	WT 0.3	WR 1.3	TOTAL
4:00 PM	9	546	17	90	580	6	12	0	5	53	0	34	1352
4:15 PM	20	563	14	60	542	2	6	0	5	61	1	37	1311
4:30 PM	11	553	18	70	591	6	9	2	5	47	1	34	1347
4:45 PM	10	595	18	55	567	5	3	1	6	72	2	32	1366
5:00 PM	16	655	26	82	575	5	4	1	4	54	1	30	1453
5:15 PM	17	567	19	66	496	7	11	0	5	61	2	40	1291
5:30 PM	10	595	25	60	573	3	6	1	5	58	1	38	1375
5:45 PM	17	533	17	91	575	6	6	1	3	68	1	34	1352
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	110	4607	154	574	4499	40	57	6	38	474	9	279	10847
APPROACH %'s :	2.26%	94.58%	3.16%	11.23%	87.99%	0.78%	56.44%	5.94%	37.62%	62.20%	1.18%	36.61%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	53	2412	88	263	2211	20	24	3	20	245	6	140	5485
PEAK HR FACTOR :		0.916			0.942			0.734			0.922		0.944

UTURNS

NB	SB	EB	WB
3	16	0	0
13	17	0	0
8	23	0	0
5	9	0	0
11	16	0	0
13	12	0	0
6	16	0	0
9	16	0	0
NB	SB	EB	WB
68	125	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-081 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 4	NR 0	SL 2	ST 4	SR 0	EL 2	ET 2	ER 0	WL 2	WT 2	WR 0	TOTAL
7:00 AM	46	386	23	35	510	49	61	61	29	75	48	17	1340
7:15 AM	51	531	29	48	626	68	61	80	34	85	65	28	1706
7:30 AM	44	426	29	54	616	90	59	70	33	105	125	40	1691
7:45 AM	78	559	42	33	574	95	62	110	41	83	108	28	1813
8:00 AM	32	443	47	68	659	97	49	117	25	88	93	46	1764
8:15 AM	37	434	51	52	511	57	51	118	28	88	82	39	1548
8:30 AM	46	443	38	49	623	64	31	81	31	103	86	29	1624
8:45 AM	39	375	42	53	571	69	48	75	24	111	78	41	1526
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	373	3597	301	392	4690	589	422	712	245	738	685	268	13012
APPROACH %'s :	8.73%	84.22%	7.05%	6.91%	82.70%	10.39%	30.60%	51.63%	17.77%	43.64%	40.51%	15.85%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	205	1959	147	203	2475	350	231	377	133	361	391	142	6974
PEAK HR FACTOR :		0.851			0.919			0.870			0.828		0.962

UTURNS	NB	SB	EB	WB
	12	0	0	0
	11	0	0	0
	16	2	0	0
	23	1	0	0
	12	1	0	0
	8	2	0	0
	12	6	0	0
	6	3	0	0
	NB	SB	EB	WB
	100	15	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-081 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 4	NR 0	SL 2	ST 4	SR 0	EL 2	ET 2	ER 0	WL 2	WT 2	WR 0	TOTAL
4:00 PM	57	550	80	41	452	46	79	105	27	89	98	30	1654
4:15 PM	67	589	67	36	538	64	90	99	30	68	82	23	1753
4:30 PM	71	599	78	45	555	55	87	88	22	59	80	29	1768
4:45 PM	48	573	87	38	438	66	84	116	41	77	93	35	1696
5:00 PM	53	665	90	45	528	86	95	112	35	84	115	37	1945
5:15 PM	54	634	83	62	493	74	110	133	48	102	122	35	1950
5:30 PM	59	631	24	34	655	45	52	73	34	24	44	17	1692
5:45 PM	59	583	25	20	527	32	60	75	32	40	66	31	1550
TOTAL VOLUMES :	468	4824	534	321	4186	468	657	801	269	543	700	237	14008
APPROACH %'s :	8.03%	82.80%	9.17%	6.45%	84.14%	9.41%	38.04%	46.38%	15.58%	36.69%	47.30%	16.01%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	226	2471	338	190	2014	281	376	449	146	322	410	136	7359
PEAK HR FACTOR :		0.939			0.943			0.834			0.838		0.943

UTURNS

	NB	SB	EB	WB
4:00 PM	10	9	0	0
4:15 PM	15	8	0	0
4:30 PM	21	6	0	0
4:45 PM	11	4	0	0
5:00 PM	17	4	0	0
5:15 PM	15	10	0	0
5:30 PM	16	6	0	0
5:45 PM	12	3	0	0
TOTAL VOLUMES :	117	50	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-082 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			Stark St			Stark St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 2	ST 4	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL
7:00 AM	12	474	6	24	587	1	1	3	1	10	2	24	1145
7:15 AM	3	457	7	23	470	1	4	4	7	12	3	15	1006
7:30 AM	14	521	10	18	590	1	5	4	5	11	4	28	1211
7:45 AM	9	446	13	32	615	3	5	4	8	16	1	28	1180
8:00 AM	13	447	15	35	616	4	7	8	6	6	5	16	1178
8:15 AM	12	442	18	40	594	2	5	8	5	18	1	17	1162
8:30 AM	12	414	21	35	531	0	3	5	7	8	2	25	1063
8:45 AM	14	461	14	42	590	7	2	3	1	5	1	17	1157
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	89	3662	104	249	4593	19	32	39	40	86	19	170	9102
APPROACH %'s :	2.31%	94.99%	2.70%	5.12%	94.49%	0.39%	28.83%	35.14%	36.04%	31.27%	6.91%	61.82%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	48	1856	56	125	2415	10	22	24	24	51	11	89	4731
PEAK HR FACTOR :		0.899			0.973			0.833			0.839		0.977

UTURNS

NB	SB	EB	WB
5	11	0	0
0	12	0	0
5	12	0	0
3	15	0	0
3	13	0	0
5	14	0	0
1	9	0	0
6	17	0	0
NB	SB	EB	WB
28	103	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-082 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			Stark St			Stark St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 2	ST 4	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL
4:00 PM	25	608	21	69	597	5	6	5	11	33	2	39	1421
4:15 PM	23	566	14	62	537	0	4	4	11	26	6	30	1283
4:30 PM	26	566	20	75	576	8	12	5	4	30	9	35	1366
4:45 PM	41	646	21	59	594	3	5	2	13	36	11	39	1470
5:00 PM	29	602	22	71	515	3	4	4	8	35	15	58	1366
5:15 PM	29	651	18	63	570	3	5	2	7	26	8	32	1414
5:30 PM	35	568	16	76	526	4	6	3	6	25	9	46	1320
5:45 PM	31	580	13	58	626	4	6	4	5	23	5	35	1390
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	239	4787	145	533	4541	30	48	29	65	234	65	314	11030
APPROACH %'s :	4.62%	92.57%	2.80%	10.44%	88.97%	0.59%	33.80%	20.42%	45.77%	38.17%	10.60%	51.22%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	125	2465	81	268	2255	17	26	13	32	127	43	164	5616
PEAK HR FACTOR :		0.943			0.964			0.845			0.773		0.955

UTURNS	NB	SB	EB	WB
	6	32	0	0
	4	26	0	0
	13	26	0	0
	16	22	0	0
	10	23	0	0
	7	21	0	0
	15	39	0	0
	13	26	0	0
	NB	SB	EB	WB
	84	215	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-083 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 1	ST 4	SR 0	EL 2	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	23	440	9	14	570	22	77	45	29	11	42	31	1313
7:15 AM	22	566	21	18	796	24	57	32	31	28	47	28	1670
7:30 AM	21	508	25	15	687	19	72	70	32	37	91	38	1615
7:45 AM	33	508	18	23	689	39	56	76	27	35	48	31	1583
8:00 AM	15	462	13	31	683	23	49	54	30	33	71	30	1494
8:15 AM	29	446	25	40	603	19	54	51	25	23	33	34	1382
8:30 AM	12	504	16	17	730	27	59	36	29	37	42	24	1533
8:45 AM	24	461	18	19	558	20	68	54	21	35	52	27	1357
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	179	3895	145	177	5316	193	492	418	224	239	426	243	11947
APPROACH %'s :	4.24%	92.32%	3.44%	3.11%	93.49%	3.39%	43.39%	36.86%	19.75%	26.32%	46.92%	26.76%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	91	2044	77	87	2855	105	234	232	120	133	257	127	6362
PEAK HR FACTOR :		0.908			0.909			0.842			0.779		0.952

UTURNS	NB	SB	EB	WB
	4	2	0	0
	4	2	0	0
	2	0	0	0
	1	0	0	0
	2	3	0	0
	5	7	0	0
	1	0	0	0
	2	2	0	0
	NB	SB	EB	WB
	21	16	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-083 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 1	ST 4	SR 0	EL 2	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	47	559	21	27	507	26	74	67	35	33	48	27	1471
4:15 PM	36	623	26	29	604	40	83	73	24	28	52	20	1638
4:30 PM	41	590	36	34	569	36	71	66	31	28	58	20	1580
4:45 PM	40	560	35	27	580	25	67	60	31	30	57	15	1527
5:00 PM	45	631	26	34	512	46	85	54	23	31	56	36	1579
5:15 PM	30	560	20	38	486	35	75	92	34	42	61	27	1500
5:30 PM	44	632	24	32	651	49	55	75	33	25	44	17	1681
5:45 PM	51	585	25	19	534	31	61	74	34	40	69	30	1553
TOTAL VOLUMES :	NL 334	NT 4740	NR 213	SL 240	ST 4443	SR 288	EL 571	ET 561	ER 245	WL 257	WT 445	WR 192	TOTAL 12529
APPROACH %'s :	6.32%	89.65%	4.03%	4.83%	89.38%	5.79%	41.47%	40.74%	17.79%	28.75%	49.78%	21.48%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	162	2404	123	124	2265	147	306	253	109	117	223	91	6324
PEAK HR FACTOR :		0.958			0.942			0.928			0.876		0.965

UTURNS	NB	SB	EB	WB
	6	2	0	0
	4	2	0	0
	3	7	0	0
	6	1	0	0
	6	4	0	0
	2	4	0	0
	2	4	0	0
	5	2	0	0
	NB 34	SB 26	EB 0	WB 0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-084 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 4	NR 0	SL 2	ST 4	SR 0	EL 2	ET 2	ER 1	WL 2	WT 2	WR 1	TOTAL
7:00 AM	31	472	13	37	635	28	36	118	17	20	52	16	1475
7:15 AM	28	486	15	26	622	19	45	156	36	42	93	26	1594
7:30 AM	58	667	29	43	545	32	56	133	27	58	151	39	1838
7:45 AM	68	567	23	51	573	40	59	143	18	54	140	40	1776
8:00 AM	50	406	19	68	602	23	53	181	45	68	140	18	1673
8:15 AM	68	454	21	43	590	26	48	125	42	48	106	20	1591
8:30 AM	48	443	16	37	529	29	52	172	49	50	130	28	1583
8:45 AM	68	457	20	34	717	40	52	117	41	51	115	26	1738
TOTAL VOLUMES :	419	3952	156	339	4813	237	401	1145	275	391	927	213	13268
APPROACH %'s :	9.26%	87.30%	3.45%	6.29%	89.31%	4.40%	22.02%	62.88%	15.10%	25.54%	60.55%	13.91%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	204	2126	86	188	2342	114	213	613	126	222	524	123	6881
PEAK HR FACTOR :		0.801			0.954			0.853			0.876		0.936

UTURNS

NB	SB	EB	WB
2	0	0	0
1	0	0	0
5	2	0	0
7	3	0	0
4	1	0	0
4	0	0	0
3	0	1	0
14	2	0	0
40	8	1	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-084 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 4	NR 0	SL 2	ST 4	SR 0	EL 2	ET 2	ER 1	WL 2	WT 2	WR 1	TOTAL
4:00 PM	68	482	29	66	494	41	72	181	40	60	157	35	1725
4:15 PM	94	623	27	48	564	40	56	157	31	50	146	41	1877
4:30 PM	67	584	23	47	603	40	66	138	41	44	114	45	1812
4:45 PM	63	561	23	59	503	36	59	182	29	39	163	39	1756
5:00 PM	71	617	23	46	512	42	50	154	28	51	142	26	1762
5:15 PM	52	547	28	52	472	29	61	202	14	48	132	42	1679
5:30 PM	64	654	29	42	589	41	58	140	37	57	149	30	1890
5:45 PM	78	542	27	57	536	49	58	149	31	55	148	47	1777
TOTAL VOLUMES :	NL 557	NT 4610	NR 209	SL 417	ST 4273	SR 318	EL 480	ET 1303	ER 251	WL 404	WT 1151	WR 305	TOTAL 14278
APPROACH %'s :	10.36%	85.75%	3.89%	8.33%	85.32%	6.35%	23.60%	64.06%	12.34%	21.72%	61.88%	16.40%	
PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	295	2385	96	200	2182	158	231	631	129	184	565	151	7207
PEAK HR FACTOR :		0.933			0.920			0.918			0.934		0.960

UTURNS	NB	SB	EB	WB
	4	4	1	0
	19	7	4	0
	10	4	1	0
	5	6	0	0
	7	2	0	0
	2	1	0	1
	6	2	0	1
	6	3	0	0
TOTAL VOLUMES :	59	29	6	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-085 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			13th St			13th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 1	ST 4	SR 0	EL 1	ET 0.5	ER 0.5	WL 1	WT 0.5	WR 0.5	TOTAL
7:00 AM	0	504	24	4	616	2	0	1	5	3	1	7	1167
7:15 AM	2	533	27	13	658	0	7	7	8	9	2	4	1270
7:30 AM	1	551	49	17	685	2	3	10	11	16	2	3	1350
7:45 AM	0	590	47	23	702	0	5	8	7	20	3	1	1406
8:00 AM	4	473	66	33	656	1	5	2	4	9	1	9	1263
8:15 AM	3	533	45	25	622	5	2	1	8	15	2	9	1270
8:30 AM	2	493	31	24	580	1	6	1	2	18	1	10	1169
8:45 AM	0	516	39	25	683	2	2	1	5	29	3	15	1320
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	12	4193	328	164	5202	13	30	31	50	119	15	58	10215
APPROACH %'s :	0.26%	92.50%	7.24%	3.05%	96.71%	0.24%	27.03%	27.93%	45.05%	61.98%	7.81%	30.21%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	8	2147	207	98	2665	8	15	21	30	60	8	22	5289
PEAK HR FACTOR :		0.927			0.956			0.688			0.865		0.940

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	3	0	0
	0	1	0	0
	1	0	0	0
	1	2	0	0
	0	2	0	0
	0	1	0	0
	NB	SB	EB	WB
	2	9	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-085 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			13th St			13th St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 4	NR 0	SL 1	ST 4	SR 0	EL 1	ET 0.5	ER 0.5	WL 1	WT 0.5	WR 0.5	TOTAL
4:00 PM	3	639	26	19	536	7	5	4	5	46	5	20	1315
4:15 PM	0	691	19	15	554	2	6	4	2	21	3	19	1336
4:30 PM	6	607	25	14	618	3	3	1	4	36	3	25	1345
4:45 PM	2	761	16	11	575	3	1	4	2	28	7	12	1422
5:00 PM	4	625	30	11	534	2	4	2	5	55	6	30	1308
5:15 PM	10	686	33	10	590	1	3	5	5	39	6	11	1399
5:30 PM	6	660	36	11	593	5	1	4	4	42	6	16	1384
5:45 PM	2	697	21	8	631	4	3	8	1	27	3	14	1419
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	33	5366	206	99	4631	27	26	32	28	294	39	147	10928
APPROACH %'s :	0.59%	95.74%	3.68%	2.08%	97.35%	0.57%	30.23%	37.21%	32.56%	61.25%	8.13%	30.63%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	22	2732	115	43	2292	11	9	15	16	164	25	69	5513
PEAK HR FACTOR :		0.921			0.963			0.769			0.709		0.969

UTURNS	NB	SB	EB	WB
	0	7	1	0
	0	4	0	0
	2	6	0	0
	1	2	0	0
	2	0	1	0
	0	1	0	0
	0	2	0	0
	0	1	0	0
	NB	SB	EB	WB
	5	23	2	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-086 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			SR-22 WB Off Ramp			SR-22 WB Off Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 4	NR 0	SL 0	ST 4	SR 0	EL 0	ET 0	ER 0	WL 2	WT 0	WR 2	TOTAL
7:00 AM	0	341	0	0	706	0	0	0	0	174	0	153	1374
7:15 AM	0	366	0	0	764	0	0	0	0	266	0	166	1562
7:30 AM	0	474	0	0	711	0	0	0	0	235	0	195	1615
7:45 AM	0	342	0	0	576	0	0	0	0	239	0	153	1310
8:00 AM	0	418	0	0	600	0	0	0	0	181	0	147	1346
8:15 AM	0	413	0	0	625	0	0	0	0	175	0	133	1346
8:30 AM	0	384	0	0	566	0	0	0	0	262	0	140	1352
8:45 AM	0	395	0	0	562	0	0	0	0	215	0	165	1337
TOTAL VOLUMES :	0	3133	0	0	5110	0	0	0	0	1747	0	1252	11242
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	58.25%	0.00%	41.75%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	0	1523	0	0	2757	0	0	0	0	914	0	667	5861
PEAK HR FACTOR :		0.803			0.902			0.000			0.915		0.907

UTURNS			
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-086 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			SR-22 WB Off Ramp			SR-22 WB Off Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 4	NR 0	SL 0	ST 4	SR 0	EL 0	ET 0	ER 0	WL 2	WT 0	WR 2	TOTAL
4:00 PM	0	544	0	0	527	0	0	0	0	244	0	166	1481
4:15 PM	0	518	0	0	587	0	0	0	0	284	0	176	1565
4:30 PM	0	517	0	0	568	0	0	0	0	284	0	200	1569
4:45 PM	0	544	0	0	579	0	0	0	0	264	0	192	1579
5:00 PM	0	537	0	0	578	0	0	0	0	274	0	192	1581
5:15 PM	0	584	0	0	634	0	0	0	0	230	0	137	1585
5:30 PM	0	518	0	0	636	0	0	0	0	283	0	181	1618
5:45 PM	0	627	0	0	548	0	0	0	0	252	0	170	1597
TOTAL VOLUMES :	0	4389	0	0	4657	0	0	0	0	2115	0	1414	12575
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	59.93%	0.00%	40.07%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	2266	0	0	2396	0	0	0	0	1039	0	680	6381
PEAK HR FACTOR :		0.904			0.942			0.000			0.922		0.986

UTURNS

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-087 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Beach Blvd			Beach Blvd			SR-22 EB Off Ramp			SR-22 EB Off Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4	0	0	4	0	2	0	2	0	0	0	
7:00 AM	0	334	0	0	632	0	28	0	46	0	0	0	1040
7:15 AM	0	410	0	0	840	0	32	0	68	0	0	0	1350
7:30 AM	0	468	0	0	769	0	47	0	74	0	0	0	1358
7:45 AM	0	418	0	0	729	0	54	0	89	0	0	0	1290
8:00 AM	0	384	0	0	630	0	84	0	99	0	0	0	1197
8:15 AM	0	371	0	0	635	0	79	0	119	0	0	0	1204
8:30 AM	0	411	0	0	703	0	57	0	93	0	0	0	1264
8:45 AM	0	379	0	0	630	0	54	0	74	0	0	0	1137
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3175	0	0	5568	0	435	0	662	0	0	0	9840
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	39.65%	0.00%	60.35%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	1680	0	0	2968	0	217	0	330	0	0	0	5195
PEAK HR FACTOR :		0.897			0.883			0.747			0.000		0.956

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-087 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Beach Blvd			Beach Blvd			SR-22 EB Off Ramp			SR-22 EB Off Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	4	0	0	4	0	2	0	2	0	0	0	
4:00 PM	0	499	0	0	597	0	88	0	64	0	0	0	1248
4:15 PM	0	446	0	0	649	0	85	0	61	0	0	0	1241
4:30 PM	0	493	0	0	636	0	80	0	67	0	0	0	1276
4:45 PM	0	433	0	0	629	0	77	0	60	0	0	0	1199
5:00 PM	0	535	0	0	659	0	95	0	46	0	0	0	1335
5:15 PM	0	458	0	0	630	0	71	0	48	0	0	0	1207
5:30 PM	0	445	0	0	693	0	86	0	60	0	0	0	1284
5:45 PM	0	523	0	0	650	0	74	0	68	0	0	0	1315
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3832	0	0	5143	0	656	0	474	0	0	0	10105
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	58.05%	0.00%	41.95%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	1961	0	0	2632	0	326	0	222	0	0	0	5141
PEAK HR FACTOR :		0.916			0.949			0.938			0.000		0.963

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-088 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	3	0	2	2	0	0	0	0	1	0	2	
7:00 AM	0	257	147	198	452	0	0	0	0	29	0	222	1305
7:15 AM	0	289	150	124	452	0	0	0	0	29	0	275	1319
7:30 AM	0	304	108	125	489	0	0	0	0	26	0	302	1354
7:45 AM	0	301	110	135	474	0	0	0	0	31	0	254	1305
8:00 AM	0	263	103	154	422	0	0	0	0	25	0	276	1243
8:15 AM	0	280	126	135	460	0	0	0	0	20	0	290	1311
8:30 AM	0	245	105	124	404	0	0	0	0	25	0	273	1176
8:45 AM	0	256	100	103	356	0	0	0	0	37	0	244	1096
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2195	949	1098	3509	0	0	0	0	222	0	2136	10109
APPROACH %'s :	0.00%	69.82%	30.18%	23.83%	76.17%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	9.41%	0.00%	90.59%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	0	1151	515	582	1867	0	0	0	0	115	0	1053	5283
PEAK HR FACTOR :		0.949			0.942			0.000			0.890		0.975

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-088 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Bolsa Chica Rd			Bolsa Chica Rd			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	3	0	2	2	0	0	0	0	1	0	2	
4:00 PM	0	304	161	108	399	0	0	0	0	20	0	256	1248
4:15 PM	0	290	164	137	435	0	0	0	0	36	0	284	1346
4:30 PM	0	303	160	133	480	0	0	0	0	42	0	268	1386
4:45 PM	0	276	135	115	495	0	0	0	0	32	0	270	1323
5:00 PM	0	306	163	126	469	0	0	0	0	43	0	302	1409
5:15 PM	0	318	168	148	501	0	0	0	0	38	0	284	1457
5:30 PM	0	280	106	110	538	0	0	0	0	27	0	280	1341
5:45 PM	0	226	131	103	463	0	0	0	0	34	0	277	1234
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2303	1188	980	3780	0	0	0	0	272	0	2221	10744
APPROACH %'s :	0.00%	65.97%	34.03%	20.59%	79.41%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	10.91%	0.00%	89.09%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	1203	626	522	1945	0	0	0	0	155	0	1124	5575
PEAK HR FACTOR :		0.941			0.950			0.000			0.927		0.957

UTURNS				
NB	SB	EB	WB	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-089 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	Goldenwest St			Goldenwest St			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1.5	ET 1.5	ER 1	WL 1.5	WT 1.5	WR 1	TOTAL
7:00 AM	2	112	134	107	155	9	59	135	39	78	109	110	1049
7:15 AM	6	130	139	99	181	19	53	164	40	120	113	139	1203
7:30 AM	17	123	136	96	193	34	83	156	44	133	113	170	1298
7:45 AM	12	133	141	103	176	39	95	139	37	115	116	180	1286
8:00 AM	18	129	167	100	164	17	97	173	36	107	128	160	1296
8:15 AM	15	106	131	89	193	21	87	114	48	110	113	144	1171
8:30 AM	10	111	144	99	146	20	69	106	31	111	105	116	1068
8:45 AM	7	113	130	82	147	23	67	130	30	113	94	117	1053
TOTAL VOLUMES :	87	957	1122	775	1355	182	610	1117	305	887	891	1136	9424
APPROACH %'s :	4.02%	44.18%	51.80%	33.52%	58.61%	7.87%	30.02%	54.97%	15.01%	30.44%	30.58%	38.98%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	53	515	583	398	714	109	328	632	157	475	470	649	5083
PEAK HR FACTOR :		0.916			0.945			0.913			0.958		0.979

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	1	0
	1	0	0	0
	1	0	0	0
	1	0	0	0
	0	1	0	1
TOTAL VOLUMES :	3	1	1	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-089 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	Goldenwest St			Goldenwest St			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1.5	ET 1.5	ER 1	WL 1.5	WT 1.5	WR 1	TOTAL
4:00 PM	13	139	126	96	145	38	73	133	55	122	104	166	1210
4:15 PM	18	172	163	102	153	31	74	127	33	109	128	140	1250
4:30 PM	17	153	122	99	197	35	76	123	51	126	129	145	1273
4:45 PM	17	165	151	104	162	34	65	156	44	116	123	126	1263
5:00 PM	13	152	143	103	188	35	61	146	49	123	132	124	1269
5:15 PM	14	165	162	101	176	36	77	139	51	115	148	113	1297
5:30 PM	13	165	150	104	159	33	78	120	44	129	141	121	1257
5:45 PM	12	177	136	88	163	28	79	151	46	101	140	132	1253
TOTAL VOLUMES :	NL 117	NT 1288	NR 1153	SL 797	ST 1343	SR 270	EL 583	ET 1095	ER 373	WL 941	WT 1045	WR 1067	TOTAL 10072
APPROACH %'s :	4.57%	50.35%	45.07%	33.07%	55.73%	11.20%	28.43%	53.39%	18.19%	30.82%	34.23%	34.95%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	61	635	578	407	723	140	279	564	195	480	532	508	5102
PEAK HR FACTOR :		0.934			0.959			0.972			0.950		0.983

UTURNS	NB	SB	EB	WB
4:00 PM	1	0	0	0
4:15 PM	3	0	0	0
4:30 PM	0	0	0	0
4:45 PM	0	0	0	0
5:00 PM	1	0	0	0
5:15 PM	1	0	0	1
5:30 PM	2	0	0	0
5:45 PM	0	1	0	0
TOTAL VOLUMES :	NB 8	SB 1	EB 0	WB 1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-090 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	SR-22/ I-405 Ramps			SR-22/ I-405 Ramps			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1.3	NT 0.3	NR 0.3	SL 1	ST 0	SR 1	EL 2	ET 0	ER 1	WL 0	WT 2	WR 1	TOTAL
7:00 AM	174	31	6	32	0	36	303	29	0	0	48	29	688
7:15 AM	204	18	7	63	0	47	236	54	0	0	56	27	712
7:30 AM	192	22	10	61	0	73	196	37	0	0	50	20	661
7:45 AM	171	20	13	43	0	62	193	59	0	0	55	14	630
8:00 AM	191	17	10	28	0	64	218	41	0	0	54	17	640
8:15 AM	195	18	28	36	0	70	221	47	0	0	37	13	665
8:30 AM	189	21	8	20	0	53	189	37	0	0	57	11	585
8:45 AM	166	19	12	13	0	48	177	32	0	0	65	5	537
TOTAL VOLUMES :	NL 1482	NT 166	NR 94	SL 296	ST 0	SR 453	EL 1733	ET 336	ER 0	WL 0	WT 422	WR 136	TOTAL 5118
APPROACH %'s :	85.07%	9.53%	5.40%	39.52%	0.00%	60.48%	83.76%	16.24%	0.00%	0.00%	75.63%	24.37%	
PEAK HR START TIME :	700 AM												TOTAL
PEAK HR VOL :	741	91	36	199	0	218	928	179	0	0	209	90	2691
PEAK HR FACTOR :		0.948			0.778			0.834			0.901		0.945

UTURNS	NB	SB	EB	WB
TOTAL VOLUMES :	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-090 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	SR-22/ I-405 Ramps			SR-22/ I-405 Ramps			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1.3	NT 0.3	NR 0.3	SL 1	ST 0	SR 1	EL 2	ET 0	ER 1	WL 0	WT 2	WR 1	TOTAL
4:00 PM	166	27	8	19	0	59	211	42	0	0	63	18	613
4:15 PM	189	28	14	31	0	70	264	39	0	0	50	12	697
4:30 PM	175	26	18	23	0	56	238	37	0	0	76	13	662
4:45 PM	178	24	12	20	0	60	212	46	0	0	76	14	642
5:00 PM	195	29	9	26	0	60	229	57	0	0	90	28	723
5:15 PM	183	26	10	29	0	65	246	48	0	0	80	26	713
5:30 PM	207	16	19	30	0	39	206	38	0	0	73	18	646
5:45 PM	191	22	17	27	0	49	201	41	0	0	66	12	626
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1484	198	107	205	0	458	1807	348	0	0	574	141	5322
APPROACH %'s :	82.95%	11.07%	5.98%	30.92%	0.00%	69.08%	83.85%	16.15%	0.00%	0.00%	80.28%	19.72%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	731	105	49	98	0	241	925	188	0	0	322	81	2740
PEAK HR FACTOR :		0.950			0.902			0.946			0.854		0.947

UTURNS

NB	SB	EB	WB
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-091 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	SR-22 WB Off Ramp/ Eagle Dr			SR-22 WB Off Ramp/ Eagle Dr			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 1	NR 1	SL 1	ST 0	SR 1	EL 1	ET 3	ER 0	WL 0	WT 3	WR 0	TOTAL
7:00 AM	247	6	44	2	0	1	8	103	0	0	64	2	477
7:15 AM	237	6	49	1	0	4	0	116	0	0	111	4	528
7:30 AM	269	12	52	1	0	5	4	124	0	0	131	4	602
7:45 AM	243	13	49	2	0	5	9	134	0	0	153	3	611
8:00 AM	289	10	55	3	0	12	10	133	0	0	114	2	628
8:15 AM	228	4	42	2	0	3	1	112	0	0	110	2	504
8:30 AM	226	11	51	3	0	2	8	110	0	0	94	7	512
8:45 AM	201	9	49	3	0	4	6	108	0	0	117	5	502
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1940	71	391	17	0	36	46	940	0	0	894	29	4364
APPROACH %'s :	80.77%	2.96%	16.28%	32.08%	0.00%	67.92%	4.67%	95.33%	0.00%	0.00%	96.86%	3.14%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	1038	41	205	7	0	26	23	507	0	0	509	13	2369
PEAK HR FACTOR :		0.907			0.550			0.927			0.837		0.943

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	1	0
	0	0	2	0
	0	0	1	0
	0	0	0	0
	0	0	1	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	5	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-091 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	SR-22 WB Off Ramp/ Eagle Dr			SR-22 WB Off Ramp/ Eagle Dr			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 1	NR 1	SL 1	ST 0	SR 1	EL 1	ET 3	ER 0	WL 0	WT 3	WR 0	TOTAL
4:00 PM	241	2	59	11	0	8	8	120	0	0	150	1	600
4:15 PM	225	4	46	5	0	11	12	120	0	0	130	6	559
4:30 PM	233	3	52	8	0	12	5	102	0	0	137	7	559
4:45 PM	225	6	59	10	0	8	8	141	0	0	113	6	576
5:00 PM	217	7	47	13	0	20	5	95	0	0	148	4	556
5:15 PM	239	4	56	9	0	7	10	118	0	0	131	2	576
5:30 PM	223	8	48	16	0	10	6	118	0	0	141	4	574
5:45 PM	226	8	58	3	0	11	2	128	0	0	128	2	566
TOTAL VOLUMES :	1829	42	425	75	0	87	56	942	0	0	1078	32	4566
APPROACH %'s :	79.66%	1.83%	18.51%	46.30%	0.00%	53.70%	5.61%	94.39%	0.00%	0.00%	97.12%	2.88%	
PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	924	15	216	34	0	39	33	483	0	0	530	20	2294
PEAK HR FACTOR :		0.956			0.913			0.866			0.911		0.956

UTURNS				
	NB	SB	EB	WB
	0	0	1	0
	0	0	4	0
	0	0	1	0
	0	0	2	0
	0	0	1	0
	0	0	2	0
	0	0	2	0
	0	0	1	0
TOTAL VOLUMES :	0	0	14	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-092 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

AM

NS/EW Streets:	SR-22 Off Ramp(W/O Golden West St)			SR-22 Off Ramp(W/O Golden West St)			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1	0	2	0	0	2	0	
7:00 AM	0	0	0	73	0	0	0	170	0	0	115	0	358
7:15 AM	0	0	0	44	0	1	0	198	0	0	152	0	395
7:30 AM	0	0	0	95	0	5	0	185	0	0	155	0	440
7:45 AM	0	0	0	131	0	8	0	164	0	0	178	0	481
8:00 AM	0	0	0	108	0	4	0	164	0	0	157	0	433
8:15 AM	0	0	0	85	0	8	0	156	0	0	151	0	400
8:30 AM	0	0	0	72	0	6	0	139	0	0	130	0	347
8:45 AM	0	0	0	107	0	5	0	117	0	0	131	0	360
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	715	0	37	0	1293	0	0	1169	0	3214
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	95.08%	0.00%	4.92%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	0	0	0	419	0	25	0	669	0	0	641	0	1754
PEAK HR FACTOR :	0.000			0.799			0.904			0.900			0.912

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-092 **Day:** Wednesday

City: Westminster **Date:** 4/15/2015

PM

NS/EW Streets:	SR-22 Off Ramp(W/O Golden West St)			SR-22 Off Ramp(W/O Golden West St)			Garden Grove Blvd			Garden Grove Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0	1	0	2	0	0	2	0	
4:00 PM	0	0	0	93	0	7	0	168	0	0	164	0	432
4:15 PM	0	0	0	91	0	8	0	141	0	0	175	0	415
4:30 PM	0	0	0	82	0	7	0	163	0	0	181	0	433
4:45 PM	0	0	0	81	0	11	0	176	0	0	179	0	447
5:00 PM	0	0	0	103	0	3	0	186	0	0	160	0	452
5:15 PM	0	0	0	93	0	11	0	175	0	0	196	0	475
5:30 PM	0	0	0	91	0	8	0	152	0	0	187	0	438
5:45 PM	0	0	0	103	0	1	0	165	0	0	181	0	450
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	737	0	56	0	1326	0	0	1423	0	3542
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	92.94%	0.00%	7.06%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	0	0	390	0	23	0	678	0	0	724	0	1815
PEAK HR FACTOR :	0.000			0.974			0.911			0.923			0.955

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-093 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Golden West St			Golden West St			I-405 Ramps			I-405 Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	3	0	0	2	1	1.5	0	1.5	0	0	0	
7:00 AM	0	374	0	0	261	81	8	0	67	0	0	0	791
7:15 AM	0	368	0	0	293	86	15	0	75	0	0	0	837
7:30 AM	0	422	0	0	306	94	32	0	110	0	0	0	964
7:45 AM	0	373	0	0	320	79	21	0	135	0	0	0	928
8:00 AM	0	334	0	0	272	62	23	0	120	0	0	0	811
8:15 AM	0	338	0	0	247	55	7	0	103	0	0	0	750
8:30 AM	0	363	0	0	268	63	9	0	128	0	0	0	831
8:45 AM	0	329	0	0	252	66	9	0	114	0	0	0	770
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2901	0	0	2219	586	124	0	852	0	0	0	6682
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	79.11%	20.89%	12.70%	0.00%	87.30%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	1497	0	0	1191	321	91	0	440	0	0	0	3540
PEAK HR FACTOR :		0.887			0.945			0.851			0.000		0.918

UTURNS			
NB	SB	EB	WB
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-093 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Golden West St			Golden West St			I-405 Ramps			I-405 Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	3	0	0	2	1	1.5	0	1.5	0	0	0	
4:00 PM	0	470	0	0	227	138	57	0	140	0	0	0	1032
4:15 PM	0	435	0	0	238	126	36	0	128	0	0	0	963
4:30 PM	0	511	0	0	241	128	51	0	144	0	0	0	1075
4:45 PM	0	465	0	0	195	110	56	0	127	0	0	0	953
5:00 PM	0	535	0	0	217	131	49	0	151	0	0	0	1083
5:15 PM	0	519	0	0	244	140	41	0	133	0	0	0	1077
5:30 PM	0	438	0	0	245	111	52	0	154	0	0	0	1000
5:45 PM	0	491	0	0	217	113	52	0	131	0	0	0	1004
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3864	0	0	1824	997	394	0	1108	0	0	0	8187
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	64.66%	35.34%	26.23%	0.00%	73.77%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	2030	0	0	897	509	197	0	555	0	0	0	4188
PEAK HR FACTOR :		0.949			0.915			0.940			0.000		0.967

UTURNS				
NB	SB	EB	WB
NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-094 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	I-405 Ramps			I-405 Ramps			Mall Ring Rd			Mall Ring Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	1.5	0.5	1	1	2	0	0	2	1	
7:00 AM	0	0	0	76	5	3	3	4	0	4	5	75	175
7:15 AM	0	0	0	76	4	2	4	9	0	0	30	53	178
7:30 AM	0	0	0	119	3	11	4	28	0	3	45	47	260
7:45 AM	0	0	0	129	7	7	5	22	2	5	36	36	249
8:00 AM	0	0	0	119	11	5	8	28	1	3	21	38	234
8:15 AM	0	0	0	95	9	5	2	11	0	0	8	47	177
8:30 AM	0	0	0	132	13	6	2	9	0	1	13	54	230
8:45 AM	0	0	0	105	12	10	6	14	1	4	19	38	209
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	851	64	49	34	125	4	20	177	388	1712
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	88.28%	6.64%	5.08%	20.86%	76.69%	2.45%	3.42%	30.26%	66.32%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	0	443	25	25	21	87	3	11	132	174	921
PEAK HR FACTOR :	0.000			0.862			0.750			0.834			0.886

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	1	
0	0	0	1	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
NB	SB	EB	WB	
0	0	0	2	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-094 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	I-405 Ramps			I-405 Ramps			Mall Ring Rd			Mall Ring Rd				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
LANES:	0	0	0	1.5	0.5	1	1	2	0	0	2	1					
4:00 PM	0	0	0	134	17	26	25	66	4	6	40	96	414	0	0	0	0
4:15 PM	0	0	0	105	16	29	25	56	4	7	29	86	357	0	0	0	0
4:30 PM	0	0	0	159	25	16	29	38	6	2	40	89	404	0	0	0	1
4:45 PM	0	0	0	142	23	26	26	43	5	10	30	71	376	0	0	0	0
5:00 PM	0	0	0	146	18	25	23	52	4	7	31	92	398	0	0	0	0
5:15 PM	0	0	0	135	9	19	16	42	2	2	28	111	364	0	0	0	0
5:30 PM	0	0	0	128	17	20	23	75	4	2	28	78	375	0	0	0	0
5:45 PM	0	0	0	130	18	23	26	54	2	3	34	79	369	0	0	0	1
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	0	0	0	1079	143	184	193	426	31	39	260	702	3057	0	0	0	2
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	76.74%	10.17%	13.09%	29.69%	65.54%	4.77%	3.90%	25.97%	70.13%					
PEAK HR START TIME :	400 PM												TOTAL				
PEAK HR VOL :	0	0	0	540	81	97	105	203	19	25	139	342	1551				
PEAK HR FACTOR :	0.000			0.898			0.861			0.891			0.937				

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-095 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Newland St			Newland St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
7:00 AM	5	35	11	21	117	5	7	96	19	3	74	7	400
7:15 AM	19	44	14	35	109	21	20	150	11	4	112	17	556
7:30 AM	28	57	18	59	123	28	34	188	24	9	146	32	746
7:45 AM	16	41	10	52	125	29	12	227	42	9	166	19	748
8:00 AM	17	44	11	43	110	22	18	218	29	6	140	25	683
8:15 AM	15	55	19	50	122	25	13	179	19	5	158	20	680
8:30 AM	21	74	16	41	100	30	8	178	20	4	128	27	647
8:45 AM	13	49	13	55	99	26	19	108	14	9	149	24	578
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	134	399	112	356	905	186	131	1344	178	49	1073	171	5038
APPROACH %'s :	20.78%	61.86%	17.36%	24.60%	62.54%	12.85%	7.92%	81.31%	10.77%	3.79%	82.99%	13.23%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	76	197	58	204	480	104	77	812	114	29	610	96	2857
PEAK HR FACTOR :		0.803			0.938			0.892			0.947		0.955

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	2	0	
NB	SB	EB	WB	
0	0	2	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-095 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Newland St			Newland St			Bolsa Ave			Bolsa Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 1	WL 1	WT 2	WR 1	TOTAL
4:00 PM	21	90	7	33	105	24	26	157	18	7	155	42	685
4:15 PM	21	101	10	24	65	29	22	172	18	12	162	52	688
4:30 PM	17	92	11	32	103	19	19	211	19	9	188	33	753
4:45 PM	17	107	13	34	92	33	26	149	20	9	157	47	704
5:00 PM	19	111	13	35	78	29	30	211	31	8	167	50	782
5:15 PM	22	119	10	32	80	25	29	155	33	3	181	51	740
5:30 PM	29	97	19	33	88	26	29	207	16	12	164	60	780
5:45 PM	16	120	8	31	118	14	29	158	31	6	195	54	780
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	162	837	91	254	729	199	210	1420	186	66	1369	389	5912
APPROACH %'s :	14.86%	76.79%	8.35%	21.49%	61.68%	16.84%	11.56%	78.19%	10.24%	3.62%	75.05%	21.33%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	86	447	50	131	364	94	117	731	111	29	707	215	3082
PEAK HR FACTOR :		0.965			0.903			0.881			0.932		0.985

UTURNS

NB	SB	EB	WB
0	0	1	0
0	0	0	0
0	0	1	0
0	0	0	1
0	0	2	0
0	0	1	0
0	0	0	1
0	0	3	0
NB	SB	EB	WB
0	0	8	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-096 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Brookhurst St			Brookhurst St			Edinger Ave			Edinger Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 1	SL 2	ST 3	SR 0	EL 2	ET 2	ER 0	WL 2	WT 2	WR 1	TOTAL
7:00 AM	5	109	28	28	402	9	13	116	31	57	92	10	900
7:15 AM	5	159	35	26	447	8	14	194	40	85	125	14	1152
7:30 AM	10	165	48	37	473	14	24	204	66	76	164	23	1304
7:45 AM	12	192	55	69	489	28	24	219	72	79	180	53	1472
8:00 AM	17	177	47	41	440	26	18	218	51	90	192	41	1358
8:15 AM	18	169	46	49	455	41	31	228	44	81	200	21	1383
8:30 AM	8	156	43	44	377	16	32	186	54	84	127	20	1147
8:45 AM	10	165	42	21	314	14	24	141	49	86	137	23	1026
TOTAL VOLUMES :	85	1292	344	315	3397	156	180	1506	407	638	1217	205	9742
APPROACH %'s :	4.94%	75.07%	19.99%	8.14%	87.82%	4.03%	8.60%	71.95%	19.45%	30.97%	59.08%	9.95%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	57	703	196	196	1857	109	97	869	233	326	736	138	5517
PEAK HR FACTOR :		0.923			0.922			0.952			0.929		0.937

UTURNS				
	NB	SB	EB	WB
7:00 AM	1	0	0	3
7:15 AM	0	0	0	0
7:30 AM	0	1	0	2
7:45 AM	1	1	0	1
8:00 AM	0	1	2	1
8:15 AM	2	1	0	2
8:30 AM	1	1	0	4
8:45 AM	0	0	0	3
TOTAL VOLUMES :	5	5	2	16

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-096 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Brookhurst St			Brookhurst St			Edinger Ave			Edinger Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 3	NR 1	SL 2	ST 3	SR 0	EL 2	ET 2	ER 0	WL 2	WT 2	WR 1	TOTAL
4:00 PM	36	337	56	38	269	18	40	174	21	88	183	27	1287
4:15 PM	32	317	81	31	244	21	41	143	35	92	186	33	1256
4:30 PM	22	303	97	35	225	24	43	134	29	88	187	40	1227
4:45 PM	44	348	71	29	235	31	50	170	28	89	187	48	1330
5:00 PM	52	369	71	25	228	27	50	144	25	76	190	47	1304
5:15 PM	53	349	87	31	252	26	60	172	25	90	211	44	1400
5:30 PM	42	351	83	29	220	25	50	156	25	98	205	47	1331
5:45 PM	42	320	87	36	283	25	34	153	33	99	199	51	1362
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	323	2694	633	254	1956	197	368	1246	221	720	1548	337	10497
APPROACH %'s :	8.85%	73.81%	17.34%	10.55%	81.26%	8.18%	20.05%	67.90%	12.04%	27.64%	59.42%	12.94%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	189	1389	328	121	983	103	194	625	108	363	805	189	5397
PEAK HR FACTOR :		0.968			0.877			0.902			0.969		0.964

UTURNS

NB	SB	EB	WB
2	5	3	1
2	3	2	3
0	2	0	3
4	4	2	3
2	2	4	1
5	3	6	1
2	0	4	3
0	2	1	2

NB	SB	EB	WB
17	21	22	17

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-097 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Brookhurst St			Brookhurst St			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	4	107	4	16	373	8	24	69	8	13	56	16	698
7:15 AM	15	179	7	21	468	16	19	63	14	27	54	17	900
7:30 AM	22	220	9	17	381	19	38	88	29	30	105	26	984
7:45 AM	25	224	15	35	414	37	42	106	30	30	129	27	1114
8:00 AM	22	211	19	33	377	25	58	142	36	33	81	64	1101
8:15 AM	23	238	24	31	424	28	42	83	24	28	92	44	1081
8:30 AM	35	210	18	29	382	25	41	84	17	23	82	26	972
8:45 AM	23	223	17	43	330	28	26	87	18	16	73	27	911
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	169	1612	113	225	3149	186	290	722	176	200	672	247	7761
APPROACH %'s :	8.92%	85.11%	5.97%	6.32%	88.46%	5.22%	24.41%	60.77%	14.81%	17.87%	60.05%	22.07%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	92	893	67	116	1596	109	180	419	119	121	407	161	4280
PEAK HR FACTOR :		0.923			0.937			0.761			0.926		0.961

UTURNS	NB	SB	EB	WB
	1	0	0	0
	0	0	0	0
	0	0	0	0
	5	0	0	1
	3	0	0	0
	1	1	0	0
	3	0	0	0
	3	3	0	0
	NB	SB	EB	WB
	16	4	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-097 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Brookhurst St			Brookhurst St			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	44	333	20	35	344	41	24	81	16	21	91	28	1078
4:15 PM	41	344	28	38	291	38	43	84	10	20	112	35	1084
4:30 PM	35	338	21	29	333	42	34	92	17	17	106	32	1096
4:45 PM	41	354	22	38	294	42	37	85	18	24	107	40	1102
5:00 PM	44	377	15	34	344	38	36	69	20	20	152	18	1167
5:15 PM	38	389	16	42	292	39	42	99	15	13	164	30	1179
5:30 PM	50	359	33	29	339	30	25	136	4	26	136	24	1191
5:45 PM	32	327	22	39	299	37	37	112	33	15	162	31	1146
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	325	2821	177	284	2536	307	278	758	133	156	1030	238	9043
APPROACH %'s :	9.78%	84.89%	5.33%	9.08%	81.10%	9.82%	23.78%	64.84%	11.38%	10.96%	72.33%	16.71%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	164	1452	86	144	1274	144	140	416	72	74	614	103	4683
PEAK HR FACTOR :		0.960			0.939			0.863			0.951		0.983

UTURNS	NB	SB	EB	WB
	1	3	0	0
	1	7	0	0
	3	6	0	0
	8	2	0	0
	3	3	0	0
	0	1	0	1
	3	1	0	0
	3	4	0	0
	NB	SB	EB	WB
	22	27	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-098 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Bushard St			Bushard St			Edinger Ave			Edinger Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	7	44	15	13	126	9	11	161	18	8	101	5	518
7:15 AM	5	65	21	32	199	14	6	184	25	19	113	10	693
7:30 AM	13	70	21	38	252	16	18	223	28	31	144	6	860
7:45 AM	15	76	34	48	218	12	13	253	28	32	153	24	906
8:00 AM	11	111	53	48	187	14	22	239	27	43	163	23	941
8:15 AM	22	90	54	41	178	29	28	220	30	40	141	16	889
8:30 AM	16	86	25	23	140	21	23	195	30	21	129	16	725
8:45 AM	23	60	17	26	146	18	10	150	25	17	156	15	663
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	112	602	240	269	1446	133	131	1625	211	211	1100	115	6195
APPROACH %'s :	11.74%	63.10%	25.16%	14.56%	78.25%	7.20%	6.66%	82.61%	10.73%	14.80%	77.14%	8.06%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	61	347	162	175	835	71	81	935	113	146	601	69	3596
PEAK HR FACTOR :		0.814			0.883			0.960			0.891		0.955

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-098 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Bushard St			Bushard St			Edinger Ave			Edinger Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	20	132	34	18	87	21	18	144	11	15	175	34	709
4:15 PM	16	133	19	16	84	19	23	142	23	25	200	41	741
4:30 PM	26	147	34	24	77	18	19	148	15	15	210	45	778
4:45 PM	24	145	15	16	75	15	35	159	15	15	249	45	808
5:00 PM	15	148	23	19	93	11	33	158	23	19	211	41	794
5:15 PM	20	152	18	24	92	20	29	177	16	27	235	42	852
5:30 PM	20	173	16	29	90	18	32	160	12	17	209	47	823
5:45 PM	22	148	16	23	99	21	27	161	16	20	226	44	823
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	163	1178	175	169	697	143	216	1249	131	153	1715	339	6328
APPROACH %'s :	10.75%	77.70%	11.54%	16.75%	69.08%	14.17%	13.53%	78.26%	8.21%	6.93%	77.71%	15.36%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	77	621	73	95	374	70	121	656	67	83	881	174	3292
PEAK HR FACTOR :		0.922			0.942			0.950			0.936		0.966

UTURNS	NB	SB	EB	WB
	0	1	0	0
	0	0	0	1
	0	0	0	0
	0	0	0	1
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
TOTAL VOLUMES :	0	1	0	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-099 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Newland St			Newland St			Edinger Ave			Edinger Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	31	31	44	2	95	8	0	142	15	14	83	1	466
7:15 AM	38	56	39	4	99	13	0	128	9	22	86	2	496
7:30 AM	44	44	66	2	114	9	0	126	16	42	161	4	628
7:45 AM	45	57	35	1	95	9	0	170	19	41	167	7	646
8:00 AM	45	50	55	2	83	15	0	173	14	29	105	6	577
8:15 AM	32	44	51	2	90	15	0	151	23	31	125	8	572
8:30 AM	30	33	49	1	83	9	0	174	20	26	120	8	553
8:45 AM	31	35	45	2	82	17	0	97	16	27	145	5	502
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	296	350	384	16	741	95	0	1161	132	232	992	41	4440
APPROACH %'s :	28.74%	33.98%	37.28%	1.88%	86.97%	11.15%	0.00%	89.79%	10.21%	18.34%	78.42%	3.24%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	166	195	207	7	382	48	0	620	72	143	558	25	2423
PEAK HR FACTOR :		0.922			0.874			0.915			0.844		0.938

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	1	0	0
	0	0	0	0
	0	1	0	0
	0	0	0	0
	0	0	0	0
	0	2	0	0
	NB	SB	EB	WB
	0	4	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-099 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Newland St			Newland St			Edinger Ave			Edinger Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	26	83	45	0	85	15	0	118	22	21	116	7	538
4:15 PM	28	76	39	0	82	18	0	144	28	26	140	7	588
4:30 PM	21	77	45	1	79	18	0	133	23	27	162	9	595
4:45 PM	37	87	44	0	87	22	0	142	30	22	178	14	663
5:00 PM	29	85	43	0	88	15	0	163	21	22	172	13	651
5:15 PM	47	79	44	0	66	15	0	160	25	24	162	11	633
5:30 PM	29	96	61	0	98	16	0	138	18	33	169	11	669
5:45 PM	38	74	55	1	89	18	0	147	17	17	161	8	625
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	255	657	376	2	674	137	0	1145	184	192	1260	80	4962
APPROACH %'s :	19.80%	51.01%	29.19%	0.25%	82.90%	16.85%	0.00%	86.16%	13.84%	12.53%	82.25%	5.22%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	142	347	192	0	339	68	0	603	94	101	681	49	2616
PEAK HR FACTOR :		0.915			0.893			0.942			0.971		0.978

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
0	0	0	0	
NB	SB	EB	WB	
0	0	0	0	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-100 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Golden West St			Golden West St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	5	198	13	42	206	16	22	71	16	8	54	21	672
7:15 AM	15	218	15	37	286	23	30	117	19	23	78	34	895
7:30 AM	13	184	11	65	346	26	34	118	43	33	133	37	1043
7:45 AM	24	252	22	73	420	22	54	170	61	38	109	45	1290
8:00 AM	17	235	19	83	394	22	42	139	41	38	90	26	1146
8:15 AM	20	252	29	80	305	24	31	129	37	33	79	32	1051
8:30 AM	10	218	23	61	369	20	26	83	26	36	56	33	961
8:45 AM	11	214	24	59	308	14	19	83	29	41	78	18	898
TOTAL VOLUMES :	NL 115	NT 1771	NR 156	SL 500	ST 2634	SR 167	EL 258	ET 910	ER 272	WL 250	WT 677	WR 246	TOTAL 7956
APPROACH %'s :	5.63%	86.73%	7.64%	15.15%	79.79%	5.06%	17.92%	63.19%	18.89%	21.31%	57.72%	20.97%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	74	923	81	301	1465	94	161	556	182	142	411	140	4530
PEAK HR FACTOR :		0.895			0.903			0.789			0.853		0.878

UTURNS	NB	SB	EB	WB
7:00 AM	0	0	0	0
7:15 AM	0	0	0	0
7:30 AM	0	0	0	0
7:45 AM	0	0	0	0
8:00 AM	0	0	0	0
8:15 AM	0	0	0	0
8:30 AM	0	0	0	1
8:45 AM	0	0	0	1
TOTAL VOLUMES :	0	0	0	2

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-100 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Golden West St			Golden West St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	27	315	33	38	317	19	31	113	30	52	102	68	1145
4:15 PM	22	320	24	42	287	28	26	89	27	38	94	63	1060
4:30 PM	21	344	24	44	317	25	40	114	35	40	97	64	1165
4:45 PM	32	283	24	46	338	24	31	112	29	48	116	72	1155
5:00 PM	33	366	23	45	363	22	45	128	31	45	123	73	1297
5:15 PM	40	300	33	53	317	26	37	121	35	49	144	84	1239
5:30 PM	37	337	17	53	355	18	27	96	55	51	105	71	1222
5:45 PM	21	294	14	56	332	14	29	118	30	49	118	78	1153
TOTAL VOLUMES :	233	2559	192	377	2626	176	266	891	272	372	899	573	9436
APPROACH %'s :	7.81%	85.76%	6.43%	11.86%	82.60%	5.54%	18.61%	62.35%	19.03%	20.17%	48.75%	31.07%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	142	1286	97	197	1373	90	140	457	150	193	488	300	4913
PEAK HR FACTOR :		0.903			0.965			0.915			0.885		0.947

UTURNS	NB	SB	EB	WB
	2	0	0	1
	1	0	0	0
	0	0	0	0
	1	0	0	0
	0	1	0	0
	0	0	0	0
	1	0	0	0
	1	0	0	0
TOTAL VOLUMES :	6	1	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-101 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Newland St			Newland St			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	6	36	7	29	124	10	6	79	6	11	47	13	374
7:15 AM	5	76	8	34	170	47	23	75	9	14	67	21	549
7:30 AM	10	147	14	37	214	69	23	101	9	10	130	42	806
7:45 AM	11	91	6	62	201	52	34	143	9	15	115	26	765
8:00 AM	6	87	7	37	148	20	29	131	7	16	75	35	598
8:15 AM	12	72	13	38	164	22	11	61	8	19	93	34	547
8:30 AM	3	82	16	51	133	23	14	94	7	20	77	24	544
8:45 AM	5	82	9	34	140	18	9	90	5	4	80	28	504
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	58	673	80	322	1294	261	149	774	60	109	684	223	4687
APPROACH %'s :	7.15%	82.98%	9.86%	17.16%	68.94%	13.91%	15.16%	78.74%	6.10%	10.73%	67.32%	21.95%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	32	401	35	170	733	188	109	450	34	55	387	124	2718
PEAK HR FACTOR :		0.684			0.852			0.797			0.777		0.843

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-101 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Newland St			Newland St			Hazard Ave			Hazard Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	5	131	11	30	125	17	17	97	3	17	96	40	589
4:15 PM	9	158	10	28	123	14	29	94	8	13	85	42	613
4:30 PM	9	125	8	28	135	29	29	103	8	13	91	34	612
4:45 PM	11	168	5	26	141	26	26	88	4	10	102	51	658
5:00 PM	12	151	9	16	125	22	27	117	7	10	97	44	637
5:15 PM	6	174	13	23	142	11	39	108	4	13	94	56	683
5:30 PM	14	179	9	23	141	31	24	94	7	10	105	54	691
5:45 PM	10	172	11	24	139	21	23	114	7	14	134	67	736
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	76	1258	76	198	1071	171	214	815	48	100	804	388	5219
APPROACH %'s :	5.39%	89.22%	5.39%	13.75%	74.38%	11.88%	19.87%	75.67%	4.46%	7.74%	62.23%	30.03%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	42	676	42	86	547	85	113	433	25	47	430	221	2747
PEAK HR FACTOR :		0.941			0.921			0.945			0.812		0.933

UTURNS	NB	SB	EB	WB
	0	0	0	1
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	0	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-102 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Magnolia St			Magnolia St			Foxglove Ave			Foxglove Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 0	WR 0	TOTAL
7:00 AM	0	117	14	4	540	0	0	0	0	6	0	1	682
7:15 AM	0	158	42	10	529	0	0	0	0	27	0	6	772
7:30 AM	0	163	78	19	475	0	0	0	0	70	0	9	814
7:45 AM	0	213	7	5	567	0	0	0	0	24	0	7	823
8:00 AM	0	248	2	6	488	0	0	0	0	5	0	8	757
8:15 AM	0	186	2	8	531	0	0	0	0	5	0	5	737
8:30 AM	0	171	1	4	549	0	0	0	0	0	0	4	729
8:45 AM	0	172	6	8	474	0	0	0	0	3	0	2	665
TOTAL VOLUMES :	0	1428	152	64	4153	0	0	0	0	140	0	42	5979
APPROACH %'s :	0.00%	90.38%	9.62%	1.52%	98.48%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	76.92%	0.00%	23.08%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	782	129	40	2059	0	0	0	0	126	0	30	3166
PEAK HR FACTOR :		0.911			0.917			0.000			0.494		0.962

UTURNS	NB	SB	EB	WB
	0	1	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	2	0	0
TOTAL VOLUMES :	0	3	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-102 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Magnolia St			Magnolia St			Foxglove Ave			Foxglove Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 0	WR 0	TOTAL
4:00 PM	0	331	4	4	241	0	0	0	0	4	0	1	585
4:15 PM	0	363	5	5	250	0	0	0	0	3	0	5	631
4:30 PM	0	336	3	4	233	0	0	0	0	3	0	5	584
4:45 PM	0	396	2	4	245	0	0	0	0	1	0	1	649
5:00 PM	0	347	9	3	230	0	0	0	0	1	0	4	594
5:15 PM	0	375	3	6	268	0	0	0	0	4	0	1	657
5:30 PM	0	347	6	5	259	0	0	0	0	0	0	10	627
5:45 PM	0	384	5	10	279	0	0	0	0	1	0	3	682
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2879	37	41	2005	0	0	0	0	17	0	30	5009
APPROACH %'s :	0.00%	98.73%	1.27%	2.00%	98.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	36.17%	0.00%	63.83%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	1453	23	24	1036	0	0	0	0	6	0	18	2560
PEAK HR FACTOR :		0.949			0.917			0.000			0.600		0.938

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	1	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	0	1	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-103 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Magnolia St			Magnolia St			Heil Ave			Heil Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 2.5	SR 0.5	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL
7:00 AM	7	121	11	3	498	9	5	1	19	45	3	6	728
7:15 AM	10	177	18	17	510	7	4	5	26	60	5	14	853
7:30 AM	10	209	15	9	533	11	13	9	43	80	4	18	954
7:45 AM	8	195	18	31	555	16	3	7	33	61	2	16	945
8:00 AM	5	214	19	25	478	3	6	5	17	59	7	19	857
8:15 AM	7	181	28	23	503	3	3	7	18	44	0	16	833
8:30 AM	6	146	22	32	488	8	7	6	24	57	1	15	812
8:45 AM	5	164	21	15	493	5	5	4	17	48	5	15	797
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	58	1407	152	155	4058	62	46	44	197	454	27	119	6779
APPROACH %'s :	3.59%	87.01%	9.40%	3.63%	94.92%	1.45%	16.03%	15.33%	68.64%	75.67%	4.50%	19.83%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	33	795	70	82	2076	37	26	26	119	260	18	67	3609
PEAK HR FACTOR :		0.943			0.912			0.658			0.846		0.946

UTURNS	NB	SB	EB	WB
	1	0	0	1
	1	0	0	0
	3	0	0	0
	2	0	0	0
	0	0	0	0
	4	0	0	0
	2	1	0	0
	4	0	0	0
	NB	SB	EB	WB
	17	1	0	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-103 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Magnolia St			Magnolia St			Heil Ave			Heil Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 2.5	SR 0.5	EL 1	ET 1	ER 0	WL 1	WT 1	WR 1	TOTAL
4:00 PM	32	324	48	13	250	3	3	6	24	34	6	19	762
4:15 PM	26	339	53	12	245	4	7	8	7	40	12	19	772
4:30 PM	24	305	46	12	224	4	6	4	18	18	7	27	695
4:45 PM	20	366	57	13	223	6	4	3	16	36	4	31	779
5:00 PM	19	324	56	16	209	7	7	3	19	37	10	25	732
5:15 PM	19	355	63	12	230	5	7	6	13	37	14	24	785
5:30 PM	25	308	54	13	255	6	7	6	23	53	14	26	790
5:45 PM	18	364	57	19	243	9	3	3	12	25	9	25	787
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	183	2685	434	110	1879	44	44	39	132	280	76	196	6102
APPROACH %'s :	5.54%	81.31%	13.14%	5.41%	92.42%	2.16%	20.47%	18.14%	61.40%	50.72%	13.77%	35.51%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	81	1351	230	60	937	27	24	18	67	152	47	100	3094
PEAK HR FACTOR :		0.946			0.934			0.757			0.804		0.979

UTURNS

NB	SB	EB	WB
15	0	0	0
9	1	0	0
10	0	0	0
5	0	0	0
2	1	1	0
7	0	0	0
7	0	0	0
10	0	0	0

NB	SB	EB	WB
65	2	1	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-104 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

AM

NS/EW Streets:	Gothard St/Vermont St			Gothard St/Vermont St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 0	NR 1	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	25	2	43	6	6	2	0	101	44	30	71	1	331
7:15 AM	37	2	34	10	5	1	0	120	55	51	98	3	416
7:30 AM	35	0	29	13	10	1	0	123	76	68	180	1	536
7:45 AM	40	5	46	10	7	1	1	174	100	95	180	4	663
8:00 AM	29	2	44	8	9	0	0	169	78	59	130	6	534
8:15 AM	35	1	28	7	8	0	0	148	70	55	119	0	471
8:30 AM	25	1	35	4	4	0	0	118	66	45	98	5	401
8:45 AM	23	2	27	5	4	0	0	106	62	64	123	4	420
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	249	15	286	63	53	5	1	1059	551	467	999	24	3772
APPROACH %'s :	45.27%	2.73%	52.00%	52.07%	43.80%	4.13%	0.06%	65.74%	34.20%	31.34%	67.05%	1.61%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	139	8	147	38	34	2	1	614	324	277	609	11	2204
PEAK HR FACTOR :		0.808			0.771			0.854			0.804		0.831

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-104 **Day:** Tuesday

City: Westminster **Date:** 4/14/2015

PM

NS/EW Streets:	Gothard St/Vermont St			Gothard St/Vermont St			McFadden Ave			McFadden Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 0	NR 1	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	82	2	58	12	4	3	2	134	68	40	139	2	546
4:15 PM	84	7	78	7	2	2	1	102	57	44	118	9	511
4:30 PM	102	3	109	4	7	0	0	141	62	35	123	8	594
4:45 PM	88	9	59	2	5	1	0	114	62	43	155	10	548
5:00 PM	129	6	125	6	2	2	2	152	77	43	177	9	730
5:15 PM	101	4	107	5	5	4	1	136	56	57	158	7	641
5:30 PM	102	6	69	4	4	5	1	124	61	50	172	9	607
5:45 PM	108	3	71	8	6	2	3	113	72	64	145	8	603
TOTAL VOLUMES :	NL 796	NT 40	NR 676	SL 48	ST 35	SR 19	EL 10	ET 1016	ER 515	WL 376	WT 1187	WR 62	TOTAL 4780
APPROACH %'s :	52.65%	2.65%	44.71%	47.06%	34.31%	18.63%	0.65%	65.93%	33.42%	23.14%	73.05%	3.82%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	440	19	372	23	17	13	7	525	266	214	652	33	2581
PEAK HR FACTOR :		0.799			0.828			0.864			0.973		0.884

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-105 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Newland St			Newland St			Heil Ave			Heil Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL
7:00 AM	16	63	5	0	77	14	21	7	62	2	5	6	278
7:15 AM	25	65	2	6	138	17	28	6	78	3	11	11	390
7:30 AM	51	85	0	8	148	15	33	9	83	5	14	8	459
7:45 AM	40	83	3	8	113	30	24	16	92	2	17	14	442
8:00 AM	55	98	2	4	96	19	36	12	62	9	12	10	415
8:15 AM	76	86	5	6	81	28	48	12	67	4	16	8	437
8:30 AM	36	67	1	10	72	12	34	18	76	5	14	6	351
8:45 AM	29	46	4	8	117	24	15	23	45	5	5	6	327
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	328	593	22	50	842	159	239	103	565	35	94	69	3099
APPROACH %'s :	34.78%	62.88%	2.33%	4.76%	80.11%	15.13%	26.35%	11.36%	62.29%	17.68%	47.47%	34.85%	
PEAK HR START TIME :	730 AM												TOTAL
PEAK HR VOL :	222	352	10	26	438	92	141	49	304	20	59	40	1753
PEAK HR FACTOR :		0.874			0.813			0.936			0.902		0.955

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-105 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Newland St			Newland St			Heil Ave			Heil Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 1	ER 1	WL 1	WT 1	WR 0	TOTAL
4:00 PM	59	103	5	6	113	25	31	8	44	1	11	10	416
4:15 PM	87	121	6	5	93	20	36	18	50	0	14	9	459
4:30 PM	60	121	4	10	100	24	38	7	47	0	10	7	428
4:45 PM	84	118	5	5	92	23	28	12	46	2	17	15	447
5:00 PM	80	131	3	6	94	28	46	10	54	4	7	12	475
5:15 PM	75	116	3	17	77	18	51	13	50	4	11	14	449
5:30 PM	99	129	3	5	95	34	42	17	56	3	16	7	506
5:45 PM	88	116	4	10	92	25	32	12	40	4	8	10	441
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	632	955	33	64	756	197	304	97	387	18	94	84	3621
APPROACH %'s :	39.01%	58.95%	2.04%	6.29%	74.34%	19.37%	38.58%	12.31%	49.11%	9.18%	47.96%	42.86%	
PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	338	494	14	33	358	103	167	52	206	13	51	48	1877
PEAK HR FACTOR :		0.916			0.922			0.924			0.824		0.927

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-106 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Newland St			Newland St			Madison Ave			Madison Ave				UTURNS			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND							
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
LANES:	1	2	0	1	2	0	0	1	0	0	1	0					
7:00 AM	0	61	4	10	141	4	6	8	1	3	4	3	245				
7:15 AM	1	84	8	26	196	4	5	24	7	5	11	23	394				
7:30 AM	4	112	3	41	197	2	9	42	7	2	19	37	475				
7:45 AM	0	91	1	11	190	9	2	5	4	7	32	40	392				
8:00 AM	1	85	0	2	164	1	3	2	5	6	9	8	286				
8:15 AM	2	83	3	4	174	1	2	1	4	1	0	3	278				
8:30 AM	1	83	2	2	181	3	6	2	5	3	4	4	296				
8:45 AM	1	69	2	3	145	6	0	1	5	5	1	3	241				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB	SB	EB	WB
TOTAL VOLUMES :	10	668	23	99	1388	30	33	85	38	32	80	121	2607	0	0	0	0
APPROACH %'s :	1.43%	95.29%	3.28%	6.53%	91.50%	1.98%	21.15%	54.49%	24.36%	13.73%	34.33%	51.93%					
PEAK HR START TIME :	715 AM												TOTAL				
PEAK HR VOL :	6	372	12	80	747	16	19	73	23	20	71	108	1547				
PEAK HR FACTOR :		0.819			0.878			0.496			0.630		0.814				

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-106 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Newland St			Newland St			Madison Ave			Madison Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	2	0	1	2	0	0	1	0	0	1	0	
4:00 PM	3	150	7	8	146	4	7	1	2	2	3	7	340
4:15 PM	0	131	1	5	122	2	7	2	5	2	2	4	283
4:30 PM	1	161	4	5	157	3	2	0	3	3	5	9	353
4:45 PM	2	174	4	2	137	9	5	5	4	2	4	14	362
5:00 PM	6	166	1	3	145	1	4	2	4	1	4	6	343
5:15 PM	2	174	4	9	152	6	7	4	11	4	4	10	387
5:30 PM	3	169	5	10	144	3	7	5	6	2	3	7	364
5:45 PM	3	162	4	4	140	4	5	12	8	5	4	16	367
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	20	1287	30	46	1143	32	44	31	43	21	29	73	2799
APPROACH %'s :	1.50%	96.26%	2.24%	3.77%	93.61%	2.62%	37.29%	26.27%	36.44%	17.07%	23.58%	59.35%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	14	671	14	26	581	14	23	23	29	12	15	39	1461
PEAK HR FACTOR :		0.971			0.930			0.750			0.660		0.944

UTURNS

NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-107 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Newland St			Newland St			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
7:00 AM	8	37	8	31	127	24	10	44	15	29	39	11	383
7:15 AM	18	60	10	36	187	47	15	44	30	37	69	9	562
7:30 AM	15	81	22	35	208	61	22	77	18	25	103	14	681
7:45 AM	16	102	20	35	154	42	20	94	15	31	88	19	636
8:00 AM	10	87	19	29	174	29	17	54	22	31	58	16	546
8:15 AM	14	81	15	23	149	24	17	52	25	41	66	14	521
8:30 AM	24	66	12	20	168	19	15	43	19	42	67	12	507
8:45 AM	24	77	16	20	140	21	16	37	27	26	73	17	494
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	129	591	122	229	1307	267	132	445	171	262	563	112	4330
APPROACH %'s :	15.32%	70.19%	14.49%	12.70%	72.49%	14.81%	17.65%	59.49%	22.86%	27.96%	60.09%	11.95%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	59	330	71	135	723	179	74	269	85	124	318	58	2425
PEAK HR FACTOR :		0.833			0.853			0.829			0.880		0.890

UTURNS

NB	SB	EB	WB
0	0	0	0
0	0	0	0
0	0	2	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	1
0	0	0	0
NB	SB	EB	WB
0	0	2	1

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-107 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Newland St			Newland St			Trask Ave			Trask Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	TOTAL
4:00 PM	14	146	30	19	97	30	23	81	17	53	62	25	597
4:15 PM	12	133	25	15	106	17	18	75	34	44	60	30	569
4:30 PM	16	150	23	16	118	16	32	84	14	41	68	36	614
4:45 PM	22	159	26	14	115	22	26	77	19	42	74	28	624
5:00 PM	22	170	28	14	116	22	23	59	17	57	82	34	644
5:15 PM	21	184	28	7	120	28	42	94	27	53	50	30	684
5:30 PM	26	186	23	13	142	30	25	68	23	42	76	27	681
5:45 PM	23	179	39	12	126	26	38	96	24	51	73	26	713
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	156	1307	222	110	940	191	227	634	175	383	545	236	5126
APPROACH %'s :	9.26%	77.57%	13.18%	8.86%	75.75%	15.39%	21.91%	61.20%	16.89%	32.90%	46.82%	20.27%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	92	719	118	46	504	106	128	317	91	203	281	117	2722
PEAK HR FACTOR :		0.964			0.886			0.822			0.868		0.954

UTURNS	NB	SB	EB	WB
	1	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	0	0	0	0
	NB	SB	EB	WB
	1	0	0	0

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-108 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Bushard St			Bushard St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1.5	0	1.5	0	1	0	1	2	0	1	3	0	
7:00 AM	30	0	36	0	0	0	0	127	34	37	91	0	355
7:15 AM	23	0	55	0	0	0	0	141	42	60	126	0	447
7:30 AM	24	0	78	0	0	0	0	203	46	88	185	0	624
7:45 AM	31	0	76	0	0	0	0	227	41	96	173	0	644
8:00 AM	34	0	89	0	0	0	0	214	49	107	218	0	711
8:15 AM	62	0	98	0	0	0	0	187	45	95	181	0	668
8:30 AM	58	0	69	0	0	0	0	233	44	58	225	0	687
8:45 AM	75	0	80	0	0	0	0	246	58	69	276	0	804
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	337	0	581	0	0	0	0	1578	359	610	1475	0	4940
APPROACH %'s :	36.71%	0.00%	63.29%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	81.47%	18.53%	29.26%	70.74%	0.00%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	229	0	336	0	0	0	0	880	196	329	900	0	2870
PEAK HR FACTOR :		0.883			0.000			0.885			0.891		0.892

UTURNS				
NB	SB	EB	WB	
0	0	0	0	
0	0	0	2	
0	0	0	2	
0	0	0	2	
0	0	0	3	
0	0	0	1	
0	0	0	1	
0	0	0	2	
NB	SB	EB	WB	
0	0	0	13	

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-108 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Bushard St			Bushard St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1.5	NT 0	NR 1.5	SL 0	ST 1	SR 0	EL 1	ET 2	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	74	0	78	0	0	0	0	232	41	64	228	0	717
4:15 PM	58	0	108	0	0	0	1	187	44	71	228	0	697
4:30 PM	77	0	99	0	0	0	0	215	44	66	197	0	698
4:45 PM	73	0	102	0	0	0	0	174	35	72	221	0	677
5:00 PM	93	0	128	0	0	0	0	200	39	85	283	0	828
5:15 PM	79	0	107	0	0	0	0	264	55	75	282	0	862
5:30 PM	81	0	123	0	0	0	0	235	53	95	256	0	843
5:45 PM	101	0	134	0	0	0	0	239	48	82	264	0	868
TOTAL VOLUMES :	NL 636	NT 0	NR 879	SL 0	ST 0	SR 0	EL 1	ET 1746	ER 359	WL 610	WT 1959	WR 0	TOTAL 6190
APPROACH %'s :	41.98%	0.00%	58.02%	#DIV/0!	#DIV/0!	#DIV/0!	0.05%	82.91%	17.05%	23.74%	76.26%	0.00%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	354	0	492	0	0	0	0	938	195	337	1085	0	3401
PEAK HR FACTOR :		0.900			0.000			0.888			0.966		0.980

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	1	2
	0	0	0	0
	0	0	0	0
	0	0	0	2
	0	0	0	3
	0	0	0	0
	0	0	0	1
TOTAL VOLUMES :	NB 0	SB 0	EB 1	WB 8

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-109 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

AM

NS/EW Streets:	Deodora Dr/Swan St			Deodora Dr/Swan St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 1	ST 0	SR 1	EL 1	ET 2	ER 0	WL 1	WT 3	WR 0	TOTAL
7:00 AM	3	1	1	5	0	3	18	154	1	4	103	17	310
7:15 AM	0	2	0	6	0	1	28	183	1	1	120	27	369
7:30 AM	3	1	7	5	1	3	19	234	2	3	187	21	486
7:45 AM	4	0	10	7	0	3	12	250	3	2	181	18	490
8:00 AM	1	0	12	9	0	2	12	240	3	11	217	23	530
8:15 AM	2	2	5	14	0	4	24	217	4	10	185	49	516
8:30 AM	1	2	7	44	1	11	42	230	3	2	182	78	603
8:45 AM	5	6	7	76	2	27	62	219	2	4	236	133	779
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	19	14	49	166	4	54	217	1727	19	37	1411	366	4083
APPROACH %'s :	23.17%	17.07%	59.76%	74.11%	1.79%	24.11%	11.05%	87.98%	0.97%	2.04%	77.78%	20.18%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	9	10	31	143	3	44	140	906	12	27	820	283	2428
PEAK HR FACTOR :		0.694			0.452			0.935			0.757		0.779

UTURNS	NB	SB	EB	WB
	0	0	0	0
	0	0	1	1
	0	0	3	1
	0	0	2	0
	0	0	0	3
	0	0	3	1
	0	1	2	0
	0	0	1	1
	NB	SB	EB	WB
	0	1	12	7

CONTROL : Signalized

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 15-1088-109 **Day:** Tuesday

City: Westminster **Date:** 4/21/2015

PM

NS/EW Streets:	Deodora Dr/Swan St			Deodora Dr/Swan St			Westminster Blvd			Westminster Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 1	ST 0	SR 1	EL 1	ET 2	ER 0	WL 1	WT 3	WR 0	TOTAL
4:00 PM	7	1	5	23	0	18	14	242	6	9	275	29	629
4:15 PM	4	0	2	25	1	16	14	202	4	4	252	24	548
4:30 PM	5	0	6	21	0	7	16	234	5	4	247	27	572
4:45 PM	4	2	5	34	0	13	17	167	3	5	268	23	541
5:00 PM	4	0	7	34	0	13	18	214	7	12	333	29	671
5:15 PM	14	3	12	40	2	16	33	251	9	25	316	34	755
5:30 PM	12	1	13	43	2	23	22	231	4	9	282	36	678
5:45 PM	3	0	7	39	1	16	29	243	9	11	312	43	713
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	53	7	57	259	6	122	163	1784	47	79	2285	245	5107
APPROACH %'s :	45.30%	5.98%	48.72%	66.93%	1.55%	31.52%	8.17%	89.47%	2.36%	3.03%	87.58%	9.39%	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	33	4	39	156	5	68	102	939	29	57	1243	142	2817
PEAK HR FACTOR :		0.655			0.842			0.913			0.961		0.933

UTURNS	NB	SB	EB	WB
	0	0	4	0
	0	0	2	0
	0	0	3	0
	0	0	2	0
	0	0	1	2
	0	0	8	0
	0	0	6	0
	0	0	1	1
	NB	SB	EB	WB
	0	0	27	3

CONTROL : Signalized

Prepared by NDS/ATD

VOLUME

Beach Blvd Bet. Westminster Blvd & Hazard Ave

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_001

DAILY TOTALS	NB	SB	EB	WB	Total
	29,411	26,925	0	0	56,336

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	93		64				157		12:00	407		427				834	
00:15	77		69				146		12:15	422		430				852	
00:30	86		40				126		12:30	473		376				849	
00:45	52	308	45	218			97	526	12:45	440	1742	393	1626			833	3368
01:00	62		41				103		13:00	483		386				869	
01:15	46		30				76		13:15	482		374				856	
01:30	26		25				51		13:30	485		376				861	
01:45	37	171	28	124			65	295	13:45	483	1933	404	1540			887	3473
02:00	40		22				62		14:00	499		408				907	
02:15	22		25				47		14:15	461		414				875	
02:30	32		28				60		14:30	524		405				929	
02:45	26	120	26	101			52	221	14:45	530	2014	448	1675			978	3689
03:00	20		13				33		15:00	563		417				980	
03:15	33		28				61		15:15	505		401				906	
03:30	36		31				67		15:30	556		461				1017	
03:45	31	120	41	113			72	233	15:45	549	2173	407	1686			956	3859
04:00	35		40				75		16:00	579		447				1026	
04:15	38		46				84		16:15	558		432				990	
04:30	70		90				160		16:30	497		455				952	
04:45	67	210	87	263			154	473	16:45	530	2164	484	1818			1014	3982
05:00	64		100				164		17:00	522		450				972	
05:15	94		136				230		17:15	589		469				1058	
05:30	135		189				324		17:30	536		410				946	
05:45	137	430	231	656			368	1086	17:45	462	2109	478	1807			940	3916
06:00	163		228				391		18:00	487		437				924	
06:15	208		321				529		18:15	489		412				901	
06:30	275		357				632		18:30	505		343				848	
06:45	275	921	437	1343			712	2264	18:45	428	1909	303	1495			731	3404
07:00	371		451				822		19:00	435		283				718	
07:15	414		483				897		19:15	379		276				655	
07:30	387		513				900		19:30	336		303				639	
07:45	416	1588	496	1943			912	3531	19:45	364	1514	290	1152			654	2666
08:00	370		464				834		20:00	363		246				609	
08:15	431		503				934		20:15	354		231				585	
08:30	401		474				875		20:30	326		226				552	
08:45	396	1598	474	1915			870	3513	20:45	291	1334	212	915			503	2249
09:00	329		442				771		21:00	326		205				531	
09:15	353		389				742		21:15	277		254				531	
09:30	370		394				764		21:30	270		207				477	
09:45	396	1448	384	1609			780	3057	21:45	213	1086	202	868			415	1954
10:00	391		353				744		22:00	218		167				385	
10:15	363		373				736		22:15	208		179				387	
10:30	370		365				735		22:30	162		158				320	
10:45	398	1522	409	1500			807	3022	22:45	214	802	158	662			372	1464
11:00	395		389				784		23:00	170		111				281	
11:15	424		362				786		23:15	144		96				240	
11:30	408		388				796		23:30	122		82				204	
11:45	403	1630	397	1536			800	3166	23:45	129	565	71	360			200	925
TOTALS		10066		11321				**21387**	**TOTALS**		19345		15604				**34949**
SPLIT %		47.1%		52.9%				**38.0%**	**SPLIT %**		55.4%		44.6%				**62.0%**

DAILY TOTALS	NB	SB	EB	WB	Total
	29,411	26,925	0	0	56,336

AM Peak Hour	11:45	07:30					**07:30**		**PM Peak Hour**	15:30	16:30					**16:30**		
AM Pk Volume	1705	1976					**3580**		**PM Pk Volume**	2242	1858					**3996**		
Pk Hr Factor	0.901	0.963					**0.958**		**Pk Hr Factor**	0.968	0.960					**0.944**		
7 - 9 Volume	3186	3858	0	0			**7044**		**4 - 6 Volume**	4273	3625	0	0			**7898**		
7 - 9 Peak Hour	07:45	07:30					**07:30**		**4 - 6 Peak Hour**	16:45	16:30					**16:30**		
7 - 9 Pk Volume	1618	1976	0	0			**3580**		**4 - 6 Pk Volume**	2177	1858	0	0			**3996**		
Pk Hr Factor	0.939	0.963	0.000	0.000			**0.958**		**Pk Hr Factor**	0.924	0.960	0.000	0.000			**0.944**		

Prepared by NDS/ATD

VOLUME

Bolsa Ave Bet. Hoover St & Beach Blvd

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,398	11,392	23,790

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			13		15		28		12:00			194		178		372	
00:15			7		15		22		12:15			155		183		338	
00:30			12		13		25		12:30			176		165		341	
00:45			7	39	12	55	19	94	12:45			195	720	178	704	373	1424
01:00			15		11		26		13:00			162		180		342	
01:15			5		5		10		13:15			179		176		355	
01:30			3		7		10		13:30			190		186		376	
01:45			5	28	3	26	8	54	13:45			193	724	179	721	372	1445
02:00			7		6		13		14:00			195		160		355	
02:15			4		2		6		14:15			185		203		388	
02:30			3		4		7		14:30			236		224		460	
02:45			3	17	6	18	9	35	14:45			251	867	211	798	462	1665
03:00			3		2		5		15:00			262		217		479	
03:15			2		7		9		15:15			223		171		394	
03:30			7		5		12		15:30			225		178		403	
03:45			2	14	15	29	17	43	15:45			220	930	197	763	417	1693
04:00			7		10		17		16:00			236		201		437	
04:15			7		15		22		16:15			246		231		477	
04:30			13		18		31		16:30			243		210		453	
04:45			8	35	45	88	53	123	16:45			238	963	259	901	497	1864
05:00			21		31		52		17:00			270		253		523	
05:15			20		42		62		17:15			241		292		533	
05:30			27		72		99		17:30			272		283		555	
05:45			37	105	73	218	110	323	17:45			244	1027	243	1071	487	2098
06:00			45		67		112		18:00			197		204		401	
06:15			80		87		167		18:15			178		185		363	
06:30			120		162		282		18:30			180		180		360	
06:45			162	407	165	481	327	888	18:45			168	723	170	739	338	1462
07:00			166		111		277		19:00			186		164		350	
07:15			217		148		365		19:15			142		138		280	
07:30			260		238		498		19:30			150		113		263	
07:45			302	945	278	775	580	1720	19:45			143	621	120	535	263	1156
08:00			304		185		489		20:00			143		110		253	
08:15			278		179		457		20:15			110		82		192	
08:30			240		181		421		20:30			108		75		183	
08:45			211	1033	173	718	384	1751	20:45			107	468	69	336	176	804
09:00			212		169		381		21:00			131		61		192	
09:15			173		186		359		21:15			80		84		164	
09:30			172		143		315		21:30			81		62		143	
09:45			171	728	159	657	330	1385	21:45			66	358	62	269	128	627
10:00			136		141		277		22:00			59		40		99	
10:15			145		142		287		22:15			38		35		73	
10:30			145		170		315		22:30			51		24		75	
10:45			169	595	167	620	336	1215	22:45			35	183	37	136	72	319
11:00			194		167		361		23:00			34		26		60	
11:15			192		174		366		23:15			28		18		46	
11:30			175		151		326		23:30			25		23		48	
11:45			198	759	159	651	357	1410	23:45			22	109	16	83	38	192
TOTALS				4705		4336		**9041**	**TOTALS**				7693		7056		**14749**
SPLIT %				52.0%		48.0%		**38.0%**	**SPLIT %**				52.2%		47.8%		**62.0%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	12,398	11,392	23,790

AM Peak Hour			07:30	07:30	**07:30**	**PM Peak Hour**			17:00	16:45	**16:45**
AM Pk Volume			1144	880	**2024**	**PM Pk Volume**			1027	1087	**2108**
Pk Hr Factor			0.941	0.791	**0.872**	**Pk Hr Factor**			0.944	0.931	**0.950**
7 - 9 Volume	0	0	1978	1493	**3471**	**4 - 6 Volume**	0	0	1990	1972	**3962**
7 - 9 Peak Hour			07:30	07:30	**07:30**	**4 - 6 Peak Hour**			17:00	16:45	**16:45**
7 - 9 Pk Volume	0	0	1144	880	**2024**	**4 - 6 Pk Volume**	0	0	1027	1087	**2108**
Pk Hr Factor	0.000	0.000	0.941	0.791	**0.872**	**Pk Hr Factor**	0.000	0.000	0.944	0.931	**0.950**

Prepared by NDS/ATD

VOLUME

Bolsa Chica Rd Bet. Duncannon Ave & Old Bolsa Chica Rd

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_003

DAILY TOTALS	NB	SB	EB	WB	Total
	20,404	22,255	0	0	42,659

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	22		53				75		12:00	256		234				490	
00:15	28		41				69		12:15	238		244				482	
00:30	30		31				61		12:30	237		234				471	
00:45	31	111	24	149			55	260	12:45	250	981	266	978			516	1959
01:00	18		38				56		13:00	231		239				470	
01:15	25		18				43		13:15	245		226				471	
01:30	5		7				12		13:30	267		249				516	
01:45	12	60	17	80			29	140	13:45	279	1022	257	971			536	1993
02:00	17		19				36		14:00	292		261				553	
02:15	19		16				35		14:15	317		339				656	
02:30	8		16				24		14:30	396		292				688	
02:45	16	60	23	74			39	134	14:45	355	1360	317	1209			672	2569
03:00	13		20				33		15:00	373		326				699	
03:15	18		16				34		15:15	356		352				708	
03:30	27		18				45		15:30	450		335				785	
03:45	20	78	17	71			37	149	15:45	355	1534	407	1420			762	2954
04:00	19		23				42		16:00	455		338				793	
04:15	38		38				76		16:15	396		377				773	
04:30	59		65				124		16:30	449		394				843	
04:45	84	200	101	227			185	427	16:45	438	1738	434	1543			872	3281
05:00	133		93				226		17:00	453		385				838	
05:15	151		147				298		17:15	459		464				923	
05:30	189		244				433		17:30	400		440				840	
05:45	198	671	312	796			510	1467	17:45	331	1643	430	1719			761	3362
06:00	244		247				491		18:00	345		384				729	
06:15	303		295				598		18:15	285		374				659	
06:30	315		342				657		18:30	289		333				622	
06:45	359	1221	470	1354			829	2575	18:45	243	1162	328	1419			571	2581
07:00	369		435				804		19:00	217		268				485	
07:15	421		544				965		19:15	245		258				503	
07:30	365		510				875		19:30	189		265				454	
07:45	397	1552	574	2063			971	3615	19:45	180	831	278	1069			458	1900
08:00	338		474				812		20:00	170		236				406	
08:15	366		467				833		20:15	161		209				370	
08:30	313		376				689		20:30	128		202				330	
08:45	320	1337	350	1667			670	3004	20:45	135	594	209	856			344	1450
09:00	294		313				607		21:00	172		196				368	
09:15	301		232				533		21:15	129		160				289	
09:30	267		276				543		21:30	110		172				282	
09:45	243	1105	270	1091			513	2196	21:45	87	498	147	675			234	1173
10:00	266		263				529		22:00	101		146				247	
10:15	260		236				496		22:15	70		141				211	
10:30	264		238				502		22:30	70		120				190	
10:45	235	1025	239	976			474	2001	22:45	69	310	130	537			199	847
11:00	283		248				531		23:00	74		97				171	
11:15	279		258				537		23:15	55		59				114	
11:30	259		265				524		23:30	52		81				133	
11:45	277	1098	225	996			502	2094	23:45	32	213	78	315			110	528
TOTALS		8518		9544				**18062**	**TOTALS**		11886		12711				**24597**
SPLIT %		47.2%		52.8%				**42.3%**	**SPLIT %**		48.3%		51.7%				**57.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	20,404	22,255	0	0	42,659

AM Peak Hour	07:00	07:15						**07:15**	**PM Peak Hour**	16:30	16:45						**16:30**
AM Pk Volume	1552	2102						**3623**	**PM Pk Volume**	1799	1723						**3476**
Pk Hr Factor	0.922	0.916						**0.933**	**Pk Hr Factor**	0.980	0.928						**0.941**
7 - 9 Volume	2889	3730	0	0				**6619**	**4 - 6 Volume**	3381	3262	0	0				**6643**
7 - 9 Peak Hour	07:00	07:15						**07:15**	**4 - 6 Peak Hour**	16:30	16:45						**16:30**
7 - 9 Pk Volume	1552	2102	0	0				**3623**	**4 - 6 Pk Volume**	1799	1723	0	0				**3476**
Pk Hr Factor	0.922	0.916	0.000	0.000				**0.933**	**Pk Hr Factor**	0.980	0.928	0.000	0.000				**0.941**

Prepared by NDS/ATD

VOLUME

Brookhurst St Bet. Edinger Ave & Margo Ln

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_004

DAILY TOTALS	NB	SB	EB	WB	Total
	18,682	19,321	0	0	38,003

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	61		41				102		12:00	272		262				534	
00:15	44		39				83		12:15	258		277				535	
00:30	45		29				74		12:30	228		310				538	
00:45	31	181	22	131			53	312	12:45	249	1007	295	1144			544	2151
01:00	36		26				62		13:00	256		279				535	
01:15	18		18				36		13:15	268		286				554	
01:30	22		21				43		13:30	247		270				517	
01:45	26	102	21	86			47	188	13:45	274	1045	294	1129			568	2174
02:00	20		21				41		14:00	255		263				518	
02:15	11		12				23		14:15	291		262				553	
02:30	11		8				19		14:30	305		278				583	
02:45	12	54	8	49			20	103	14:45	381	1232	317	1120			698	2352
03:00	12		15				27		15:00	358		291				649	
03:15	13		21				34		15:15	328		315				643	
03:30	11		19				30		15:30	328		293				621	
03:45	12	48	34	89			46	137	15:45	384	1398	278	1177			662	2575
04:00	12		28				40		16:00	360		236				596	
04:15	16		49				65		16:15	411		265				676	
04:30	19		60				79		16:30	386		230				616	
04:45	13	60	59	196			72	256	16:45	400	1557	239	970			639	2527
05:00	25		68				93		17:00	424		240				664	
05:15	34		121				155		17:15	435		299				734	
05:30	37		141				178		17:30	443		297				740	
05:45	40	136	135	465			175	601	17:45	404	1706	287	1123			691	2829
06:00	53		121				174		18:00	399		335				734	
06:15	64		213				277		18:15	379		274				653	
06:30	93		306				399		18:30	372		281				653	
06:45	94	304	313	953			407	1257	18:45	336	1486	227	1117			563	2603
07:00	123		383				506		19:00	338		254				592	
07:15	175		461				636		19:15	356		225				581	
07:30	212		461				673		19:30	299		213				512	
07:45	259	769	460	1765			719	2534	19:45	315	1308	188	880			503	2188
08:00	223		461				684		20:00	296		197				493	
08:15	228		415				643		20:15	243		204				447	
08:30	197		439				636		20:30	266		155				421	
08:45	193	841	395	1710			588	2551	20:45	247	1052	199	755			446	1807
09:00	195		360				555		21:00	203		156				359	
09:15	198		296				494		21:15	184		149				333	
09:30	243		250				493		21:30	212		159				371	
09:45	240	876	243	1149			483	2025	21:45	159	758	132	596			291	1354
10:00	220		249				469		22:00	157		143				300	
10:15	209		240				449		22:15	117		123				240	
10:30	229		250				479		22:30	160		108				268	
10:45	244	902	237	976			481	1878	22:45	102	536	115	489			217	1025
11:00	223		230				453		23:00	87		88				175	
11:15	240		244				484		23:15	85		88				173	
11:30	238		212				450		23:30	98		68				166	
11:45	283	984	274	960			557	1944	23:45	70	340	48	292			118	632
TOTALS		5257		8529				13786	TOTALS		13425		10792				24217
SPLIT %		38.1%		61.9%				36.3%	SPLIT %		55.4%		44.6%				63.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	18,682	19,321	0	0	38,003

AM Peak Hour	11:30	07:15				07:30	PM Peak Hour	17:00	17:15				17:15
AM Pk Volume	1051	1843				2719	PM Pk Volume	1706	1218				2899
Pk Hr Factor	0.928	0.999				0.945	Pk Hr Factor	0.963	0.909				0.979
7 - 9 Volume	1610	3475	0	0		5085	4 - 6 Volume	3263	2093	0	0		5356
7 - 9 Peak Hour	07:30	07:15				07:30	4 - 6 Peak Hour	17:00	17:00				17:00
7 - 9 Pk Volume	922	1843	0	0		2719	4 - 6 Pk Volume	1706	1123	0	0		2829
Pk Hr Factor	0.890	0.999	0.000	0.000		0.945	Pk Hr Factor	0.963	0.939	0.000	0.000		0.956

Prepared by NDS/ATD

VOLUME

Bushard St Bet. McFadden Ave & Bishop Pl

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_005

DAILY TOTALS	NB	SB	EB	WB	Total
	9,392	8,568	0	0	17,960

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	21		18				39		12:00	126		138				264	
00:15	10		12				22		12:15	116		130				246	
00:30	5		5				10		12:30	125		132				257	
00:45	2	38	11	46			13	84	12:45	132	499	85	485			217	984
01:00	5		6				11		13:00	117		94				211	
01:15	9		7				16		13:15	104		105				209	
01:30	10		9				19		13:30	119		128				247	
01:45	4	28	5	27			9	55	13:45	145	485	126	453			271	938
02:00	6		6				12		14:00	145		135				280	
02:15	5		1				6		14:15	136		119				255	
02:30	2		4				6		14:30	207		166				373	
02:45	3	16	2	13			5	29	14:45	179	667	165	585			344	1252
03:00	2		5				7		15:00	263		160				423	
03:15	1		5				6		15:15	187		121				308	
03:30	8		4				12		15:30	170		125				295	
03:45	4	15	9	23			13	38	15:45	197	817	111	517			308	1334
04:00	3		9				12		16:00	188		139				327	
04:15	2		14				16		16:15	209		109				318	
04:30	7		25				32		16:30	205		118				323	
04:45	6	18	14	62			20	80	16:45	220	822	122	488			342	1310
05:00	13		27				40		17:00	224		151				375	
05:15	17		38				55		17:15	239		114				353	
05:30	15		39				54		17:30	244		158				402	
05:45	16	61	36	140			52	201	17:45	222	929	137	560			359	1489
06:00	18		37				55		18:00	219		156				375	
06:15	40		47				87		18:15	190		142				332	
06:30	34		83				117		18:30	192		126				318	
06:45	71	163	122	289			193	452	18:45	151	752	110	534			261	1286
07:00	66		137				203		19:00	145		132				277	
07:15	90		189				279		19:15	150		101				251	
07:30	141		322				463		19:30	133		99				232	
07:45	204	501	225	873			429	1374	19:45	114	542	70	402			184	944
08:00	235		249				484		20:00	65		86				151	
08:15	273		219				492		20:15	94		68				162	
08:30	140		165				305		20:30	92		74				166	
08:45	122	770	213	846			335	1616	20:45	79	330	69	297			148	627
09:00	106		186				292		21:00	72		59				131	
09:15	100		130				230		21:15	83		56				139	
09:30	127		120				247		21:30	67		57				124	
09:45	130	463	107	543			237	1006	21:45	52	274	60	232			112	506
10:00	103		101				204		22:00	55		45				100	
10:15	115		125				240		22:15	50		51				101	
10:30	107		109				216		22:30	59		30				89	
10:45	116	441	120	455			236	896	22:45	34	198	39	165			73	363
11:00	89		126				215		23:00	25		29				54	
11:15	136		100				236		23:15	23		23				46	
11:30	140		122				262		23:30	16		18				34	
11:45	116	481	104	452			220	933	23:45	18	82	11	81			29	163
TOTALS		2995		3769				**6764**	**TOTALS**		6397		4799				**11196**
SPLIT %		44.3%		55.7%				**37.7%**	**SPLIT %**		57.1%		42.9%				**62.3%**

DAILY TOTALS	NB	SB	EB	WB	Total
	9,392	8,568	0	0	17,960

AM Peak Hour	07:30	07:30						**07:30**	**PM Peak Hour**	17:00	14:30						**17:00**
AM Pk Volume	853	1015						**1868**	**PM Pk Volume**	929	612						**1489**
Pk Hr Factor	0.781	0.788						**0.949**	**Pk Hr Factor**	0.952	0.922						**0.926**
7 - 9 Volume	1271	1719	0	0				**2990**	**4 - 6 Volume**	1751	1048	0	0				**2799**
7 - 9 Peak Hour	07:30	07:30						**07:30**	**4 - 6 Peak Hour**	17:00	17:00						**17:00**
7 - 9 Pk Volume	853	1015	0	0				**1868**	**4 - 6 Pk Volume**	929	560	0	0				**1489**
Pk Hr Factor	0.781	0.788	0.000	0.000				**0.949**	**Pk Hr Factor**	0.952	0.886	0.000	0.000				**0.926**

Prepared by NDS/ATD

VOLUME

Edinger Ave Bet. Newland St & Magnolia St

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,085	10,095	20,180

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			27		13		40		12:00			140		115		255	
00:15			21		7		28		12:15			137		145		282	
00:30			13		15		28		12:30			118		144		262	
00:45			16	77	9	44	25	121	12:45			139	534	138	542	277	1076
01:00			11		5		16		13:00			135		134		269	
01:15			12		7		19		13:15			139		125		264	
01:30			7		3		10		13:30			134		136		270	
01:45			11	41	8	23	19	64	13:45			156	564	113	508	269	1072
02:00			5		7		12		14:00			140		152		292	
02:15			6		6		12		14:15			168		166		334	
02:30			11		6		17		14:30			156		154		310	
02:45			3	25	4	23	7	48	14:45			166	630	151	623	317	1253
03:00			3		6		9		15:00			167		161		328	
03:15			3		6		9		15:15			179		203		382	
03:30			8		7		15		15:30			157		176		333	
03:45			5	19	8	27	13	46	15:45			166	669	180	720	346	1389
04:00			7		5		12		16:00			163		202		365	
04:15			8		11		19		16:15			192		206		398	
04:30			10		19		29		16:30			157		194		351	
04:45			17	42	35	70	52	112	16:45			190	702	242	844	432	1546
05:00			23		19		42		17:00			196		237		433	
05:15			24		39		63		17:15			194		232		426	
05:30			24		54		78		17:30			206		227		433	
05:45			34	105	55	167	89	272	17:45			172	768	234	930	406	1698
06:00			43		37		80		18:00			176		223		399	
06:15			62		55		117		18:15			207		215		422	
06:30			91		78		169		18:30			160		202		362	
06:45			107	303	97	267	204	570	18:45			132	675	176	816	308	1491
07:00			130		78		208		19:00			170		172		342	
07:15			208		117		325		19:15			140		166		306	
07:30			220		188		408		19:30			132		152		284	
07:45			204	762	168	551	372	1313	19:45			134	576	126	616	260	1192
08:00			228		151		379		20:00			167		112		279	
08:15			207		150		357		20:15			129		152		281	
08:30			174		146		320		20:30			122		118		240	
08:45			142	751	169	616	311	1367	20:45			97	515	94	476	191	991
09:00			126		140		266		21:00			127		97		224	
09:15			124		119		243		21:15			111		71		182	
09:30			118		109		227		21:30			113		77		190	
09:45			124	492	122	490	246	982	21:45			81	432	79	324	160	756
10:00			109		132		241		22:00			70		56		126	
10:15			113		133		246		22:15			70		74		144	
10:30			127		135		262		22:30			69		35		104	
10:45			125	474	124	524	249	998	22:45			51	260	49	214	100	474
11:00			147		163		310		23:00			42		35		77	
11:15			135		133		268		23:15			30		35		65	
11:30			127		144		271		23:30			36		25		61	
11:45			127	536	129	569	256	1105	23:45			25	133	16	111	41	244
TOTALS				3627		3371		6998	TOTALS				6458		6724		13182
SPLIT %				51.8%		48.2%		34.7%	SPLIT %				49.0%		51.0%		65.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	10,085	10,095	20,180

AM Peak Hour			07:15	07:30	07:30	PM Peak Hour			16:45	16:45	16:45
AM Pk Volume			860	657	1516	PM Pk Volume			786	938	1724
Pk Hr Factor			0.943	0.874	0.929	Pk Hr Factor			0.954	0.969	0.995
7 - 9 Volume	0	0	1513	1167	2680	4 - 6 Volume	0	0	1470	1774	3244
7 - 9 Peak Hour			07:15	07:30	07:30	4 - 6 Peak Hour			16:45	16:45	16:45
7 - 9 Pk Volume	0	0	860	657	1516	4 - 6 Pk Volume	0	0	786	938	1724
Pk Hr Factor	0.000	0.000	0.943	0.874	0.929	Pk Hr Factor	0.000	0.000	0.954	0.969	0.995

Prepared by NDS/ATD

VOLUME

Edwards St Bet. Westminster Blvd & Trask Ave

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_007

DAILY TOTALS	NB	SB	EB	WB	Total
	7,667	7,526	0	0	15,193

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	15		11				26		12:00	91		81				172	
00:15	23		16				39		12:15	90		89				179	
00:30	9		5				14		12:30	100		100				200	
00:45	20	67	16	48			36	115	12:45	93	374	106	376			199	750
01:00	13		9				22		13:00	103		76				179	
01:15	13		8				21		13:15	100		99				199	
01:30	6		5				11		13:30	86		104				190	
01:45	9	41	9	31			18	72	13:45	110	399	107	386			217	785
02:00	9		5				14		14:00	126		116				242	
02:15	3		6				9		14:15	119		118				237	
02:30	4		5				9		14:30	144		132				276	
02:45	6	22	4	20			10	42	14:45	158	547	129	495			287	1042
03:00	2		6				8		15:00	190		137				327	
03:15	3		6				9		15:15	146		135				281	
03:30	3		7				10		15:30	143		131				274	
03:45	4	12	17	36			21	48	15:45	163	642	125	528			288	1170
04:00	9		10				19		16:00	152		112				264	
04:15	5		11				16		16:15	132		125				257	
04:30	9		10				19		16:30	172		137				309	
04:45	14	37	27	58			41	95	16:45	162	618	147	521			309	1139
05:00	14		23				37		17:00	191		137				328	
05:15	19		29				48		17:15	178		155				333	
05:30	30		34				64		17:30	211		161				372	
05:45	34	97	46	132			80	229	17:45	182	762	156	609			338	1371
06:00	41		56				97		18:00	129		167				296	
06:15	53		70				123		18:15	138		160				298	
06:30	63		101				164		18:30	133		169				302	
06:45	88	245	130	357			218	602	18:45	129	529	113	609			242	1138
07:00	95		102				197		19:00	119		88				207	
07:15	119		139				258		19:15	134		94				228	
07:30	116		189				305		19:30	110		104				214	
07:45	141	471	185	615			326	1086	19:45	100	463	92	378			192	841
08:00	131		163				294		20:00	108		80				188	
08:15	109		132				241		20:15	103		76				179	
08:30	105		100				205		20:30	98		71				169	
08:45	94	439	104	499			198	938	20:45	98	407	55	282			153	689
09:00	81		93				174		21:00	101		59				160	
09:15	68		98				166		21:15	90		65				155	
09:30	57		103				160		21:30	80		57				137	
09:45	63	269	109	403			172	672	21:45	57	328	40	221			97	549
10:00	73		88				161		22:00	60		41				101	
10:15	77		64				141		22:15	54		32				86	
10:30	79		86				165		22:30	36		25				61	
10:45	62	291	93	331			155	622	22:45	36	186	42	140			78	326
11:00	81		75				156		23:00	30		32				62	
11:15	96		86				182		23:15	28		22				50	
11:30	80		97				177		23:30	20		23				43	
11:45	68	325	84	342			152	667	23:45	18	96	32	109			50	205
TOTALS		2316		2872				**5188**	**TOTALS**		5351		4654				**10005**
SPLIT %		44.6%		55.4%				**34.1%**	**SPLIT %**		53.5%		46.5%				**65.9%**

DAILY TOTALS	NB	SB	EB	WB	Total
	7,667	7,526	0	0	15,193

AM Peak Hour	07:15	07:15				**07:15**	**PM Peak Hour**	17:00	17:45				**17:00**
AM Pk Volume	507	676				**1183**	**PM Pk Volume**	762	652				**1371**
Pk Hr Factor	0.899	0.894				**0.907**	**Pk Hr Factor**	0.903	0.964				**0.921**
7 - 9 Volume	910	1114	0	0		**2024**	**4 - 6 Volume**	1380	1130	0	0		**2510**
7 - 9 Peak Hour	07:15	07:15				**07:15**	**4 - 6 Peak Hour**	17:00	17:00				**17:00**
7 - 9 Pk Volume	507	676	0	0		**1183**	**4 - 6 Pk Volume**	762	609	0	0		**1371**
Pk Hr Factor	0.899	0.894	0.000	0.000		**0.907**	**Pk Hr Factor**	0.903	0.946	0.000	0.000		**0.921**

Prepared by NDS/ATD

VOLUME

Garden Grove Blvd Bet. Hoover St & Beach Blvd

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_008

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,057	9,648	20,705

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			19	23	42	12:00			169	123	292
00:15			28	15	43	12:15			145	156	301
00:30			24	19	43	12:30			142	167	309
00:45			22	23	45	12:45			151	156	307
			93	80	173				607	602	1209
01:00			15	15	30	13:00			139	136	275
01:15			14	6	20	13:15			180	150	330
01:30			16	11	27	13:30			148	138	286
01:45			18	7	25	13:45			132	144	276
			63	39	102				599	568	1167
02:00			9	16	25	14:00			169	159	328
02:15			7	12	19	14:15			174	145	319
02:30			9	6	15	14:30			198	159	357
02:45			6	4	10	14:45			179	147	326
			31	38	69				720	610	1330
03:00			11	12	23	15:00			176	114	290
03:15			4	7	11	15:15			203	135	338
03:30			6	9	15	15:30			239	152	391
03:45			9	21	30	15:45			185	156	341
			30	49	79				803	557	1360
04:00			11	13	24	16:00			252	136	388
04:15			11	14	25	16:15			233	160	393
04:30			14	20	34	16:30			261	176	437
04:45			19	28	47	16:45			230	171	401
			55	75	130				976	643	1619
05:00			21	30	51	17:00			235	180	415
05:15			28	25	53	17:15			243	165	408
05:30			39	55	94	17:30			228	181	409
05:45			57	75	132	17:45			227	182	409
			145	185	330				933	708	1641
06:00			58	54	112	18:00			217	186	403
06:15			79	69	148	18:15			173	156	329
06:30			92	129	221	18:30			168	140	308
06:45			129	164	293	18:45			150	148	298
			358	416	774				708	630	1338
07:00			186	139	325	19:00			157	130	287
07:15			187	158	345	19:15			164	119	283
07:30			211	273	484	19:30			160	105	265
07:45			173	221	394	19:45			109	99	208
			757	791	1548				590	453	1043
08:00			221	165	386	20:00			148	105	253
08:15			176	144	320	20:15			124	95	219
08:30			141	158	299	20:30			120	86	206
08:45			150	150	300	20:45			108	92	200
			688	617	1305				500	378	878
09:00			138	150	288	21:00			103	59	162
09:15			131	172	303	21:15			97	71	168
09:30			119	172	291	21:30			90	78	168
09:45			128	170	298	21:45			75	70	145
			516	664	1180				365	278	643
10:00			142	113	255	22:00			73	53	126
10:15			122	125	247	22:15			70	38	108
10:30			125	146	271	22:30			54	44	98
10:45			119	117	236	22:45			58	36	94
			508	501	1009				255	171	426
11:00			150	104	254	23:00			45	38	83
11:15			141	121	262	23:15			44	38	82
11:30			150	110	260	23:30			38	28	66
11:45			160	123	283	23:45			29	33	62
			601	458	1059				156	137	293
TOTALS			3845	3913	**7758**	**TOTALS**			7212	5735	**12947**
SPLIT %			49.6%	50.4%	**37.5%**	**SPLIT %**			55.7%	44.3%	**62.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	11,057	9,648	20,705

AM Peak Hour			07:15	07:15	**07:15**	**PM Peak Hour**			16:00	17:15	**16:30**
AM Pk Volume			792	817	**1609**	**PM Pk Volume**			976	714	**1661**
Pk Hr Factor			0.896	0.748	**0.831**	**Pk Hr Factor**			0.935	0.960	**0.950**
7 - 9 Volume	0	0	1445	1408	**2853**	**4 - 6 Volume**	0	0	1909	1351	**3260**
7 - 9 Peak Hour			07:15	07:15	**07:15**	**4 - 6 Peak Hour**			16:00	17:00	**16:30**
7 - 9 Pk Volume	0	0	792	817	**1609**	**4 - 6 Pk Volume**	0	0	976	708	**1661**
Pk Hr Factor	0.000	0.000	0.896	0.748	**0.831**	**Pk Hr Factor**	0.000	0.000	0.935	0.973	**0.950**

Prepared by NDS/ATD

VOLUME

Goldenwest St Bet. Hazard Ave & Main St

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_009

DAILY TOTALS	NB	SB	EB	WB	Total
	17,157	17,184	0	0	34,341

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	34		43						77		12:00	228		266						494	
00:15	42		28						70		12:15	265		234						499	
00:30	28		20						48		12:30	224		272						496	
00:45	27	131	19	110					46	241	12:45	262	979	266	1038					528	2017
01:00	22		13						35		13:00	260		235						495	
01:15	24		18						42		13:15	241		234						475	
01:30	20		17						37		13:30	235		242						477	
01:45	18	84	23	71					41	155	13:45	285	1021	256	967					541	1988
02:00	17		13						30		14:00	286		258						544	
02:15	13		16						29		14:15	263		246						509	
02:30	14		16						30		14:30	272		274						546	
02:45	9	53	10	55					19	108	14:45	317	1138	312	1090					629	2228
03:00	9		8						17		15:00	287		243						530	
03:15	11		15						26		15:15	293		268						561	
03:30	18		25						43		15:30	314		262						576	
03:45	18	56	21	69					39	125	15:45	309	1203	247	1020					556	2223
04:00	14		21						35		16:00	295		234						529	
04:15	15		30						45		16:15	316		272						588	
04:30	22		49						71		16:30	307		277						584	
04:45	33	84	52	152					85	236	16:45	331	1249	298	1081					629	2330
05:00	32		59						91		17:00	343		272						615	
05:15	48		91						139		17:15	364		323						687	
05:30	60		137						197		17:30	354		289						643	
05:45	91	231	143	430					234	661	17:45	331	1392	287	1171					618	2563
06:00	109		156						265		18:00	351		303						654	
06:15	117		183						300		18:15	322		250						572	
06:30	145		264						409		18:30	304		254						558	
06:45	203	574	315	918					518	1492	18:45	275	1252	261	1068					536	2320
07:00	182		267						449		19:00	286		183						469	
07:15	210		353						563		19:15	247		196						443	
07:30	223		382						605		19:30	245		203						448	
07:45	316	931	410	1412					726	2343	19:45	251	1029	187	769					438	1798
08:00	226		316						542		20:00	226		169						395	
08:15	212		346						558		20:15	228		144						372	
08:30	179		321						500		20:30	204		145						349	
08:45	204	821	271	1254					475	2075	20:45	235	893	143	601					378	1494
09:00	192		233						425		21:00	228		115						343	
09:15	186		290						476		21:15	189		135						324	
09:30	191		251						442		21:30	190		130						320	
09:45	188	757	244	1018					432	1775	21:45	164	771	89	469					253	1240
10:00	175		219						394		22:00	143		88						231	
10:15	207		225						432		22:15	105		65						170	
10:30	207		220						427		22:30	88		73						161	
10:45	194	783	292	956					486	1739	22:45	99	435	66	292					165	727
11:00	250		234						484		23:00	92		72						164	
11:15	236		252						488		23:15	72		50						122	
11:30	226		235						461		23:30	77		38						115	
11:45	265	977	256	977					521	1954	23:45	72	313	36	196					108	509
TOTALS		5482		7422						12904	TOTALS		11675		9762						21437
SPLIT %		42.5%		57.5%						37.6%	SPLIT %		54.5%		45.5%						62.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	17,157	17,184	0	0	34,341

AM Peak Hour	11:30	07:15			07:15	PM Peak Hour	17:15	17:15			17:15
AM Pk Volume	984	1461			2436	PM Pk Volume	1400	1202			2602
Pk Hr Factor	0.928	0.891			0.839	Pk Hr Factor	0.962	0.930			0.947
7 - 9 Volume	1752	2666	0	0	4418	4 - 6 Volume	2641	2252	0	0	4893
7 - 9 Peak Hour	07:30	07:15			07:15	4 - 6 Peak Hour	16:45	16:45			16:45
7 - 9 Pk Volume	977	1461	0	0	2436	4 - 6 Pk Volume	1392	1182	0	0	2574
Pk Hr Factor	0.773	0.891	0.000	0.000	0.839	Pk Hr Factor	0.956	0.915	0.000	0.000	0.937

Prepared by NDS/ATD

VOLUME

Hazard Ave Bet. Bushard St & Brookhurst St

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_010

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,052	9,355	17,407

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			18	21	39	12:00			125	136	261
00:15			15	20	35	12:15			114	128	242
00:30			10	17	27	12:30			96	106	202
00:45			13	15	28	12:45			104	96	200
			56	73	129				439	466	905
01:00			15	16	31	13:00			113	126	239
01:15			12	11	23	13:15			100	137	237
01:30			10	12	22	13:30			115	123	238
01:45			8	10	18	13:45			124	117	241
			45	49	94				452	503	955
02:00			7	5	12	14:00			108	125	233
02:15			4	9	13	14:15			123	114	237
02:30			3	6	9	14:30			150	154	304
02:45			5	4	9	14:45			183	174	357
			19	24	43				564	567	1131
03:00			3	7	10	15:00			182	177	359
03:15			2	7	9	15:15			170	153	323
03:30			6	4	10	15:30			127	182	309
03:45			2	4	6	15:45			147	186	333
			13	22	35				626	698	1324
04:00			8	9	17	16:00			122	165	287
04:15			12	9	21	16:15			135	160	295
04:30			12	9	21	16:30			148	176	324
04:45			13	13	26	16:45			126	149	275
			45	40	85				531	650	1181
05:00			18	19	37	17:00			175	207	382
05:15			22	27	49	17:15			151	194	345
05:30			26	22	48	17:30			151	219	370
05:45			27	28	55	17:45			158	219	377
			93	96	189				635	839	1474
06:00			27	26	53	18:00			152	230	382
06:15			32	44	76	18:15			123	171	294
06:30			59	58	117	18:30			129	168	297
06:45			82	73	155	18:45			126	162	288
			200	201	401				530	731	1261
07:00			74	69	143	19:00			134	151	285
07:15			63	97	160	19:15			142	153	295
07:30			89	149	238	19:30			106	125	231
07:45			156	194	350	19:45			105	137	242
			382	509	891				487	566	1053
08:00			160	131	291	20:00			102	160	262
08:15			170	163	333	20:15			117	127	244
08:30			148	135	283	20:30			110	117	227
08:45			123	125	248	20:45			76	102	178
			601	554	1155				405	506	911
09:00			128	124	252	21:00			72	99	171
09:15			122	122	244	21:15			79	106	185
09:30			129	126	255	21:30			74	106	180
09:45			113	132	245	21:45			60	74	134
			492	504	996				285	385	670
10:00			98	112	210	22:00			56	58	114
10:15			107	129	236	22:15			43	67	110
10:30			93	116	209	22:30			50	59	109
10:45			124	132	256	22:45			48	57	105
			422	489	911				197	241	438
11:00			98	112	210	23:00			23	50	73
11:15			110	115	225	23:15			29	46	75
11:30			111	146	257	23:30			26	36	62
11:45			120	106	226	23:45			16	31	47
			439	479	918				94	163	257
TOTALS			2807	3040	**5847**	**TOTALS**			5245	6315	**11560**
SPLIT %			48.0%	52.0%	**33.6%**	**SPLIT %**			45.4%	54.6%	**66.4%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,052	9,355	17,407

AM Peak Hour			07:45	07:30	**07:45**	**PM Peak Hour**			14:30	17:15	**17:00**
AM Pk Volume			634	637	**1257**	**PM Pk Volume**			685	862	**1474**
Pk Hr Factor			0.932	0.821	**0.898**	**Pk Hr Factor**			0.936	0.937	**0.965**
7 - 9 Volume	0	0	983	1063	**2046**	**4 - 6 Volume**	0	0	1166	1489	**2655**
7 - 9 Peak Hour			07:45	07:30	**07:45**	**4 - 6 Peak Hour**			17:00	17:00	**17:00**
7 - 9 Pk Volume	0	0	634	637	**1257**	**4 - 6 Pk Volume**	0	0	635	839	**1474**
Pk Hr Factor	0.000	0.000	0.932	0.821	**0.898**	**Pk Hr Factor**	0.000	0.000	0.907	0.958	**0.965**

Prepared by NDS/ATD

VOLUME

Hoover St Bet. Westminster Blvd & Trask Ave

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_011

DAILY TOTALS	NB	SB	EB	WB	Total
	6,446	6,886	0	0	13,332

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	9		11						20		12:00	95		88						183	
00:15	6		4						10		12:15	79		93						172	
00:30	10		8						18		12:30	81		94						175	
00:45	6	31	5	28					11	59	12:45	85	340	93	368					178	708
01:00	4		7						11		13:00	98		63						161	
01:15	6		5						11		13:15	80		89						169	
01:30	2		2						4		13:30	100		98						198	
01:45	6	18	6	20					12	38	13:45	117	395	85	335					202	730
02:00	6		4						10		14:00	116		115						231	
02:15	2		3						5		14:15	125		117						242	
02:30	2		2						4		14:30	126		145						271	
02:45	4	14	3	12					7	26	14:45	130	497	119	496					249	993
03:00	2		1						3		15:00	146		127						273	
03:15	3		2						5		15:15	131		107						238	
03:30	3		3						6		15:30	149		128						277	
03:45	0	8	5	11					5	19	15:45	111	537	127	489					238	1026
04:00	2		6						8		16:00	146		144						290	
04:15	1		7						8		16:15	139		124						263	
04:30	3		8						11		16:30	156		149						305	
04:45	10	16	11	32					21	48	16:45	137	578	122	539					259	1117
05:00	13		15						28		17:00	174		134						308	
05:15	9		23						32		17:15	138		140						278	
05:30	23		38						61		17:30	152		141						293	
05:45	20	65	31	107					51	172	17:45	138	602	123	538					261	1140
06:00	27		48						75		18:00	118		107						225	
06:15	25		80						105		18:15	122		84						206	
06:30	52		115						167		18:30	104		101						205	
06:45	72	176	119	362					191	538	18:45	108	452	78	370					186	822
07:00	55		131						186		19:00	86		62						148	
07:15	79		200						279		19:15	71		66						137	
07:30	96		228						324		19:30	78		67						145	
07:45	143	373	198	757					341	1130	19:45	64	299	53	248					117	547
08:00	125		142						267		20:00	65		62						127	
08:15	69		134						203		20:15	69		40						109	
08:30	101		131						232		20:30	71		55						126	
08:45	87	382	126	533					213	915	20:45	60	265	38	195					98	460
09:00	80		118						198		21:00	59		40						99	
09:15	83		100						183		21:15	49		42						91	
09:30	85		121						206		21:30	48		28						76	
09:45	92	340	76	415					168	755	21:45	35	191	26	136					61	327
10:00	86		79						165		22:00	32		26						58	
10:15	90		104						194		22:15	27		31						58	
10:30	70		101						171		22:30	20		23						43	
10:45	86	332	88	372					174	704	22:45	19	98	21	101					40	199
11:00	74		90						164		23:00	26		11						37	
11:15	87		92						179		23:15	16		22						38	
11:30	107		97						204		23:30	20		12						32	
11:45	92	360	85	364					177	724	23:45	15	77	13	58					28	135
TOTALS		2115		3013						5128	TOTALS		4331		3873						8204
SPLIT %		41.2%		58.8%						38.5%	SPLIT %		52.8%		47.2%						61.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	6,446	6,886	0	0	13,332

AM Peak Hour	07:15	07:15				07:15	PM Peak Hour	16:15	16:30				16:30
AM Pk Volume	443	768				1211	PM Pk Volume	606	545				1150
Pk Hr Factor	0.774	0.842				0.888	Pk Hr Factor	0.871	0.914				0.933
7 - 9 Volume	755	1290	0	0		2045	4 - 6 Volume	1180	1077	0	0		2257
7 - 9 Peak Hour	07:15	07:15				07:15	4 - 6 Peak Hour	16:15	16:30				16:30
7 - 9 Pk Volume	443	768	0	0		1211	4 - 6 Pk Volume	606	545	0	0		1150
Pk Hr Factor	0.774	0.842	0.000	0.000		0.888	Pk Hr Factor	0.871	0.914	0.000	0.000		0.933

Prepared by NDS/ATD

VOLUME

Magnolia St Bet. Bolsa Ave & Hazard Ave

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_012

DAILY TOTALS	NB	SB	EB	WB	Total
	19,097	18,960	0	0	38,057

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	46		40				86		12:00	300		278				578	
00:15	47		23				70		12:15	273		316				589	
00:30	25		35				60		12:30	269		288				557	
00:45	30	148	30	128			60	276	12:45	324	1166	264	1146			588	2312
01:00	31		26				57		13:00	271		285				556	
01:15	37		28				65		13:15	304		260				564	
01:30	23		19				42		13:30	281		270				551	
01:45	14	105	10	83			24	188	13:45	266	1122	272	1087			538	2209
02:00	13		10				23		14:00	321		259				580	
02:15	16		19				35		14:15	289		272				561	
02:30	22		16				38		14:30	301		311				612	
02:45	21	72	12	57			33	129	14:45	287	1198	306	1148			593	2346
03:00	9		16				25		15:00	331		289				620	
03:15	13		12				25		15:15	358		254				612	
03:30	17		25				42		15:30	309		288				597	
03:45	15	54	23	76			38	130	15:45	351	1349	281	1112			632	2461
04:00	17		22				39		16:00	316		260				576	
04:15	18		28				46		16:15	364		293				657	
04:30	34		63				97		16:30	391		278				669	
04:45	24	93	55	168			79	261	16:45	385	1456	301	1132			686	2588
05:00	48		75				123		17:00	385		290				675	
05:15	54		86				140		17:15	396		316				712	
05:30	64		132				196		17:30	408		280				688	
05:45	79	245	123	416			202	661	17:45	405	1594	278	1164			683	2758
06:00	89		132				221		18:00	404		295				699	
06:15	89		198				287		18:15	379		271				650	
06:30	120		283				403		18:30	391		263				654	
06:45	151	449	330	943			481	1392	18:45	332	1506	244	1073			576	2579
07:00	151		362				513		19:00	332		212				544	
07:15	188		428				616		19:15	303		196				499	
07:30	261		303				564		19:30	302		206				508	
07:45	248	848	359	1452			607	2300	19:45	293	1230	182	796			475	2026
08:00	257		352				609		20:00	249		182				431	
08:15	262		370				632		20:15	234		207				441	
08:30	230		348				578		20:30	208		175				383	
08:45	273	1022	385	1455			658	2477	20:45	210	901	161	725			371	1626
09:00	224		356				580		21:00	192		140				332	
09:15	209		319				528		21:15	192		152				344	
09:30	247		348				595		21:30	186		165				351	
09:45	230	910	291	1314			521	2224	21:45	133	703	138	595			271	1298
10:00	227		286				513		22:00	157		135				292	
10:15	254		262				516		22:15	158		95				253	
10:30	254		300				554		22:30	96		79				175	
10:45	260	995	310	1158			570	2153	22:45	115	526	96	405			211	931
11:00	274		256				530		23:00	85		87				172	
11:15	273		266				539		23:15	84		70				154	
11:30	266		255				521		23:30	51		54				105	
11:45	305	1118	283	1060			588	2178	23:45	67	287	56	267			123	554
TOTALS		6059		8310				14369	TOTALS		13038		10650				23688
SPLIT %		42.2%		57.8%				37.8%	SPLIT %		55.0%		45.0%				62.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	19,097	18,960	0	0	38,057

AM Peak Hour	11:45	08:15					08:00		PM Peak Hour	17:15	16:45					17:15		
AM Pk Volume	1147	1459					2477		PM Pk Volume	1613	1187					2782		
Pk Hr Factor	0.940	0.947					0.941		Pk Hr Factor	0.988	0.939					0.977		
7 - 9 Volume	1870	2907	0	0			4777		4 - 6 Volume	3050	2296	0	0			5346		
7 - 9 Peak Hour	07:30	08:00					08:00		4 - 6 Peak Hour	17:00	16:45					16:45		
7 - 9 Pk Volume	1028	1455	0	0			2477		4 - 6 Pk Volume	1594	1187	0	0			2761		
Pk Hr Factor	0.981	0.945	0.000	0.000			0.941		Pk Hr Factor	0.977	0.939	0.000	0.000			0.969		

Prepared by NDS/ATD

VOLUME

Newland St Bet. McFadden Ave & Bolsa Ave

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_013

DAILY TOTALS	NB	SB	EB	WB	Total
	4,673	6,247	0	0	10,920

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	15		10						25		12:00	55		76						131	
00:15	8		12						20		12:15	61		82						143	
00:30	5		9						14		12:30	52		92						144	
00:45	6	34	9	40					15	74	12:45	76	244	83	333					159	577
01:00	9		5						14		13:00	58		70						128	
01:15	5		4						9		13:15	57		79						136	
01:30	7		4						11		13:30	60		86						146	
01:45	6	27	7	20					13	47	13:45	51	226	80	315					131	541
02:00	7		4						11		14:00	56		99						155	
02:15	3		7						10		14:15	70		78						148	
02:30	0		3						3		14:30	84		88						172	
02:45	0	10	2	16					2	26	14:45	58	268	113	378					171	646
03:00	3		3						6		15:00	92		118						210	
03:15	2		2						4		15:15	102		93						195	
03:30	5		5						10		15:30	95		108						203	
03:45	1	11	6	16					7	27	15:45	97	386	127	446					224	832
04:00	5		4						9		16:00	105		86						191	
04:15	6		16						22		16:15	105		102						207	
04:30	8		18						26		16:30	107		102						209	
04:45	9	28	20	58					29	86	16:45	108	425	115	405					223	830
05:00	17		20						37		17:00	127		106						233	
05:15	16		37						53		17:15	120		111						231	
05:30	16		39						55		17:30	119		118						237	
05:45	17	66	53	149					70	215	17:45	140	506	121	456					261	962
06:00	27		44						71		18:00	135		103						238	
06:15	27		63						90		18:15	104		106						210	
06:30	34		96						130		18:30	113		79						192	
06:45	37	125	98	301					135	426	18:45	105	457	102	390					207	847
07:00	40		113						153		19:00	73		82						155	
07:15	57		129						186		19:15	74		84						158	
07:30	44		147						191		19:30	76		59						135	
07:45	48	189	133	522					181	711	19:45	95	318	56	281					151	599
08:00	61		141						202		20:00	50		49						99	
08:15	61		126						187		20:15	68		58						126	
08:30	74		117						191		20:30	45		56						101	
08:45	71	267	132	516					203	783	20:45	39	202	66	229					105	431
09:00	41		144						185		21:00	40		45						85	
09:15	53		94						147		21:15	42		71						113	
09:30	51		88						139		21:30	43		52						95	
09:45	48	193	76	402					124	595	21:45	36	161	39	207					75	368
10:00	41		63						104		22:00	38		39						77	
10:15	46		65						111		22:15	23		31						54	
10:30	34		73						107		22:30	27		27						54	
10:45	41	162	72	273					113	435	22:45	25	113	32	129					57	242
11:00	54		82						136		23:00	19		22						41	
11:15	47		73						120		23:15	25		22						47	
11:30	47		71						118		23:30	15		13						28	
11:45	38	186	72	298					110	484	23:45	10	69	10	67					20	136
TOTALS		1298		2611						**3909**	**TOTALS**		3375		3636						**7011**
SPLIT %		33.2%		66.8%						**35.8%**	**SPLIT %**		48.1%		51.9%						**64.2%**

DAILY TOTALS	NB	SB	EB	WB	Total
	4,673	6,247	0	0	10,920

AM Peak Hour	08:00	07:15			**08:00**	**PM Peak Hour**	17:15	17:00			**17:15**
AM Pk Volume	267	550			**783**	**PM Pk Volume**	514	456			**967**
Pk Hr Factor	0.902	0.935			**0.964**	**Pk Hr Factor**	0.918	0.942			**0.926**
7 - 9 Volume	456	1038	0	0	**1494**	**4 - 6 Volume**	931	861	0	0	**1792**
7 - 9 Peak Hour	08:00	07:15			**08:00**	**4 - 6 Peak Hour**	17:00	17:00			**17:00**
7 - 9 Pk Volume	267	550	0	0	**783**	**4 - 6 Pk Volume**	506	456	0	0	**962**
Pk Hr Factor	0.902	0.935	0.000	0.000	**0.964**	**Pk Hr Factor**	0.904	0.942	0.000	0.000	**0.921**

Prepared by NDS/ATD

VOLUME

Ward St Bet. Bolsa Ave & Hazard Ave

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_014

DAILY TOTALS	NB	SB	EB	WB	Total
	6,525	6,339	0	0	12,864

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	10		16				26		12:00	83		95				178	
00:15	14		13				27		12:15	94		72				166	
00:30	10		8				18		12:30	78		81				159	
00:45	6	40	7	44			13	84	12:45	88	343	79	327			167	670
01:00	7		6				13		13:00	59		93				152	
01:15	10		15				25		13:15	70		66				136	
01:30	5		4				9		13:30	74		81				155	
01:45	4	26	2	27			6	53	13:45	77	280	105	345			182	625
02:00	3		7				10		14:00	120		82				202	
02:15	4		2				6		14:15	108		97				205	
02:30	1		1				2		14:30	88		129				217	
02:45	6	14	3	13			9	27	14:45	113	429	127	435			240	864
03:00	0		2				2		15:00	165		118				283	
03:15	2		2				4		15:15	142		109				251	
03:30	1		7				8		15:30	129		110				239	
03:45	4	7	2	13			6	20	15:45	118	554	83	420			201	974
04:00	3		6				9		16:00	129		101				230	
04:15	5		8				13		16:15	155		95				250	
04:30	6		10				16		16:30	118		105				223	
04:45	11	25	20	44			31	69	16:45	125	527	111	412			236	939
05:00	7		17				24		17:00	174		115				289	
05:15	17		18				35		17:15	134		103				237	
05:30	18		22				40		17:30	164		120				284	
05:45	10	52	27	84			37	136	17:45	181	653	123	461			304	1114
06:00	29		29				58		18:00	162		103				265	
06:15	30		29				59		18:15	155		119				274	
06:30	41		46				87		18:30	138		90				228	
06:45	42	142	70	174			112	316	18:45	133	588	99	411			232	999
07:00	44		80				124		19:00	118		78				196	
07:15	72		126				198		19:15	108		79				187	
07:30	106		154				260		19:30	123		72				195	
07:45	170	392	143	503			313	895	19:45	99	448	84	313			183	761
08:00	112		152				264		20:00	82		69				151	
08:15	88		127				215		20:15	96		59				155	
08:30	70		131				201		20:30	68		65				133	
08:45	62	332	124	534			186	866	20:45	50	296	63	256			113	552
09:00	81		133				214		21:00	64		47				111	
09:15	66		111				177		21:15	69		47				116	
09:30	88		103				191		21:30	47		54				101	
09:45	74	309	103	450			177	759	21:45	45	225	30	178			75	403
10:00	75		76				151		22:00	44		26				70	
10:15	67		81				148		22:15	41		32				73	
10:30	71		84				155		22:30	34		29				63	
10:45	67	280	72	313			139	593	22:45	29	148	27	114			56	262
11:00	94		114				208		23:00	21		24				45	
11:15	78		102				180		23:15	6		16				22	
11:30	93		76				169		23:30	17		26				43	
11:45	86	351	100	392			186	743	23:45	20	64	10	76			30	140
TOTALS		1970		2591				**4561**	**TOTALS**		4555		3748				**8303**
SPLIT %		43.2%		56.8%				**35.5%**	**SPLIT %**		54.9%		45.1%				**64.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	6,525	6,339	0	0	12,864

AM Peak Hour	07:30	07:30					**07:30**		**PM Peak Hour**	17:30	14:30					**17:30**		
AM Pk Volume	476	576					**1052**		**PM Pk Volume**	662	483					**1127**		
Pk Hr Factor	0.700	0.935					**0.840**		**Pk Hr Factor**	0.914	0.936					**0.927**		
7 - 9 Volume	724	1037	0	0			**1761**		**4 - 6 Volume**	1180	873			0	0	**2053**		
7 - 9 Peak Hour	07:30	07:30					**07:30**		**4 - 6 Peak Hour**	17:00	17:00					**17:00**		
7 - 9 Pk Volume	476	576	0	0			**1052**		**4 - 6 Pk Volume**	653	461			0	0	**1114**		
Pk Hr Factor	0.700	0.935	0.000	0.000			**0.840**		**Pk Hr Factor**	0.902	0.937			0.000	0.000	**0.916**		

Prepared by NDS/ATD

VOLUME

Westminster Blvd Bet. Newland St & Magnolia St

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_015

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,571	13,361	26,932

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			24		44		68		12:00			223		216		439	
00:15			13		28		41		12:15			225		217		442	
00:30			19		26		45		12:30			201		212		413	
00:45			20	76	25	123	45	199	12:45			242	891	194	839	436	1730
01:00			17		17		34		13:00			239		180		419	
01:15			13		23		36		13:15			202		192		394	
01:30			7		8		15		13:30			181		192		373	
01:45			10	47	17	65	27	112	13:45			180	802	169	733	349	1535
02:00			11		15		26		14:00			186		201		387	
02:15			21		12		33		14:15			218		193		411	
02:30			13		5		18		14:30			237		213		450	
02:45			6	51	11	43	17	94	14:45			270	911	238	845	508	1756
03:00			12		5		17		15:00			234		223		457	
03:15			6		3		9		15:15			215		199		414	
03:30			9		6		15		15:30			220		245		465	
03:45			7	34	10	24	17	58	15:45			244	913	252	919	496	1832
04:00			10		10		20		16:00			242		233		475	
04:15			13		15		28		16:15			262		246		508	
04:30			33		23		56		16:30			239		248		487	
04:45			36	92	20	68	56	160	16:45			245	988	249	976	494	1964
05:00			43		31		74		17:00			255		248		503	
05:15			39		21		60		17:15			243		271		514	
05:30			47		38		85		17:30			218		286		504	
05:45			51	180	46	136	97	316	17:45			198	914	286	1091	484	2005
06:00			63		47		110		18:00			203		264		467	
06:15			83		60		143		18:15			157		262		419	
06:30			120		74		194		18:30			202		297		499	
06:45			133	399	90	271	223	670	18:45			182	744	240	1063	422	1807
07:00			185		83		268		19:00			165		231		396	
07:15			227		116		343		19:15			147		227		374	
07:30			311		212		523		19:30			140		194		334	
07:45			349	1072	200	611	549	1683	19:45			138	590	191	843	329	1433
08:00			317		212		529		20:00			173		185		358	
08:15			256		195		451		20:15			166		195		361	
08:30			254		168		422		20:30			122		166		288	
08:45			215	1042	151	726	366	1768	20:45			122	583	178	724	300	1307
09:00			233		178		411		21:00			120		144		264	
09:15			205		167		372		21:15			106		150		256	
09:30			237		181		418		21:30			108		126		234	
09:45			190	865	165	691	355	1556	21:45			69	403	125	545	194	948
10:00			191		196		387		22:00			90		92		182	
10:15			190		162		352		22:15			42		85		127	
10:30			197		190		387		22:30			43		67		110	
10:45			210	788	203	751	413	1539	22:45			44	219	58	302	102	521
11:00			181		169		350		23:00			51		67		118	
11:15			207		188		395		23:15			24		42		66	
11:30			235		196		431		23:30			29		28		57	
11:45			215	838	241	794	456	1632	23:45			25	129	41	178	66	307
TOTALS				5484		4303		9787	TOTALS				8087		9058		17145
SPLIT %				56.0%		44.0%		36.3%	SPLIT %				47.2%		52.8%		63.7%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	13,571	13,361	26,932

AM Peak Hour			07:30	11:45	07:30	PM Peak Hour			16:15	17:45	16:45
AM Pk Volume			1233	886	2052	PM Pk Volume			1001	1109	2015
Pk Hr Factor			0.883	0.919	0.934	Pk Hr Factor			0.955	0.934	0.980
7 - 9 Volume	0	0	2114	1337	3451	4 - 6 Volume	0	0	1902	2067	3969
7 - 9 Peak Hour			07:30	07:30	07:30	4 - 6 Peak Hour			16:15	17:00	16:45
7 - 9 Pk Volume	0	0	1233	819	2052	4 - 6 Pk Volume	0	0	1001	1091	2015
Pk Hr Factor	0.000	0.000	0.883	0.966	0.934	Pk Hr Factor	0.000	0.000	0.955	0.954	0.980

Prepared by NDS/ATD

VOLUME

Westminster Blvd Bet. Hammon Pl & Springdale St

Day: Thursday
Date: 4/16/2015

City: Westminster
Project #: CA15_1089_016

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,411	12,677	27,088

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			23		23		46		12:00			212		168		380	
00:15			16		19		35		12:15			216		205		421	
00:30			17		14		31		12:30			213		228		441	
00:45			10	66	7	63	17	129	12:45			196	837	191	792	387	1629
01:00			7		21		28		13:00			182		170		352	
01:15			15		21		36		13:15			185		190		375	
01:30			6		13		19		13:30			182		170		352	
01:45			8	36	8	63	16	99	13:45			183	732	230	760	413	1492
02:00			7		13		20		14:00			230		185		415	
02:15			16		6		22		14:15			221		218		439	
02:30			9		5		14		14:30			370		196		566	
02:45			10	42	8	32	18	74	14:45			214	1035	217	816	431	1851
03:00			7		4		11		15:00			239		190		429	
03:15			13		10		23		15:15			234		215		449	
03:30			11		3		14		15:30			268		204		472	
03:45			16	47	7	24	23	71	15:45			270	1011	228	837	498	1848
04:00			17		4		21		16:00			290		199		489	
04:15			26		13		39		16:15			300		220		520	
04:30			31		16		47		16:30			333		223		556	
04:45			24	98	22	55	46	153	16:45			299	1222	270	912	569	2134
05:00			48		30		78		17:00			338		231		569	
05:15			74		48		122		17:15			321		248		569	
05:30			86		65		151		17:30			318		224		542	
05:45			82	290	109	252	191	542	17:45			301	1278	255	958	556	2236
06:00			109		88		197		18:00			235		244		479	
06:15			148		95		243		18:15			244		222		466	
06:30			199		128		327		18:30			219		208		427	
06:45			220	676	193	504	413	1180	18:45			207	905	210	884	417	1789
07:00			228		196		424		19:00			174		200		374	
07:15			236		192		428		19:15			183		170		353	
07:30			309		235		544		19:30			149		159		308	
07:45			323	1096	279	902	602	1998	19:45			132	638	187	716	319	1354
08:00			250		228		478		20:00			136		145		281	
08:15			199		200		399		20:15			112		146		258	
08:30			197		196		393		20:30			113		148		261	
08:45			219	865	189	813	408	1678	20:45			107	468	119	558	226	1026
09:00			173		159		332		21:00			75		138		213	
09:15			204		171		375		21:15			78		120		198	
09:30			176		131		307		21:30			75		95		170	
09:45			223	776	172	633	395	1409	21:45			52	280	90	443	142	723
10:00			193		152		345		22:00			54		68		122	
10:15			203		142		345		22:15			55		78		133	
10:30			208		131		339		22:30			41		57		98	
10:45			217	821	157	582	374	1403	22:45			34	184	63	266	97	450
11:00			207		144		351		23:00			48		53		101	
11:15			222		155		377		23:15			34		47		81	
11:30			218		170		388		23:30			29		31		60	
11:45			237	884	184	653	421	1537	23:45			13	124	28	159	41	283
TOTALS				5697		4576		**10273**	**TOTALS**				8714		8101		**16815**
SPLIT %				55.5%		44.5%		**37.9%**	**SPLIT %**				51.8%		48.2%		**62.1%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	14,411	12,677	27,088

AM Peak Hour			07:15	07:30	**07:15**	**PM Peak Hour**			16:30	16:45	**16:30**
AM Pk Volume			1118	942	**2052**	**PM Pk Volume**			1291	973	**2263**
Pk Hr Factor			0.865	0.844	**0.852**	**Pk Hr Factor**			0.955	0.901	**0.994**
7 - 9 Volume	0	0	1961	1715	**3676**	**4 - 6 Volume**	0	0	2500	1870	**4370**
7 - 9 Peak Hour			07:15	07:30	**07:15**	**4 - 6 Peak Hour**			16:30	16:45	**16:30**
7 - 9 Pk Volume	0	0	1118	942	**2052**	**4 - 6 Pk Volume**	0	0	1291	973	**2263**
Pk Hr Factor	0.000	0.000	0.865	0.844	**0.852**	**Pk Hr Factor**	0.000	0.000	0.955	0.901	**0.994**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-001
N/S Street: Bolsa Chica Rd
E/W Street: Churchill Ave
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	1	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	2	1	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**3**	**3**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	3	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	3	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	0	0
4:15 PM	0	0	0	0	1	0	0	0
4:30 PM	0	0	0	0	1	1	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	3	2	0	0
5:45 PM	0	0	0	0	0	1	0	0
TOTALS	**0**	**0**	**0**	**0**	**7**	**4**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	1	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-002
N/S Street: Bolsa Chica Rd
E/W Street: Duncannon Ave
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-003
N/S Street: Bolsa Chica Rd
E/W Street: Old Bolsa Chica Rd
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	2	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-004
N/S Street: Bolsa Chica Rd
E/W Street: Rancho Rd
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	2	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	2	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**3**	**3**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	1	0	0
TOTALS	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-005
N/S Street: Bolsa Chica Rd
E/W Street: St. James St
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	1	0	0
8:15 AM	0	0	0	0	2	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	2	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	1	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	2	0	0	1	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-006
N/S Street: Bolsa Chica Rd
E/W Street: Westminster Blvd
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	1	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	1	2	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	3	0	0	0	1	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0
TOTALS	**4**	**2**	**0**	**0**	**2**	**3**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	1	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	**0**	**0**	**4**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	2	0	4	2	0
5:45 PM	0	0	0	0	1	1	0	0
TOTALS	**0**	**0**	**2**	**2**	**2**	**5**	**2**	**3**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	1	0
5:15 PM	0	1	0	2	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	0	1	0	0	0
TOTALS	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**5**	**1**	**0**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-007
N/S Street: Bushard Ave
E/W Street: Bolsa Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	2
7:15 AM	0	1	1	0	1	0	0	1
7:30 AM	0	0	0	2	1	4	0	0
7:45 AM	0	0	5	3	3	3	1	1
8:00 AM	0	0	0	0	4	3	0	1
8:15 AM	0	1	2	1	2	0	0	2
8:30 AM	2	2	1	2	2	1	1	1
8:45 AM	4	3	1	1	3	1	3	0
TOTALS	**6**	**8**	**10**	**9**	**16**	**12**	**5**	**8**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	2	0	0	1	0	0	1	0	0	3	0
7:15 AM	0	0	0	0	5	0	0	1	0	0	0	0
7:30 AM	0	3	0	0	8	0	0	0	0	0	0	0
7:45 AM	0	0	0	1	1	0	0	0	0	0	4	1
8:00 AM	0	4	0	1	4	0	0	0	0	0	0	0
8:15 AM	0	1	0	1	2	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:45 AM	0	1	0	1	0	0	0	1	0	0	1	0
TOTALS	**0**	**11**	**0**	**4**	**22**	**0**	**0**	**4**	**0**	**0**	**8**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	3	2	1	1	4	0	1
4:15 PM	1	1	0	1	4	2	0	0
4:30 PM	0	1	1	4	0	1	2	0
4:45 PM	2	1	1	2	6	0	0	1
5:00 PM	0	1	0	3	4	2	0	0
5:15 PM	0	0	0	0	2	1	0	1
5:30 PM	0	0	1	0	2	2	0	0
5:45 PM	0	0	0	0	1	2	0	1
TOTALS	**3**	**7**	**5**	**11**	**20**	**14**	**2**	**4**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	2	0	0	0	0	0	1	0	0	0	1
4:15 PM	0	0	0	0	1	0	1	2	0	0	1	0
4:30 PM	0	3	0	0	0	0	1	1	0	0	1	1
4:45 PM	0	1	0	0	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	1	0	0	1	0
5:15 PM	0	4	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	2	0	1	1	0	0	0	0	0	0	0
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0
TOTALS	**0**	**12**	**0**	**2**	**5**	**0**	**2**	**5**	**0**	**0**	**3**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-008
N/S Street: Brookhurst St
E/W Street: Bolsa Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	1	1
7:15 AM	1	1	6	0	1	0	5	5
7:30 AM	1	1	1	1	3	0	1	5
7:45 AM	0	1	4	2	1	0	0	4
8:00 AM	0	0	1	2	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	7
8:30 AM	1	3	0	1	0	0	0	0
8:45 AM	0	0	2	1	1	0	1	1
TOTALS	**3**	**7**	**14**	**7**	**6**	**0**	**8**	**23**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	2	0	0	0	0	0	2	0
7:15 AM	0	1	1	0	1	0	0	1	0	0	1	0
7:30 AM	1	3	0	0	8	0	0	2	0	0	2	0
7:45 AM	0	0	0	0	5	0	0	1	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	2	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	2	0	0	0	0	0	0	0
TOTALS	**1**	**4**	**1**	**0**	**21**	**0**	**0**	**4**	**0**	**0**	**5**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	2	3	1	0	0	2	4
4:15 PM	3	0	2	2	0	0	1	3
4:30 PM	1	2	1	0	0	0	0	5
4:45 PM	3	0	4	2	0	2	3	0
5:00 PM	3	1	1	1	0	5	1	1
5:15 PM	0	1	3	5	0	1	0	2
5:30 PM	2	2	2	1	1	1	5	1
5:45 PM	1	1	1	1	2	0	1	1
TOTALS	**14**	**9**	**17**	**13**	**3**	**9**	**13**	**17**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	1	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	2	0	0	1	0
4:30 PM	0	1	0	0	0	0	0	4	0	0	1	0
4:45 PM	0	3	0	0	1	0	0	2	0	0	0	0
5:00 PM	0	5	0	0	0	0	0	5	0	0	0	0
5:15 PM	0	2	1	0	3	0	0	0	0	0	3	0
5:30 PM	0	0	0	0	4	0	0	1	0	0	1	0
5:45 PM	0	0	0	0	1	1	0	0	0	0	0	0
TOTALS	**0**	**12**	**1**	**0**	**10**	**1**	**0**	**14**	**0**	**0**	**7**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-009
N/S Street: Chestnut St
E/W Street: Bolsa Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	1	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-010
N/S Street: Goldenwest Cir
E/W Street: Bolsa Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	1	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	1	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	2	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	1	0	0	0	2	2	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	1	0	0
5:15 PM	1	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**3**	**0**	**0**	**0**	**2**	**6**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	2	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-011
N/S Street: Cultural Ct/Asian Garden
E/W Street: Bolsa Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	3
7:15 AM	2	5	0	0	0	1	1	2
7:30 AM	2	0	0	0	0	0	1	2
7:45 AM	4	2	0	0	0	0	3	4
8:00 AM	6	3	1	0	0	0	2	4
8:15 AM	2	1	0	1	0	0	1	1
8:30 AM	1	1	1	1	0	0	1	5
8:45 AM	7	0	1	1	0	0	5	5
TOTALS	**24**	**12**	**3**	**4**	**0**	**1**	**14**	**26**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	2	0	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	4	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2	1	0	3	0
8:00 AM	0	0	0	0	0	0	0	3	2	0	3	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	2	0
8:30 AM	1	1	0	0	1	0	0	1	0	0	3	0
8:45 AM	0	0	0	0	0	0	0	2	0	0	1	0
TOTALS	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**15**	**3**	**0**	**15**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	4	0	6	0	0	0	0	6
4:15 PM	0	3	1	1	0	0	3	2
4:30 PM	0	1	0	0	0	0	2	5
4:45 PM	0	1	3	2	0	0	4	1
5:00 PM	3	4	1	3	0	0	10	2
5:15 PM	0	4	0	3	0	0	4	5
5:30 PM	4	3	0	2	0	0	3	5
5:45 PM	0	1	0	1	0	0	4	1
TOTALS	**11**	**17**	**11**	**12**	**0**	**0**	**30**	**27**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	2	0	2	0	0	1	0	0	0	2
4:15 PM	1	0	0	0	1	0	0	1	1	0	1	0
4:30 PM	2	0	0	0	0	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	2	0	0	1	0	0	0	0
5:15 PM	4	1	0	0	1	0	0	0	0	0	1	0
5:30 PM	0	0	0	1	1	0	0	3	0	0	1	1
5:45 PM	1	0	0	0	0	0	0	1	0	0	0	0
TOTALS	**8**	**1**	**2**	**1**	**7**	**0**	**0**	**7**	**2**	**0**	**5**	**3**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-012
N/S Street: Moran St
E/W Street: Bolsa Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	0
7:15 AM	0	7	0	0	0	0	0	0
7:30 AM	0	3	0	0	0	1	0	0
7:45 AM	0	4	0	0	1	0	0	0
8:00 AM	3	0	0	0	0	2	0	0
8:15 AM	1	3	0	2	3	0	0	0
8:30 AM	4	2	1	0	1	2	0	0
8:45 AM	2	1	1	2	1	1	0	0
TOTALS	**10**	**20**	**2**	**5**	**6**	**6**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	1	0	0	0	0	0	0	2	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	1	0	0	0	0	0	2	0	0	0	0
7:45 AM	0	1	0	0	1	0	1	1	0	0	4	0
8:00 AM	0	0	0	0	2	0	0	2	1	0	3	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	3	0
8:30 AM	1	1	0	0	0	0	0	2	0	0	3	1
8:45 AM	0	0	0	0	0	0	0	1	0	0	1	0
TOTALS	**2**	**3**	**0**	**0**	**4**	**0**	**1**	**10**	**1**	**0**	**16**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	2	0	2	4	2	5	0	0
4:15 PM	2	1	3	0	3	1	0	0
4:30 PM	4	1	1	0	0	8	0	0
4:45 PM	1	3	2	2	3	0	0	0
5:00 PM	1	2	2	1	3	5	0	0
5:15 PM	0	2	0	0	1	1	0	1
5:30 PM	4	0	1	0	0	2	0	0
5:45 PM	0	1	2	1	1	2	0	0
TOTALS	**14**	**10**	**13**	**8**	**13**	**24**	**0**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	1	0	0	2	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	3	0
4:30 PM	0	0	0	0	1	0	0	1	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	1	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	1	0
5:30 PM	1	0	0	0	0	0	0	3	0	0	3	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
TOTALS	**1**	**2**	**0**	**0**	**1**	**0**	**0**	**8**	**0**	**0**	**12**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-013
N/S Street: East Dr
E/W Street: Bolsa Ave
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	3	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**5**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-014
N/S Street: Edwards St
E/W Street: Bolsa Ave
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	2	0	1
7:15 AM	0	0	0	0	0	1	0	0
7:30 AM	0	0	0	2	1	2	2	5
7:45 AM	0	2	1	0	2	1	1	2
8:00 AM	1	0	0	0	1	0	3	0
8:15 AM	0	0	2	0	1	0	1	0
8:30 AM	0	0	1	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**1**	**2**	**4**	**2**	**5**	**6**	**7**	**8**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	2	0	0	0	1	1	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	0	2	0	0	2	0	0	0	0	0	4	0
7:45 AM	0	2	0	0	0	0	0	0	0	0	2	0
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:15 AM	1	1	0	0	4	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	2	0	0	0	0	0	1	0
TOTALS	**1**	**8**	**0**	**0**	**9**	**2**	**1**	**1**	**0**	**0**	**8**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	2	0	2	1	3
4:15 PM	0	0	0	0	1	0	1	0
4:30 PM	0	0	0	2	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	1	0	1	0	0	1
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	1	0	1	0	0	0
5:45 PM	0	1	1	0	1	0	1	1
TOTALS	**0**	**2**	**3**	**4**	**6**	**2**	**3**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	1	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0
4:30 PM	0	1	0	0	1	0	1	1	0	0	2	0
4:45 PM	0	3	0	0	2	0	0	2	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	1	1	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**6**	**0**	**0**	**7**	**0**	**2**	**4**	**1**	**0**	**3**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-015
N/S Street: Goldenwest St
E/W Street: Bolsa Ave
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	2	1	0	0
7:15 AM	0	2	0	1	0	0	0	0
7:30 AM	5	0	2	0	1	0	0	2
7:45 AM	0	0	2	0	0	1	0	0
8:00 AM	0	1	0	0	0	0	0	0
8:15 AM	1	1	0	0	1	0	0	2
8:30 AM	0	0	4	0	1	1	0	0
8:45 AM	2	0	2	0	0	2	0	0
TOTALS	**8**	**4**	**10**	**1**	**5**	**5**	**0**	**4**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	3	0
7:30 AM	0	0	0	0	2	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	2	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	3	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	2	0	0	1	0	0	0	0
TOTALS	**1**	**3**	**0**	**0**	**11**	**0**	**0**	**1**	**0**	**0**	**4**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	1
4:15 PM	0	1	2	0	1	1	0	1
4:30 PM	2	4	0	0	0	0	0	0
4:45 PM	0	1	1	0	0	1	1	5
5:00 PM	2	2	0	0	0	1	0	1
5:15 PM	0	1	0	0	0	0	0	1
5:30 PM	3	0	2	0	0	0	1	0
5:45 PM	0	0	0	1	0	0	0	1
TOTALS	**8**	**9**	**5**	**1**	**1**	**3**	**2**	**10**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	3	0	0	2	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	2	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	2	0
5:45 PM	0	3	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**10**	**1**	**0**	**3**	**0**	**0**	**3**	**0**	**0**	**2**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-016
N/S Street: Hoover St
E/W Street: Bolsa Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	0	0	0	0
7:15 AM	0	0	0	3	0	0	1	0
7:30 AM	0	0	0	3	0	0	2	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**6**	**0**	**0**	**3**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	1
7:15 AM	0	0	0	1	0	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	1	0	3	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**2**	**0**	**2**	**0**	**1**	**1**	**0**	**3**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	4	3	0	0	2	5
4:15 PM	1	0	0	0	0	0	0	0
4:30 PM	0	0	2	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	2	2
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	1	0	0	1	1
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**1**	**1**	**7**	**4**	**0**	**0**	**5**	**12**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	1
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	2	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	2	0	0	0	2	0
TOTALS	**0**	**4**	**0**	**2**	**1**	**1**	**2**	**2**	**0**	**0**	**2**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-017
N/S Street: Hope St
E/W Street: Bolsa Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	3	1	1	0	0	0	0
7:15 AM	0	1	1	1	0	0	1	0
7:30 AM	0	0	0	2	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	0	0	3	0	0	0	0	0
8:15 AM	0	0	0	2	1	0	0	0
8:30 AM	1	3	0	0	0	0	0	0
8:45 AM	0	1	2	1	0	0	0	0
TOTALS	**1**	**10**	**7**	**7**	**1**	**0**	**1**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	1	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	1	0	0	0	2	0
7:45 AM	0	2	0	0	0	0	0	3	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	3	0	0	1	0
8:15 AM	0	0	0	0	0	1	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0
8:45 AM	0	0	0	0	0	0	0	1	0	1	1	0
TOTALS	**0**	**2**	**0**	**0**	**0**	**2**	**1**	**9**	**0**	**1**	**9**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	2	0	0	0	0	1	0
4:15 PM	0	0	1	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	2
5:00 PM	0	1	0	0	0	0	0	0
5:15 PM	0	6	1	0	0	0	0	0
5:30 PM	6	0	3	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0
TOTALS	**6**	**9**	**5**	**0**	**0**	**0**	**4**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	5	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	3	0
5:30 PM	0	0	0	0	0	0	1	3	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**0**	**0**	**14**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-018
N/S Street: Magnolia St
E/W Street: Bolsa Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	4	0	2	1	2	2
7:15 AM	0	0	3	0	0	0	0	2
7:30 AM	0	1	6	0	2	2	2	2
7:45 AM	1	0	0	2	0	0	1	0
8:00 AM	0	4	2	0	1	0	2	9
8:15 AM	3	3	5	6	1	2	4	2
8:30 AM	0	4	5	3	0	2	2	6
8:45 AM	3	0	6	9	1	8	2	3
TOTALS	**8**	**14**	**31**	**20**	**7**	**15**	**15**	**26**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	1	0	1	1	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	2	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	2	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	3	0	0	2	0	0	1	0
8:30 AM	0	1	0	0	2	0	0	1	0	0	1	0
8:45 AM	0	2	0	0	0	0	0	0	0	0	1	0
TOTALS	**0**	**7**	**0**	**0**	**12**	**0**	**1**	**5**	**0**	**0**	**4**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	2	1	0	0	0	1
4:15 PM	1	1	5	5	0	1	4	3
4:30 PM	1	0	1	3	0	0	0	0
4:45 PM	8	5	5	7	1	0	2	2
5:00 PM	7	0	5	1	0	0	7	3
5:15 PM	2	0	4	2	0	0	0	1
5:30 PM	2	1	1	4	0	1	3	2
5:45 PM	0	2	2	3	1	0	0	2
TOTALS	**22**	**10**	**25**	**26**	**2**	**2**	**16**	**14**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	2	0	0	1	0
4:15 PM	0	0	0	0	2	0	0	1	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	2	0	0	1	0	0	1	0
5:45 PM	0	0	0	0	3	0	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**8**	**0**	**1**	**5**	**0**	**0**	**2**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-019
N/S Street: Pagoda
E/W Street: Bolsa Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	2	0	0	0	0	0	0
7:15 AM	1	5	1	1	0	0	1	0
7:30 AM	1	2	2	3	0	0	3	1
7:45 AM	1	2	0	1	0	0	0	1
8:00 AM	1	2	6	0	0	0	2	0
8:15 AM	3	0	1	0	0	0	2	3
8:30 AM	0	3	1	1	0	0	1	4
8:45 AM	0	2	0	1	0	0	1	2
TOTALS	**7**	**18**	**11**	**7**	**0**	**0**	**10**	**11**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	2	0
7:30 AM	0	0	1	0	0	0	0	0	0	0	4	0
7:45 AM	1	0	0	0	0	0	0	1	0	0	3	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	1	1	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	5	0	0	5	0
8:45 AM	0	1	0	0	0	1	1	3	0	0	3	0
TOTALS	**1**	**1**	**1**	**0**	**0**	**1**	**2**	**11**	**0**	**0**	**21**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	14	0	0	0	0
4:15 PM	1	1	0	0	0	0	0	1
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	2	0	0	0	0	0	0	0
5:00 PM	0	3	0	0	0	0	0	1
5:15 PM	0	0	0	2	0	0	2	0
5:30 PM	0	0	2	1	0	0	1	1
5:45 PM	0	0	1	1	0	0	1	0
TOTALS	**3**	**6**	**4**	**18**	**0**	**0**	**4**	**3**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	1	0	0	2	0
5:00 PM	0	0	1	0	0	0	0	0	0	0	2	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	0	0	1	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	3	0	0	1	0
TOTALS	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**9**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-020
N/S Street: Purdy St
E/W Street: Bolsa Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	2	0	0
7:15 AM	0	0	0	1	3	1	0	0
7:30 AM	0	0	0	0	1	1	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	2	0	0	0	3	0	0
TOTALS	**0**	**2**	**0**	**1**	**4**	**8**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	1	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	1	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	1	1	0	0	1	0	0	1	0
8:30 AM	0	1	0	0	0	0	0	1	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	1
TOTALS	**1**	**3**	**1**	**1**	**1**	**0**	**0**	**3**	**0**	**0**	**2**	**2**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	1	1	0	0
4:30 PM	1	0	0	0	1	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	3	0	0	0
5:15 PM	0	0	0	0	2	0	0	0
5:30 PM	0	0	0	0	1	2	0	0
5:45 PM	0	0	0	0	1	1	0	0
TOTALS	**2**	**1**	**0**	**0**	**10**	**5**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0
5:45 PM	0	1	0	0	1	0	0	0	1	0	0	1
TOTALS	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	**3**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-021
N/S Street: Victoria Ln
E/W Street: Bolsa Ave
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	1	0	1	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	1
TOTALS	**3**	**0**	**3**	**1**	**0**	**0**	**0**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	2	0
7:45 AM	1	0	0	0	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**1**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	2	0	0	0	4	2
4:15 PM	0	0	4	0	0	0	0	6
4:30 PM	0	0	0	4	0	0	0	5
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	4	0	0	0	0	5
5:15 PM	0	0	1	0	0	0	0	1
5:30 PM	0	2	4	0	0	0	0	6
5:45 PM	0	2	5	0	0	0	0	4
TOTALS	**0**	**4**	**20**	**4**	**0**	**0**	**4**	**29**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	1	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	1
TOTALS	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**2**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-022
N/S Street: Ward St
E/W Street: Bolsa Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	3	0	0
7:15 AM	3	1	1	2	0	5	0	2
7:30 AM	1	1	0	2	0	8	0	5
7:45 AM	1	3	2	2	0	4	0	5
8:00 AM	0	0	2	1	3	1	1	0
8:15 AM	2	2	2	0	3	2	0	2
8:30 AM	1	4	0	0	2	2	0	0
8:45 AM	1	0	0	1	1	2	0	0
TOTALS	**9**	**12**	**7**	**8**	**9**	**27**	**1**	**14**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	1	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	1	0
7:30 AM	0	0	0	0	4	0	0	0	0	1	2	1
7:45 AM	0	0	1	0	2	0	0	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	1	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	1	0	0	0	0	2	1	0
TOTALS	**0**	**2**	**2**	**0**	**9**	**0**	**0**	**3**	**0**	**3**	**6**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	2	0	1	0	2	2
4:15 PM	3	1	0	0	1	1	1	2
4:30 PM	1	2	0	1	2	1	0	0
4:45 PM	1	1	0	0	0	0	0	2
5:00 PM	1	1	2	0	3	1	0	3
5:15 PM	1	0	2	2	3	0	0	0
5:30 PM	0	1	2	0	2	2	0	0
5:45 PM	0	0	1	0	1	1	0	0
TOTALS	**7**	**6**	**9**	**3**	**13**	**6**	**3**	**9**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	2	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	3	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	3	0	0	2	0	0	2	0	0	3	0
5:00 PM	0	3	0	0	2	1	0	2	0	1	2	0
5:15 PM	0	0	1	0	0	0	0	0	0	1	2	0
5:30 PM	0	1	0	0	0	0	0	2	0	0	1	0
5:45 PM	0	3	0	0	0	0	1	2	0	1	1	0
TOTALS	**0**	**12**	**1**	**0**	**7**	**1**	**1**	**8**	**0**	**3**	**10**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-023
N/S Street: West Dr
E/W Street: Bolsa Ave
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	4	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	1	0	1	1	0	0	0	0
8:45 AM	1	0	0	0	0	0	0	0
TOTALS	**2**	**4**	**1**	**1**	**0**	**0**	**1**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	1	0	0	0	0
4:30 PM	0	0	0	5	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	1	0	0	0	1
5:45 PM	0	0	2	0	0	0	0	0
TOTALS	**0**	**0**	**3**	**7**	**0**	**0**	**0**	**3**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-024
N/S Street: Brookhurst St
E/W Street: Bishop Pl
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	2	0	0	0	1	0	2
7:15 AM	2	0	1	0	3	2	2	7
7:30 AM	0	3	0	1	0	0	0	9
7:45 AM	1	2	0	1	2	3	1	4
8:00 AM	0	1	0	3	0	0	0	2
8:15 AM	0	1	0	0	0	0	0	6
8:30 AM	0	0	2	0	1	0	2	5
8:45 AM	0	0	0	0	0	1	2	4
TOTALS	**3**	**9**	**3**	**5**	**6**	**7**	**7**	**39**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	1	0	0	0
7:30 AM	0	0	0	0	11	0	0	1	4	0	0	0
7:45 AM	0	0	0	0	8	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	2	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	2	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	1	0	0	0
8:45 AM	0	1	0	0	2	0	0	1	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**25**	**0**	**0**	**2**	**8**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	1	0	0	2	6
4:15 PM	0	0	0	0	0	0	5	5
4:30 PM	0	5	0	0	3	0	1	4
4:45 PM	1	0	1	0	0	0	3	1
5:00 PM	1	3	0	0	3	0	1	2
5:15 PM	0	0	0	0	0	0	8	0
5:30 PM	0	0	0	1	0	0	5	0
5:45 PM	0	0	0	1	1	0	4	1
TOTALS	**2**	**9**	**1**	**3**	**7**	**0**	**29**	**19**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	2	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	3	0	0	1	0	0	1	0	0	0	0
5:00 PM	0	5	0	0	1	0	0	1	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	2	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**12**	**0**	**0**	**5**	**0**	**0**	**2**	**0**	**0**	**1**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-025
N/S Street: Brookhurst St
E/W Street: Margo Ln
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM								
7:15 AM								
7:30 AM								
7:45 AM								
8:00 AM								
8:15 AM								
8:30 AM								
8:45 AM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM												
7:15 AM												
7:30 AM												
7:45 AM												
8:00 AM												
8:15 AM												
8:30 AM												
8:45 AM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM								
4:15 PM								
4:30 PM								
4:45 PM								
5:00 PM								
5:15 PM								
5:30 PM								
5:45 PM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM												
4:15 PM												
4:30 PM												
4:45 PM												
5:00 PM												
5:15 PM												
5:30 PM												
5:45 PM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-026
N/S Street: Brookhurst St
E/W Street: McFadden Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	3	4	2	1	0	1	6	1
7:15 AM	1	4	3	2	3	4	0	6
7:30 AM	13	9	9	1	3	5	6	10
7:45 AM	3	6	6	1	1	6	9	4
8:00 AM	5	7	0	1	0	1	7	8
8:15 AM	0	3	0	0	0	0	2	5
8:30 AM	5	1	2	1	3	1	3	0
8:45 AM	3	2	1	0	0	1	5	10
TOTALS	**33**	**36**	**23**	**7**	**10**	**19**	**38**	**44**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	1	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	4	0	0	0	0
7:30 AM	0	1	10	4	11	0	0	5	0	0	0	1
7:45 AM	0	0	2	7	4	0	0	12	2	0	0	0
8:00 AM	0	0	0	0	2	0	0	0	2	0	2	0
8:15 AM	0	1	2	1	2	1	0	0	0	1	1	1
8:30 AM	0	0	0	0	1	0	0	0	0	1	0	0
8:45 AM	0	0	0	0	1	0	0	0	1	0	0	0
TOTALS	**0**	**2**	**14**	**12**	**21**	**1**	**0**	**22**	**5**	**2**	**4**	**2**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	14	8	5	2	0	1	2	18
4:15 PM	6	0	2	2	1	0	0	6
4:30 PM	1	3	3	1	6	0	1	4
4:45 PM	4	7	3	3	3	0	0	5
5:00 PM	5	9	6	0	0	0	1	2
5:15 PM	3	9	1	0	0	0	4	5
5:30 PM	6	6	6	2	0	2	0	10
5:45 PM	0	1	0	0	0	0	1	1
TOTALS	**39**	**43**	**26**	**10**	**10**	**3**	**9**	**51**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	1	0	0	0	2	0
4:15 PM	0	0	0	0	1	0	0	2	0	0	1	0
4:30 PM	0	1	2	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	1	0	0	0	0	1	1	0
5:00 PM	0	2	1	0	0	0	0	1	0	1	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	4	0
5:30 PM	0	0	0	0	0	1	0	0	2	0	1	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**3**	**3**	**0**	**2**	**1**	**1**	**3**	**2**	**2**	**11**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-027
N/S Street: Bushard St
E/W Street: Bishop Pl
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	0	0	1	1	0	0
7:15 AM	0	0	6	1	0	2	0	2
7:30 AM	0	0	4	0	1	0	0	1
7:45 AM	6	0	21	1	0	26	0	2
8:00 AM	0	2	46	20	21	26	0	0
8:15 AM	0	0	5	6	4	3	0	1
8:30 AM	0	0	1	0	2	0	0	0
8:45 AM	0	0	2	1	2	1	1	0
TOTALS	**7**	**3**	**85**	**29**	**31**	**59**	**1**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	1	2	0	0	1	1	0	0	0
7:15 AM	1	0	1	4	7	0	0	5	0	0	0	0
7:30 AM	0	0	1	2	4	0	0	2	1	0	0	1
7:45 AM	0	0	0	1	3	0	0	4	0	0	1	0
8:00 AM	0	1	0	3	1	0	0	2	0	0	1	2
8:15 AM	1	0	0	0	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0
8:45 AM	0	1	0	0	3	0	0	0	0	0	0	0
TOTALS	**2**	**3**	**2**	**11**	**21**	**1**	**0**	**14**	**2**	**0**	**2**	**3**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	2	0	0	1	0
4:45 PM	0	1	0	0	0	0	1	0
5:00 PM	0	0	0	0	2	0	0	1
5:15 PM	1	0	0	1	0	0	1	0
5:30 PM	0	0	0	0	1	1	0	0
5:45 PM	0	1	0	1	0	1	0	0
TOTALS	**1**	**2**	**0**	**4**	**4**	**2**	**3**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	1
4:30 PM	0	0	0	0	1	0	0	2	0	1	1	1
4:45 PM	0	0	0	0	0	0	0	2	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	2	0
5:15 PM	2	1	0	1	0	0	0	0	0	0	2	2
5:30 PM	1	3	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	1	0	0	1	0	0	0	2
TOTALS	**3**	**4**	**0**	**1**	**3**	**0**	**0**	**7**	**0**	**1**	**5**	**7**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-028
N/S Street: Bushard St
E/W Street: Hazard Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	0	0	0	1
7:15 AM	0	0	2	0	1	0	0	2
7:30 AM	1	3	1	0	1	0	0	0
7:45 AM	2	1	0	0	0	4	0	3
8:00 AM	0	2	1	0	1	3	1	2
8:15 AM	0	0	3	1	1	1	0	4
8:30 AM	0	0	2	0	4	0	1	0
8:45 AM	0	0	4	0	0	1	0	1
TOTALS	**3**	**6**	**14**	**1**	**8**	**9**	**2**	**13**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	0	0	0	3	0	0	2	0
7:15 AM	0	0	0	0	1	0	0	1	0	0	1	0
7:30 AM	1	2	0	0	1	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	2	0	1	1	0	0	2	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	2	0
8:30 AM	0	1	0	0	1	0	0	1	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	2	0	0	2	0
TOTALS	**1**	**5**	**0**	**0**	**7**	**0**	**1**	**9**	**0**	**0**	**9**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	2	0	1	2	0	0	0
5:00 PM	0	0	0	1	0	1	0	0
5:15 PM	0	0	0	0	0	0	3	0
5:30 PM	0	1	0	1	0	0	0	1
5:45 PM	0	0	0	0	0	1	0	0
TOTALS	**0**	**3**	**1**	**3**	**2**	**3**	**3**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	1	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	2	0	0	3	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	1	0	0	0	0
5:45 PM	0	2	0	0	0	0	0	1	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**5**	**0**	**0**	**3**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-029
N/S Street: Bushard St
E/W Street: McFadden Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	1	1	0	0
7:15 AM	1	0	0	0	2	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	3	0	2	0	1	0	2	0
8:00 AM	0	1	2	0	2	0	0	0
8:15 AM	1	2	1	0	2	0	1	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**5**	**3**	**6**	**0**	**8**	**1**	**3**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	2	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	1	0	0	2	0	1	0	0
7:30 AM	0	0	0	3	1	1	0	4	0	0	0	0
7:45 AM	0	1	0	0	0	1	0	3	0	0	0	0
8:00 AM	0	0	0	0	1	0	1	0	0	0	1	1
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**3**	**5**	**2**	**1**	**10**	**0**	**1**	**2**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	2	0	0	0	1
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	10
4:45 PM	0	0	1	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**3**	**3**	**2**	**0**	**0**	**0**	**13**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	1	0	0	1	0	0	1	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0
4:45 PM	0	0	0	0	2	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	2	0	1	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	3	0
5:45 PM	0	0	0	0	2	0	0	2	0	0	1	0
TOTALS	**0**	**2**	**0**	**0**	**5**	**0**	**0**	**7**	**0**	**2**	**6**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-030
N/S Street: Edwards St
E/W Street: Trask Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	2	0	0	0	0	2
7:15 AM	0	0	0	25	4	6	2	6
7:30 AM	0	0	24	59	11	32	6	4
7:45 AM	0	0	2	5	6	3	1	7
8:00 AM	0	0	0	3	0	1	1	1
8:15 AM	0	0	0	5	1	2	0	1
8:30 AM	0	0	1	2	1	2	0	0
8:45 AM	0	0	0	0	0	2	0	1
TOTALS	**0**	**0**	**29**	**99**	**23**	**48**	**10**	**22**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	1	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	3	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	2	0	0	0	0	0	0	0
7:45 AM	0	1	0	1	3	0	0	0	0	0	2	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**3**	**0**	**1**	**9**	**0**	**0**	**0**	**0**	**2**	**3**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	1	1	0	2
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	2	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	2	2	1	1	3	2
5:45 PM	0	0	4	1	4	0	4	7
TOTALS	**0**	**0**	**9**	**3**	**7**	**2**	**7**	**18**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:45 PM	0	1	1	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	1	0	1	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	1
TOTALS	**0**	**3**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-031
N/S Street: Edwards St
E/W Street: Mar Vista St
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	2
7:30 AM	0	2	0	0	3	0	0	1
7:45 AM	1	0	0	0	0	1	0	0
8:00 AM	1	0	0	0	1	1	1	0
8:15 AM	0	1	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**2**	**3**	**0**	**0**	**4**	**2**	**2**	**4**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	3	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	2	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	3	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	2	0	0	0	0	0	0	0
TOTALS	**0**	**5**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	3	0	2
4:45 PM	2	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	0	0	1
5:15 PM	2	1	0	0	1	0	0	0
5:30 PM	1	0	0	0	2	0	0	0
5:45 PM	1	2	0	0	0	0	1	0
TOTALS	**7**	**4**	**0**	**0**	**3**	**4**	**1**	**4**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	3	0	0	0	0	0	5	1	0	1	0
4:45 PM	0	2	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	2	0
5:30 PM	0	0	0	0	0	0	0	0	1	0	0	0
5:45 PM	0	3	0	0	0	0	1	1	0	0	3	0
TOTALS	**1**	**9**	**0**	**0**	**2**	**0**	**1**	**6**	**2**	**0**	**6**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-032
N/S Street: Edwards St
E/W Street: Royal Oak Dr
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	6	2	0	0	0	0	1	0
7:15 AM	0	4	0	0	0	0	0	2
7:30 AM	1	6	0	0	0	0	0	1
7:45 AM	0	7	0	0	0	0	0	0
8:00 AM	0	3	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	1	0
8:30 AM	1	1	0	0	1	2	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**9**	**23**	**0**	**0**	**1**	**2**	**2**	**3**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	2	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	1	1	0	0	0	0	0	0
7:30 AM	0	1	0	0	3	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	0	1	2	0	0	0	0	0	0
8:15 AM	0	0	0	0	3	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:45 AM	0	0	0	0	2	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**11**	**4**	**0**	**1**	**0**	**0**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	1	0	1
4:15 PM	1	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	1
5:00 PM	0	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**2**	**1**	**0**	**0**	**2**	**2**	**1**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	1	0	0	0	0	0
4:30 PM	1	1	0	0	0	0	1	0	0	0	0	0
4:45 PM	0	3	0	0	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	**1**	**6**	**0**	**0**	**2**	**1**	**2**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-033
N/S Street: Edwards St
E/W Street: Garden Grove Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	1	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	0	0	0	0	0
8:45 AM	0	0	0	2	0	0	0	0
TOTALS	**0**	**0**	**5**	**2**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0
8:15 AM	1	0	0	0	0	0	0	0	0	0	2	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0
TOTALS	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**2**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	1	0	1	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	2	1	0	0	0	0
5:15 PM	0	0	2	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	1	0	0	0	0
TOTALS	**0**	**0**	**4**	**3**	**0**	**1**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0
TOTALS	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-034
N/S Street: Hoover St
E/W Street: Garden Grove Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	3	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	1	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	1	1	1	0	0	1	0
8:00 AM	2	0	1	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	2	1	0	0
8:45 AM	0	1	2	0	0	1	0	0
TOTALS	**3**	**7**	**4**	**2**	**2**	**3**	**1**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	1	0	0	0	0	0	0	1	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	1	2	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0	1	0	1	0
8:30 AM	0	0	0	0	0	1	1	1	0	0	0	0
8:45 AM	1	0	1	0	0	1	0	1	1	0	0	0
TOTALS	**2**	**0**	**2**	**0**	**1**	**3**	**1**	**4**	**2**	**1**	**5**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	2	0	0
4:15 PM	0	2	0	1	0	1	0	0
4:30 PM	1	1	1	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0
5:45 PM	1	0	0	0	0	1	0	0
TOTALS	**2**	**3**	**3**	**1**	**0**	**4**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	2	1	3	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	1	1	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	1	0	1	0	0	1	1	1	1	0	1	0
5:00 PM	1	0	1	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	1	0	1	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	2	1	0	2	0	0	1	0
TOTALS	**2**	**0**	**3**	**0**	**3**	**4**	**2**	**6**	**3**	**1**	**7**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-035
N/S Street: Village Center Dr
E/W Street: Garden Grove Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	5	0	0	0	0	0	0
7:15 AM	0	2	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	7	0	3	1	0	2
8:15 AM	1	0	0	0	1	0	0	0
8:30 AM	0	2	0	1	0	0	0	0
8:45 AM	0	2	1	0	0	1	0	0
TOTALS	**1**	**11**	**8**	**1**	**4**	**3**	**0**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	1	0	0	5	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0
8:45 AM	0	1	0	0	1	0	0	0	0	0	0	2
TOTALS	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**5**	**0**	**0**	**9**	**2**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	13	1	0	0	0	0	0	2
4:15 PM	9	5	0	0	0	0	0	0
4:30 PM	1	1	1	0	1	0	0	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	1	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	2	0	0	0	0	0	0	0
TOTALS	**27**	**7**	**2**	**0**	**1**	**0**	**0**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	5	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	0
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	3	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	1	0
TOTALS	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**9**	**0**	**0**	**7**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-036
N/S Street: Western Ave
E/W Street: Garden Grove Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	3	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	1	2	0	0	0	0	0
8:00 AM	2	0	1	0	0	0	0	0
8:15 AM	1	0	0	1	0	0	0	0
8:30 AM	0	2	0	0	0	0	0	0
8:45 AM	0	0	1	3	0	0	0	0
TOTALS	**4**	**6**	**4**	**4**	**0**	**0**	**1**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	1	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	0	0	2	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**0**	**0**	**7**	**2**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	2	1	0	0	0	0	1
4:15 PM	1	2	0	1	0	0	0	1
4:30 PM	0	2	3	0	0	0	0	1
4:45 PM	0	1	0	0	0	0	0	1
5:00 PM	0	0	0	1	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	1
5:45 PM	1	1	0	0	0	0	1	0
TOTALS	**2**	**8**	**5**	**2**	**0**	**0**	**2**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	3	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	1	1	0	3	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**1**	**0**	**8**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-037
N/S Street: Goldenwest St
E/W Street: 21st St
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	4	1	1	0	1	0	1
7:15 AM	3	6	1	1	1	2	5	3
7:30 AM	3	19	2	3	2	6	0	10
7:45 AM	2	15	0	1	0	3	1	2
8:00 AM	2	4	1	0	0	3	0	4
8:15 AM	2	0	1	3	0	3	1	0
8:30 AM	0	1	2	4	1	2	0	1
8:45 AM	1	4	3	2	2	0	1	5
TOTALS	**15**	**53**	**11**	**15**	**6**	**20**	**8**	**26**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	2	0	0	0	0	0	0	0	0	3	0
7:15 AM	0	1	0	0	5	0	0	1	0	0	5	1
7:30 AM	0	1	0	0	1	0	1	0	0	0	4	0
7:45 AM	0	2	0	0	2	0	0	0	0	0	2	0
8:00 AM	0	2	0	0	0	0	0	0	0	0	2	0
8:15 AM	0	1	0	0	2	0	0	1	0	0	1	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0
TOTALS	**0**	**9**	**0**	**0**	**10**	**1**	**1**	**2**	**0**	**0**	**18**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	2	11	7	8	2	7	1
4:15 PM	1	1	0	1	0	0	4	2
4:30 PM	1	3	5	5	7	1	2	2
4:45 PM	2	3	5	4	0	1	4	3
5:00 PM	3	0	5	0	2	0	4	2
5:15 PM	0	5	4	3	4	1	3	2
5:30 PM	4	1	2	1	3	2	2	2
5:45 PM	2	4	2	2	4	2	0	0
TOTALS	**13**	**19**	**34**	**23**	**28**	**9**	**26**	**14**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	2	0	0	1	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	2	0	0	0	0	0	0	0
4:30 PM	0	1	1	0	1	0	0	0	0	0	1	0
4:45 PM	0	1	0	0	2	1	0	1	0	0	1	0
5:00 PM	0	4	0	0	1	0	0	0	0	0	2	0
5:15 PM	0	1	0	0	0	0	1	1	0	0	1	0
5:30 PM	0	1	0	0	0	0	0	0	1	0	0	0
5:45 PM	0	1	0	0	1	0	0	0	0	1	1	0
TOTALS	**0**	**11**	**1**	**0**	**8**	**1**	**1**	**2**	**1**	**1**	**6**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-038
N/S Street: Goldenwest St
E/W Street: Georgetown Ave
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	2	0	0
7:15 AM	0	1	0	0	1	2	0	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	2	1	1
TOTALS	**0**	**2**	**0**	**0**	**1**	**7**	**1**	**4**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	2	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	2	0	0	1	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**8**	**0**	**0**	**1**	**0**	**0**	**1**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	1	1
4:15 PM	0	0	0	0	2	4	1	1
4:30 PM	0	0	0	0	1	2	0	0
4:45 PM	0	1	0	0	0	0	0	4
5:00 PM	1	0	0	0	0	2	0	2
5:15 PM	2	0	0	0	0	1	0	0
5:30 PM	0	1	0	0	2	1	0	0
5:45 PM	0	1	0	0	1	0	0	2
TOTALS	**3**	**3**	**0**	**0**	**7**	**10**	**2**	**10**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	1	0	0	1	0	0	1	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	1	2	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	2
5:15 PM	0	1	0	0	2	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	3	0	0	2	0	0	0	0	0	0	1
TOTALS	**0**	**8**	**0**	**1**	**8**	**0**	**0**	**1**	**0**	**0**	**0**	**6**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-039
N/S Street: Goldenwest St
E/W Street: Hazard Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	8	0	0	4	1	1	3
7:15 AM	7	12	0	0	8	7	5	1
7:30 AM	8	34	0	0	22	7	8	1
7:45 AM	1	65	0	0	20	6	15	3
8:00 AM	2	5	0	0	1	1	3	2
8:15 AM	0	1	0	0	0	0	0	0
8:30 AM	1	1	0	0	0	1	0	0
8:45 AM	3	1	0	0	1	2	2	0
TOTALS	**23**	**127**	**0**	**0**	**56**	**25**	**34**	**10**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0
7:15 AM	0	0	0	0	2	0	0	1	0	0	0	2
7:30 AM	0	1	0	0	2	0	0	3	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	4	1
8:00 AM	0	0	0	0	1	0	0	0	0	0	1	0
8:15 AM	0	2	0	0	1	1	2	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	1	0	0	1	0	0	0	1
TOTALS	**0**	**3**	**0**	**0**	**8**	**2**	**2**	**5**	**0**	**0**	**7**	**4**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	7	4	0	1	2	8	3	8
4:15 PM	1	3	0	0	6	5	3	1
4:30 PM	4	11	0	0	3	2	1	9
4:45 PM	3	0	0	0	2	3	0	0
5:00 PM	8	2	0	0	5	7	3	1
5:15 PM	7	0	0	0	0	0	1	0
5:30 PM	4	0	0	0	3	1	4	0
5:45 PM	0	2	0	0	3	0	3	1
TOTALS	**34**	**22**	**0**	**1**	**24**	**26**	**18**	**20**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0
4:15 PM	0	1	0	1	1	0	1	0	0	1	0	1
4:30 PM	0	3	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	2	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	1
5:45 PM	0	1	0	0	0	0	0	0	0	1	0	0
TOTALS	**0**	**5**	**0**	**1**	**3**	**0**	**1**	**6**	**0**	**2**	**0**	**3**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-040
N/S Street: Goldenwest St
E/W Street: Main St
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	5	16	0	5	0	0	1	3
7:15 AM	9	27	0	6	2	0	0	3
7:30 AM	8	87	0	24	1	3	1	4
7:45 AM	16	154	7	44	2	6	0	8
8:00 AM	3	30	1	8	1	2	5	3
8:15 AM	2	3	0	4	0	0	0	1
8:30 AM	0	2	0	0	1	0	0	2
8:45 AM	1	1	0	3	0	0	1	3
TOTALS	**44**	**320**	**8**	**94**	**7**	**11**	**8**	**27**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	1	0	0	0	0	1	0
7:15 AM	0	0	0	0	2	2	0	0	0	0	2	0
7:30 AM	0	0	0	0	1	2	0	0	0	0	4	0
7:45 AM	0	1	0	0	0	2	0	4	0	0	9	0
8:00 AM	0	1	0	1	1	1	0	1	0	0	1	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	3	0	0	0	0	1	0	0
TOTALS	**0**	**2**	**0**	**1**	**9**	**8**	**0**	**5**	**0**	**1**	**17**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	14	3	5	0	0	1	2	5
4:15 PM	5	1	3	4	0	0	8	1
4:30 PM	9	1	2	1	0	2	1	2
4:45 PM	8	7	2	3	1	0	4	1
5:00 PM	11	3	0	0	3	1	1	1
5:15 PM	5	4	2	2	6	1	4	0
5:30 PM	9	1	1	0	2	1	1	1
5:45 PM	6	7	2	1	2	2	1	0
TOTALS	**67**	**27**	**17**	**11**	**14**	**8**	**22**	**11**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	2	0	0	7	0	0	1	0
4:15 PM	0	2	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	5	0	0	1	0	0	1	0	0	2	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:15 PM	0	1	0	0	3	0	0	0	0	1	0	0
5:30 PM	0	1	0	0	0	0	1	0	0	0	0	0
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**13**	**0**	**0**	**6**	**0**	**1**	**9**	**0**	**1**	**3**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-041
N/S Street: Goldenwest St
E/W Street: Natal Dr
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	3	1
7:15 AM	0	0	0	0	0	1	3	4
7:30 AM	0	2	0	0	2	0	1	2
7:45 AM	1	3	0	0	1	0	1	4
8:00 AM	1	1	0	0	0	1	1	3
8:15 AM	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	2	0	0
8:45 AM	2	0	0	0	3	3	3	0
TOTALS	**4**	**7**	**0**	**0**	**6**	**7**	**12**	**16**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	2	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	1	0	1
7:30 AM	0	3	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	3	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	2	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**7**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**1**	**0**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	4	2	0	0	1	2	3	2
4:15 PM	1	2	0	0	4	1	1	2
4:30 PM	0	2	0	0	2	0	1	2
4:45 PM	0	1	0	0	0	0	1	0
5:00 PM	0	0	0	0	0	0	2	2
5:15 PM	0	1	0	0	0	1	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	2
TOTALS	**5**	**9**	**0**	**0**	**7**	**4**	**8**	**10**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	2	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	3	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	5	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-042
N/S Street: Goldenwest St
E/W Street: Hood Dr/Lisa Ln
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	2	1	2	1
7:15 AM	0	0	0	0	0	4	2	2
7:30 AM	1	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	1	0	1	0
8:00 AM	0	0	0	0	0	1	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	3	3	0	0
8:45 AM	0	0	0	1	2	3	3	0
TOTALS	**1**	**0**	**0**	**1**	**8**	**13**	**9**	**3**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	2	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	3	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	0	0
4:15 PM	0	0	0	0	2	1	0	1
4:30 PM	0	1	0	0	0	0	0	3
4:45 PM	1	0	1	0	0	0	2	1
5:00 PM	1	0	0	0	0	0	2	1
5:15 PM	0	0	0	0	3	2	0	0
5:30 PM	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	1	0	0
TOTALS	**2**	**1**	**1**	**0**	**6**	**4**	**4**	**7**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	2	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	3	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	2	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**8**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-043
N/S Street: Goldenwest St
E/W Street: Trask Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	1	2	0	0
7:15 AM	2	2	1	0	1	0	0	0
7:30 AM	1	0	6	9	1	0	4	0
7:45 AM	0	1	2	0	1	1	0	4
8:00 AM	0	0	0	0	0	0	1	1
8:15 AM	1	3	0	1	0	0	1	1
8:30 AM	0	4	3	0	1	0	0	4
8:45 AM	0	1	0	0	1	1	0	0
TOTALS	**4**	**11**	**13**	**10**	**6**	**4**	**6**	**10**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	2	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	5	1	0	2	0	0	0	0	0	2	0
7:30 AM	0	1	0	0	1	0	0	1	0	0	1	0
7:45 AM	0	2	0	0	0	0	0	1	0	0	1	2
8:00 AM	0	0	0	0	1	0	0	1	0	0	0	0
8:15 AM	0	0	0	0	2	0	0	3	0	0	3	0
8:30 AM	0	3	0	0	1	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0
TOTALS	**0**	**13**	**1**	**0**	**7**	**0**	**0**	**6**	**0**	**0**	**10**	**2**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	2	0	2	0	0	0
4:15 PM	2	0	2	0	0	2	0	0
4:30 PM	0	0	2	0	0	1	1	0
4:45 PM	1	0	1	1	1	2	0	3
5:00 PM	1	0	1	1	1	4	1	0
5:15 PM	0	0	1	3	0	1	1	0
5:30 PM	2	0	2	0	1	0	1	2
5:45 PM	1	3	0	0	0	0	3	2
TOTALS	**7**	**3**	**11**	**5**	**5**	**10**	**7**	**7**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	1	0	0	0	4	1	0	2	0
4:15 PM	0	0	0	0	0	0	0	2	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	4	0
5:00 PM	0	0	0	0	1	0	0	2	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	1
5:30 PM	0	1	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**1**	**1**	**0**	**0**	**12**	**1**	**0**	**8**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-044
N/S Street: Goldenwest St
E/W Street: Wyoming St
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	1	0	0	4
7:15 AM	0	0	3	2	0	0	1	6
7:30 AM	0	0	0	4	0	2	3	15
7:45 AM	0	0	0	0	1	1	2	1
8:00 AM	0	0	0	1	0	0	0	3
8:15 AM	0	0	1	2	0	0	1	0
8:30 AM	0	0	0	5	0	0	0	3
8:45 AM	0	0	2	1	0	0	1	0
TOTALS	**0**	**0**	**6**	**16**	**2**	**3**	**8**	**32**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	4	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**7**	**0**	**0**	**1**	**0**	**0**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	0	9	2	1	0	12	3
4:15 PM	0	2	2	4	1	0	2	0
4:30 PM	0	0	6	3	1	1	8	5
4:45 PM	0	0	1	2	1	0	0	1
5:00 PM	0	0	3	4	1	1	8	5
5:15 PM	0	0	1	5	0	0	0	1
5:30 PM	1	0	3	3	2	0	0	0
5:45 PM	0	0	6	4	1	0	2	1
TOTALS	**4**	**2**	**31**	**27**	**8**	**2**	**32**	**16**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	2	0	0	1	0	0	1	0	0	0	0
5:00 PM	0	1	0	0	2	0	0	2	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	2	0	0	1	0	0	1	0
TOTALS	**0**	**5**	**0**	**0**	**7**	**0**	**0**	**4**	**0**	**0**	**2**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-045
N/S Street: Hoover St
E/W Street: Hazard Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	3	0	0	0	0	0	1
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	2	1
8:45 AM	0	0	0	0	0	0	1	1
TOTALS	**0**	**4**	**0**	**1**	**0**	**0**	**4**	**3**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	1	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	1	0	5	0
7:30 AM	0	2	0	0	1	0	0	3	0	0	4	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	3	0
8:00 AM	0	2	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	2	0	0	0	0	0	1	0
TOTALS	**0**	**5**	**0**	**0**	**5**	**0**	**0**	**4**	**1**	**0**	**14**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	0	0	0	0	1	0	1
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	1	3	0	0	0	0	1	3
4:45 PM	0	1	0	0	0	0	2	0
5:00 PM	0	1	0	1	0	0	0	0
5:15 PM	5	0	0	0	0	0	1	1
5:30 PM	2	0	0	0	0	0	1	1
5:45 PM	2	0	0	0	0	0	1	0
TOTALS	**13**	**5**	**0**	**1**	**0**	**1**	**7**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	2	0	0	2	0
4:15 PM	0	0	0	0	1	0	0	2	0	0	1	0
4:30 PM	0	1	0	0	1	0	0	1	0	0	1	0
4:45 PM	0	1	0	0	1	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	3	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	1	0
TOTALS	**0**	**3**	**0**	**0**	**4**	**0**	**0**	**10**	**0**	**0**	**5**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-046
N/S Street: Magnolia St
E/W Street: Bishop Pl/Natoma Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	0	1	0	0
7:30 AM	1	1	2	0	2	0	0	0
7:45 AM	0	0	5	0	2	0	0	0
8:00 AM	0	1	0	0	0	2	2	2
8:15 AM	1	2	0	2	2	1	0	3
8:30 AM	1	1	0	1	2	0	2	0
8:45 AM	1	0	1	0	0	0	1	2
TOTALS	**4**	**5**	**8**	**3**	**9**	**4**	**5**	**7**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	2	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	2	0	0	1	0	0	0	0
7:45 AM	0	1	0	1	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	3	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	2	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0
TOTALS	**0**	**10**	**0**	**1**	**4**	**0**	**0**	**1**	**0**	**0**	**1**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	3
4:45 PM	0	0	1	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	1	0	0	0	1
5:30 PM	0	2	0	0	0	0	0	1
5:45 PM	0	2	0	0	0	0	1	0
TOTALS	**1**	**4**	**1**	**1**	**0**	**0**	**1**	**7**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	1	3	0	0	1	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	1	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	1	1	0	1	1	0	0	0	0	0	1
5:45 PM	0	1	0	0	0	0	0	0	0	0	1	0
TOTALS	**0**	**2**	**1**	**1**	**4**	**1**	**1**	**2**	**0**	**1**	**2**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-047
N/S Street: Magnolia St
E/W Street: Edinger Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	3	2	0	1	0	0
7:15 AM	0	0	3	1	0	0	0	0
7:30 AM	2	0	0	0	0	2	0	0
7:45 AM	0	0	2	0	0	0	1	0
8:00 AM	0	2	0	0	2	1	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	1	0	3	1	0	0	1	1
8:45 AM	0	0	0	1	0	3	0	0
TOTALS	**3**	**2**	**11**	**5**	**2**	**7**	**2**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	1	0	0	2	0
7:15 AM	0	0	0	0	1	0	0	1	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	1	0	0	0	1	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	2	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	1	0	0	0	0
TOTALS	**0**	**3**	**0**	**1**	**4**	**0**	**0**	**4**	**0**	**0**	**2**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	1	1	0	0	0	1
4:15 PM	0	0	0	3	0	3	1	1
4:30 PM	1	0	0	2	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	3
5:15 PM	0	0	0	1	1	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	1	0	1	0	1	1	1	1
TOTALS	**3**	**1**	**3**	**7**	**2**	**4**	**3**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	2	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**6**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-048
N/S Street: Magnolia St
E/W Street: Hazard St
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	0	1	0	1	1	0	0
7:15 AM	2	2	1	1	1	1	0	0
7:30 AM	1	3	0	0	0	4	1	1
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	1	2	2	1	2	1	1	0
8:15 AM	0	0	0	0	3	1	1	0
8:30 AM	1	0	1	0	0	0	0	2
8:45 AM	1	3	1	0	0	3	1	3
TOTALS	**8**	**10**	**6**	**2**	**7**	**12**	**4**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	2	0	0	1	1	0	1	0	0	3	0
7:15 AM	0	1	0	0	2	0	0	2	0	0	3	0
7:30 AM	0	0	0	1	3	0	0	4	0	0	1	0
7:45 AM	0	1	0	0	2	0	0	0	0	0	1	0
8:00 AM	0	2	0	0	1	0	0	1	0	0	0	0
8:15 AM	0	3	0	1	0	0	0	1	0	0	0	0
8:30 AM	0	2	0	0	3	0	0	2	0	0	1	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	1
TOTALS	**0**	**11**	**0**	**2**	**13**	**1**	**0**	**11**	**0**	**0**	**9**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	0	0	1	2	1	1	0	0
4:30 PM	0	0	2	0	0	0	0	1
4:45 PM	0	0	1	1	0	1	1	0
5:00 PM	0	1	1	0	2	0	0	0
5:15 PM	0	1	1	0	3	1	0	0
5:30 PM	0	4	0	1	0	0	1	0
5:45 PM	0	1	1	0	3	1	0	0
TOTALS	**1**	**7**	**7**	**4**	**9**	**4**	**2**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	1	0	0	2	0	0	1	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	1	0	0	1	0
5:00 PM	0	1	0	0	1	0	0	2	0	0	0	0
5:15 PM	1	0	0	1	0	0	0	0	0	3	0	1
5:30 PM	0	1	0	0	1	0	0	1	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	0	1	0	1	0
TOTALS	**1**	**5**	**0**	**1**	**4**	**0**	**0**	**6**	**1**	**3**	**4**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-049
N/S Street: Magnolia St
E/W Street: McFadden Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	2	1	0	0
7:15 AM	0	0	1	1	1	0	0	1
7:30 AM	1	0	0	1	0	0	0	0
7:45 AM	0	0	1	0	1	1	0	0
8:00 AM	2	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	0	0	0	0
TOTALS	**4**	**0**	**2**	**3**	**4**	**2**	**1**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0
7:30 AM	0	1	0	0	1	0	0	1	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:30 AM	0	1	0	0	1	0	0	0	0	0	1	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**3**	**0**	**0**	**4**	**0**	**0**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	2	2	0	0	0	1	0
4:15 PM	1	1	0	2	0	0	1	2
4:30 PM	0	1	1	0	0	0	0	1
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	1	1	1	0	2	1	0	1
5:15 PM	0	0	0	0	0	0	2	0
5:30 PM	0	1	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**2**	**6**	**4**	**2**	**3**	**1**	**4**	**8**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	1	0	1	0	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	1	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	1	0	2	0	0	0	1	0	1	0
TOTALS	**0**	**0**	**1**	**0**	**3**	**1**	**2**	**6**	**1**	**1**	**1**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-050
N/S Street: Ward St
E/W Street: McFadden Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	0	2	0	0	0	0	0
7:15 AM	0	1	3	1	0	3	0	0
7:30 AM	3	0	0	1	0	1	0	0
7:45 AM	0	3	0	0	0	0	0	3
8:00 AM	0	1	0	0	0	0	1	2
8:15 AM	0	0	2	0	0	1	1	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**5**	**5**	**7**	**2**	**0**	**5**	**2**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	2	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	1	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:00 AM	0	0	0	1	2	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**1**	**3**	**1**	**0**	**1**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	0	0	0	0	2	0	2
4:15 PM	3	1	2	2	0	2	1	0
4:30 PM	2	1	0	3	0	2	2	0
4:45 PM	0	0	0	2	0	0	0	0
5:00 PM	4	2	0	0	0	2	0	0
5:15 PM	1	0	2	1	0	0	0	0
5:30 PM	0	0	0	2	0	0	0	0
5:45 PM	1	0	0	0	0	0	0	0
TOTALS	**14**	**4**	**4**	**10**	**0**	**8**	**3**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	1	0	0	0	0
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	2	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**4**	**1**	**0**	**1**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-051
N/S Street: Newland St
E/W Street: 15th St
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	1	4	0	1	5
7:15 AM	0	0	8	16	3	8	8	29
7:30 AM	0	0	9	88	7	47	1	61
7:45 AM	0	0	5	36	2	10	1	61
8:00 AM	0	0	3	4	1	3	4	1
8:15 AM	0	0	3	2	2	1	1	3
8:30 AM	0	0	0	0	1	0	0	2
8:45 AM	0	0	2	4	1	2	1	2
TOTALS	**0**	**0**	**31**	**151**	**21**	**71**	**17**	**164**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	3	0	1	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	3	0	1	0	0	0	0	0
7:45 AM	1	2	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0	1	0	0	0
8:15 AM	0	1	0	0	1	1	0	0	0	0	0	0
8:30 AM	0	2	0	0	0	0	1	0	1	0	0	0
8:45 AM	0	1	0	0	2	0	0	0	1	0	0	0
TOTALS	**1**	**10**	**0**	**0**	**11**	**1**	**4**	**0**	**3**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	5	1	1	0	2	5
4:15 PM	0	0	5	4	0	2	1	26
4:30 PM	0	0	8	14	0	5	5	6
4:45 PM	0	0	3	9	4	5	8	8
5:00 PM	0	0	3	2	2	2	4	2
5:15 PM	0	0	5	9	1	3	4	6
5:30 PM	0	0	3	30	0	11	4	8
5:45 PM	0	0	6	26	2	9	1	14
TOTALS	**1**	**0**	**38**	**95**	**10**	**37**	**29**	**75**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	1	1	0	0	0	1	0	0	0	0	0	0
4:15 PM	3	0	0	0	2	1	0	0	1	0	0	0
4:30 PM	0	2	0	0	1	0	0	0	1	0	0	0
4:45 PM	0	1	0	0	2	0	2	0	0	0	0	0
5:00 PM	1	0	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	1	1	1	0	0	0	0	0
5:30 PM	0	2	0	0	1	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**5**	**7**	**0**	**0**	**8**	**3**	**3**	**0**	**3**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-052
N/S Street: Newland St
E/W Street: Oasis Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	4	14	0	0	7	4	0	0
7:30 AM	1	91	0	0	35	1	0	0
7:45 AM	1	23	0	0	9	0	0	0
8:00 AM	1	0	0	0	1	2	0	0
8:15 AM	0	1	0	0	4	4	0	0
8:30 AM	0	0	0	0	1	1	0	0
8:45 AM	1	0	0	0	0	1	0	0
TOTALS	**8**	**130**	**0**	**0**	**57**	**13**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	3	0	0	0	0	0	1	0	0	0	0
7:45 AM	0	4	0	0	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	2	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	2	0	0	0	0	0	0	0
TOTALS	**0**	**12**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**0**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	0	0	0	5	0	0
4:15 PM	0	12	0	0	5	2	0	0
4:30 PM	2	0	0	0	1	1	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	0	0	0
5:15 PM	0	6	0	0	1	0	0	0
5:30 PM	3	19	0	0	4	1	0	0
5:45 PM	5	21	0	0	4	5	0	0
TOTALS	**12**	**59**	**0**	**0**	**15**	**14**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	1	0	0	3	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	2	0	0	0	0
4:30 PM	0	2	0	0	1	0	0	2	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	2	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	2	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**9**	**0**	**0**	**2**	**0**	**0**	**7**	**0**	**0**	**1**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-053
N/S Street: Newland St
E/W Street: McFadden Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	0	0	0	0	1
7:15 AM	1	0	0	0	0	0	0	0
7:30 AM	0	0	1	0	1	1	0	1
7:45 AM	3	0	0	1	1	1	0	0
8:00 AM	2	3	1	0	0	0	0	1
8:15 AM	0	1	1	0	1	0	0	2
8:30 AM	0	1	1	0	0	0	0	1
8:45 AM	3	0	1	0	0	0	2	1
TOTALS	**10**	**5**	**5**	**1**	**3**	**2**	**2**	**7**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	2	0	0	0	0	0	1	0
7:30 AM	0	3	0	0	0	0	0	1	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	1	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	2	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	1	0	0	2	0
TOTALS	**0**	**4**	**0**	**0**	**4**	**1**	**0**	**2**	**0**	**0**	**6**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	1	0	0	0
4:15 PM	0	0	1	0	1	0	0	0
4:30 PM	0	1	0	1	0	0	1	1
4:45 PM	0	0	1	0	0	0	0	0
5:00 PM	3	0	0	0	1	1	0	1
5:15 PM	1	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	1
5:45 PM	0	0	0	0	0	0	1	0
TOTALS	**4**	**2**	**3**	**1**	**3**	**1**	**4**	**3**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	3	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**3**	**0**	**0**	**4**	**0**	**0**	**1**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-054
N/S Street: Newland St
E/W Street: Palos Verdes Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	4	1	0	0	0	4	0	0
7:15 AM	0	0	0	0	1	0	1	0
7:30 AM	0	0	0	1	0	0	0	1
7:45 AM	2	5	0	0	3	1	0	0
8:00 AM	2	20	0	0	0	0	0	0
8:15 AM	10	135	0	0	9	1	2	0
8:30 AM	42	50	0	0	1	11	0	1
8:45 AM	2	1	0	0	0	0	2	0
TOTALS	**62**	**212**	**0**	**1**	**14**	**17**	**5**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	1
7:15 AM	0	0	0	0	2	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	3	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**6**	**0**	**0**	**1**	**0**	**0**	**0**	**2**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	0	0	0	0	0	2	0
4:15 PM	1	1	0	0	1	1	1	1
4:30 PM	0	1	0	0	0	0	0	1
4:45 PM	2	0	0	0	0	0	4	0
5:00 PM	2	0	0	0	0	0	3	1
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	1	0	0	0	0	0	3
5:45 PM	1	2	0	0	0	1	1	1
TOTALS	**9**	**5**	**0**	**0**	**1**	**2**	**11**	**8**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	2	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	1	3	0	0	0	0	0	0	0
5:15 PM	0	2	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**3**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-055
N/S Street: Sringdale St
E/W Street: Iroquois Rd
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	2
7:15 AM	0	0	3	1	0	0	1	3
7:30 AM	0	0	1	1	0	0	0	2
7:45 AM	0	0	0	11	2	4	0	5
8:00 AM	0	0	6	13	2	4	2	3
8:15 AM	0	0	1	1	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**11**	**27**	**4**	**8**	**4**	**16**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	2	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	1	0	0	0	1
7:45 AM	0	0	0	0	1	0	0	0	0	0	1	0
8:00 AM	0	0	0	0	0	0	0	2	0	0	1	1
8:15 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**6**	**0**	**0**	**4**	**0**	**0**	**2**	**3**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	2	0	3	0	0
4:15 PM	0	0	2	1	1	0	0	0
4:30 PM	0	0	1	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	2	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	1	0
5:45 PM	0	0	2	2	2	3	0	3
TOTALS	**0**	**0**	**7**	**6**	**3**	**6**	**2**	**3**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	0	0	0	0	0	1	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	1	0	0
TOTALS	**0**	**6**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-056
N/S Street: Sringdale St
E/W Street: Navajo Rd/Meinhardt Rd
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	2	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	2	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	2	0	0
TOTALS	**4**	**0**	**0**	**0**	**0**	**2**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	0	1	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	1	2	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**1**	**4**	**2**	**0**	**0**	**0**	**1**	**1**	**3**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	2	2	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	1	0	0	0	1	0	0	0
TOTALS	**1**	**3**	**0**	**0**	**5**	**2**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	1	0	0	0	0	0	0	0
4:45 PM	1	0	0	1	0	1	0	0	0	2	0	1
5:00 PM	0	0	0	2	0	0	0	0	0	0	0	1
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	**1**	**5**	**0**	**3**	**3**	**1**	**0**	**0**	**0**	**2**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-057
N/S Street: Descanso Dr
E/W Street: Trask Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	1
7:15 AM	0	0	0	0	0	0	2	0
7:30 AM	3	0	1	3	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	1
8:00 AM	1	1	2	0	0	0	3	1
8:15 AM	0	0	1	1	0	0	0	2
8:30 AM	0	0	0	0	0	0	2	2
8:45 AM	0	0	1	0	0	0	1	1
TOTALS	**4**	**2**	**5**	**5**	**0**	**0**	**8**	**8**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	1	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**4**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	1	0
4:15 PM	0	2	0	1	0	0	1	2
4:30 PM	0	2	2	1	0	0	3	2
4:45 PM	0	1	1	1	0	0	1	0
5:00 PM	1	0	0	0	0	0	0	2
5:15 PM	0	0	2	0	0	0	1	1
5:30 PM	1	0	1	1	0	0	0	2
5:45 PM	0	0	0	1	0	0	0	0
TOTALS	**3**	**5**	**6**	**5**	**0**	**0**	**7**	**9**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	1	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	1	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	1	0	0	1	1
TOTALS	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**5**	**1**	**0**	**3**	**5**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-058
N/S Street: Hoover St
E/W Street: Trask Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	0
7:15 AM	0	2	0	7	0	1	0	1
7:30 AM	0	1	1	1	1	1	0	0
7:45 AM	0	1	3	2	0	1	0	3
8:00 AM	1	0	3	3	1	0	0	2
8:15 AM	1	0	3	1	1	0	0	0
8:30 AM	3	0	0	0	0	1	0	0
8:45 AM	0	1	1	0	0	0	0	1
TOTALS	**5**	**5**	**11**	**15**	**3**	**4**	**0**	**7**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	0	2	0
7:15 AM	1	0	0	0	1	0	1	0	0	2	1	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	1	0	0	0	0	0	0	0	0	1	0
8:00 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	2	0	0	0	0
8:45 AM	0	2	0	0	2	0	0	0	0	0	1	0
TOTALS	**2**	**4**	**0**	**0**	**5**	**1**	**1**	**3**	**0**	**2**	**5**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	1	0	0	0	0	0
4:15 PM	1	2	1	0	1	1	1	1
4:30 PM	2	1	3	0	0	0	1	1
4:45 PM	0	1	1	0	1	0	0	1
5:00 PM	1	2	0	0	1	0	3	1
5:15 PM	2	0	0	0	0	0	0	1
5:30 PM	1	0	0	3	0	1	1	0
5:45 PM	2	0	0	2	0	1	0	0
TOTALS	**10**	**7**	**6**	**5**	**3**	**3**	**6**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	1	0	2	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	1	0	0	2	0	0	1	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0
4:45 PM	0	2	0	0	1	0	0	2	0	0	1	0
5:00 PM	0	2	0	0	1	0	0	1	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	2	0	0	1	0	0	1	0
5:45 PM	0	2	0	0	1	0	0	0	0	0	0	0
TOTALS	**0**	**7**	**2**	**0**	**8**	**0**	**0**	**6**	**0**	**0**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-059
N/S Street: Commerce Wy
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	2	1	0	0	0	1
7:15 AM	1	0	0	1	0	0	2	0
7:30 AM	2	0	9	3	0	0	1	2
7:45 AM	1	0	2	1	0	0	0	1
8:00 AM	2	0	2	0	0	0	2	2
8:15 AM	0	0	1	0	0	0	3	0
8:30 AM	2	7	2	2	0	0	2	6
8:45 AM	2	1	3	0	0	0	1	0
TOTALS	**11**	**8**	**21**	**8**	**0**	**0**	**11**	**12**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	4	1	0	3	0
7:15 AM	1	1	0	0	0	0	0	4	0	1	1	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	1	0
8:00 AM	0	0	0	0	0	0	0	2	0	0	2	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	1
TOTALS	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**13**	**1**	**1**	**9**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	6	4	0	0	3	1
4:15 PM	5	1	4	4	0	0	1	0
4:30 PM	3	3	1	1	0	0	1	1
4:45 PM	1	1	3	5	0	0	0	3
5:00 PM	1	1	3	2	0	0	1	3
5:15 PM	1	3	0	3	0	0	2	3
5:30 PM	0	2	1	1	0	0	1	1
5:45 PM	0	2	2	4	0	0	1	2
TOTALS	**11**	**13**	**20**	**24**	**0**	**0**	**10**	**14**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	1	1	0	0	3	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	1	0
4:45 PM	0	0	0	0	0	2	0	0	0	0	`	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	1	0
5:15 PM	0	0	1	0	0	0	0	3	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**2**	**2**	**9**	**0**	**0**	**6**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-060
N/S Street: Edwards St
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	6	5	2	8	3	2
7:15 AM	3	2	1	1	0	7	3	1
7:30 AM	5	1	1	0	2	9	1	1
7:45 AM	2	0	1	1	0	0	4	3
8:00 AM	0	0	2	1	1	2	1	1
8:15 AM	1	4	0	0	1	3	0	3
8:30 AM	0	1	2	0	2	0	1	0
8:45 AM	2	1	0	2	0	2	1	1
TOTALS	**14**	**10**	**13**	**10**	**8**	**31**	**14**	**12**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	1	0	0	3	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	1	0	0	3	0
7:30 AM	0	0	0	0	4	0	0	4	0	0	2	0
7:45 AM	0	3	0	0	4	0	0	3	0	0	1	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:15 AM	0	1	0	0	0	0	0	2	0	0	0	0
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**7**	**0**	**0**	**11**	**0**	**0**	**13**	**0**	**0**	**7**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	4	1	3	2	1	3	1
4:15 PM	3	4	0	0	3	3	0	2
4:30 PM	0	1	0	2	2	1	1	0
4:45 PM	1	0	1	2	3	1	0	1
5:00 PM	0	2	1	1	2	0	1	1
5:15 PM	2	0	0	3	0	0	1	1
5:30 PM	2	2	0	2	0	0	4	0
5:45 PM	4	0	0	0	2	0	1	0
TOTALS	**13**	**13**	**3**	**13**	**14**	**6**	**11**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	2	0	0	1	0	0	4	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	2	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0
4:45 PM	0	2	0	0	0	0	0	3	0	0	1	0
5:00 PM	0	1	0	0	0	0	0	1	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	3	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	1	0	0	1	0
5:45 PM	0	2	0	0	0	0	0	3	0	0	2	0
TOTALS	**0**	**8**	**0**	**0**	**1**	**0**	**0**	**18**	**0**	**0**	**8**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-061
N/S Street: Goldenwest St
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	2	6	0	5	4	8
7:15 AM	1	2	4	7	1	6	2	12
7:30 AM	0	4	5	11	2	5	4	26
7:45 AM	2	2	3	3	0	0	0	14
8:00 AM	2	2	1	3	1	2	1	4
8:15 AM	1	2	6	1	0	0	2	1
8:30 AM	0	1	5	3	0	1	1	2
8:45 AM	1	0	3	1	0	2	1	0
TOTALS	**8**	**14**	**29**	**35**	**4**	**21**	**15**	**67**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	1	1	0	0	1	0	0	4	0	0	2	0
7:15 AM	0	0	0	0	7	0	0	3	0	0	4	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	1	0
8:00 AM	0	1	0	0	1	0	0	0	0	0	2	0
8:15 AM	0	0	0	0	2	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	2	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	2	0	0	3	1
TOTALS	**1**	**4**	**0**	**0**	**13**	**0**	**0**	**9**	**0**	**0**	**13**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	2	6	9	1	3	1	8	4
4:15 PM	4	2	1	0	1	3	4	5
4:30 PM	3	5	8	0	4	7	6	9
4:45 PM	2	5	4	1	2	2	10	3
5:00 PM	0	1	7	1	9	1	8	7
5:15 PM	2	5	2	5	7	6	8	3
5:30 PM	1	1	2	5	3	8	5	1
5:45 PM	0	1	6	1	1	1	3	5
TOTALS	**14**	**26**	**39**	**14**	**30**	**29**	**52**	**37**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	5	1	1	3	0	0	2	0	0	1	0
4:15 PM	0	1	0	0	1	0	0	2	0	0	2	0
4:30 PM	0	2	0	0	1	0	0	2	0	0	2	0
4:45 PM	0	1	0	0	0	0	0	1	0	0	3	0
5:00 PM	0	2	0	0	0	0	0	3	0	0	0	0
5:15 PM	0	0	0	0	1	0	0	4	0	0	2	0
5:30 PM	0	1	0	0	1	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	2	1	0	1	0
TOTALS	**0**	**12**	**1**	**1**	**7**	**0**	**0**	**16**	**1**	**0**	**12**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-062
N/S Street: Hoover St
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	1	0	0	2	0	0
7:15 AM	1	0	2	7	0	3	0	4
7:30 AM	0	5	3	8	0	3	1	4
7:45 AM	2	1	3	0	3	3	0	4
8:00 AM	0	3	1	1	1	2	0	1
8:15 AM	3	0	5	2	0	1	2	1
8:30 AM	1	0	1	1	0	0	1	0
8:45 AM	0	0	1	0	1	2	1	0
TOTALS	**8**	**11**	**17**	**19**	**5**	**16**	**5**	**14**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	0	0	0	3	0	0	1	0
7:15 AM	0	0	0	0	2	0	0	4	1	0	5	0
7:30 AM	0	1	0	1	2	0	0	0	0	0	6	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	2	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	2	0	0	1	0
8:30 AM	0	1	0	0	1	0	0	1	0	0	1	0
8:45 AM	0	1	0	0	1	0	0	1	0	0	3	0
TOTALS	**0**	**5**	**0**	**1**	**6**	**0**	**0**	**14**	**1**	**0**	**17**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	2	1	4	1	0	1	1	0
4:15 PM	1	4	3	1	2	3	1	0
4:30 PM	0	1	0	2	0	1	2	0
4:45 PM	1	0	2	1	0	2	2	0
5:00 PM	2	1	5	4	2	0	0	1
5:15 PM	3	0	2	0	0	2	0	1
5:30 PM	0	2	0	2	0	2	0	3
5:45 PM	0	1	0	0	0	0	0	1
TOTALS	**9**	**10**	**16**	**11**	**4**	**11**	**6**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	3	0	0	0	0	0	3	0	0	1	0
4:15 PM	2	1	0	0	2	0	1	1	0	0	3	0
4:30 PM	0	1	0	0	0	0	0	0	0	1	0	0
4:45 PM	1	2	0	0	1	0	0	1	0	0	3	0
5:00 PM	1	1	0	0	0	0	0	1	0	0	0	0
5:15 PM	0	2	1	0	0	0	0	2	0	0	1	0
5:30 PM	0	1	1	1	1	0	0	1	1	0	0	0
5:45 PM	0	0	0	0	1	0	0	1	0	0	3	0
TOTALS	**4**	**11**	**2**	**1**	**5**	**0**	**1**	**10**	**1**	**1**	**11**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-063
N/S Street: Magnolia St
E/W Street: Westminster Blvd
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	2	4	1	3	1	0	0
7:15 AM	1	2	5	1	2	0	0	0
7:30 AM	6	4	3	3	2	5	0	0
7:45 AM	3	5	1	1	3	5	0	0
8:00 AM	6	1	1	3	0	4	0	0
8:15 AM	0	3	5	1	0	7	0	0
8:30 AM	3	0	8	0	1	2	0	0
8:45 AM	4	0	6	2	4	2	0	0
TOTALS	**25**	**17**	**33**	**12**	**15**	**26**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	2	0	0	2	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	3	0	0	3	0
8:15 AM	0	1	0	1	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	4	0	0	2	0
8:45 AM	1	1	1	0	1	0	1	4	0	0	0	0
TOTALS	**1**	**3**	**1**	**1**	**1**	**0**	**1**	**15**	**0**	**0**	**8**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	8	3	0	1	1	0	0	0
4:15 PM	5	2	2	2	1	0	0	0
4:30 PM	2	3	10	3	1	2	0	0
4:45 PM	3	4	3	3	1	0	0	0
5:00 PM	2	4	2	2	2	4	0	0
5:15 PM	1	1	0	1	1	2	0	0
5:30 PM	6	6	3	3	2	7	0	0
5:45 PM	3	1	6	1	8	2	0	0
TOTALS	**30**	**24**	**26**	**16**	**17**	**17**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	1	1	0	2	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	2	0
4:30 PM	0	0	0	0	0	1	1	2	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:00 PM	0	1	0	0	1	0	0	2	0	0	3	0
5:15 PM	0	0	0	0	1	0	0	4	0	0	4	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**3**	**1**	**0**	**2**	**1**	**1**	**10**	**1**	**0**	**13**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-064
N/S Street: Milan St
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	2	0	4	0	0
7:15 AM	0	0	3	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	2	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	1	2	0	0	0	0	0
8:30 AM	0	0	2	1	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**1**	**1**	**11**	**3**	**0**	**4**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	2	0	0	2	0
7:15 AM	0	0	0	0	1	0	0	2	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	2	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	0	0	0	1	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	1	0
TOTALS	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**10**	**0**	**0**	**6**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	1	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	1	2	0	0	0	0
5:30 PM	1	1	0	1	0	0	0	0
5:45 PM	0	0	2	0	0	1	0	0
TOTALS	**1**	**1**	**3**	**4**	**1**	**1**	**0**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	3	0	0	2	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**5**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-065
N/S Street: Monroe St/All American Wy
E/W Street: Westminster Blvd
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	3	10	0	3	1	2
7:15 AM	2	2	2	7	1	4	2	4
7:30 AM	0	0	2	0	0	0	0	5
7:45 AM	1	3	2	3	0	3	1	3
8:00 AM	0	1	2	3	1	2	2	9
8:15 AM	0	1	5	4	5	0	2	0
8:30 AM	0	1	2	3	0	6	1	9
8:45 AM	1	1	2	5	1	2	0	0
TOTALS	**5**	**10**	**20**	**35**	**8**	**20**	**9**	**32**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	2	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	1	0	3	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	1	0	1	0	2	1	0	1	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	3	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	3	0
TOTALS	**0**	**1**	**0**	**1**	**3**	**1**	**0**	**4**	**2**	**0**	**11**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	3	7	7	0	0	0	0
4:15 PM	2	0	16	2	2	0	2	1
4:30 PM	0	1	7	1	1	0	0	3
4:45 PM	0	4	0	2	1	0	0	6
5:00 PM	0	1	1	0	0	0	1	0
5:15 PM	0	0	4	5	0	2	1	0
5:30 PM	0	0	0	1	1	0	0	1
5:45 PM	0	0	0	0	0	1	1	1
TOTALS	**2**	**9**	**35**	**18**	**5**	**3**	**5**	**12**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	1	0	0	1	0	0	0	3	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	2	0
5:00 PM	0	0	0	0	1	0	0	1	0	0	2	0
5:15 PM	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
TOTALS	**2**	**0**	**0**	**1**	**1**	**0**	**0**	**11**	**0**	**0**	**4**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-066
N/S Street: Newland St
E/W Street: Westminster Blvd
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	9	2	5	3	3	7
7:15 AM	7	7	11	6	4	7	18	27
7:30 AM	15	9	2	5	1	16	21	53
7:45 AM	2	1	13	6	2	13	3	6
8:00 AM	0	3	7	3	2	6	1	4
8:15 AM	2	8	5	3	4	4	3	7
8:30 AM	1	4	10	0	3	2	0	4
8:45 AM	1	0	3	2	1	2	1	0
TOTALS	**28**	**32**	**60**	**27**	**22**	**53**	**50**	**108**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	2	0	0	0	1	0	0	0
7:15 AM	0	1	0	0	3	0	0	1	0	1	0	0
7:30 AM	0	3	0	1	4	0	0	1	0	0	1	0
7:45 AM	0	1	0	0	1	0	0	3	0	0	1	0
8:00 AM	0	1	0	0	1	0	0	0	0	0	2	0
8:15 AM	0	1	0	0	1	0	0	0	0	0	1	1
8:30 AM	0	1	0	0	2	0	0	2	0	0	3	0
8:45 AM	0	0	0	0	2	0	0	1	0	0	1	0
TOTALS	**0**	**8**	**0**	**1**	**16**	**0**	**0**	**8**	**1**	**1**	**9**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	2	2	1	2	1	2	12
4:15 PM	5	1	0	4	1	3	1	6
4:30 PM	4	10	3	2	5	3	0	8
4:45 PM	5	1	7	0	5	3	3	6
5:00 PM	5	9	7	5	2	2	10	1
5:15 PM	1	6	5	3	3	3	3	14
5:30 PM	1	4	3	0	1	4	5	4
5:45 PM	5	8	4	4	5	5	0	8
TOTALS	**29**	**41**	**31**	**19**	**24**	**24**	**24**	**59**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	1	0	0	1	0	0	1	0
4:15 PM	0	1	0	0	2	0	0	1	0	0	5	0
4:30 PM	0	1	0	1	0	0	0	0	0	0	1	0
4:45 PM	0	3	0	0	4	0	0	2	0	0	0	1
5:00 PM	0	1	0	0	0	0	0	0	1	0	5	0
5:15 PM	0	4	0	0	0	0	0	1	0	0	4	0
5:30 PM	0	3	0	0	1	0	1	1	0	0	3	1
5:45 PM	0	0	0	0	2	1	0	0	0	0	2	0
TOTALS	**0**	**14**	**0**	**1**	**10**	**1**	**1**	**6**	**1**	**0**	**21**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-067
N/S Street: Olive St
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	1	0	0	2	7	2
7:15 AM	3	2	2	5	1	8	1	7
7:30 AM	5	0	2	1	0	7	0	12
7:45 AM	0	2	0	1	1	4	3	6
8:00 AM	1	2	1	1	0	1	3	9
8:15 AM	0	0	1	1	5	1	6	0
8:30 AM	0	1	0	2	2	1	4	3
8:45 AM	0	1	1	0	2	0	3	1
TOTALS	**10**	**8**	**8**	**11**	**11**	**24**	**27**	**40**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	2	0	0	1	0
7:15 AM	0	0	0	0	0	1	0	3	0	1	4	0
7:30 AM	0	1	0	0	2	0	0	1	0	0	2	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:15 AM	0	2	0	0	0	1	0	0	1	0	0	0
8:30 AM	0	0	0	0	0	1	0	2	2	0	1	0
8:45 AM	0	1	0	0	1	0	0	1	0	0	2	0
TOTALS	**0**	**4**	**0**	**0**	**4**	**3**	**0**	**10**	**3**	**1**	**10**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	2	0	0	1	1	1
4:15 PM	1	2	0	1	0	1	4	2
4:30 PM	0	0	1	1	0	3	1	0
4:45 PM	0	0	5	0	0	0	1	7
5:00 PM	0	0	2	3	2	2	3	3
5:15 PM	0	0	1	0	0	4	0	3
5:30 PM	0	0	0	0	0	2	6	7
5:45 PM	0	0	1	0	0	1	0	3
TOTALS	**2**	**2**	**12**	**5**	**2**	**14**	**16**	**26**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	1	0	2	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	3	0	0	6	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0	0	0	3	0
5:00 PM	0	2	0	0	1	0	0	1	0	0	1	0
5:15 PM	0	1	0	0	0	0	0	2	0	0	0	0
5:30 PM	0	1	0	0	1	0	0	2	0	0	0	0
5:45 PM	0	0	0	0	1	0	1	1	0	0	1	0
TOTALS	**1**	**5**	**0**	**0**	**3**	**1**	**1**	**13**	**0**	**0**	**11**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-068
N/S Street: Rancho Rd/Hammon Pl
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	1	0	0
7:15 AM	1	0	1	0	2	1	0	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	2	1	0	2
8:00 AM	0	0	0	0	1	1	0	0
8:15 AM	0	1	1	0	0	1	2	1
8:30 AM	0	0	2	0	0	1	1	0
8:45 AM	1	0	1	0	1	0	0	1
TOTALS	**2**	**1**	**5**	**0**	**6**	**7**	**3**	**4**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	3	0	0	0	2	0	0	3	0	1	0	0
7:15 AM	0	0	0	0	2	0	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	2	0	0	1	0
7:45 AM	0	0	0	0	2	0	0	2	0	0	0	0
8:00 AM	0	0	0	1	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0	1	0	1	0
8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	1	0
TOTALS	**5**	**0**	**0**	**1**	**6**	**0**	**0**	**8**	**2**	**1**	**3**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	1	0	0	0	0	0	0
4:45 PM	1	0	1	0	0	2	0	0
5:00 PM	0	0	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**1**	**1**	**2**	**0**	**2**	**3**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	1	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0
5:45 PM	1	0	0	0	0	0	0	1	3	0	1	1
TOTALS	**1**	**1**	**0**	**0**	**2**	**0**	**0**	**4**	**3**	**0**	**4**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-069
N/S Street: Sringdale St
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	2	1	1	1	0
7:15 AM	1	0	1	3	1	0	0	0
7:30 AM	0	0	1	0	0	1	0	0
7:45 AM	0	0	0	1	0	0	1	1
8:00 AM	0	0	0	1	0	1	0	0
8:15 AM	0	1	0	2	0	2	0	0
8:30 AM	0	0	1	0	1	0	1	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**1**	**1**	**4**	**9**	**3**	**5**	**3**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	2	0	0	1	0	0	3	0
7:15 AM	0	0	0	0	3	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	2	0	0	0	1	0	1	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	1	0
8:15 AM	0	0	1	0	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**10**	**1**	**0**	**1**	**1**	**0**	**6**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	1	0	0	0	0
4:15 PM	0	0	0	1	0	0	1	0
4:30 PM	0	0	1	0	1	0	0	1
4:45 PM	1	0	4	2	0	0	2	1
5:00 PM	0	0	1	0	1	1	3	0
5:15 PM	3	1	3	3	1	2	2	1
5:30 PM	0	1	1	0	1	0	2	3
5:45 PM	0	1	3	4	2	1	0	0
TOTALS	**4**	**3**	**13**	**11**	**6**	**4**	**10**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:15 PM	1	0	0	0	1	0	1	0	0	0	0	0
4:30 PM	0	3	0	0	1	0	1	1	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	3	0	0	0	0
5:00 PM	1	1	0	0	2	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	2	0	0	2	0	0	1	0
5:30 PM	0	1	0	0	0	0	1	1	0	1	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
TOTALS	**2**	**5**	**0**	**0**	**6**	**0**	**3**	**9**	**0**	**2**	**2**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-070
N/S Street: University St
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	2	0	0	0	1
7:15 AM	0	0	3	0	1	1	0	1
7:30 AM	1	0	0	0	4	0	0	1
7:45 AM	0	0	1	1	0	0	0	0
8:00 AM	0	0	2	1	0	1	0	2
8:15 AM	0	1	3	0	0	0	2	0
8:30 AM	0	1	0	0	1	0	1	0
8:45 AM	0	0	0	0	0	0	1	0
TOTALS	**1**	**2**	**9**	**4**	**6**	**2**	**4**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	1	0	0	3	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	1	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	1	0	0	1	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**6**	**0**	**0**	**5**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	2	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	2	0	0	0	0
5:30 PM	0	0	1	1	0	0	1	0
5:45 PM	0	0	2	0	0	0	0	1
TOTALS	**2**	**1**	**3**	**4**	**0**	**0**	**2**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	1	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	1	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	3	0	0	2	0
TOTALS	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**6**	**0**	**0**	**5**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-071
N/S Street: Westmart Pl
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	4	3	1	1	1	0	1	0
7:15 AM	1	0	2	0	0	0	0	4
7:30 AM	1	0	0	0	0	0	0	5
7:45 AM	2	1	1	0	0	0	0	1
8:00 AM	3	1	0	1	0	0	1	2
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	0	0	2	0	0	0	2	1
8:45 AM	1	0	0	0	0	0	1	2
TOTALS	**13**	**5**	**6**	**2**	**1**	**0**	**5**	**15**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	3	0	0	2	0
7:15 AM	0	0	0	1	0	0	0	2	0	0	0	0
7:30 AM	0	0	0	1	0	0	0	1	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	1	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**8**	**0**	**0**	**4**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	7	0	2	1	0	0	2	3
4:15 PM	2	3	0	1	1	0	1	2
4:30 PM	3	3	0	0	0	0	1	0
4:45 PM	2	2	0	2	0	0	4	1
5:00 PM	1	3	0	0	0	0	4	0
5:15 PM	0	3	2	1	0	0	1	2
5:30 PM	0	0	0	1	0	0	0	0
5:45 PM	4	2	0	3	0	0	1	3
TOTALS	**19**	**16**	**4**	**9**	**1**	**0**	**14**	**11**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	2	0	0	2	0	0	3	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	1	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**3**	**0**	**0**	**5**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-072
N/S Street: Willow Ln (South)
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	4	1	0	0	0	0
7:15 AM	0	0	3	0	0	0	0	0
7:30 AM	0	0	0	1	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	1	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0
8:45 AM	0	0	3	2	0	0	0	0
TOTALS	**0**	**0**	**12**	**5**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	1	0	3	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	2	1	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**7**	**1**	**0**	**4**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	1	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	0	0	3	1	0	0	0	0
5:00 PM	0	0	1	2	0	0	0	0
5:15 PM	0	0	0	2	0	0	0	0
5:30 PM	0	1	1	1	0	0	0	0
5:45 PM	0	0	1	4	0	0	0	0
TOTALS	**1**	**1**	**6**	**11**	**0**	**1**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	1	0	0	0	0	1	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	1	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	2	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	2	0	0	6	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**9**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-073
N/S Street: Willow Ln (North)
E/W Street: Westminster Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	4	1	3	1	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	1	0	0	2	0	0
7:45 AM	0	0	0	0	1	0	0	0
8:00 AM	0	0	0	1	0	1	0	0
8:15 AM	0	0	2	2	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	1	0	0	0	0
TOTALS	**0**	**0**	**9**	**5**	**4**	**5**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	1	0	2	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	1	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**1**	**1**	**0**	**4**	**0**	**0**	**4**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	3	0	0
4:15 PM	0	0	0	0	1	1	0	1
4:30 PM	1	0	0	0	0	1	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	0	0	0	1	1	5	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	4	0	0
TOTALS	**1**	**0**	**1**	**1**	**5**	**15**	**0**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	1	0	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	1	0
4:45 PM	0	1	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	1	0	0	0	0	0	1	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	2	2	2	2	0	0	2	0
TOTALS	**0**	**2**	**1**	**0**	**3**	**2**	**3**	**5**	**0**	**0**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-074
N/S Street: Beach Blvd
E/W Street: Bolsa Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	5	1	3	0	0
7:15 AM	0	0	1	3	1	1	0	0
7:30 AM	0	1	1	4	0	4	0	0
7:45 AM	0	3	2	2	2	0	0	0
8:00 AM	0	2	0	4	0	6	0	1
8:15 AM	1	1	0	5	1	1	0	0
8:30 AM	2	5	0	2	0	2	0	0
8:45 AM	0	3	0	0	0	1	0	0
TOTALS	**3**	**15**	**4**	**25**	**5**	**18**	**0**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	0	1	0
7:15 AM	0	3	0	0	0	0	0	0	0	1	2	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	7	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**1**	**10**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	4	1	3	1	1	2	2	1
4:15 PM	0	3	5	0	2	0	2	1
4:30 PM	0	0	6	2	2	3	0	1
4:45 PM	3	0	1	1	0	1	3	0
5:00 PM	1	1	0	2	0	3	1	2
5:15 PM	0	0	4	2	0	1	1	0
5:30 PM	0	2	0	2	0	0	0	1
5:45 PM	0	0	4	2	0	1	0	0
TOTALS	**8**	**7**	**23**	**12**	**5**	**11**	**9**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	1	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	0	4	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	1	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**7**	**0**	**0**	**3**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-075
N/S Street: Beach Blvd
E/W Street: Center Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	1
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	1	1
8:30 AM	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	2	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-076
N/S Street: Beach Blvd
E/W Street: Edinger Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM								
7:15 AM								
7:30 AM								
7:45 AM								
8:00 AM								
8:15 AM								
8:30 AM								
8:45 AM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM												
7:15 AM												
7:30 AM												
7:45 AM												
8:00 AM												
8:15 AM												
8:30 AM												
8:45 AM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM								
4:15 PM								
4:30 PM								
4:45 PM								
5:00 PM								
5:15 PM								
5:30 PM								
5:45 PM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM												
4:15 PM												
4:30 PM												
4:45 PM												
5:00 PM												
5:15 PM												
5:30 PM												
5:45 PM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-077
N/S Street: Beach Blvd
E/W Street: Garden Grove Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM								
7:15 AM								
7:30 AM								
7:45 AM								
8:00 AM								
8:15 AM								
8:30 AM								
8:45 AM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM												
7:15 AM												
7:30 AM												
7:45 AM												
8:00 AM												
8:15 AM												
8:30 AM												
8:45 AM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM								
4:15 PM								
4:30 PM								
4:45 PM								
5:00 PM								
5:15 PM								
5:30 PM								
5:45 PM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM												
4:15 PM												
4:30 PM												
4:45 PM												
5:00 PM												
5:15 PM												
5:30 PM												
5:45 PM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-078
N/S Street: Beach Blvd
E/W Street: Hazard Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM								
7:15 AM								
7:30 AM								
7:45 AM								
8:00 AM								
8:15 AM								
8:30 AM								
8:45 AM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM												
7:15 AM												
7:30 AM												
7:45 AM												
8:00 AM												
8:15 AM												
8:30 AM												
8:45 AM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM								
4:15 PM								
4:30 PM								
4:45 PM								
5:00 PM								
5:15 PM								
5:30 PM								
5:45 PM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM												
4:15 PM												
4:30 PM												
4:45 PM												
5:00 PM												
5:15 PM												
5:30 PM												
5:45 PM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-079
N/S Street: Beach Blvd
E/W Street: Heil Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM								
7:15 AM								
7:30 AM								
7:45 AM								
8:00 AM								
8:15 AM								
8:30 AM								
8:45 AM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM												
7:15 AM												
7:30 AM												
7:45 AM												
8:00 AM												
8:15 AM												
8:30 AM												
8:45 AM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM								
4:15 PM								
4:30 PM								
4:45 PM								
5:00 PM								
5:15 PM								
5:30 PM								
5:45 PM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM												
4:15 PM												
4:30 PM												
4:45 PM												
5:00 PM												
5:15 PM												
5:30 PM												
5:45 PM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-080
N/S Street: Beach Blvd
E/W Street: McDonald Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM								
7:15 AM								
7:30 AM								
7:45 AM								
8:00 AM								
8:15 AM								
8:30 AM								
8:45 AM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM												
7:15 AM												
7:30 AM												
7:45 AM												
8:00 AM												
8:15 AM												
8:30 AM												
8:45 AM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM								
4:15 PM								
4:30 PM								
4:45 PM								
5:00 PM								
5:15 PM								
5:30 PM								
5:45 PM								
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM												
4:15 PM												
4:30 PM												
4:45 PM												
5:00 PM												
5:15 PM												
5:30 PM												
5:45 PM												
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-082
N/S Street: Beach Blvd
E/W Street: Stark St
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	0	0	1	1
7:15 AM	0	0	1	2	1	0	0	0
7:30 AM	0	0	0	0	0	1	0	1
7:45 AM	0	2	0	0	0	0	0	1
8:00 AM	0	1	5	0	2	2	0	1
8:15 AM	1	0	1	2	0	1	0	1
8:30 AM	1	1	1	1	2	1	1	0
8:45 AM	0	0	0	0	1	1	1	0
TOTALS	**2**	**4**	**9**	**5**	**6**	**6**	**3**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	2	0	0	3	0	0	0	0	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	3	0	0	0	0	0	1	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:45 AM	0	2	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**7**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**5**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	1	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	3
4:30 PM	1	1	1	1	3	0	0	1
4:45 PM	0	0	0	0	0	2	0	0
5:00 PM	1	3	2	2	4	0	1	1
5:15 PM	2	0	1	2	1	3	0	1
5:30 PM	0	2	0	2	0	1	3	0
5:45 PM	3	2	0	1	1	2	0	3
TOTALS	**7**	**10**	**5**	**9**	**9**	**8**	**4**	**9**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	1	0	0	1	0	0	0	0
4:15 PM	0	3	0	0	1	0	0	1	0	0	0	0
4:30 PM	0	2	0	0	1	0	0	0	0	0	1	0
4:45 PM	0	1	0	0	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	2	0	0	0	0	0	0	0	0	2	0
5:30 PM	0	2	0	0	1	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	1	0	0	0	0	0	1	0
TOTALS	**0**	**11**	**0**	**0**	**6**	**0**	**0**	**2**	**0**	**0**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-083
N/S Street: Beach Blvd
E/W Street: Trask Ave
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	2	0	3	0	1	0	0
7:15 AM	0	2	4	0	1	0	0	0
7:30 AM	4	0	1	4	0	1	0	0
7:45 AM	2	0	2	0	0	1	0	0
8:00 AM	0	1	2	0	1	0	0	0
8:15 AM	2	3	1	4	0	1	0	0
8:30 AM	8	3	0	0	0	2	0	1
8:45 AM	0	2	0	0	1	0	2	0
TOTALS	**18**	**13**	**10**	**11**	**3**	**6**	**2**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	1	0	1	0	0	0	0	0	0	1
7:15 AM	0	1	0	0	0	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	3	0
8:15 AM	0	0	0	0	0	0	0	3	0	1	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	1	0
TOTALS	**0**	**1**	**2**	**0**	**2**	**0**	**0**	**4**	**0**	**1**	**5**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	3	6	4	0	0	0	0
4:15 PM	2	0	0	7	1	0	7	1
4:30 PM	1	0	4	1	0	1	3	0
4:45 PM	0	3	1	1	0	1	0	0
5:00 PM	0	1	6	2	0	1	1	7
5:15 PM	1	1	3	4	0	3	2	0
5:30 PM	4	2	1	1	1	0	2	2
5:45 PM	1	4	0	1	0	0	2	0
TOTALS	**12**	**14**	**21**	**21**	**2**	**6**	**17**	**10**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	3	1	0	0	0	0	0	1	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	2	0
4:45 PM	0	2	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	2	0	0	2	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	2	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	2	0	0	1	0
TOTALS	**0**	**4**	**0**	**3**	**1**	**0**	**0**	**8**	**0**	**0**	**9**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-085
N/S Street: Beach Blvd
E/W Street: 13th St
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	2	2	0	0
7:15 AM	3	0	0	0	0	0	0	0
7:30 AM	1	0	0	2	1	1	1	0
7:45 AM	0	1	0	1	0	0	0	0
8:00 AM	3	0	0	1	0	0	0	0
8:15 AM	0	1	1	2	0	0	0	1
8:30 AM	1	2	0	1	0	1	0	0
8:45 AM	1	0	0	0	1	4	1	0
TOTALS	**9**	**4**	**1**	**7**	**4**	**8**	**2**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	1	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
TOTALS	**0**	**6**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	1	0
4:15 PM	0	1	3	1	0	0	0	1
4:30 PM	0	1	2	1	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0
5:00 PM	1	1	3	0	0	0	1	0
5:15 PM	0	0	1	4	1	0	1	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	0	1	0	3	0	0	0	1
TOTALS	**2**	**5**	**9**	**9**	**1**	**1**	**3**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	3	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-086
N/S Street: Beach Blvd
E/W Street: SR-22 WB Off Ramp
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	1	0	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	1	0	0
8:15 AM	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	2	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	0	0
4:15 PM	0	0	0	0	0	0	2	2
4:30 PM	0	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	1	1	1	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	1	3	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**9**	**3**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	3	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0
TOTALS	**0**	**3**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-087
N/S Street: Beach Blvd
E/W Street: SR-22 EB Off Ramp
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	3
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	1	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**8**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	2	2
4:15 PM	0	0	0	0	0	0	1	2
4:30 PM	0	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	1	1	1	1
5:00 PM	0	0	0	0	0	0	2	0
5:15 PM	0	0	0	0	0	0	2	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**1**	**1**	**10**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	2	0	0	1	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0
TOTALS	**0**	**5**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-088
N/S Street: Bolsa Chica Rd
E/W Street: Garden Grove Blvd
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	1	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-090
N/S Street: SR-22/ I-405 Ramps
E/W Street: Garden Grove Blvd
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:00 PM	0	1	0	0	0	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-091
N/S Street: SR-22 WB Off Ramp/ Eagle Dr
E/W Street: Garden Grove Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	4	0	1	0	0	0	0
7:30 AM	0	0	2	0	0	0	0	0
7:45 AM	0	0	1	0	1	0	0	0
8:00 AM	0	0	1	1	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**1**	**4**	**4**	**2**	**1**	**1**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	1	0
TOTALS	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**3**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	3	1	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	0	0	0	1	0	1	0	0
5:00 PM	0	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**1**	**0**	**4**	**2**	**0**	**2**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	1	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	2	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	1	0
5:00 PM	0	0	0	0	1	0	0	3	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**7**	**0**	**0**	**6**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-092
N/S Street: SR-22 Off Ramp(W/O Golden West St)
E/W Street: Garden Grove Blvd
DATE: 4/15/2015 DAY: Wednesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	3	0	0	0	1	5
7:30 AM	0	0	2	0	0	0	0	0
7:45 AM	0	0	2	0	0	0	0	0
8:00 AM	0	0	2	1	0	0	0	3
8:15 AM	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	1	1	0	0	0	0	0
TOTALS	**0**	**2**	**10**	**1**	**0**	**0**	**1**	**8**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	1	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**1**	**0**	**0**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	0	1	0	0	0	1
4:15 PM	1	0	1	2	0	0	1	0
4:30 PM	1	1	1	1	0	0	1	1
4:45 PM	0	0	2	0	0	0	0	1
5:00 PM	0	0	1	1	0	0	0	0
5:15 PM	1	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**4**	**2**	**5**	**5**	**0**	**0**	**2**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	1	0	0	0	1	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-093
N/S Street: Golden West St
E/W Street: I-405 Ramps
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	2	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-094
N/S Street: I-405 Ramps
E/W Street: Mall Ring Rd
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	1	0	0	0	0	0	0	1	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-095
N/S Street: Newland St
E/W Street: Bolsa Ave
DATE: 4/21/2015
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	0	1	1	0
7:15 AM	0	1	0	1	0	0	1	0
7:30 AM	0	0	1	0	1	2	0	0
7:45 AM	0	1	0	3	1	3	1	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	2	0	0	0	0	2	2	0
8:45 AM	1	0	0	4	0	3	0	0
TOTALS	**4**	**2**	**4**	**8**	**2**	**11**	**5**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	1	0	0	0	0
7:15 AM	0	1	0	0	0	1	0	1	1	0	0	0
7:30 AM	0	4	2	0	1	0	0	1	0	0	1	1
7:45 AM	0	2	0	0	1	0	0	1	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	1	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	2	0	0	1	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	4	0	0	1	0	0	0	0
TOTALS	**0**	**8**	**2**	**0**	**9**	**1**	**0**	**8**	**1**	**0**	**2**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	2	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	0	2	0	1	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	1	0	0	0	0	1	0	3
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	1	0	0	0	1	0
TOTALS	**2**	**2**	**1**	**1**	**1**	**3**	**1**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	1	1	0	0	1	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	3	0	0	1	0	0	0	0
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**1**	**7**	**1**	**0**	**2**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-096
N/S Street: Brookhurst St
E/W Street: Edinger Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	3	2	0	4	0	0
7:15 AM	1	0	0	0	1	2	0	0
7:30 AM	1	3	2	0	1	0	2	0
7:45 AM	1	1	0	4	0	2	0	0
8:00 AM	0	2	2	2	2	1	4	2
8:15 AM	3	0	2	0	1	0	0	2
8:30 AM	3	0	5	2	0	0	1	2
8:45 AM	1	0	2	2	1	1	3	0
TOTALS	**10**	**6**	**16**	**12**	**6**	**10**	**10**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	3	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	2	0	0	0	0
8:15 AM	0	1	0	0	2	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	3	0	0	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	1	0
TOTALS	**0**	**3**	**0**	**0**	**5**	**0**	**1**	**7**	**0**	**1**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	2	4	2	1	3	3	0
4:15 PM	3	2	4	1	2	2	3	1
4:30 PM	0	0	2	4	4	4	0	2
4:45 PM	2	0	0	0	0	0	2	0
5:00 PM	4	2	4	0	0	3	2	5
5:15 PM	1	4	0	1	2	0	0	1
5:30 PM	0	0	4	4	3	0	0	0
5:45 PM	1	1	4	0	0	2	1	2
TOTALS	**12**	**11**	**22**	**12**	**12**	**14**	**11**	**11**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	1	0	0	1	0
4:15 PM	0	1	0	0	1	0	0	1	0	0	2	0
4:30 PM	0	1	0	0	0	0	0	2	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	1	0	0	3	0	0	0	0	0	4	0
5:15 PM	0	1	0	0	0	0	0	1	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	1	0	0	1	0	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**5**	**0**	**0**	**7**	**0**	**0**	**9**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-097
N/S Street: Brookhurst St
E/W Street: Hazard Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	2	3	2	0	1	2
7:15 AM	3	0	0	0	0	1	2	0
7:30 AM	2	1	1	1	1	1	2	1
7:45 AM	0	1	3	0	1	2	1	2
8:00 AM	0	0	3	0	2	1	0	0
8:15 AM	0	0	1	0	2	0	0	2
8:30 AM	0	0	1	0	1	6	0	0
8:45 AM	2	1	0	0	0	0	0	2
TOTALS	**7**	**4**	**11**	**4**	**9**	**11**	**6**	**9**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	2	0	0	0	0	0	2	0
7:15 AM	0	2	0	0	2	0	0	0	0	0	2	0
7:30 AM	0	2	1	0	5	0	0	4	0	1	2	0
7:45 AM	0	1	0	0	0	0	1	1	0	0	0	0
8:00 AM	0	2	0	0	2	0	2	2	0	0	2	0
8:15 AM	0	0	0	0	1	0	0	0	0	1	0	0
8:30 AM	0	1	0	0	0	0	0	1	0	0	1	0
8:45 AM	0	1	0	0	1	0	0	1	0	0	0	0
TOTALS	**0**	**9**	**1**	**0**	**13**	**0**	**3**	**9**	**0**	**2**	**9**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	3	0	0	0	0
4:15 PM	1	1	3	2	2	0	0	0
4:30 PM	0	2	0	2	0	0	4	10
4:45 PM	0	0	2	0	0	0	0	3
5:00 PM	1	0	0	1	2	1	2	0
5:15 PM	2	0	0	0	0	0	0	0
5:30 PM	0	0	2	2	2	1	0	2
5:45 PM	0	3	3	0	0	0	1	2
TOTALS	**4**	**7**	**10**	**10**	**6**	**2**	**7**	**17**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	2	0	0	1	0	0	1	1	0	1	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	3	0	0	1	0	0	1	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	3	1	0	4	1	1	1	0	0	0	0
5:15 PM	0	0	0	0	3	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	3	0	1	1	0	0	1	0
5:45 PM	0	1	2	0	2	0	0	1	0	0	1	0
TOTALS	**0**	**10**	**3**	**0**	**17**	**1**	**2**	**5**	**1**	**0**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-098
N/S Street: Bushard St
E/W Street: Edinger Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	1	1	0	0
7:15 AM	0	0	0	1	0	0	0	0
7:30 AM	0	0	1	0	0	1	0	0
7:45 AM	1	0	0	1	1	2	0	0
8:00 AM	0	1	1	1	0	3	0	2
8:15 AM	0	0	0	1	0	0	1	0
8:30 AM	1	0	0	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**2**	**5**	**2**	**8**	**1**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	2	0	0	0	0
7:30 AM	0	0	0	0	2	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	1	0	0	0	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	2	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**6**	**0**	**0**	**3**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	1	0	0	1	0	0
4:15 PM	0	1	0	1	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	0	1	1	0	0	1	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	1	1	1	0	1	0	0
5:45 PM	1	0	0	0	0	1	0	0
TOTALS	**2**	**3**	**4**	**4**	**0**	**3**	**1**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	1	0	0	0	0	0	2	0
5:45 PM	0	1	0	0	0	0	0	1	0	0	2	0
TOTALS	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**6**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-099
N/S Street: Newland St
E/W Street: Edinger Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	1	0	0	1	0
7:45 AM	0	0	0	1	0	1	0	0
8:00 AM	0	0	0	1	2	1	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0
8:45 AM	0	0	1	1	0	0	1	0
TOTALS	**0**	**0**	**4**	**4**	**2**	**3**	**2**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	2	1	0
7:15 AM	0	1	0	1	0	0	0	0	0	1	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	3	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	1	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	1	0
8:45 AM	0	0	1	0	0	0	0	1	0	0	0	0
TOTALS	**0**	**1**	**1**	**1**	**6**	**0**	**0**	**2**	**0**	**3**	**2**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	1	0	0	0
4:15 PM	0	0	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	1	0	0	0	1	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	0	1
5:45 PM	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**3**	**1**	**1**	**0**	**2**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	1	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	1	0	0	0	0	0	1	0	1	0
4:45 PM	0	2	1	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	0	2	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0
5:30 PM	0	1	0	0	1	0	0	1	0	0	0	0
5:45 PM	0	1	0	1	0	0	0	0	0	1	1	0
TOTALS	**0**	**5**	**3**	**1**	**1**	**1**	**0**	**3**	**1**	**1**	**6**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-100
N/S Street: Golden West St
E/W Street: McFadden Ave
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	1	0	0	0	2	2
7:15 AM	0	0	0	1	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	2	0	0	0	0	1
8:00 AM	0	1	0	0	0	1	0	0
8:15 AM	1	0	2	0	0	3	0	3
8:30 AM	2	2	6	1	3	0	1	2
8:45 AM	0	0	1	0	2	1	0	0
TOTALS	**4**	**4**	**12**	**2**	**5**	**5**	**4**	**9**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	1	0	0	0	0	0	1	1	0	1	0
7:15 AM	0	0	0	0	2	0	0	1	1	0	0	0
7:30 AM	0	0	0	0	4	0	0	1	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	1	0
8:00 AM	0	2	0	1	4	0	0	2	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	3	0
8:30 AM	0	3	0	0	2	0	0	1	0	0	0	0
8:45 AM	0	1	0	0	1	0	0	0	0	0	0	0
TOTALS	**0**	**8**	**0**	**1**	**13**	**0**	**0**	**7**	**2**	**0**	**7**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	0	1	4	1	0	1
4:15 PM	3	2	1	0	4	0	2	1
4:30 PM	0	1	2	0	2	1	0	0
4:45 PM	4	3	1	2	3	3	2	1
5:00 PM	2	1	3	0	1	0	1	2
5:15 PM	0	2	3	1	0	1	1	3
5:30 PM	0	0	3	0	3	3	1	1
5:45 PM	6	4	1	0	2	1	0	3
TOTALS	**16**	**14**	**14**	**4**	**19**	**10**	**7**	**12**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	2	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	0	0	1	0	0	0	2	0
4:45 PM	0	0	0	0	1	0	1	1	0	0	2	0
5:00 PM	0	3	0	0	0	0	0	1	0	0	2	0
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	2
5:30 PM	0	2	0	0	1	0	0	3	0	0	0	0
5:45 PM	0	3	0	1	0	1	0	1	0	1	0	0
TOTALS	**0**	**11**	**0**	**1**	**3**	**1**	**2**	**8**	**1**	**1**	**6**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-101
N/S Street: Newland St
E/W Street: Hazard Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	2	0	0	1	0	0
7:15 AM	1	2	0	0	0	2	0	1
7:30 AM	2	4	3	0	0	7	1	0
7:45 AM	0	0	0	0	0	3	1	3
8:00 AM	0	0	0	0	0	1	0	1
8:15 AM	0	0	0	0	0	0	2	0
8:30 AM	0	1	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	1	1	0
TOTALS	**4**	**7**	**5**	**0**	**0**	**15**	**6**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	3	0	0	0	0	0	1	0	1	0	0
7:15 AM	0	0	0	0	1	0	0	3	2	0	0	0
7:30 AM	0	1	0	0	7	0	0	1	0	0	0	0
7:45 AM	0	1	0	0	2	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0	0	0	1	0
8:15 AM	0	1	0	0	2	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:45 AM	1	1	1	0	0	0	0	0	0	0	0	0
TOTALS	**1**	**8**	**1**	**0**	**13**	**0**	**1**	**5**	**2**	**1**	**1**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	2	0	1	0
4:15 PM	0	0	0	0	0	2	0	1
4:30 PM	1	0	0	0	0	1	0	1
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	4	1	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**1**	**1**	**0**	**0**	**6**	**4**	**1**	**2**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	3	0	0	1	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	1	0	0	1	0	0	1	0	0	0	0
4:45 PM	0	2	0	0	0	0	0	0	0	0	1	0
5:00 PM	0	1	0	0	0	0	0	0	1	0	0	0
5:15 PM	0	1	0	0	0	1	1	1	1	0	0	0
5:30 PM	0	2	1	0	2	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	0
TOTALS	**1**	**9**	**1**	**0**	**6**	**1**	**1**	**5**	**2**	**0**	**1**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-102
N/S Street: Magnolia St
E/W Street: Foxglove Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	0
7:15 AM	0	0	9	0	0	0	0	0
7:30 AM	0	0	9	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0
8:45 AM	0	0	0	0	0	2	0	1
TOTALS	**0**	**0**	**19**	**0**	**0**	**2**	**1**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	3	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**6**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	2	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	1	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**1**	**2**	**1**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	1	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-103
N/S Street: Magnolia St
E/W Street: Heil Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	1	1	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	0	0	0	0
TOTALS	**3**	**4**	**1**	**0**	**0**	**0**	**0**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	2	0	0	0	0
4:15 PM	1	1	0	0	0	1	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	2	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	1
TOTALS	**4**	**1**	**1**	**2**	**0**	**1**	**0**	**1**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	1	0
TOTALS	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-104
N/S Street: Gothard St/Vermont St
E/W Street: McFadden Ave
DATE: 4/14/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	2	0	1	0	0
7:45 AM	0	0	1	1	0	0	1	0
8:00 AM	0	0	0	0	0	1	0	0
8:15 AM	0	0	0	1	2	0	0	0
8:30 AM	0	0	1	0	0	0	0	0
8:45 AM	1	1	0	0	0	0	0	0
TOTALS	**1**	**2**	**2**	**4**	**3**	**2**	**1**	**0**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	1	0	1	0	0
7:30 AM	0	0	0	0	1	0	0	1	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	1
8:00 AM	0	0	0	0	1	0	0	1	0	0	1	1
8:15 AM	1	0	0	0	0	0	0	0	0	0	2	0
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**3**	**0**	**2**	**7**	**2**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	1	0	1	0	1	2
4:15 PM	0	0	0	1	0	1	0	0
4:30 PM	1	1	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	2	0	1	1	0	1	0	0
5:15 PM	1	0	0	0	0	0	1	0
5:30 PM	0	1	0	1	1	1	1	1
5:45 PM	0	1	0	2	0	0	0	1
TOTALS	**5**	**3**	**2**	**5**	**2**	**3**	**3**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	1
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0
5:30 PM	0	0	0	0	0	0	0	1	1	0	0	0
5:45 PM	0	0	1	0	0	0	0	1	0	0	1	0
TOTALS	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**2**	**1**	**1**	**2**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-105
N/S Street: Newland St
E/W Street: Heil Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	2	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	2
7:45 AM	1	4	0	0	0	0	1	0
8:00 AM	1	1	1	0	0	0	13	1
8:15 AM	1	3	0	0	1	0	16	0
8:30 AM	1	2	0	0	0	0	0	3
8:45 AM	1	1	0	0	0	0	0	0
TOTALS	**7**	**11**	**1**	**0**	**1**	**0**	**30**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	1	0	0	0	2	0	0	1	0	0	1	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	3	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	1	0
7:45 AM	0	0	0	1	1	0	0	0	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0
TOTALS	**1**	**0**	**1**	**1**	**3**	**1**	**0**	**2**	**0**	**0**	**8**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	1
4:15 PM	1	0	1	0	0	0	0	0
4:30 PM	0	0	6	0	1	0	0	0
4:45 PM	1	3	0	0	1	0	0	0
5:00 PM	0	0	1	0	0	0	1	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	2	1
TOTALS	**2**	**3**	**10**	**0**	**2**	**0**	**3**	**4**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	2	0	0	2	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	2	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	1	0	0	0
TOTALS	**0**	**4**	**0**	**0**	**2**	**0**	**0**	**4**	**1**	**0**	**0**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-106
N/S Street: Newland St
E/W Street: Madison Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	2	1	0	0	2	2
7:15 AM	3	2	6	0	2	0	0	0
7:30 AM	4	1	7	2	3	1	1	1
7:45 AM	1	3	0	3	1	0	0	0
8:00 AM	1	1	0	0	4	1	0	0
8:15 AM	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	1	0	0
8:45 AM	0	0	0	0	0	1	0	0
TOTALS	**9**	**8**	**15**	**7**	**10**	**4**	**3**	**3**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:15 AM	0	2	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	4	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**5**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	1	2	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**2**	**2**	**0**	**0**	**5**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	1	1	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:45 PM	0	2	0	0	1	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	2	0	0	0	0	0	0	0
TOTALS	**0**	**4**	**0**	**1**	**6**	**0**	**1**	**0**	**1**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-107
N/S Street: Newland St
E/W Street: Trask Ave
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	4	0	2	1	5	0	9
7:15 AM	1	11	2	4	2	3	0	18
7:30 AM	12	39	1	2	0	4	13	6
7:45 AM	20	60	1	0	5	8	13	4
8:00 AM	26	5	0	0	0	1	2	6
8:15 AM	5	0	0	2	1	2	3	2
8:30 AM	0	0	1	1	1	0	0	0
8:45 AM	0	0	1	0	0	1	0	0
TOTALS	**64**	**119**	**6**	**11**	**10**	**24**	**31**	**45**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	0	2	0	0	0	0	0	3	0
7:15 AM	0	1	0	0	1	1	0	0	0	0	1	0
7:30 AM	0	3	1	1	4	0	0	0	1	0	0	0
7:45 AM	0	2	0	0	3	1	0	1	3	0	2	0
8:00 AM	0	1	0	0	1	0	0	0	0	0	1	0
8:15 AM	0	2	0	0	1	0	0	2	0	0	0	0
8:30 AM	0	0	0	0	3	0	0	1	0	1	2	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**9**	**1**	**1**	**15**	**2**	**0**	**4**	**4**	**1**	**9**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	1	0	0	0	1	3
4:15 PM	2	3	1	0	0	0	1	3
4:30 PM	0	0	0	1	0	0	0	0
4:45 PM	3	0	0	1	1	0	1	0
5:00 PM	1	0	3	2	1	3	0	1
5:15 PM	0	0	0	0	0	1	0	1
5:30 PM	1	6	1	1	3	1	0	1
5:45 PM	13	4	1	0	2	2	0	3
TOTALS	**21**	**14**	**7**	**5**	**7**	**7**	**3**	**12**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	1	0	0	0	0	0	0	0	0	2	0
4:15 PM	0	1	0	0	1	0	1	1	0	0	0	0
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0
4:45 PM	0	4	0	0	0	0	0	0	0	1	0	0
5:00 PM	0	1	1	0	0	0	0	0	1	1	0	0
5:15 PM	2	0	1	0	1	1	0	0	0	0	1	0
5:30 PM	1	3	1	0	0	0	0	2	0	0	0	0
5:45 PM	0	0	0	0	2	0	1	1	0	2	1	0
TOTALS	**3**	**11**	**3**	**0**	**5**	**1**	**2**	**4**	**1**	**4**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-108
N/S Street: Bushard St
E/W Street: Westminster Blvd
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	0	3	1	0	1	0
7:15 AM	1	4	1	0	1	0	0	2
7:30 AM	8	4	0	0	1	3	3	0
7:45 AM	6	2	0	0	8	2	1	0
8:00 AM	6	6	2	0	2	1	1	0
8:15 AM	9	3	0	1	5	1	5	1
8:30 AM	6	2	0	1	9	4	1	2
8:45 AM	3	0	1	0	23	5	10	1
TOTALS	**40**	**22**	**4**	**5**	**50**	**16**	**22**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	1	0	0	0	0	0	0	2	1	1	1	0
7:15 AM	0	0	2	0	0	0	0	2	0	0	3	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	1	0
7:45 AM	1	0	1	0	0	0	0	2	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	2	0	2	0
8:15 AM	2	0	0	0	0	0	0	1	0	0	1	0
8:30 AM	1	0	0	0	0	0	0	4	0	0	3	0
8:45 AM	3	0	0	0	0	0	0	1	0	0	2	0
TOTALS	**8**	**0**	**3**	**0**	**0**	**0**	**0**	**14**	**3**	**1**	**13**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	2	1	5	0	0
4:15 PM	1	1	2	1	1	2	0	2
4:30 PM	4	3	0	0	0	10	0	1
4:45 PM	3	0	1	1	0	6	0	1
5:00 PM	0	0	0	0	1	0	0	2
5:15 PM	2	2	0	0	0	2	0	0
5:30 PM	2	0	0	1	2	0	0	0
5:45 PM	0	3	2	0	0	1	0	0
TOTALS	**13**	**9**	**5**	**5**	**5**	**26**	**0**	**6**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	3	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	2	2	0
4:30 PM	1	0	1	0	0	0	0	3	1	0	1	0
4:45 PM	0	0	1	0	0	0	0	2	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	3	0	0	4	0
5:15 PM	0	1	0	0	0	0	0	2	0	0	1	0
5:30 PM	0	0	1	0	0	0	0	3	0	0	1	0
5:45 PM	0	0	0	0	2	0	0	3	0	0	2	1
TOTALS	**1**	**1**	**3**	**0**	**3**	**0**	**0**	**19**	**1**	**2**	**11**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 15-1088-109
N/S Street: Deodora Dr/Swan St
E/W Street: Westminster Blvd
DATE: 4/21/2015 DAY: Tuesday
CITY: Westminster

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	2	1	0	0	1	2
7:15 AM	0	1	4	0	0	0	0	2
7:30 AM	0	4	0	0	0	0	1	0
7:45 AM	2	0	0	0	1	0	1	1
8:00 AM	3	0	0	1	0	0	3	0
8:15 AM	2	2	0	1	0	0	3	2
8:30 AM	4	0	1	0	0	0	9	0
8:45 AM	6	0	1	0	0	0	7	1
TOTALS	**18**	**9**	**8**	**3**	**1**	**0**	**25**	**8**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
7:00 AM	0	0	0	1	0	1	0	1	0	0	0	1
7:15 AM	0	0	0	0	0	1	0	2	0	0	2	1
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	1
7:45 AM	0	0	0	1	0	0	0	1	0	0	0	0
8:00 AM	0	0	0	1	0	0	0	2	0	0	3	0
8:15 AM	0	1	0	0	0	0	0	2	0	0	1	1
8:30 AM	0	0	0	0	0	1	0	1	0	0	4	0
8:45 AM	0	0	0	0	0	1	0	1	0	0	2	0
TOTALS	**0**	**1**	**0**	**3**	**0**	**4**	**0**	**11**	**0**	**0**	**12**	**4**

P M

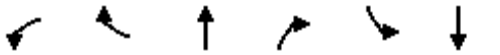
PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	2	2	1	0	0	0	0	6
4:15 PM	0	2	0	0	0	0	2	4
4:30 PM	2	0	0	0	0	0	5	1
4:45 PM	0	3	1	1	0	0	0	1
5:00 PM	1	1	0	0	0	0	0	2
5:15 PM	0	0	0	1	0	0	0	1
5:30 PM	0	4	1	1	0	0	0	4
5:45 PM	0	5	1	0	0	0	1	6
TOTALS	**5**	**17**	**4**	**3**	**0**	**0**	**8**	**25**

BIKES

TIME	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
4:00 PM	0	0	0	0	0	0	0	2	1	0	1	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	2	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	3	0	0	2	0
5:15 PM	0	0	0	0	0	0	0	2	0	0	1	0
5:30 PM	1	0	0	1	0	0	0	2	2	0	1	0
5:45 PM	0	1	0	0	0	0	0	1	0	0	0	0
TOTALS	**1**	**2**	**0**	**1**	**0**	**0**	**0**	**13**	**3**	**0**	**7**	**0**

APPENDIX B: SYNCHRO/TRAFFIX REPORTS



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	12	15	1630	7	5	2833
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	12	1	1680	6	5	2921
Adj No. of Lanes	1	1	3	1	1	3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	42	37	4414	1371	15	4627
Arrive On Green	0.02	0.02	1.00	1.00	0.02	1.00
Sat Flow, veh/h	1774	1583	5253	1580	1774	5253
Grp Volume(v), veh/h	12	1	1680	6	5	2921
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1580	1774	1695
Q Serve(g_s), s	0.8	0.1	0.0	0.0	0.3	0.0
Cycle Q Clear(g_c), s	0.8	0.1	0.0	0.0	0.3	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	42	37	4414	1371	15	4627
V/C Ratio(X)	0.29	0.03	0.38	0.00	0.33	0.63
Avail Cap(c_a), veh/h	473	422	4414	1371	355	4627
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.90	0.90	0.75	0.75
Uniform Delay (d), s/veh	57.6	57.3	0.0	0.0	58.6	0.0
Incr Delay (d2), s/veh	1.4	0.1	0.2	0.0	3.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	0.0	0.1	0.0	0.2	0.2
LnGrp Delay(d),s/veh	59.0	57.4	0.2	0.0	62.0	0.5
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	13		1686			2926
Approach Delay, s/veh	58.9		0.2			0.6
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.0	108.2				113.2		6.8
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	50.7				78.7		32.0
Max Q Clear Time (g_c+I1), s	2.3	2.0				2.0		2.8
Green Ext Time (p_c), s	0.0	48.5				76.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	0.6
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	40	193	1509	19	69	2214
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	43	1	1605	17	73	2355
Adj No. of Lanes	1	1	2	1	1	3
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	68	61	2795	1249	127	4551
Arrive On Green	0.04	0.04	1.00	1.00	0.14	1.00
Sat Flow, veh/h	1774	1583	3632	1581	1774	5253
Grp Volume(v), veh/h	43	1	1605	17	73	2355
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1581	1774	1695
Q Serve(g_s), s	2.9	0.1	0.0	0.0	4.6	0.0
Cycle Q Clear(g_c), s	2.9	0.1	0.0	0.0	4.6	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	68	61	2795	1249	127	4551
V/C Ratio(X)	0.63	0.02	0.57	0.01	0.57	0.52
Avail Cap(c_a), veh/h	444	396	2795	1249	355	4551
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.76	0.76	0.85	0.85
Uniform Delay (d), s/veh	56.9	55.5	0.0	0.0	49.7	0.0
Incr Delay (d2), s/veh	3.5	0.0	0.7	0.0	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	0.0	0.3	0.0	2.3	0.2
LnGrp Delay(d),s/veh	60.4	55.5	0.7	0.0	50.9	0.4
LnGrp LOS	E	E	A	A	D	A
Approach Vol, veh/h	44		1622			2428
Approach Delay, s/veh	60.3		0.6			1.9
Approach LOS	E		A			A

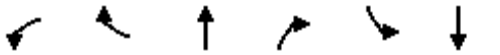
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.6	98.8				111.4		8.6
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	52.7				80.7		30.0
Max Q Clear Time (g_c+I1), s	6.6	2.0				2.0		4.9
Green Ext Time (p_c), s	0.0	50.2				77.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	2.0
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	16	3	4	1698	2308	18
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	17	0	4	1806	2455	17
Adj No. of Lanes	1	1	1	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	38	34	1	3227	4472	1392
Arrive On Green	0.02	0.00	0.00	1.00	0.88	0.88
Sat Flow, veh/h	1774	1583	1774	3632	5253	1583
Grp Volume(v), veh/h	17	0	4	1806	2455	17
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1695	1583
Q Serve(g_s), s	1.1	0.0	0.1	0.0	13.5	0.2
Cycle Q Clear(g_c), s	1.1	0.0	0.1	0.0	13.5	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	38	34	1	3227	4472	1392
V/C Ratio(X)	0.44	0.00	2.71	0.56	0.55	0.01
Avail Cap(c_a), veh/h	458	409	118	3227	4472	1392
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.77	0.77	0.68	0.68
Uniform Delay (d), s/veh	58.0	0.0	60.0	0.0	1.7	0.9
Incr Delay (d2), s/veh	3.0	0.0	872.0	0.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	581.3	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.6	0.0	0.7	0.2	6.3	0.1
LnGrp Delay(d),s/veh	60.9	0.0	1513.2	0.5	2.0	0.9
LnGrp LOS	E		F	A	A	A
Approach Vol, veh/h	17			1810	2472	
Approach Delay, s/veh	60.9			3.9	2.0	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		113.4		6.6	3.9	109.5		
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		
Max Green Setting (Gmax), s		79.7		31.0	8.5	67.7		
Max Q Clear Time (g_c+I1), s		2.0		3.1	2.1	15.5		
Green Ext Time (p_c), s		77.2		0.0	0.0	51.9		

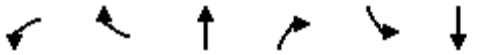
Intersection Summary	
HCM 2010 Ctrl Delay	3.0
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	134	35	1579	130	190	2651
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	138	3	1628	99	196	2733
Adj No. of Lanes	1	1	3	1	2	3
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	164	147	3753	1169	238	4275
Arrive On Green	0.09	0.09	0.74	0.74	0.14	1.00
Sat Flow, veh/h	1774	1583	5253	1583	3442	5253
Grp Volume(v), veh/h	138	3	1628	99	196	2733
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1583	1721	1695
Q Serve(g_s), s	9.2	0.2	14.8	2.1	6.6	0.0
Cycle Q Clear(g_c), s	9.2	0.2	14.8	2.1	6.6	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	164	147	3753	1169	238	4275
V/C Ratio(X)	0.84	0.02	0.43	0.08	0.82	0.64
Avail Cap(c_a), veh/h	237	211	3753	1169	602	4275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.74	0.74
Uniform Delay (d), s/veh	53.6	49.5	6.1	4.4	51.0	0.0
Incr Delay (d2), s/veh	11.5	0.0	0.4	0.1	2.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.0	0.1	6.9	1.0	3.2	0.2
LnGrp Delay(d),s/veh	65.1	49.5	6.4	4.5	53.0	0.6
LnGrp LOS	E	D	A	A	D	A
Approach Vol, veh/h	141		1727			2929
Approach Delay, s/veh	64.7		6.3			4.1
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.3	92.6				104.9		15.1
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	21.5	69.7				94.7		16.0
Max Q Clear Time (g_c+I1), s	8.6	16.8				2.0		11.2
Green Ext Time (p_c), s	0.2	52.7				92.1		0.0

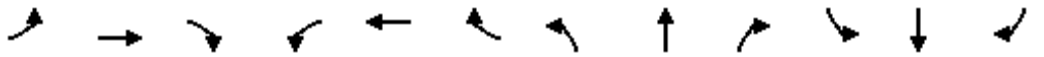
Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	14	70	1684	3	13	2728
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	15	73	1754	3	14	2842
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	105	94	4266	7	48	4444
Arrive On Green	0.06	0.06	1.00	1.00	0.05	1.00
Sat Flow, veh/h	1774	1583	5410	9	1774	5253
Grp Volume(v), veh/h	15	73	1134	623	14	2842
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1861	1774	1695
Q Serve(g_s), s	1.0	5.5	0.0	0.0	0.9	0.0
Cycle Q Clear(g_c), s	1.0	5.5	0.0	0.0	0.9	0.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	105	94	2759	1514	48	4444
V/C Ratio(X)	0.14	0.78	0.41	0.41	0.29	0.64
Avail Cap(c_a), veh/h	458	409	2759	1514	355	4444
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.09	0.09
Uniform Delay (d), s/veh	53.5	55.6	0.0	0.0	55.7	0.0
Incr Delay (d2), s/veh	0.2	5.1	0.4	0.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.5	2.5	0.2	0.3	0.4	0.0
LnGrp Delay(d),s/veh	53.8	60.7	0.4	0.8	55.8	0.1
LnGrp LOS	D	E	A	A	E	A
Approach Vol, veh/h	88		1757			2856
Approach Delay, s/veh	59.5		0.6			0.3
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.2	101.6				108.9		11.1
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	51.7				79.7		31.0
Max Q Clear Time (g_c+I1), s	2.9	2.0				2.0		7.5
Green Ext Time (p_c), s	0.0	49.5				77.3		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	1.5
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	164	369	592	104	531	74	396	1263	46	82	2045	145
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	173	388	438	109	559	18	417	1329	45	86	2153	54
Adj No. of Lanes	1	2	1	1	2	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	702	310	135	731	323	450	2737	93	121	2269	704
Arrive On Green	0.08	0.20	0.20	0.03	0.07	0.07	0.26	1.00	1.00	0.02	0.30	0.30
Sat Flow, veh/h	1774	3539	1564	1774	3539	1565	3442	5051	171	3442	5085	1577
Grp Volume(v), veh/h	173	388	438	109	559	18	417	892	482	86	2153	54
Grp Sat Flow(s),veh/h/ln	1774	1770	1564	1774	1770	1565	1721	1695	1832	1721	1695	1577
Q Serve(g_s), s	10.0	11.8	17.0	7.3	18.6	1.3	14.2	0.0	0.0	3.0	49.7	2.9
Cycle Q Clear(g_c), s	10.0	11.8	17.0	7.3	18.6	1.3	14.2	0.0	0.0	3.0	49.7	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	148	702	310	135	731	323	450	1837	992	121	2269	704
V/C Ratio(X)	1.17	0.55	1.41	0.81	0.77	0.06	0.93	0.49	0.49	0.71	0.95	0.08
Avail Cap(c_a), veh/h	148	973	430	148	973	430	459	1837	992	287	2269	704
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	0.84	0.84	0.84	0.92	0.92	0.92	0.83	0.83	0.83
Uniform Delay (d), s/veh	55.0	43.3	24.4	57.6	53.1	45.0	43.8	0.0	0.0	58.0	40.7	24.3
Incr Delay (d2), s/veh	127.1	0.3	203.0	19.6	1.4	0.0	22.8	0.8	1.6	2.4	8.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	10.1	5.8	24.8	4.3	9.3	0.6	8.1	0.2	0.4	1.5	25.1	1.3
LnGrp Delay(d),s/veh	182.1	43.5	227.4	77.2	54.5	45.0	66.6	0.8	1.6	60.4	49.6	24.5
LnGrp LOS	F	D	F	E	D	D	E	A	A	E	D	C
Approach Vol, veh/h		999			686			1791			2293	
Approach Delay, s/veh		148.1			57.8			16.3			49.4	
Approach LOS		F			E			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	69.0	15.0	27.8	19.7	57.5	14.0	28.8
Change Period (Y+Rc), s	3.5	5.3	5.3	* 6	3.5	5.3	3.5	5.3
Max Green Setting (Gmax), s	10.5	49.7	10.5	* 31	16.5	43.7	10.5	31.7
Max Q Clear Time (g_c+I1), s	5.0	2.0	9.3	19.0	16.2	51.7	12.0	20.6
Green Ext Time (p_c), s	0.0	31.0	0.3	1.8	0.0	0.0	0.0	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	57.2
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	95	628	126	136	659	131	103	445	89	179	823	177
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1863	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	102	675	135	146	709	141	111	478	96	192	885	190
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	1791	354	195	1742	542	166	852	170	239	964	207
Arrive On Green	0.32	0.81	0.81	0.22	0.69	0.69	0.03	0.09	0.09	0.27	0.64	0.64
Sat Flow, veh/h	1774	4433	875	1774	5085	1583	1774	3059	611	1774	3016	647
Grp Volume(v), veh/h	102	535	275	146	709	141	111	287	287	192	540	535
Grp Sat Flow(s),veh/h/ln	1774	1763	1783	1774	1695	1583	1774	1840	1829	1774	1840	1823
Q Serve(g_s), s	5.3	5.0	5.1	9.2	7.3	2.8	7.4	17.9	18.1	12.1	30.8	30.8
Cycle Q Clear(g_c), s	5.3	5.0	5.1	9.2	7.3	2.8	7.4	17.9	18.1	12.1	30.8	30.8
Prop In Lane	1.00		0.49	1.00		1.00	1.00		0.33	1.00		0.36
Lane Grp Cap(c), veh/h	283	1425	720	195	1742	542	166	513	509	239	588	582
V/C Ratio(X)	0.36	0.38	0.38	0.75	0.41	0.26	0.67	0.56	0.56	0.80	0.92	0.92
Avail Cap(c_a), veh/h	283	1425	720	214	1742	542	214	569	566	273	630	624
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.97	0.97	0.97	0.98	0.98	0.98	0.98	0.98	0.98	0.91	0.91	0.91
Uniform Delay (d), s/veh	36.1	7.3	7.4	45.3	13.6	6.2	56.3	47.4	47.5	42.4	20.3	20.3
Incr Delay (d2), s/veh	0.3	0.7	1.5	10.4	0.7	1.1	2.4	0.4	0.4	11.3	16.0	16.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.6	2.5	2.7	5.0	3.4	1.3	3.8	9.2	9.2	6.6	17.9	17.8
LnGrp Delay(d),s/veh	36.4	8.1	8.8	55.7	14.3	7.4	58.7	47.8	47.9	53.7	36.3	36.5
LnGrp LOS	D	A	A	E	B	A	E	D	D	D	D	D
Approach Vol, veh/h		912			996			685			1267	
Approach Delay, s/veh		11.5			19.4			49.6			39.1	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	36.3	14.7	51.4	12.7	41.2	22.0	44.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	16.5	35.1	12.5	39.1	12.5	39.1	12.5	* 39
Max Q Clear Time (g_c+I1), s	14.1	20.1	11.2	7.1	9.4	32.8	7.3	9.3
Green Ext Time (p_c), s	0.0	6.0	0.0	7.7	0.0	3.5	2.7	7.8

Intersection Summary	
HCM 2010 Ctrl Delay	29.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

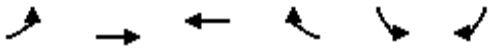
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	571	180	310	644	152	120	907	262	251	1697	145
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1788	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	128	607	191	330	685	162	128	965	279	267	1805	154
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	1115	344	426	1745	522	233	1562	451	374	2436	801
Arrive On Green	0.02	0.10	0.10	0.25	0.69	0.69	0.14	0.80	0.80	0.14	0.58	0.58
Sat Flow, veh/h	3442	3855	1188	3442	5085	1520	3442	3922	1132	3548	5588	1583
Grp Volume(v), veh/h	128	532	266	330	685	162	128	834	410	267	1805	154
Grp Sat Flow(s),veh/h/ln	1721	1695	1653	1721	1695	1520	1721	1695	1663	1774	1863	1583
Q Serve(g_s), s	4.4	18.0	18.4	10.7	6.9	5.1	4.2	11.8	11.9	8.6	28.6	4.9
Cycle Q Clear(g_c), s	4.4	18.0	18.4	10.7	6.9	5.1	4.2	11.8	11.9	8.6	28.6	4.9
Prop In Lane	1.00		0.72	1.00		1.00	1.00		0.68	1.00		1.00
Lane Grp Cap(c), veh/h	240	980	478	426	1745	522	233	1350	662	374	2436	801
V/C Ratio(X)	0.53	0.54	0.56	0.77	0.39	0.31	0.55	0.62	0.62	0.71	0.74	0.19
Avail Cap(c_a), veh/h	387	980	478	502	1745	522	387	1350	662	399	2436	801
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	0.98	0.98	0.98	0.97	0.97	0.97	0.91	0.91	0.91	0.61	0.61	0.61
Uniform Delay (d), s/veh	56.7	46.7	46.9	43.6	13.5	13.2	50.1	8.6	8.6	49.8	20.2	11.8
Incr Delay (d2), s/veh	0.7	2.1	4.5	5.0	0.6	1.5	0.7	1.9	3.9	2.8	1.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.1	8.7	9.0	5.3	3.3	2.3	2.0	5.7	5.9	4.3	14.8	2.2
LnGrp Delay(d),s/veh	57.4	48.8	51.4	48.6	14.1	14.7	50.8	10.5	12.5	52.6	21.5	12.2
LnGrp LOS	E	D	D	D	B	B	D	B	B	D	C	B
Approach Vol, veh/h		926			1177			1372			2226	
Approach Delay, s/veh		50.8			23.8			14.8			24.6	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	56.0	9.9	44.5	14.2	51.5	16.3	38.0
Change Period (Y+Rc), s	3.5	5.7	3.5	5.3	3.5	5.7	3.5	5.3
Max Green Setting (Gmax), s	11.5	42.3	11.5	36.7	11.5	42.3	15.5	32.7
Max Q Clear Time (g_c+I1), s	6.2	30.6	6.4	8.9	10.6	13.9	12.7	20.4
Green Ext Time (p_c), s	0.1	11.5	0.1	15.9	0.0	27.1	0.1	8.9

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	75	866	830	100	80	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.2	5.2	5.2	5.5	5.5
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	1770	1559
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	1770	1559
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	88	1019	976	118	94	209
RTOR Reduction (vph)	0	0	0	0	0	190
Lane Group Flow (vph)	88	1019	976	118	94	19
Confl. Peds. (#/hr)					1	1
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	10.3	79.6	73.4	73.4	10.7	10.7
Effective Green, g (s)	9.8	80.9	74.7	74.7	10.9	10.9
Actuated g/C Ratio	0.08	0.67	0.62	0.62	0.09	0.09
Clearance Time (s)	3.5	6.5	6.5	6.5	5.7	5.7
Vehicle Extension (s)	2.0	4.3	4.3	4.3	2.0	2.0
Lane Grp Cap (vph)	144	2385	2203	985	160	141
v/s Ratio Prot	c0.05	0.29	c0.28		c0.05	
v/s Ratio Perm				0.07		0.01
v/c Ratio	0.61	0.43	0.44	0.12	0.59	0.13
Uniform Delay, d1	53.3	8.9	11.8	9.2	52.4	50.2
Progression Factor	1.00	1.00	0.14	0.08	1.00	1.00
Incremental Delay, d2	5.3	0.6	0.6	0.2	3.5	0.2
Delay (s)	58.6	9.5	2.3	1.0	55.9	50.4
Level of Service	E	A	A	A	E	D
Approach Delay (s)		13.4	2.2		52.1	
Approach LOS		B	A		D	

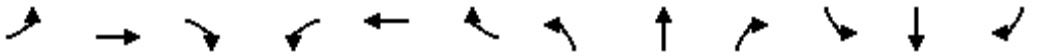
Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	44.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	874	72	23	913	19	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2		4.0	5.2	5.5	5.5
Lane Util. Factor	0.95		1.00	0.91	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3499		1770	5085	1770	1563
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	3499		1770	5085	1770	1563
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	993	82	26	1038	22	17
RTOR Reduction (vph)	2	0	0	0	0	16
Lane Group Flow (vph)	1073	0	26	1038	22	1
Confl. Peds. (#/hr)					4	1
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	4		3	8	5	
Permitted Phases						5
Actuated Green, G (s)	79.6		4.1	73.4	4.2	4.2
Effective Green, g (s)	80.9		3.6	74.7	4.4	4.4
Actuated g/C Ratio	0.67		0.03	0.62	0.04	0.04
Clearance Time (s)	6.5		3.5	6.5	5.7	5.7
Vehicle Extension (s)	4.3		1.5	4.3	2.0	2.0
Lane Grp Cap (vph)	2358		53	3165	64	57
v/s Ratio Prot	c0.31		c0.01	0.20	c0.01	
v/s Ratio Perm						0.00
v/c Ratio	0.45		0.49	0.33	0.34	0.01
Uniform Delay, d1	9.2		57.3	10.7	56.4	55.7
Progression Factor	0.37		0.99	1.12	1.00	1.00
Incremental Delay, d2	0.6		2.4	0.3	1.2	0.0
Delay (s)	4.0		59.0	12.3	57.6	55.7
Level of Service	A		E	B	E	E
Approach Delay (s)	4.0			13.4	56.8	
Approach LOS	A			B	E	

Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		

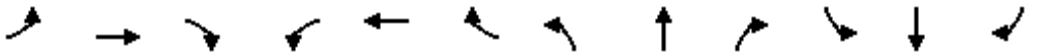
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	74	826	52	34	801	71	12	2	4	19	1	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	11	10	11	11	11	11	11	11
Total Lost time (s)	1.5	3.0		1.5	3.0	3.0		2.6			1.5	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00			1.00	
Frt	1.00	0.99		1.00	1.00	0.85		0.97			0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97			0.96	
Satd. Flow (prot)	3204	5040		1652	4916	1478		1692			1705	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.86			0.82	
Satd. Flow (perm)	3204	5040		1652	4916	1478		1501			1456	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	79	879	55	36	852	76	13	2	4	20	1	2
RTOR Reduction (vph)	0	3	0	0	0	22	0	3	0	0	2	0
Lane Group Flow (vph)	79	931	0	36	852	54	0	16	0	0	21	0
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2 5			1 6	
Permitted Phases						8	2 5			1 6		
Actuated Green, G (s)	6.1	78.3		10.8	83.0	83.0		15.9			12.7	
Effective Green, g (s)	8.1	80.3		12.8	85.0	85.0		19.8			16.7	
Actuated g/C Ratio	0.07	0.67		0.11	0.71	0.71		0.17			0.14	
Clearance Time (s)	3.5	5.0		3.5	5.0	5.0						
Vehicle Extension (s)	1.5	3.9		1.5	3.9	3.9						
Lane Grp Cap (vph)	216	3372		176	3482	1046		247			202	
v/s Ratio Prot	c0.02	c0.18		0.02	c0.17							
v/s Ratio Perm						0.04		c0.01			c0.01	
v/c Ratio	0.37	0.28		0.20	0.24	0.05		0.06			0.11	
Uniform Delay, d1	53.5	8.1		49.0	6.2	5.3		42.3			45.1	
Progression Factor	1.00	1.00		0.67	0.34	0.05		1.00			1.00	
Incremental Delay, d2	0.4	0.2		0.2	0.2	0.1		0.0			0.1	
Delay (s)	53.9	8.3		33.1	2.3	0.4		42.3			45.2	
Level of Service	D	A		C	A	A		D			D	
Approach Delay (s)		11.8			3.3			42.3			45.2	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		

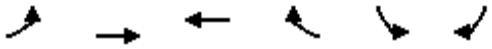
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	739	74	64	821	30	50	27	67	29	16	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	13	13	10	10	10	10	14	14
Total Lost time (s)	1.5	3.0		1.5	3.0		1.5	2.6		1.5	2.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.89		1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	4849		1652	5227		1652	1552		1652	1775	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1652	4849		1652	5227		1652	1552		1652	1775	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	38	830	83	72	922	34	56	30	75	33	18	44
RTOR Reduction (vph)	0	5	0	0	1	0	0	68	0	0	41	0
Lane Group Flow (vph)	38	908	0	72	955	0	56	37	0	33	21	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.1	78.3		10.8	83.0		7.2	8.7		5.6	7.1	
Effective Green, g (s)	8.1	80.3		12.8	85.0		9.2	10.7		7.6	9.1	
Actuated g/C Ratio	0.07	0.67		0.11	0.71		0.08	0.09		0.06	0.08	
Clearance Time (s)	3.5	5.0		3.5	5.0		3.5	4.6		3.5	4.6	
Vehicle Extension (s)	1.5	3.9		1.5	3.9		1.5	2.0		1.5	2.0	
Lane Grp Cap (vph)	111	3244		176	3702		126	138		104	134	
v/s Ratio Prot	c0.02	c0.19		c0.04	0.18		c0.03	c0.02		0.02	0.01	
v/s Ratio Perm												
v/c Ratio	0.34	0.28		0.41	0.26		0.44	0.27		0.32	0.16	
Uniform Delay, d1	53.4	8.1		50.1	6.2		53.0	51.0		53.7	51.9	
Progression Factor	1.27	0.24		0.68	0.26		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.2		0.5	0.2		0.9	0.4		0.6	0.2	
Delay (s)	68.3	2.1		34.5	1.8		53.9	51.4		54.4	52.1	
Level of Service	E	A		C	A		D	D		D	D	
Approach Delay (s)		4.8			4.1			52.2			52.9	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	39.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



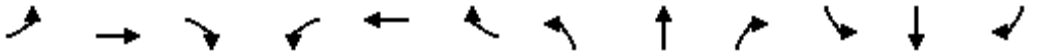
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	4	836	1284	55	14	10
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	4	939	1443	62	14	14
Adj No. of Lanes	1	3	3	1	1	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	34	4622	4457	1462	83	76
Arrive On Green	0.04	1.00	0.88	0.88	0.05	0.05
Sat Flow, veh/h	1703	5253	5253	1583	1774	1615
Grp Volume(v), veh/h	4	939	1443	62	14	14
Grp Sat Flow(s),veh/h/ln	1703	1695	1695	1583	1774	1615
Q Serve(g_s), s	0.3	0.0	5.9	0.4	0.9	1.0
Cycle Q Clear(g_c), s	0.3	0.0	5.9	0.4	0.9	1.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	34	4622	4457	1462	83	76
V/C Ratio(X)	0.12	0.20	0.32	0.04	0.17	0.18
Avail Cap(c_a), veh/h	263	4622	4457	1462	532	484
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.70	0.70	1.00	1.00
Uniform Delay (d), s/veh	56.6	0.0	1.3	0.4	54.9	55.0
Incr Delay (d2), s/veh	0.6	0.1	0.1	0.0	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	0.0	2.7	0.3	0.5	0.9
LnGrp Delay(d),s/veh	57.2	0.1	1.4	0.4	55.3	55.4
LnGrp LOS	E	A	A	A	E	E
Approach Vol, veh/h		943	1505		28	
Approach Delay, s/veh		0.3	1.4		55.3	
Approach LOS		A	A		E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				112.4		7.6	3.9	108.5
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				76.7		34.0	16.5	56.7
Max Q Clear Time (g_c+I1), s				2.0		3.0	2.3	7.9
Green Ext Time (p_c), s				54.4		0.0	0.0	39.3

Intersection Summary	
HCM 2010 Ctrl Delay	1.6
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	48	366	56	124	916	238	102	540	181	251	848	75
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1937	1863	1937	1976
Adj Flow Rate, veh/h	58	441	47	149	1104	45	123	651	99	302	1022	84
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	1020	107	204	1399	436	177	1384	644	353	1689	139
Arrive On Green	0.06	0.22	0.22	0.08	0.18	0.18	0.10	0.39	0.39	0.20	0.49	0.49
Sat Flow, veh/h	1774	4675	491	1774	5085	1583	1774	3539	1647	1774	3445	283
Grp Volume(v), veh/h	58	318	170	149	1104	45	123	651	99	302	546	560
Grp Sat Flow(s),veh/h/ln	1774	1695	1776	1774	1695	1583	1774	1770	1647	1774	1840	1887
Q Serve(g_s), s	3.8	9.7	9.9	9.9	24.9	2.8	8.0	16.5	4.7	19.7	25.8	25.8
Cycle Q Clear(g_c), s	3.8	9.7	9.9	9.9	24.9	2.8	8.0	16.5	4.7	19.7	25.8	25.8
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	103	739	387	204	1399	436	177	1384	644	353	903	926
V/C Ratio(X)	0.56	0.43	0.44	0.73	0.79	0.10	0.70	0.47	0.15	0.86	0.60	0.61
Avail Cap(c_a), veh/h	200	754	395	303	1428	445	362	1384	644	436	903	926
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	1.00	1.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	55.0	40.5	40.6	53.5	45.6	36.6	52.3	27.3	23.7	46.4	22.1	22.2
Incr Delay (d2), s/veh	1.8	0.6	1.2	1.8	3.2	0.2	1.8	1.1	0.5	8.6	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.9	4.6	5.0	4.9	12.1	1.3	4.1	8.3	2.2	10.5	13.6	13.9
LnGrp Delay(d),s/veh	56.8	41.1	41.8	55.3	48.8	36.8	54.1	28.4	24.2	55.0	24.4	24.3
LnGrp LOS	E	D	D	E	D	D	D	C	C	D	C	C
Approach Vol, veh/h		546			1298			873			1408	
Approach Delay, s/veh		43.0			49.1			31.6			30.9	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.4	49.8	15.3	29.5	13.4	61.8	8.5	36.3
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	27.5	32.1	18.5	24.7	22.5	37.1	11.5	31.7
Max Q Clear Time (g_c+I1), s	21.7	18.5	11.9	11.9	10.0	27.8	5.8	26.9
Green Ext Time (p_c), s	0.1	11.2	0.1	9.9	0.1	8.0	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	38.4
HCM 2010 LOS	D

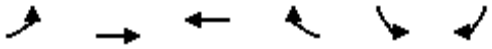
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	147	600	135	460	1075	419	62	996	180	167	1330	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1788	1937	1976
Adj Flow Rate, veh/h	160	652	147	500	1168	455	67	1083	196	182	1446	93
Adj No. of Lanes	2	3	1	2	3	1	2	3	0	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	1123	426	612	1758	547	165	1500	271	227	2191	141
Arrive On Green	0.10	0.29	0.29	0.18	0.35	0.35	0.10	0.69	0.69	0.27	0.86	0.86
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	4332	783	1703	5079	327
Grp Volume(v), veh/h	160	652	147	500	1168	455	67	847	432	182	1004	535
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1725	1703	1763	1880
Q Serve(g_s), s	5.3	13.1	5.2	16.8	23.4	31.7	2.2	18.4	18.5	12.0	10.9	10.9
Cycle Q Clear(g_c), s	5.3	13.1	5.2	16.8	23.4	31.7	2.2	18.4	18.5	12.0	10.9	10.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.17
Lane Grp Cap(c), veh/h	268	1123	426	612	1758	547	165	1174	597	227	1521	811
V/C Ratio(X)	0.60	0.58	0.35	0.82	0.66	0.83	0.40	0.72	0.72	0.80	0.66	0.66
Avail Cap(c_a), veh/h	387	1123	426	731	1758	547	387	1174	597	277	1521	811
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.96	0.96	0.96	0.73	0.73	0.73
Uniform Delay (d), s/veh	52.0	37.6	14.4	47.4	33.3	36.0	52.6	14.9	14.9	42.5	5.4	5.4
Incr Delay (d2), s/veh	0.8	2.2	2.2	5.1	2.0	13.7	0.6	3.7	7.1	7.9	1.6	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.5	6.3	2.5	8.4	11.2	15.9	1.1	8.8	9.6	6.1	5.1	5.7
LnGrp Delay(d),s/veh	52.7	39.8	16.5	52.6	35.3	49.7	53.2	18.6	22.0	50.5	7.1	8.5
LnGrp LOS	D	D	B	D	D	D	D	B	C	D	A	A
Approach Vol, veh/h		959			2123			1346			1721	
Approach Delay, s/veh		38.4			42.5			21.4			12.1	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	45.7	25.9	31.0	7.3	55.9	10.9	46.0
Change Period (Y+Rc), s	3.5	6.1	6.5	* 6.5	3.5	6.1	3.5	6.5
Max Green Setting (Gmax), s	17.5	34.9	23.5	* 25	11.5	40.9	11.5	36.5
Max Q Clear Time (g_c+I1), s	14.0	20.5	18.8	15.1	4.2	12.9	7.3	33.7
Green Ext Time (p_c), s	0.1	13.8	0.6	4.4	0.0	25.8	0.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	28.7
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	93	805	725	152	415	243
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1863	1788	1863	1937
Adj Flow Rate, veh/h	103	894	806	169	461	270
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	368	2065	1986	853	572	531
Arrive On Green	0.75	0.75	0.56	0.56	0.32	0.32
Sat Flow, veh/h	574	3778	3632	1520	1774	1647
Grp Volume(v), veh/h	103	894	806	169	461	270
Grp Sat Flow(s),veh/h/ln	574	1840	1770	1520	1774	1647
Q Serve(g_s), s	6.0	5.5	7.8	3.3	14.3	8.0
Cycle Q Clear(g_c), s	13.8	5.5	7.8	3.3	14.3	8.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	368	2065	1986	853	572	531
V/C Ratio(X)	0.28	0.43	0.41	0.20	0.81	0.51
Avail Cap(c_a), veh/h	368	2065	1986	853	967	897
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.66	0.66	0.90	0.90
Uniform Delay (d), s/veh	7.3	4.0	7.5	6.5	18.6	16.5
Incr Delay (d2), s/veh	1.7	0.6	0.4	0.3	0.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	2.8	3.8	1.4	7.1	3.6
LnGrp Delay(d),s/veh	9.0	4.6	7.9	6.8	19.6	16.7
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h		997	975		731	
Approach Delay, s/veh		5.1	7.7		18.5	
Approach LOS		A	A		B	

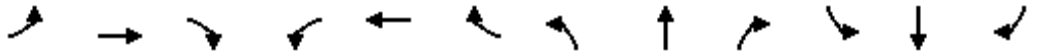
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				37.4		22.6		37.4
Change Period (Y+Rc), s				5.7		5.3		5.7
Max Green Setting (Gmax), s				18.3		30.7		18.3
Max Q Clear Time (g_c+I1), s				15.8		16.3		9.8
Green Ext Time (p_c), s				2.3		1.1		7.6

Intersection Summary	
HCM 2010 Ctrl Delay	9.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	995	14	4	1000	8	14	1	3	21	2	103
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1900	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	22	1106	16	4	1111	9	16	1	3	23	2	114
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	4311	62	35	4114	33	123	50	149	220	3	188
Arrive On Green	0.03	0.80	0.80	0.01	0.26	0.26	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1774	5372	78	1774	5203	42	1271	428	1283	1407	28	1622
Grp Volume(v), veh/h	22	726	396	4	724	396	16	0	4	23	0	116
Grp Sat Flow(s),veh/h/ln	1774	1763	1924	1774	1695	1855	1271	0	1711	1407	0	1651
Q Serve(g_s), s	1.5	6.1	6.1	0.3	20.4	20.4	1.5	0.0	0.2	1.8	0.0	8.0
Cycle Q Clear(g_c), s	1.5	6.1	6.1	0.3	20.4	20.4	9.5	0.0	0.2	2.0	0.0	8.0
Prop In Lane	1.00		0.04	1.00		0.02	1.00		0.75	1.00		0.98
Lane Grp Cap(c), veh/h	56	2829	1544	35	2680	1467	123	0	199	220	0	192
V/C Ratio(X)	0.39	0.26	0.26	0.11	0.27	0.27	0.13	0.00	0.02	0.10	0.00	0.61
Avail Cap(c_a), veh/h	214	2829	1544	214	2680	1467	350	0	505	472	0	487
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	2.9	2.9	58.6	16.8	16.8	54.9	0.0	47.0	47.9	0.0	50.4
Incr Delay (d2), s/veh	1.3	0.2	0.3	0.5	0.2	0.4	0.2	0.0	0.0	0.1	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	3.0	3.3	0.1	9.7	10.7	0.5	0.0	0.1	0.7	0.0	3.7
LnGrp Delay(d),s/veh	58.3	3.1	3.3	59.0	17.0	17.2	55.1	0.0	47.0	48.0	0.0	51.6
LnGrp LOS	E	A	A	E	B	B	E		D	D		D
Approach Vol, veh/h		1144			1124			20			139	
Approach Delay, s/veh		4.2			17.3			53.5			51.0	
Approach LOS		A			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.5	3.9	99.6		16.5	5.3	98.2
Change Period (Y+Rc), s		4.6	3.5	5.3		4.6	3.5	5.3
Max Green Setting (Gmax), s		33.4	12.5	60.7		33.4	12.5	60.7
Max Q Clear Time (g_c+I1), s		11.5	2.3	8.1		10.0	3.5	22.4
Green Ext Time (p_c), s		0.5	0.0	33.9		0.5	0.0	27.4

Intersection Summary	
HCM 2010 Ctrl Delay	13.3
HCM 2010 LOS	B



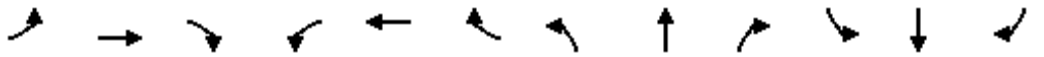
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	198	669	271	185	492	138	133	826	73	283	1328	60
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	204	690	279	191	507	142	137	852	75	292	1369	62
Adj No. of Lanes	2	3	0	2	3	1	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	841	335	295	1177	873	568	1524	134	487	1455	66
Arrive On Green	0.09	0.24	0.24	0.09	0.23	0.23	0.11	0.11	0.11	0.55	0.55	0.55
Sat Flow, veh/h	3442	3576	1425	3442	5085	1583	1774	4762	418	1774	5306	240
Grp Volume(v), veh/h	204	654	315	191	507	142	137	606	321	292	961	470
Grp Sat Flow(s),veh/h/ln	1721	1695	1611	1721	1695	1583	1774	1695	1789	1774	1863	1820
Q Serve(g_s), s	7.5	23.7	24.2	7.0	11.1	5.7	9.2	22.1	22.2	14.4	31.3	31.3
Cycle Q Clear(g_c), s	7.5	23.7	24.2	7.0	11.1	5.7	9.2	22.1	22.2	14.4	31.3	31.3
Prop In Lane	1.00		0.88	1.00		1.00	1.00		0.23	1.00		0.13
Lane Grp Cap(c), veh/h	308	798	379	295	1177	873	568	1085	573	487	1022	499
V/C Ratio(X)	0.66	0.82	0.83	0.65	0.43	0.16	0.24	0.56	0.56	0.60	0.94	0.94
Avail Cap(c_a), veh/h	463	798	379	463	1177	873	568	1085	573	487	1023	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	0.91	0.91	0.91	0.38	0.38	0.38
Uniform Delay (d), s/veh	57.3	47.1	47.3	57.5	42.6	14.4	43.6	49.4	49.5	24.5	28.3	28.3
Incr Delay (d2), s/veh	0.9	9.2	18.8	0.9	1.1	0.4	0.9	1.9	3.6	1.0	7.6	13.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	12.2	12.8	3.4	5.3	4.4	4.7	10.7	11.6	7.1	16.8	17.2
LnGrp Delay(d),s/veh	58.2	56.3	66.1	58.4	43.8	14.7	44.6	51.3	53.1	25.5	35.9	41.7
LnGrp LOS	E	E	E	E	D	B	D	D	D	C	D	D
Approach Vol, veh/h		1173			840			1064			1723	
Approach Delay, s/veh		59.3			42.2			51.0			35.7	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.9	13.1	33.0		39.0	12.6	33.5
Change Period (Y+Rc), s		5.3	3.5	4.9		5.3	3.5	4.9
Max Green Setting (Gmax), s		33.7	15.5	28.1		33.7	15.5	28.1
Max Q Clear Time (g_c+I1), s		24.2	9.5	13.1		33.3	9.0	26.2
Green Ext Time (p_c), s		5.5	0.2	10.8		0.4	0.2	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	46.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



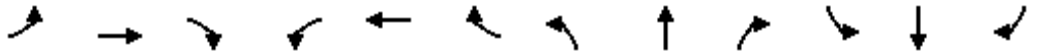
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	65	853	18	86	803	65	15	4	36	27	3	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	68	898	19	91	845	68	16	4	38	28	3	29
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	573	4114	87	143	2583	207	123	14	130	139	12	141
Arrive On Green	0.65	1.00	1.00	0.05	0.35	0.35	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	1774	5330	113	1774	4992	400	1372	153	1453	917	136	1583
Grp Volume(v), veh/h	68	594	323	91	596	317	16	0	42	31	0	29
Grp Sat Flow(s),veh/h/ln	1774	1763	1917	1774	1763	1867	1372	0	1606	1052	0	1583
Q Serve(g_s), s	1.8	0.0	0.0	6.0	14.9	15.0	1.4	0.0	2.9	2.3	0.0	2.0
Cycle Q Clear(g_c), s	1.8	0.0	0.0	6.0	14.9	15.0	6.5	0.0	2.9	5.2	0.0	2.0
Prop In Lane	1.00		0.06	1.00		0.21	1.00		0.90	0.90		1.00
Lane Grp Cap(c), veh/h	573	2721	1480	143	1825	966	123	0	143	151	0	141
V/C Ratio(X)	0.12	0.22	0.22	0.64	0.33	0.33	0.13	0.00	0.29	0.21	0.00	0.21
Avail Cap(c_a), veh/h	573	2721	1480	229	1825	966	405	0	474	438	0	467
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	0.0	55.0	23.8	23.8	55.2	0.0	51.1	53.1	0.0	50.7
Incr Delay (d2), s/veh	0.0	0.2	0.3	1.6	0.4	0.8	0.2	0.0	0.4	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	0.1	0.1	3.0	7.4	8.0	0.5	0.0	1.3	1.0	0.0	0.9
LnGrp Delay(d),s/veh	14.7	0.2	0.3	56.7	24.2	24.7	55.4	0.0	51.5	53.3	0.0	51.0
LnGrp LOS	B	A	A	E	C	C	E		D	D		D
Approach Vol, veh/h		985			1004			58			60	
Approach Delay, s/veh		1.2			27.3			52.6			52.2	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.3	11.2	95.5		13.3	41.7	65.0
Change Period (Y+Rc), s		4.6	3.5	4.9		4.6	4.9	* 4.9
Max Green Setting (Gmax), s		33.4	13.5	60.1		33.4	13.5	* 60
Max Q Clear Time (g_c+I1), s		8.5	8.0	2.0		7.2	3.8	17.0
Green Ext Time (p_c), s		0.3	0.0	9.8		0.3	3.5	9.7

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	27	1024	45	5	621	71	47	18	16	117	25	53
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	30	1138	50	6	690	79	52	20	18	130	28	59
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	83	2800	123	35	2506	287	188	138	124	231	82	172
Arrive On Green	0.09	1.00	1.00	0.02	0.75	0.75	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1774	3592	158	1774	3330	381	1305	941	847	1364	557	1173
Grp Volume(v), veh/h	30	583	605	6	381	388	52	0	38	130	0	87
Grp Sat Flow(s),veh/h/ln	1774	1840	1909	1774	1840	1870	1305	0	1788	1364	0	1730
Q Serve(g_s), s	2.1	0.0	0.0	0.4	8.4	8.4	4.8	0.0	2.4	11.9	0.0	5.9
Cycle Q Clear(g_c), s	2.1	0.0	0.0	0.4	8.4	8.4	10.7	0.0	2.4	14.3	0.0	5.9
Prop In Lane	1.00		0.08	1.00		0.20	1.00		0.47	1.00		0.68
Lane Grp Cap(c), veh/h	83	1434	1488	35	1385	1407	188	0	263	231	0	254
V/C Ratio(X)	0.36	0.41	0.41	0.17	0.28	0.28	0.28	0.00	0.14	0.56	0.00	0.34
Avail Cap(c_a), veh/h	252	1434	1488	252	1385	1407	422	0	583	475	0	564
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	0.60	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.1	0.0	0.0	62.7	5.0	5.0	54.6	0.0	48.3	54.6	0.0	49.8
Incr Delay (d2), s/veh	0.6	0.5	0.5	0.8	0.5	0.5	0.3	0.0	0.1	0.8	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.0	0.2	0.2	0.2	4.4	4.5	1.8	0.0	1.2	4.6	0.0	2.8
LnGrp Delay(d),s/veh	57.7	0.5	0.5	63.5	5.5	5.5	54.9	0.0	48.4	55.4	0.0	50.1
LnGrp LOS	E	A	A	E	A	A	D		D	E		D
Approach Vol, veh/h		1218			775			90			217	
Approach Delay, s/veh		1.9			6.0			52.2			53.3	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.1	104.2		21.7	7.6	100.7		21.7
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	16.5	60.1		40.4	16.5	60.1		40.4
Max Q Clear Time (g_c+I1), s	2.4	2.0		16.3	4.1	10.4		12.7
Green Ext Time (p_c), s	0.0	34.3		0.8	0.0	31.3		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	10.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	6	775	13	9	1264	22	12	2	70	17	4	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1900	1863	1863	1900	1976	1937	1976	1900	1863	1863
Adj Flow Rate, veh/h	7	881	15	10	1436	25	14	2	80	19	5	6
Adj No. of Lanes	1	3	0	1	4	0	0	1	0	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	549	4262	73	42	3360	58	50	10	126	144	32	146
Arrive On Green	0.64	1.00	1.00	0.05	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	1703	5150	88	1774	6535	114	165	108	1367	986	348	1583
Grp Volume(v), veh/h	7	580	316	10	1056	405	96	0	0	24	0	6
Grp Sat Flow(s),veh/h/ln	1703	1695	1847	1774	1602	1843	1641	0	0	1334	0	1583
Q Serve(g_s), s	0.2	0.0	0.0	0.7	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	0.2	0.0	0.0	0.7	0.0	0.0	6.7	0.0	0.0	1.9	0.0	0.4
Prop In Lane	1.00		0.05	1.00		0.06	0.15		0.83	0.79		1.00
Lane Grp Cap(c), veh/h	549	2806	1529	42	2471	947	185	0	0	177	0	146
V/C Ratio(X)	0.01	0.21	0.21	0.24	0.43	0.43	0.52	0.00	0.00	0.14	0.00	0.04
Avail Cap(c_a), veh/h	549	2806	1529	273	2471	947	522	0	0	467	0	475
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.95	0.95	0.95	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	0.0	56.1	0.0	0.0	52.5	0.0	0.0	50.2	0.0	49.7
Incr Delay (d2), s/veh	0.0	0.2	0.3	1.0	0.5	1.3	0.8	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	0.1	0.1	0.3	0.1	0.4	3.1	0.0	0.0	0.7	0.0	0.2
LnGrp Delay(d),s/veh	14.5	0.2	0.3	57.1	0.5	1.3	53.3	0.0	0.0	50.4	0.0	49.7
LnGrp LOS	B	A	A	E	A	A	D			D		D
Approach Vol, veh/h		903			1471			96			30	
Approach Delay, s/veh		0.3			1.1			53.3			50.2	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.0	4.4	102.6		13.0	42.0	65.0
Change Period (Y+Rc), s		4.0	3.5	5.3		4.0	5.3	* 5.3
Max Green Setting (Gmax), s		34.0	16.5	56.7		34.0	13.5	* 60
Max Q Clear Time (g_c+I1), s		8.7	2.7	2.0		3.9	2.2	2.0
Green Ext Time (p_c), s		0.5	0.0	11.2		0.5	0.2	23.4

Intersection Summary	
HCM 2010 Ctrl Delay	3.4
HCM 2010 LOS	A

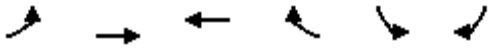
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	42	828	118	133	818	129	88	306	160	99	408	107
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	47	930	133	149	919	145	99	344	180	111	458	120
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	2469	352	203	2726	429	193	692	355	209	850	221
Arrive On Green	0.02	0.17	0.17	0.11	0.59	0.59	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	4679	667	1774	4610	725	832	2355	1210	875	2892	752
Grp Volume(v), veh/h	47	700	363	149	702	362	99	267	257	111	290	288
Grp Sat Flow(s),veh/h/ln	1774	1763	1820	1774	1763	1809	832	1840	1724	875	1840	1804
Q Serve(g_s), s	3.2	21.1	21.2	9.7	12.2	12.3	13.6	14.4	14.8	14.5	15.9	16.1
Cycle Q Clear(g_c), s	3.2	21.1	21.2	9.7	12.2	12.3	29.7	14.4	14.8	29.3	15.9	16.1
Prop In Lane	1.00		0.37	1.00		0.40	1.00		0.70	1.00		0.42
Lane Grp Cap(c), veh/h	90	1861	960	203	2085	1070	193	541	507	209	541	530
V/C Ratio(X)	0.52	0.38	0.38	0.74	0.34	0.34	0.51	0.49	0.51	0.53	0.54	0.54
Avail Cap(c_a), veh/h	214	1861	960	273	2085	1070	206	569	533	222	569	558
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	0.77	0.77	0.77	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	32.1	32.1	51.4	12.5	12.5	48.1	35.0	35.1	47.3	35.5	35.6
Incr Delay (d2), s/veh	1.7	0.6	1.1	3.9	0.4	0.9	0.6	0.2	0.2	0.8	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	10.4	11.0	5.0	6.1	6.4	3.2	7.4	7.1	3.5	8.1	8.1
LnGrp Delay(d),s/veh	59.3	32.7	33.2	55.3	13.0	13.4	48.7	35.2	35.4	48.1	35.9	36.0
LnGrp LOS	E	C	C	E	B	B	D	D	D	D	D	D
Approach Vol, veh/h		1110			1213			623			689	
Approach Delay, s/veh		34.0			18.3			37.4			37.9	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.2	66.6		38.2	7.6	74.2		38.2
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	16.5	54.7		35.1	12.5	58.7		35.1
Max Q Clear Time (g_c+I1), s	11.7	23.2		31.3	5.2	14.3		31.7
Green Ext Time (p_c), s	0.0	22.8		1.7	0.0	28.9		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	16	764	1266	21	22	8
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	20	955	1582	26	19	20
Adj No. of Lanes	1	3	4	0	1	1
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	53	4591	5628	92	94	86
Arrive On Green	0.06	1.00	1.00	1.00	0.05	0.05
Sat Flow, veh/h	1774	5253	6803	107	1774	1615
Grp Volume(v), veh/h	20	955	1162	446	19	20
Grp Sat Flow(s),veh/h/ln	1774	1695	1602	1844	1774	1615
Q Serve(g_s), s	1.3	0.0	0.0	0.0	1.2	1.4
Cycle Q Clear(g_c), s	1.3	0.0	0.0	0.0	1.2	1.4
Prop In Lane	1.00			0.06	1.00	1.00
Lane Grp Cap(c), veh/h	53	4591	4134	1586	94	86
V/C Ratio(X)	0.37	0.21	0.28	0.28	0.20	0.23
Avail Cap(c_a), veh/h	214	4591	4134	1586	517	471
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	55.3	0.0	0.0	0.0	54.4	54.5
Incr Delay (d2), s/veh	1.4	0.1	0.2	0.4	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.0	0.1	0.2	0.6	1.3
LnGrp Delay(d),s/veh	56.7	0.1	0.2	0.4	54.8	55.0
LnGrp LOS	E	A	A	A	D	D
Approach Vol, veh/h		975	1608		39	
Approach Delay, s/veh		1.2	0.2		54.9	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				111.6		8.4	5.1	106.5
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				77.7		33.0	12.5	61.7
Max Q Clear Time (g_c+I1), s				2.0		3.4	3.3	2.0
Green Ext Time (p_c), s				56.9		0.0	0.0	47.4

Intersection Summary	
HCM 2010 Ctrl Delay	1.4
HCM 2010 LOS	A

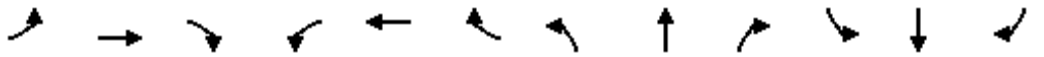
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	249	4	192	27	7	17	99	1015	12	10	2018	195
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	271	4	45	29	8	3	108	1103	12	11	2193	203
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	356	27	301	240	63	20	131	3519	38	18	2916	267
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.15	1.00	1.00	0.02	1.00	1.00
Sat Flow, veh/h	1398	131	1472	920	306	99	1774	5187	56	1774	4743	434
Grp Volume(v), veh/h	271	0	49	40	0	0	108	721	394	11	1560	836
Grp Sat Flow(s),veh/h/ln	1398	0	1603	1326	0	0	1774	1695	1853	1774	1695	1786
Q Serve(g_s), s	17.1	0.0	3.0	1.8	0.0	0.0	7.1	0.0	0.0	0.7	0.0	0.0
Cycle Q Clear(g_c), s	21.9	0.0	3.0	4.8	0.0	0.0	7.1	0.0	0.0	0.7	0.0	0.0
Prop In Lane	1.00		0.92	0.72		0.07	1.00		0.03	1.00		0.24
Lane Grp Cap(c), veh/h	356	0	328	323	0	0	131	2300	1257	18	2084	1098
V/C Ratio(X)	0.76	0.00	0.15	0.12	0.00	0.00	0.82	0.31	0.31	0.61	0.75	0.76
Avail Cap(c_a), veh/h	512	0	508	485	0	0	185	2300	1257	185	2084	1098
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.78	0.78	0.78	0.18	0.18	0.18
Uniform Delay (d), s/veh	46.4	0.0	39.2	40.1	0.0	0.0	50.4	0.0	0.0	58.5	0.0	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.1	0.1	0.0	0.0	10.5	0.3	0.5	2.2	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.0	0.0	1.3	1.1	0.0	0.0	3.9	0.1	0.2	0.4	0.1	0.3
LnGrp Delay(d),s/veh	48.5	0.0	39.2	40.2	0.0	0.0	60.8	0.3	0.5	60.7	0.5	0.9
LnGrp LOS	D		D	D			E	A	A	E	A	A
Approach Vol, veh/h		320			40			1223			2407	
Approach Delay, s/veh		47.1			40.2			5.7			0.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	79.1		28.6	4.7	86.7		28.6
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	56.7		38.0	12.5	56.7		38.0
Max Q Clear Time (g_c+I1), s	9.1	2.0		23.9	2.7	2.0		6.8
Green Ext Time (p_c), s	0.0	52.3		0.7	0.0	52.3		0.7

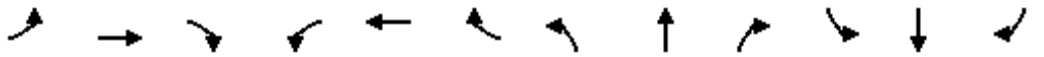
Intersection Summary	
HCM 2010 Ctrl Delay	6.5
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	43	17	37	50	12	51	12	968	31	23	1925	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	46	18	40	54	13	55	13	1041	33	25	2070	29
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	38	58	102	25	69	16	3936	125	31	4061	57
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.26	0.26	0.03	1.00	1.00
Sat Flow, veh/h	557	385	589	595	256	698	1774	5064	160	1774	5168	72
Grp Volume(v), veh/h	104	0	0	122	0	0	13	697	377	25	1357	742
Grp Sat Flow(s),veh/h/ln	1530	0	0	1549	0	0	1774	1695	1834	1774	1695	1850
Q Serve(g_s), s	0.0	0.0	0.0	1.3	0.0	0.0	0.9	19.7	19.7	1.7	0.0	0.0
Cycle Q Clear(g_c), s	7.8	0.0	0.0	9.1	0.0	0.0	0.9	19.7	19.7	1.7	0.0	0.0
Prop In Lane	0.44		0.38	0.44		0.45	1.00		0.09	1.00		0.04
Lane Grp Cap(c), veh/h	194	0	0	196	0	0	16	2635	1426	31	2664	1454
V/C Ratio(X)	0.54	0.00	0.00	0.62	0.00	0.00	0.83	0.26	0.26	0.81	0.51	0.51
Avail Cap(c_a), veh/h	483	0	0	483	0	0	185	2635	1426	185	2664	1454
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.93	0.93	0.93	0.17	0.17	0.17
Uniform Delay (d), s/veh	52.1	0.0	0.0	52.8	0.0	0.0	59.7	17.2	17.3	57.7	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.2	0.0	0.0	30.5	0.2	0.4	3.4	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.4	0.0	0.0	4.0	0.0	0.0	0.6	9.4	10.2	0.8	0.0	0.1
LnGrp Delay(d),s/veh	53.0	0.0	0.0	54.0	0.0	0.0	90.2	17.5	17.7	61.1	0.1	0.2
LnGrp LOS	D			D			F	B	B	E	A	A
Approach Vol, veh/h		104			122			1087			2124	
Approach Delay, s/veh		53.0			54.0			18.4			0.9	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	98.6		15.8	4.6	99.6		15.8
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	59.7		35.0	12.5	59.7		35.0
Max Q Clear Time (g_c+I1), s	3.7	21.7		9.8	2.9	2.0		11.1
Green Ext Time (p_c), s	0.0	35.8		0.9	0.0	52.8		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	9.9
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	87	579	201	119	703	131	129	789	105	205	1865	100
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.89	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	99	658	228	135	799	149	147	897	119	233	2119	114
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	616	213	160	770	144	170	1710	226	256	2172	647
Arrive On Green	0.02	0.08	0.08	0.12	0.35	0.35	0.19	0.76	0.76	0.29	0.85	0.85
Sat Flow, veh/h	1774	2528	875	1774	2915	544	1774	4516	596	1774	5085	1515
Grp Volume(v), veh/h	99	461	425	135	485	463	147	672	344	233	2119	114
Grp Sat Flow(s),veh/h/ln	1774	1770	1633	1774	1770	1689	1774	1695	1722	1774	1695	1515
Q Serve(g_s), s	6.7	29.2	29.2	8.9	31.7	31.7	9.6	9.6	9.7	15.2	43.7	1.5
Cycle Q Clear(g_c), s	6.7	29.2	29.2	8.9	31.7	31.7	9.6	9.6	9.7	15.2	43.7	1.5
Prop In Lane	1.00		0.54	1.00		0.32	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	123	431	398	160	467	446	170	1284	652	256	2172	647
V/C Ratio(X)	0.80	1.07	1.07	0.84	1.04	1.04	0.86	0.52	0.53	0.91	0.98	0.18
Avail Cap(c_a), veh/h	126	431	398	170	467	446	170	1284	652	377	2172	647
HCM Platoon Ratio	0.33	0.33	0.33	1.33	1.33	1.33	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.59	0.59	0.59	0.77	0.77	0.77	0.97	0.97	0.97	0.43	0.43	0.43
Uniform Delay (d), s/veh	57.8	55.2	55.2	52.0	38.9	38.9	47.7	10.2	10.2	41.9	8.2	5.1
Incr Delay (d2), s/veh	17.8	53.3	54.9	22.0	46.5	47.3	32.2	1.5	3.0	7.7	8.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.9	20.7	19.3	5.4	21.4	20.6	6.2	4.6	4.9	7.9	20.1	0.7
LnGrp Delay(d),s/veh	75.6	108.4	110.1	73.9	85.4	86.3	80.0	11.7	13.2	49.6	16.4	5.4
LnGrp LOS	E	F	F	E	F	F	E	B	B	D	B	A
Approach Vol, veh/h		985			1083			1163			2466	
Approach Delay, s/veh		105.9			84.3			20.8			19.1	
Approach LOS		F			F			C			B	

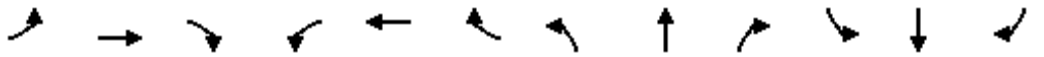
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	56.2	11.8	37.0	20.8	50.3	14.3	34.5
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	11.5	51.1	8.5	31.7	25.5	37.1	11.5	28.7
Max Q Clear Time (g_c+I1), s	11.6	45.7	8.7	33.7	17.2	11.7	10.9	31.2
Green Ext Time (p_c), s	0.0	5.3	0.0	0.0	0.1	24.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	28	95	60	24	65	52	83	542	40	134	1017	37
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.88		0.82	0.89		0.82	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	29	100	63	25	68	55	87	571	42	141	1071	39
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	185	106	70	169	120	365	2421	178	533	2526	92
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.24	0.24	0.24	0.73	0.73	0.72
Sat Flow, veh/h	148	894	509	167	813	580	505	3335	245	805	3479	127
Grp Volume(v), veh/h	192	0	0	148	0	0	87	302	311	141	545	565
Grp Sat Flow(s),veh/h/ln	1552	0	0	1559	0	0	505	1770	1810	805	1770	1836
Q Serve(g_s), s	3.3	0.0	0.0	0.0	0.0	0.0	17.5	16.5	16.6	10.5	14.6	14.7
Cycle Q Clear(g_c), s	12.9	0.0	0.0	9.6	0.0	0.0	32.2	16.5	16.6	27.1	14.6	14.7
Prop In Lane	0.15		0.33	0.17		0.37	1.00		0.14	1.00		0.07
Lane Grp Cap(c), veh/h	356	0	0	358	0	0	365	1285	1314	533	1285	1333
V/C Ratio(X)	0.54	0.00	0.00	0.41	0.00	0.00	0.24	0.24	0.24	0.26	0.42	0.42
Avail Cap(c_a), veh/h	370	0	0	372	0	0	365	1285	1314	533	1285	1333
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.95	0.95	0.95	0.36	0.36	0.36
Uniform Delay (d), s/veh	42.7	0.0	0.0	41.5	0.0	0.0	31.0	18.8	18.8	12.4	6.5	6.5
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.3	0.0	0.0	1.5	0.4	0.4	0.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.8	0.0	0.0	4.3	0.0	0.0	2.6	8.3	8.5	2.4	7.2	7.5
LnGrp Delay(d),s/veh	43.4	0.0	0.0	41.8	0.0	0.0	32.4	19.2	19.2	12.8	6.9	6.9
LnGrp LOS	D			D			C	B	B	B	A	A
Approach Vol, veh/h		192			148			700			1251	
Approach Delay, s/veh		43.4			41.8			20.8			7.5	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		91.1		28.9		91.1		28.9
Change Period (Y+Rc), s		4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s		85.1		26.0		85.1		26.0
Max Q Clear Time (g_c+I1), s		34.2		14.9		29.1		11.6
Green Ext Time (p_c), s		7.7		1.2		7.7		1.4

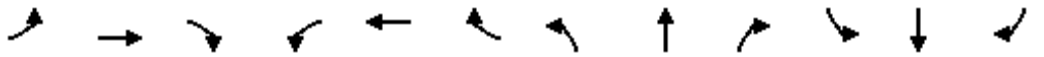
Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	108	409	121	86	531	73	140	404	117	64	560	209
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	114	431	127	91	559	77	147	425	123	67	589	220
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	132	631	184	107	686	94	386	1646	472	578	1530	571
Arrive On Green	0.07	0.23	0.23	0.08	0.29	0.28	1.00	1.00	1.00	0.61	0.61	0.60
Sat Flow, veh/h	1774	2701	789	1774	3125	429	671	2715	779	855	2524	941
Grp Volume(v), veh/h	114	281	277	91	316	320	147	276	272	67	413	396
Grp Sat Flow(s),veh/h/ln	1774	1770	1720	1774	1770	1785	671	1770	1724	855	1770	1696
Q Serve(g_s), s	7.6	17.4	17.7	6.1	19.9	20.0	8.2	0.0	0.0	4.0	14.4	14.5
Cycle Q Clear(g_c), s	7.6	17.4	17.7	6.1	19.9	20.0	22.8	0.0	0.0	4.0	14.4	14.5
Prop In Lane	1.00		0.46	1.00		0.24	1.00		0.45	1.00		0.56
Lane Grp Cap(c), veh/h	132	413	402	107	388	392	386	1073	1045	578	1073	1028
V/C Ratio(X)	0.86	0.68	0.69	0.85	0.81	0.82	0.38	0.26	0.26	0.12	0.38	0.39
Avail Cap(c_a), veh/h	148	678	659	237	767	773	386	1073	1045	578	1073	1028
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	0.69	0.69	0.69	0.87	0.87	0.87	0.38	0.38	0.38
Uniform Delay (d), s/veh	54.9	41.9	42.2	54.7	40.2	40.4	2.3	0.0	0.0	10.1	12.1	12.3
Incr Delay (d2), s/veh	21.5	0.4	0.5	5.0	1.1	1.1	2.5	0.5	0.5	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	8.6	8.5	3.1	9.8	10.0	1.7	0.2	0.2	1.0	7.1	6.9
LnGrp Delay(d),s/veh	76.5	42.3	42.7	59.6	41.3	41.5	4.8	0.5	0.5	10.3	12.5	12.7
LnGrp LOS	E	D	D	E	D	D	A	A	A	B	B	B
Approach Vol, veh/h		672			727			695			876	
Approach Delay, s/veh		48.3			43.7			1.4			12.4	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		76.7	11.2	32.0		76.7	12.9	30.3
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	16.5	45.1		45.1	10.5	51.1
Max Q Clear Time (g_c+I1), s		24.8	8.1	19.7		16.5	9.6	22.0
Green Ext Time (p_c), s		5.0	0.0	3.4		5.3	0.0	3.4

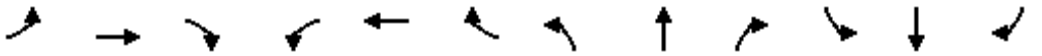
Intersection Summary	
HCM 2010 Ctrl Delay	25.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	81	621	147	114	569	197	62	399	84	119	794	98
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	647	153	119	593	205	65	416	88	124	827	102
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	800	189	136	781	269	244	1575	330	473	1716	212
Arrive On Green	0.06	0.28	0.27	0.15	0.61	0.59	0.54	0.54	0.53	0.18	0.18	0.18
Sat Flow, veh/h	1774	2838	670	1774	2578	890	600	2910	610	889	3169	391
Grp Volume(v), veh/h	84	403	397	119	407	391	65	252	252	124	462	467
Grp Sat Flow(s),veh/h/ln	1774	1770	1738	1774	1770	1698	600	1770	1750	889	1770	1791
Q Serve(g_s), s	5.6	25.4	25.5	7.9	20.1	20.4	10.1	9.1	9.3	14.9	28.1	28.2
Cycle Q Clear(g_c), s	5.6	25.4	25.5	7.9	20.1	20.4	38.3	9.1	9.3	24.2	28.1	28.2
Prop In Lane	1.00		0.39	1.00		0.52	1.00		0.35	1.00		0.22
Lane Grp Cap(c), veh/h	99	499	490	136	536	514	244	958	948	473	958	970
V/C Ratio(X)	0.85	0.81	0.81	0.87	0.76	0.76	0.27	0.26	0.27	0.26	0.48	0.48
Avail Cap(c_a), veh/h	133	782	768	177	826	793	244	958	948	473	958	970
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.42	0.42	0.42	0.23	0.23	0.23	0.77	0.77	0.77	0.92	0.92	0.92
Uniform Delay (d), s/veh	56.2	40.1	40.3	50.2	20.5	20.9	32.3	14.7	14.8	36.7	34.2	34.2
Incr Delay (d2), s/veh	12.0	0.7	0.7	7.3	0.2	0.2	2.1	0.5	0.5	1.2	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	12.5	12.3	4.1	9.5	9.4	1.8	4.6	4.6	3.8	14.3	14.4
LnGrp Delay(d),s/veh	68.1	40.8	41.0	57.5	20.6	21.1	34.4	15.2	15.4	37.9	35.7	35.8
LnGrp LOS	E	D	D	E	C	C	C	B	B	D	D	D
Approach Vol, veh/h		884			917			569			1053	
Approach Delay, s/veh		43.5			25.6			17.5			36.0	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		69.0	13.2	37.8		69.0	10.7	40.3
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		42.1	12.5	52.1		42.1	9.5	55.1
Max Q Clear Time (g_c+I1), s		40.3	9.9	27.5		30.2	7.6	22.4
Green Ext Time (p_c), s		1.1	0.0	5.4		4.2	0.0	5.6

Intersection Summary	
HCM 2010 Ctrl Delay	32.1
HCM 2010 LOS	C



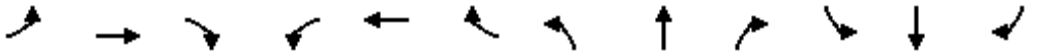
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	294	0	74	0	402	148	53	567	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor					1.00	1.00		0.95		1.00	0.95	
Frt					1.00	0.85		0.96		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1770	1583		3396		1770	3539	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1770	1583		3396		1770	3539	
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	0	0	0	363	0	91	0	496	183	65	700	0
RTOR Reduction (vph)	0	0	0	0	0	70	0	19	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	363	21	0	660	0	65	700	0
Turn Type				Split	NA	Perm		NA		Prot	NA	
Protected Phases				8	8			2		1	6	
Permitted Phases						8						
Actuated Green, G (s)					27.9	27.9		72.3		7.4	83.2	
Effective Green, g (s)					27.9	27.9		73.2		6.9	84.1	
Actuated g/C Ratio					0.23	0.23		0.61		0.06	0.70	
Clearance Time (s)					4.0	4.0		4.9		3.5	4.9	
Vehicle Extension (s)					1.5	1.5		1.5		1.5	1.5	
Lane Grp Cap (vph)					411	368		2071		101	2480	
v/s Ratio Prot					c0.21			c0.19		c0.04	0.20	
v/s Ratio Perm						0.01						
v/c Ratio					0.88	0.06		0.32		0.64	0.28	
Uniform Delay, d1					44.5	35.8		11.3		55.3	6.7	
Progression Factor					0.73	0.65		0.54		1.20	0.54	
Incremental Delay, d2					18.4	0.0		0.4		9.9	0.3	
Delay (s)					50.8	23.2		6.5		76.4	3.9	
Level of Service					D	C		A		E	A	
Approach Delay (s)		0.0			45.3			6.5			10.0	
Approach LOS		A			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	67	49	333	12	41	10	223	555	40	33	837	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	77	56	383	14	47	11	256	638	46	38	962	54
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	178	367	26	86	93	251	1946	868	41	1469	82
Arrive On Green	0.23	0.23	0.23	0.06	0.06	0.06	0.28	1.00	1.00	0.05	0.86	0.85
Sat Flow, veh/h	1048	762	1573	423	1419	1544	1774	3539	1579	1774	3407	191
Grp Volume(v), veh/h	133	0	383	61	0	11	256	638	46	38	500	516
Grp Sat Flow(s),veh/h/ln	1810	0	1573	1842	0	1544	1774	1770	1579	1774	1770	1828
Q Serve(g_s), s	7.3	0.0	28.0	3.9	0.0	0.8	17.0	0.0	0.0	2.6	10.7	10.8
Cycle Q Clear(g_c), s	7.3	0.0	28.0	3.9	0.0	0.8	17.0	0.0	0.0	2.6	10.7	10.8
Prop In Lane	0.58		1.00	0.23		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	422	0	367	111	0	93	251	1946	868	41	763	788
V/C Ratio(X)	0.31	0.00	1.04	0.55	0.00	0.12	1.02	0.33	0.05	0.93	0.65	0.65
Avail Cap(c_a), veh/h	422	0	367	414	0	347	251	1946	868	101	763	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.84	0.84	0.84	0.78	0.78	0.78
Uniform Delay (d), s/veh	38.1	0.0	46.0	54.8	0.0	53.4	43.0	0.0	0.0	57.1	5.4	5.5
Incr Delay (d2), s/veh	0.2	0.0	58.7	1.6	0.0	0.2	57.0	0.4	0.1	20.9	3.4	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	0.0	18.1	2.0	0.0	0.3	12.2	0.1	0.0	1.5	5.4	5.6
LnGrp Delay(d),s/veh	38.2	0.0	104.7	56.4	0.0	53.6	100.1	0.4	0.1	78.0	8.8	8.8
LnGrp LOS	D		F	E		D	F	A	A	E	A	A
Approach Vol, veh/h		516			72			940			1054	
Approach Delay, s/veh		87.6			55.9			27.5			11.3	
Approach LOS		F			E			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	70.0		32.0	21.0	55.8		11.2
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	7.3	41.3		28.0	17.5	31.1		27.0
Max Q Clear Time (g_c+I1), s	4.6	2.0		30.0	19.0	12.8		5.9
Green Ext Time (p_c), s	0.0	5.8		0.0	0.0	5.2		0.2

Intersection Summary			
HCM 2010 Ctrl Delay		33.7	
HCM 2010 LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	181	56	56	10	90	23	34	522	10	28	860	246
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	218	67	67	12	108	28	41	629	12	34	1036	296
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	177	177	50	362	327	45	2385	45	36	1811	514
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.05	1.00	1.00	0.02	0.67	0.66
Sat Flow, veh/h	1241	852	852	84	1737	1570	1774	3552	68	1774	2719	771
Grp Volume(v), veh/h	218	0	134	120	0	28	41	313	328	34	672	660
Grp Sat Flow(s),veh/h/ln	1241	0	1704	1821	0	1570	1774	1770	1850	1774	1770	1720
Q Serve(g_s), s	18.5	0.0	8.1	0.0	0.0	1.7	2.8	0.0	0.0	2.3	24.5	25.1
Cycle Q Clear(g_c), s	25.0	0.0	8.1	6.5	0.0	1.7	2.8	0.0	0.0	2.3	24.5	25.1
Prop In Lane	1.00		0.50	0.10		1.00	1.00		0.04	1.00		0.45
Lane Grp Cap(c), veh/h	251	0	355	412	0	327	45	1188	1242	36	1179	1146
V/C Ratio(X)	0.87	0.00	0.38	0.29	0.00	0.09	0.91	0.26	0.26	0.95	0.57	0.58
Avail Cap(c_a), veh/h	251	0	355	412	0	327	118	1188	1242	118	1179	1146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	0.56	0.56	0.56
Uniform Delay (d), s/veh	51.9	0.0	40.8	40.2	0.0	38.3	56.8	0.0	0.0	58.7	10.8	11.0
Incr Delay (d2), s/veh	25.3	0.0	0.2	0.1	0.0	0.0	20.7	0.5	0.5	22.0	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.0	0.0	3.9	3.4	0.0	0.8	1.6	0.2	0.2	1.3	12.3	12.2
LnGrp Delay(d),s/veh	77.2	0.0	41.1	40.3	0.0	38.3	77.5	0.5	0.5	80.7	11.9	12.2
LnGrp LOS	E		D	D		D	E	A	A	F	B	B
Approach Vol, veh/h		352			148			682			1366	
Approach Delay, s/veh		63.4			40.0			5.1			13.7	
Approach LOS		E			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	84.6		29.0	7.0	84.0		29.0
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	8.5	74.1		25.0	8.5	74.1		25.0
Max Q Clear Time (g_c+I1), s	4.3	2.0		27.0	4.8	27.1		8.5
Green Ext Time (p_c), s	0.0	7.4		0.0	0.0	7.4		1.4

Intersection Summary		
HCM 2010 Ctrl Delay		19.8
HCM 2010 LOS		B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	341	137	298	297	75	310
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863
Adj Flow Rate, veh/h	355	123	310	309	78	169
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1582	540	328	1545	184	451
Arrive On Green	0.61	0.60	0.31	1.00	0.10	0.10
Sat Flow, veh/h	2683	884	1774	1863	1774	1583
Grp Volume(v), veh/h	241	237	310	309	78	169
Grp Sat Flow(s),veh/h/ln	1770	1703	1774	1863	1774	1583
Q Serve(g_s), s	7.4	7.6	20.5	0.0	4.9	10.3
Cycle Q Clear(g_c), s	7.4	7.6	20.5	0.0	4.9	10.3
Prop In Lane		0.52	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1081	1041	328	1545	184	451
V/C Ratio(X)	0.22	0.23	0.94	0.20	0.42	0.37
Avail Cap(c_a), veh/h	1081	1041	621	1545	473	708
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.95	0.95	0.96	0.96
Uniform Delay (d), s/veh	10.5	10.7	40.9	0.0	50.4	34.4
Incr Delay (d2), s/veh	0.5	0.5	5.8	0.3	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	3.7	10.4	0.1	2.5	4.5
LnGrp Delay(d),s/veh	11.0	11.2	46.7	0.3	50.9	34.5
LnGrp LOS	B	B	D	A	D	C
Approach Vol, veh/h	478			619	247	
Approach Delay, s/veh	11.1			23.5	39.7	
Approach LOS	B			C	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	26.2	77.3				103.5		16.5
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	42.5	32.7				78.7		32.0
Max Q Clear Time (g_c+I1), s	22.5	9.6				2.0		12.3
Green Ext Time (p_c), s	0.2	7.0				8.7		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

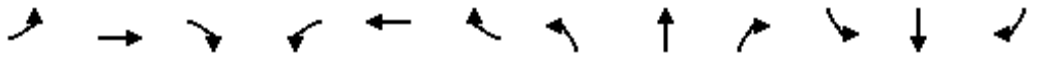
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	17	616	351	247	520	49	170	8	159	15	7	9
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	751	428	301	634	60	214	0	194	18	9	11
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	1797	835	231	3083	289	553	0	431	79	33	41
Arrive On Green	0.01	0.53	0.52	0.13	0.65	0.64	0.16	0.00	0.14	0.04	0.04	0.04
Sat Flow, veh/h	1774	3390	1576	1774	4728	444	3548	0	1563	1774	748	915
Grp Volume(v), veh/h	21	751	428	301	453	241	214	0	194	18	0	20
Grp Sat Flow(s),veh/h/ln	1774	1695	1576	1774	1695	1781	1774	0	1563	1774	0	1663
Q Serve(g_s), s	1.0	15.4	20.5	15.0	6.2	6.3	6.2	0.0	11.8	1.1	0.0	1.3
Cycle Q Clear(g_c), s	1.0	15.4	20.5	15.0	6.2	6.3	6.2	0.0	11.8	1.1	0.0	1.3
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	15	1797	835	231	2211	1162	553	0	431	79	0	74
V/C Ratio(X)	1.41	0.42	0.51	1.30	0.20	0.21	0.39	0.00	0.45	0.23	0.00	0.27
Avail Cap(c_a), veh/h	123	1797	835	231	2211	1162	956	0	609	123	0	116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	0.90	0.90	0.90	0.98	0.00	0.98	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	16.3	17.9	50.0	8.0	8.1	43.6	0.0	34.6	53.0	0.0	53.4
Incr Delay (d2), s/veh	209.3	0.6	1.9	160.7	0.2	0.4	0.6	0.0	1.0	0.5	0.0	0.7
Initial Q Delay(d3),s/veh	20.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	7.4	9.4	17.7	3.0	3.2	3.1	0.0	5.2	0.6	0.0	0.6
LnGrp Delay(d),s/veh	286.4	16.9	19.9	210.7	8.2	8.5	44.2	0.0	35.6	53.6	0.0	54.1
LnGrp LOS	F	B	B	F	A	A	D		D	D		D
Approach Vol, veh/h		1200			995			408			38	
Approach Delay, s/veh		22.7			69.5			40.1			53.8	
Approach LOS		C			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.0	65.0		9.1	5.0	79.0		21.9
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	15.5	43.7		7.1	8.5	50.7		30.1
Max Q Clear Time (g_c+I1), s	17.0	22.5		3.3	3.0	8.3		13.8
Green Ext Time (p_c), s	0.0	16.4		0.0	0.0	27.2		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	43.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	777	3	4	683	20	2	0	1	67	0	228
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	17	996	4	5	876	26	3	0	1	86	0	292
Adj No. of Lanes	1	3	0	1	3	0	0	1	0	0	1	1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	451	2580	10	423	2502	74	391	26	77	605	0	423
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	610	5227	21	557	5070	150	757	99	285	1457	0	1578
Grp Volume(v), veh/h	17	646	354	5	585	317	4	0	0	86	0	292
Grp Sat Flow(s),veh/h/ln	610	1695	1858	557	1695	1830	1141	0	0	1457	0	1578
Q Serve(g_s), s	0.6	4.0	4.0	0.2	3.5	3.6	0.0	0.0	0.0	0.0	0.0	5.6
Cycle Q Clear(g_c), s	4.2	4.0	4.0	4.2	3.5	3.6	1.3	0.0	0.0	1.3	0.0	5.6
Prop In Lane	1.00		0.01	1.00		0.08	0.75		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	451	1673	917	423	1673	903	494	0	0	605	0	423
V/C Ratio(X)	0.04	0.39	0.39	0.01	0.35	0.35	0.01	0.00	0.00	0.14	0.00	0.69
Avail Cap(c_a), veh/h	549	2221	1217	513	2221	1199	878	0	0	1065	0	940
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.5	5.3	5.3	6.6	5.2	5.2	9.0	0.0	0.0	9.5	0.0	11.0
Incr Delay (d2), s/veh	0.0	0.1	0.3	0.0	0.1	0.2	0.0	0.0	0.0	0.1	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	1.8	2.0	0.0	1.7	1.8	0.0	0.0	0.0	0.6	0.0	2.6
LnGrp Delay(d),s/veh	6.5	5.5	5.6	6.6	5.3	5.4	9.0	0.0	0.0	9.6	0.0	13.0
LnGrp LOS	A	A	A	A	A	A	A			A		B
Approach Vol, veh/h		1017			907			4			378	
Approach Delay, s/veh		5.5			5.4			9.0			12.3	
Approach LOS		A			A			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		13.0		20.6		13.0		20.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		22.0		20.0		22.0
Max Q Clear Time (g_c+I1), s		3.3		6.2		7.6		6.2
Green Ext Time (p_c), s		1.4		10.4		1.2		10.4

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	287	365	6	3	356	382	1	1	1	615	3	153
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	315	401	5	3	391	117	1	1	0	678	0	60
Adj No. of Lanes	1	3	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	340	3649	45	532	1672	742	9	9	0	601	0	268
Arrive On Green	0.19	0.70	0.69	0.47	0.47	0.47	0.01	0.01	0.00	0.17	0.00	0.17
Sat Flow, veh/h	1774	5177	64	971	3539	1572	909	909	0	3548	0	1581
Grp Volume(v), veh/h	315	262	144	3	391	117	2	0	0	678	0	60
Grp Sat Flow(s),veh/h/ln	1774	1695	1851	971	1770	1572	1817	0	0	1774	0	1581
Q Serve(g_s), s	17.1	2.4	2.4	0.2	6.4	4.2	0.1	0.0	0.0	16.6	0.0	3.2
Cycle Q Clear(g_c), s	17.1	2.4	2.4	0.2	6.4	4.2	0.1	0.0	0.0	16.6	0.0	3.2
Prop In Lane	1.00		0.03	1.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	340	2390	1305	532	1672	742	17	0	0	601	0	268
V/C Ratio(X)	0.93	0.11	0.11	0.01	0.23	0.16	0.12	0.00	0.00	1.13	0.00	0.22
Avail Cap(c_a), veh/h	489	2390	1305	532	1672	742	148	0	0	601	0	268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.98	0.98	0.98	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.9	4.6	4.6	13.7	15.3	14.7	48.1	0.0	0.0	40.7	0.0	35.1
Incr Delay (d2), s/veh	15.3	0.1	0.2	0.0	0.3	0.4	1.1	0.0	0.0	77.3	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.8	1.2	1.3	0.0	3.2	1.9	0.1	0.0	0.0	14.6	0.0	1.4
LnGrp Delay(d),s/veh	54.2	4.7	4.8	13.7	15.7	15.2	49.3	0.0	0.0	118.0	0.0	35.6
LnGrp LOS	D	A	A	B	B	B	D			F		D
Approach Vol, veh/h		721			511			2			738	
Approach Delay, s/veh		26.4			15.5			49.3			111.3	
Approach LOS		C			B			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		73.1		20.0	22.8	50.3		4.9
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		4.6
Max Green Setting (Gmax), s		60.7		16.0	27.5	29.7		7.4
Max Q Clear Time (g_c+I1), s		4.4		18.6	19.1	8.4		2.1
Green Ext Time (p_c), s		10.6		0.0	0.2	8.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.4
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

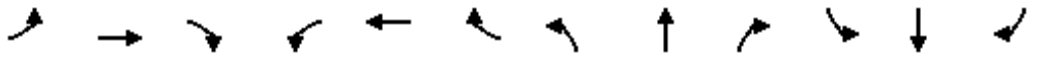
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	31	68	126	68	65	104	32	990	35	20	1508	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	34	75	138	75	71	114	35	1088	38	22	1657	25
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	70	138	220	120	113	151	458	3034	106	26	1791	27
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.53	1.00	1.00	0.01	0.12	0.12
Sat Flow, veh/h	139	538	856	316	438	588	1714	4873	170	1714	4986	75
Grp Volume(v), veh/h	247	0	0	260	0	0	35	731	395	22	1089	593
Grp Sat Flow(s),veh/h/ln	1532	0	0	1342	0	0	1714	1638	1767	1714	1638	1785
Q Serve(g_s), s	0.0	0.0	0.0	5.2	0.0	0.0	1.2	0.0	0.0	1.5	39.5	39.5
Cycle Q Clear(g_c), s	16.7	0.0	0.0	21.9	0.0	0.0	1.2	0.0	0.0	1.5	39.5	39.5
Prop In Lane	0.14		0.56	0.29		0.44	1.00		0.10	1.00		0.04
Lane Grp Cap(c), veh/h	428	0	0	384	0	0	458	2039	1100	26	1177	641
V/C Ratio(X)	0.58	0.00	0.00	0.68	0.00	0.00	0.08	0.36	0.36	0.83	0.93	0.93
Avail Cap(c_a), veh/h	725	0	0	663	0	0	458	2039	1100	250	1177	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.97	0.97	0.97	0.74	0.74	0.74
Uniform Delay (d), s/veh	39.2	0.0	0.0	41.0	0.0	0.0	20.8	0.0	0.0	59.5	51.3	51.3
Incr Delay (d2), s/veh	1.2	0.0	0.0	2.1	0.0	0.0	0.1	0.5	0.9	36.5	10.6	17.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.4	0.0	0.0	8.2	0.0	0.0	0.6	0.1	0.3	1.0	19.7	22.6
LnGrp Delay(d),s/veh	40.5	0.0	0.0	43.1	0.0	0.0	20.8	0.5	0.9	96.1	61.9	68.4
LnGrp LOS	D			D			C	A	A	F	E	E
Approach Vol, veh/h		247			260			1161			1704	
Approach Delay, s/veh		40.5			43.1			1.2			64.6	
Approach LOS		D			D			A			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	79.6		35.1	36.9	48.0		35.1
Change Period (Y+Rc), s	3.5	4.9		* 4.2	4.9	* 4.9		* 4.2
Max Green Setting (Gmax), s	17.5	35.1		* 55	9.5	* 43		* 55
Max Q Clear Time (g_c+I1), s	3.5	2.0		18.7	3.2	41.5		23.9
Green Ext Time (p_c), s	0.0	8.5		4.0	0.1	1.3		3.9

Intersection Summary	
HCM 2010 Ctrl Delay	39.4
HCM 2010 LOS	D

Notes

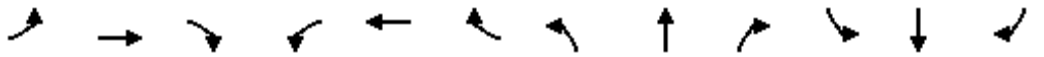
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	36	8	27	19	9	51	3	1149	8	27	1896	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	39	9	29	21	10	55	3	1249	9	29	2061	23
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	101	28	50	60	26	87	4	3935	28	36	4009	45
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.00	1.00	1.00	0.04	1.00	1.00
Sat Flow, veh/h	647	326	588	266	306	1014	1714	5033	36	1714	5010	56
Grp Volume(v), veh/h	77	0	0	86	0	0	3	813	445	29	1347	737
Grp Sat Flow(s),veh/h/ln	1561	0	0	1586	0	0	1714	1638	1793	1714	1638	1790
Q Serve(g_s), s	0.0	0.0	0.0	0.7	0.0	0.0	0.2	0.0	0.0	2.0	0.0	0.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	6.0	0.0	0.0	0.2	0.0	0.0	2.0	0.0	0.0
Prop In Lane	0.51		0.38	0.24		0.64	1.00		0.02	1.00		0.03
Lane Grp Cap(c), veh/h	179	0	0	173	0	0	4	2561	1402	36	2621	1432
V/C Ratio(X)	0.43	0.00	0.00	0.50	0.00	0.00	0.74	0.32	0.32	0.81	0.51	0.51
Avail Cap(c_a), veh/h	416	0	0	423	0	0	121	2561	1402	121	2621	1432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.47	0.47	0.47	0.65	0.65	0.65
Uniform Delay (d), s/veh	52.6	0.0	0.0	52.9	0.0	0.0	59.7	0.0	0.0	57.3	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	2.2	0.0	0.0	75.9	0.2	0.3	24.2	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.5	0.0	0.0	2.9	0.0	0.0	0.2	0.1	0.1	1.2	0.2	0.3
LnGrp Delay(d),s/veh	54.2	0.0	0.0	55.1	0.0	0.0	135.5	0.2	0.3	81.5	0.5	0.9
LnGrp LOS	D			E			F	A	A	F	A	A
Approach Vol, veh/h		77			86			1261			2113	
Approach Delay, s/veh		54.2			55.1			0.5			1.7	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	99.1		14.9	3.8	101.3		14.9
Change Period (Y+Rc), s	3.5	5.3		4.6	3.5	5.3		4.6
Max Green Setting (Gmax), s	8.5	67.7		30.4	8.5	67.7		30.4
Max Q Clear Time (g_c+I1), s	4.0	2.0		7.3	2.2	2.0		8.0
Green Ext Time (p_c), s	0.0	48.9		0.9	0.0	48.9		0.9

Intersection Summary			
HCM 2010 Ctrl Delay		3.7	
HCM 2010 LOS		A	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	129	107	42	184	159	62	61	812	136	136	1327	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.80	0.89		0.80	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	163	135	53	233	201	78	77	1028	172	172	1680	199
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	97	213	83	163	214	83	98	2116	353	261	2717	321
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.06	0.50	0.50	0.15	0.61	0.61
Sat Flow, veh/h	983	1143	449	1027	1148	445	1714	4222	705	1714	4435	523
Grp Volume(v), veh/h	163	0	188	233	0	279	77	797	403	172	1239	640
Grp Sat Flow(s),veh/h/ln	983	0	1592	1027	0	1593	1714	1638	1651	1714	1638	1683
Q Serve(g_s), s	1.1	0.0	9.4	6.6	0.0	14.9	3.8	13.8	13.8	8.1	20.3	20.5
Cycle Q Clear(g_c), s	16.0	0.0	9.4	16.0	0.0	14.9	3.8	13.8	13.8	8.1	20.3	20.5
Prop In Lane	1.00		0.28	1.00		0.28	1.00		0.43	1.00		0.31
Lane Grp Cap(c), veh/h	97	0	296	163	0	296	98	1642	827	261	2007	1031
V/C Ratio(X)	1.69	0.00	0.63	1.43	0.00	0.94	0.78	0.49	0.49	0.66	0.62	0.62
Avail Cap(c_a), veh/h	97	0	296	163	0	296	189	1642	827	289	2007	1031
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.42	0.00	0.42	0.83	0.83	0.83	0.62	0.62	0.62
Uniform Delay (d), s/veh	42.9	0.0	32.3	41.4	0.0	34.5	40.0	14.1	14.2	34.3	10.4	10.4
Incr Delay (d2), s/veh	348.8	0.0	4.4	208.1	0.0	20.7	10.8	0.9	1.7	3.0	0.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.7	0.0	4.5	13.3	0.0	8.2	2.1	6.4	6.7	4.0	9.4	9.9
LnGrp Delay(d),s/veh	391.7	0.0	36.7	249.5	0.0	55.2	50.8	15.0	15.9	37.3	11.3	12.2
LnGrp LOS	F		D	F		E	D	B	B	D	B	B
Approach Vol, veh/h		351			512			1277			2051	
Approach Delay, s/veh		201.6			143.6			17.4			13.7	
Approach LOS		F			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.0	48.0		20.0	8.4	57.6		20.0
Change Period (Y+Rc), s	4.9	* 4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	14.5	* 43		16.0	9.5	48.1		16.0
Max Q Clear Time (g_c+I1), s	10.1	15.8		18.0	5.8	22.5		18.0
Green Ext Time (p_c), s	0.3	8.8		0.0	0.0	15.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	35	18	7	50	29	125	93	917	33	52	1524	149
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.68	0.70		0.70	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	43	22	9	62	36	154	115	1132	41	64	1881	184
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	199	263	108	92	55	172	107	2909	105	81	2648	257
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.06	0.60	0.60	0.09	1.00	1.00
Sat Flow, veh/h	1069	1054	431	217	220	686	1714	4865	176	1714	4545	442
Grp Volume(v), veh/h	43	0	31	252	0	0	115	762	411	64	1353	712
Grp Sat Flow(s),veh/h/ln	1069	0	1485	1123	0	0	1714	1638	1765	1714	1638	1711
Q Serve(g_s), s	0.0	0.0	1.9	20.2	0.0	0.0	7.5	14.6	14.6	4.4	0.0	0.0
Cycle Q Clear(g_c), s	9.0	0.0	1.9	25.9	0.0	0.0	7.5	14.6	14.6	4.4	0.0	0.0
Prop In Lane	1.00		0.29	0.25		0.61	1.00		0.10	1.00		0.26
Lane Grp Cap(c), veh/h	199	0	371	318	0	0	107	1959	1055	81	1908	997
V/C Ratio(X)	0.22	0.00	0.08	0.79	0.00	0.00	1.07	0.39	0.39	0.79	0.71	0.71
Avail Cap(c_a), veh/h	206	0	381	325	0	0	107	1959	1055	107	1908	997
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.67	0.67	0.67	0.64	0.64	0.64
Uniform Delay (d), s/veh	37.1	0.0	34.5	43.1	0.0	0.0	56.3	12.6	12.6	53.8	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.1	12.3	0.0	0.0	92.1	0.4	0.7	17.2	1.5	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	0.0	0.8	9.1	0.0	0.0	6.3	6.7	7.3	2.4	0.4	0.8
LnGrp Delay(d),s/veh	37.7	0.0	34.6	55.4	0.0	0.0	148.5	13.0	13.4	71.0	1.5	2.8
LnGrp LOS	D		C	E			F	B	B	E	A	A
Approach Vol, veh/h		74			252			1288			2129	
Approach Delay, s/veh		36.4			55.4			25.2			4.0	
Approach LOS		D			E			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	76.7		34.2	11.0	74.8		34.2
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	69.1		* 31	7.5	69.1		* 31
Max Q Clear Time (g_c+I1), s	6.4	16.6		11.0	9.5	2.0		27.9
Green Ext Time (p_c), s	0.0	41.3		2.5	0.0	49.7		0.6

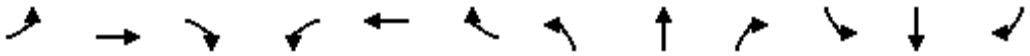
Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	100	93	1038	56	71	1284
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2		4.9		3.5	4.9
Lane Util. Factor	1.00		0.91		1.00	0.91
Frpb, ped/bikes	0.98		1.00		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.94		0.99		1.00	1.00
Flt Protected	0.97		1.00		0.95	1.00
Satd. Flow (prot)	1604		4876		1710	4914
Flt Permitted	0.97		1.00		0.95	1.00
Satd. Flow (perm)	1604		4876		1710	4914
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	101	1128	61	77	1396
RTOR Reduction (vph)	31	0	4	0	0	0
Lane Group Flow (vph)	179	0	1185	0	77	1396
Confl. Peds. (#/hr)		27				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Prot		NA		Prot	NA
Protected Phases	4		2 9		1	6
Permitted Phases						
Actuated Green, G (s)	18.5		64.9		9.6	55.3
Effective Green, g (s)	18.5		64.9		9.6	55.3
Actuated g/C Ratio	0.15		0.54		0.08	0.46
Clearance Time (s)	4.2				3.5	4.9
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	247		2637		136	2264
v/s Ratio Prot	c0.11		c0.24		c0.05	c0.28
v/s Ratio Perm						
v/c Ratio	0.72		0.45		0.57	0.62
Uniform Delay, d1	48.3		16.7		53.2	24.4
Progression Factor	1.00		0.15		0.93	0.72
Incremental Delay, d2	10.0		0.5		3.9	0.9
Delay (s)	58.3		3.1		53.4	18.3
Level of Service	E		A		D	B
Approach Delay (s)	58.3		3.1			20.2
Approach LOS	E		A			C

Intersection Summary			
HCM 2000 Control Delay	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	69	1	123	11	3	8	68	1022	5	2	1293	91
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.89		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1710	1532		1710	1598		1710	4909		1710	4845	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1710	1532		1710	1598		1710	4909		1710	4845	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	1	134	12	3	9	74	1111	5	2	1405	99
RTOR Reduction (vph)	0	122	0	0	8	0	0	1	0	0	5	0
Lane Group Flow (vph)	75	13	0	12	4	0	74	1115	0	2	1499	0
Confl. Peds. (#/hr)							12		17	17		12
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6 10	
Permitted Phases												
Actuated Green, G (s)	10.6	10.6		18.5	18.5		9.3	55.0		9.6	65.2	
Effective Green, g (s)	10.6	10.6		18.5	18.5		9.3	55.0		9.6	65.2	
Actuated g/C Ratio	0.09	0.09		0.15	0.15		0.08	0.46		0.08	0.54	
Clearance Time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	151	135		263	246		132	2249		136	2632	
v/s Ratio Prot	c0.04	0.01		c0.01	0.00		c0.04	0.23		0.00	c0.31	
v/s Ratio Perm												
v/c Ratio	0.50	0.10		0.05	0.02		0.56	0.50		0.01	0.57	
Uniform Delay, d1	52.2	50.3		43.2	43.0		53.4	22.8		50.8	18.1	
Progression Factor	1.00	1.00		1.00	1.00		1.41	0.29		1.89	0.10	
Incremental Delay, d2	2.6	0.3		0.1	0.0		4.8	0.7		0.0	0.7	
Delay (s)	54.7	50.6		43.3	43.1		79.8	7.3		95.9	2.5	
Level of Service	D	D		D	D		E	A		F	A	
Approach Delay (s)		52.1			43.2			11.8			2.7	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	10.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	112	186	81	122	221	86	73	896	167	87	1343	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	124	207	90	136	246	96	81	996	186	97	1492	49
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	154	483	202	161	487	184	102	1526	284	312	2451	80
Arrive On Green	0.09	0.21	0.21	0.09	0.20	0.20	0.02	0.12	0.12	0.36	1.00	1.00
Sat Flow, veh/h	1714	2331	972	1714	2407	909	1714	4154	774	1714	4885	160
Grp Volume(v), veh/h	124	150	147	136	172	170	81	785	397	97	1000	541
Grp Sat Flow(s),veh/h/ln	1714	1710	1593	1714	1710	1605	1714	1638	1651	1714	1638	1770
Q Serve(g_s), s	8.5	9.1	9.7	9.4	10.7	11.3	5.6	27.4	27.5	4.9	0.0	0.0
Cycle Q Clear(g_c), s	8.5	9.1	9.7	9.4	10.7	11.3	5.6	27.4	27.5	4.9	0.0	0.0
Prop In Lane	1.00		0.61	1.00		0.57	1.00		0.47	1.00		0.09
Lane Grp Cap(c), veh/h	154	355	330	161	346	325	102	1204	607	312	1643	888
V/C Ratio(X)	0.81	0.42	0.45	0.84	0.50	0.52	0.79	0.65	0.65	0.31	0.61	0.61
Avail Cap(c_a), veh/h	179	504	470	179	504	474	121	1204	607	312	1643	888
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.80	0.80	0.80	0.85	0.85	0.85	0.94	0.94	0.94	0.80	0.80	0.80
Uniform Delay (d), s/veh	53.6	41.3	41.5	53.5	42.4	42.7	58.1	45.4	45.4	32.8	0.0	0.0
Incr Delay (d2), s/veh	17.0	0.6	0.8	24.0	0.9	1.1	24.3	2.6	5.1	0.5	1.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.8	4.4	4.3	5.5	5.2	5.1	3.4	12.9	13.5	2.3	0.3	0.6
LnGrp Delay(d),s/veh	70.6	42.0	42.3	77.5	43.4	43.8	82.4	48.0	50.6	33.2	1.4	2.5
LnGrp LOS	E	D	D	E	D	D	F	D	D	C	A	A
Approach Vol, veh/h		421			478			1263			1638	
Approach Delay, s/veh		50.5			53.2			51.0			3.6	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.7	49.0	14.8	29.5	10.6	65.1	15.4	28.9
Change Period (Y+Rc), s	4.9	* 4.9	3.5	4.6	3.5	4.9	4.6	* 4.6
Max Green Setting (Gmax), s	11.5	* 44	12.5	35.4	8.5	47.1	12.5	* 35
Max Q Clear Time (g_c+I1), s	6.9	29.5	11.4	11.7	7.6	2.0	10.5	13.3
Green Ext Time (p_c), s	2.3	6.5	0.0	2.0	0.0	14.9	0.4	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	30.8
HCM 2010 LOS	C

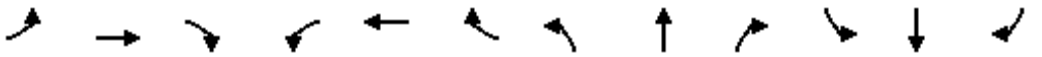
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	9	21	18	16	42	15	970	20	23	1606	93
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.98		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	44	10	23	20	18	46	16	1066	22	25	1765	102
Adj No. of Lanes	0	1	1	0	1	0	1	3	0	1	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	178	35	175	63	55	99	18	3787	78	30	3791	1148
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.02	1.00	1.00	0.04	1.00	1.00
Sat Flow, veh/h	1054	298	1495	224	473	844	1714	4952	102	1714	4914	1487
Grp Volume(v), veh/h	54	0	23	84	0	0	16	705	383	25	1765	102
Grp Sat Flow(s),veh/h/ln	1352	0	1495	1541	0	0	1714	1638	1778	1714	1638	1487
Q Serve(g_s), s	0.0	0.0	1.7	0.6	0.0	0.0	1.1	0.0	0.0	1.7	0.0	0.0
Cycle Q Clear(g_c), s	4.3	0.0	1.7	5.9	0.0	0.0	1.1	0.0	0.0	1.7	0.0	0.0
Prop In Lane	0.81		1.00	0.24		0.55	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	212	0	175	217	0	0	18	2505	1360	30	3791	1148
V/C Ratio(X)	0.25	0.00	0.13	0.39	0.00	0.00	0.87	0.28	0.28	0.83	0.47	0.09
Avail Cap(c_a), veh/h	514	0	511	553	0	0	121	2505	1360	121	3791	1148
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.87	0.87	0.87	0.83	0.83	0.83
Uniform Delay (d), s/veh	48.6	0.0	47.5	49.4	0.0	0.0	58.6	0.0	0.0	57.7	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.3	1.1	0.0	0.0	60.0	0.2	0.5	35.1	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	0.0	0.7	2.7	0.0	0.0	0.8	0.1	0.2	1.1	0.1	0.0
LnGrp Delay(d),s/veh	49.3	0.0	47.9	50.5	0.0	0.0	118.6	0.2	0.5	92.8	0.3	0.1
LnGrp LOS	D		D	D			F	A	A	F	A	A
Approach Vol, veh/h		77			84			1104			1892	
Approach Delay, s/veh		48.8			50.5			2.0			1.6	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	96.4		18.0	4.8	97.2		18.0
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	8.5	58.4		41.0	8.5	58.4		41.0
Max Q Clear Time (g_c+I1), s	3.7	2.0		6.3	3.1	2.0		7.9
Green Ext Time (p_c), s	0.0	39.3		1.0	0.0	39.3		1.0

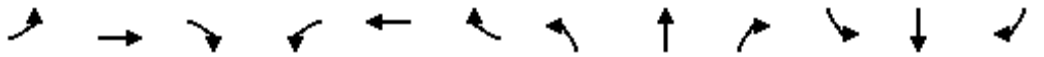
Intersection Summary	
HCM 2010 Ctrl Delay	4.2
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	19	327	70	69	456	199	28	178	30	115	551	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	25	430	0	91	600	262	37	234	39	151	725	79
Adj No. of Lanes	0	2	1	0	2	0	1	2	0	1	2	0
Peak Hour Factor	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	1092	667	125	752	366	40	1162	191	171	1468	160
Arrive On Green	0.42	0.42	0.00	0.42	0.42	0.41	0.02	0.38	0.37	0.10	0.46	0.45
Sat Flow, veh/h	81	2590	1583	213	1783	868	1774	3043	500	1774	3219	351
Grp Volume(v), veh/h	186	269	0	490	0	463	37	135	138	151	398	406
Grp Sat Flow(s),veh/h/ln	1061	1610	1583	1330	0	1534	1774	1770	1773	1774	1770	1800
Q Serve(g_s), s	2.5	14.0	0.0	28.9	0.0	30.1	2.5	6.1	6.3	10.1	19.0	19.0
Cycle Q Clear(g_c), s	32.6	14.0	0.0	42.8	0.0	30.1	2.5	6.1	6.3	10.1	19.0	19.0
Prop In Lane	0.13		1.00	0.19		0.57	1.00		0.28	1.00		0.19
Lane Grp Cap(c), veh/h	481	679	667	596	0	646	40	676	677	171	807	821
V/C Ratio(X)	0.39	0.40	0.00	0.82	0.00	0.72	0.93	0.20	0.20	0.88	0.49	0.49
Avail Cap(c_a), veh/h	573	778	765	694	0	741	103	676	677	281	807	821
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.00	0.83	0.00	0.83	0.97	0.97	0.97	0.62	0.62	0.62
Uniform Delay (d), s/veh	23.8	24.1	0.0	34.9	0.0	29.0	58.6	24.8	24.9	53.5	22.9	23.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	5.0	0.0	1.8	25.7	0.6	0.7	6.5	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.0	6.2	0.0	15.9	0.0	13.1	1.5	3.1	3.2	5.3	9.5	9.8
LnGrp Delay(d),s/veh	23.9	24.2	0.0	39.9	0.0	30.8	84.2	25.4	25.6	60.1	24.3	24.3
LnGrp LOS	C	C		D		C	F	C	C	E	C	C
Approach Vol, veh/h		455			953			310			955	
Approach Delay, s/veh		24.1			35.5			32.5			29.9	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.6	49.8		54.6	6.7	58.7		54.6
Change Period (Y+Rc), s	3.5	4.9		4.9	3.5	4.9		4.9
Max Green Setting (Gmax), s	19.5	30.1		57.1	7.5	42.1		57.1
Max Q Clear Time (g_c+I1), s	12.1	8.3		34.6	4.5	21.0		44.8
Green Ext Time (p_c), s	0.1	2.9		6.2	0.0	2.9		4.9

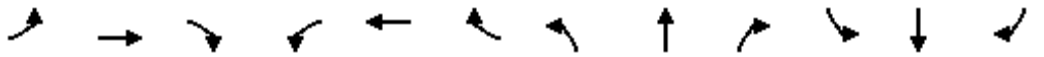
Intersection Summary	
HCM 2010 Ctrl Delay	31.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	43	61	98	69	29	114	31	989	89	57	1754	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1824	1863	1863	1863	1863	1863	1863	1863	1824
Adj Flow Rate, veh/h	45	64	102	72	30	119	32	1030	93	59	1827	30
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	92	117	161	59	380	77	2145	956	101	3193	52
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.04	0.61	0.61	0.06	0.62	0.61
Sat Flow, veh/h	133	376	477	465	242	1554	1774	3539	1577	1774	5153	85
Grp Volume(v), veh/h	211	0	0	102	0	119	32	1030	93	59	1202	655
Grp Sat Flow(s),veh/h/ln	986	0	0	707	0	1554	1774	1770	1577	1774	1695	1847
Q Serve(g_s), s	10.6	0.0	0.0	0.0	0.0	8.1	2.3	21.0	3.2	4.2	27.2	27.2
Cycle Q Clear(g_c), s	28.6	0.0	0.0	18.0	0.0	8.1	2.3	21.0	3.2	4.2	27.2	27.2
Prop In Lane	0.21		0.48	0.71		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	275	0	0	220	0	380	77	2145	956	101	2101	1145
V/C Ratio(X)	0.77	0.00	0.00	0.46	0.00	0.31	0.41	0.48	0.10	0.58	0.57	0.57
Avail Cap(c_a), veh/h	344	0	0	284	0	454	150	2145	956	218	2101	1145
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	48.5	0.0	0.0	43.2	0.0	40.2	60.5	14.2	10.7	59.8	14.6	14.6
Incr Delay (d2), s/veh	6.0	0.0	0.0	0.6	0.0	0.2	1.3	0.8	0.2	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.8	0.0	0.0	3.3	0.0	3.5	1.1	10.4	1.4	2.1	12.7	13.9
LnGrp Delay(d),s/veh	54.4	0.0	0.0	43.8	0.0	40.4	61.9	15.0	10.9	59.9	14.7	14.8
LnGrp LOS	D			D		D	E	B	B	E	B	B
Approach Vol, veh/h		211			221			1155			1916	
Approach Delay, s/veh		54.4			41.9			16.0			16.1	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.4	82.8		35.8	9.7	84.6		35.8
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	16.5	62.7		38.0	11.5	67.7		38.0
Max Q Clear Time (g_c+I1), s	6.2	23.0		30.6	4.3	29.2		20.0
Green Ext Time (p_c), s	0.0	36.4		1.0	0.0	35.4		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	20.0
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	97	608	180	135	460	154	129	704	97	399	1793	78
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1788	1863	1863	1788	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	103	647	191	144	489	164	137	749	103	424	1907	83
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	863	369	139	902	384	258	1431	195	423	1975	86
Arrive On Green	0.07	0.24	0.24	0.16	0.51	0.51	0.15	0.32	0.31	0.24	0.40	0.39
Sat Flow, veh/h	1774	3539	1514	1774	3539	1507	1774	4524	617	1774	4996	217
Grp Volume(v), veh/h	103	647	191	144	489	164	137	560	292	424	1293	697
Grp Sat Flow(s),veh/h/ln	1774	1770	1514	1774	1770	1507	1774	1695	1751	1774	1695	1823
Q Serve(g_s), s	7.5	22.0	14.2	10.2	12.2	6.0	9.3	17.6	17.9	31.0	48.4	48.7
Cycle Q Clear(g_c), s	7.5	22.0	14.2	10.2	12.2	6.0	9.3	17.6	17.9	31.0	48.4	48.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		0.12
Lane Grp Cap(c), veh/h	119	863	369	139	902	384	258	1072	554	423	1340	721
V/C Ratio(X)	0.86	0.75	0.52	1.03	0.54	0.43	0.53	0.52	0.53	1.00	0.96	0.97
Avail Cap(c_a), veh/h	123	909	389	139	942	401	259	1072	554	423	1340	721
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	0.78	0.78	0.78	0.97	0.97	0.97	0.09	0.09	0.09
Uniform Delay (d), s/veh	60.0	45.5	42.5	54.8	26.7	11.9	51.4	36.4	36.7	49.5	38.4	38.6
Incr Delay (d2), s/veh	5.5	0.3	0.2	76.7	0.7	0.9	1.0	1.8	3.5	13.7	2.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	10.8	6.0	7.9	5.9	2.5	4.6	8.5	9.2	16.8	23.1	25.4
LnGrp Delay(d),s/veh	65.6	45.8	42.7	131.9	27.4	12.8	52.4	38.2	40.2	63.2	41.2	43.5
LnGrp LOS	E	D	D	F	C	B	D	D	D	F	D	D
Approach Vol, veh/h		941			797			989			2414	
Approach Delay, s/veh		47.4			43.3			40.7			45.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	35.0	45.1	12.7	37.1	24.7	55.4	14.2	35.7
Change Period (Y+Rc), s	3.5	5.3	3.5	5.3	5.3	* 5.3	3.5	5.3
Max Green Setting (Gmax), s	31.5	38.1	9.5	33.3	19.5	* 50	10.7	32.1
Max Q Clear Time (g_c+I1), s	33.0	19.9	9.5	14.2	11.3	50.7	12.2	24.0
Green Ext Time (p_c), s	0.0	7.2	0.0	11.8	4.3	0.0	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	44.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

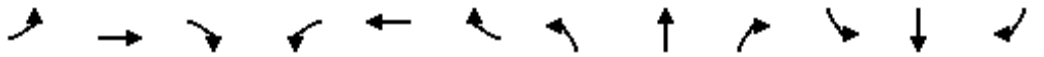
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	115	460	127	74	384	138	83	906	90	179	1483	107
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1824	1863	1863	1824	1863	1863	1824	1863	1863	1863
Adj Flow Rate, veh/h	120	479	132	77	400	144	86	944	94	186	1545	111
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	690	189	108	576	205	196	2153	214	205	1590	706
Arrive On Green	0.08	0.24	0.24	0.06	0.23	0.22	0.04	0.15	0.15	0.12	0.45	0.45
Sat Flow, veh/h	1774	2849	780	1774	2551	907	1774	4700	467	1774	3539	1572
Grp Volume(v), veh/h	120	308	303	77	276	268	86	680	358	186	1545	111
Grp Sat Flow(s),veh/h/ln	1774	1840	1788	1774	1770	1688	1774	1695	1777	1774	1770	1572
Q Serve(g_s), s	8.7	19.8	20.1	5.5	18.6	19.0	6.2	23.7	23.8	13.5	55.5	3.9
Cycle Q Clear(g_c), s	8.7	19.8	20.1	5.5	18.6	19.0	6.2	23.7	23.8	13.5	55.5	3.9
Prop In Lane	1.00		0.44	1.00		0.54	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	137	446	433	108	400	381	196	1553	814	205	1590	706
V/C Ratio(X)	0.87	0.69	0.70	0.71	0.69	0.70	0.44	0.44	0.44	0.91	0.97	0.16
Avail Cap(c_a), veh/h	153	501	487	139	468	447	196	1553	814	322	1590	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	0.61	0.61	0.61	0.75	0.75	0.75	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.3	44.8	45.1	59.9	46.2	46.6	58.7	40.0	40.1	56.8	35.0	10.7
Incr Delay (d2), s/veh	30.7	3.0	3.3	4.3	2.2	2.5	0.4	0.7	1.3	14.2	16.8	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.4	10.5	10.3	2.8	9.4	9.1	3.1	11.3	12.0	7.4	30.7	1.8
LnGrp Delay(d),s/veh	90.1	47.9	48.5	64.2	48.3	49.1	59.1	40.6	41.4	70.9	51.8	11.2
LnGrp LOS	F	D	D	E	D	D	E	D	D	E	D	B
Approach Vol, veh/h		731			621			1124			1842	
Approach Delay, s/veh		55.0			50.6			42.3			51.3	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	63.5	11.9	35.5	20.2	62.4	14.1	33.4
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	5.3	* 5.3	3.5	4.9
Max Green Setting (Gmax), s	24.1	43.5	10.7	34.5	10.5	* 57	11.7	33.5
Max Q Clear Time (g_c+I1), s	15.5	25.8	7.5	22.1	8.2	57.5	10.7	21.0
Green Ext Time (p_c), s	0.1	8.7	0.0	5.4	0.1	0.0	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	49.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	86	526	357	104	510	132	130	841	50	125	1732	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1824	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	88	537	364	106	520	135	133	858	51	128	1767	91
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	224	624	423	123	671	173	123	2045	121	146	2127	109
Arrive On Green	0.13	0.31	0.31	0.07	0.24	0.24	0.02	0.14	0.13	0.08	0.43	0.42
Sat Flow, veh/h	1774	2021	1369	1774	2782	719	1774	4909	291	1774	4952	255
Grp Volume(v), veh/h	88	470	431	106	330	325	133	592	317	128	1209	649
Grp Sat Flow(s),veh/h/ln	1774	1770	1620	1774	1770	1732	1774	1695	1810	1774	1695	1817
Q Serve(g_s), s	5.9	32.5	32.5	7.7	22.6	22.8	9.0	20.8	20.9	9.3	41.1	41.3
Cycle Q Clear(g_c), s	5.9	32.5	32.5	7.7	22.6	22.8	9.0	20.8	20.9	9.3	41.1	41.3
Prop In Lane	1.00		0.85	1.00		0.42	1.00		0.16	1.00		0.14
Lane Grp Cap(c), veh/h	224	547	501	123	427	418	123	1412	754	146	1456	780
V/C Ratio(X)	0.39	0.86	0.86	0.86	0.77	0.78	1.08	0.42	0.42	0.88	0.83	0.83
Avail Cap(c_a), veh/h	224	626	573	177	667	653	123	1412	754	150	1456	780
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	0.63	0.63	0.63	0.80	0.80	0.80	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	42.3	42.1	59.9	46.0	46.0	63.5	41.7	41.7	59.0	32.9	33.0
Incr Delay (d2), s/veh	0.3	9.5	10.3	12.5	2.6	2.8	96.4	0.7	1.4	38.4	5.6	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.9	17.4	16.0	4.2	11.4	11.2	7.7	9.9	10.8	6.1	20.3	22.7
LnGrp Delay(d),s/veh	52.5	51.8	52.4	72.4	48.6	48.8	159.9	42.4	43.1	97.4	38.5	43.1
LnGrp LOS	D	D	D	E	D	D	F	D	D	F	D	D
Approach Vol, veh/h		989			761			1042			1986	
Approach Delay, s/veh		52.1			52.0			57.6			43.8	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	58.2	13.0	44.2	13.0	59.8	21.8	35.4
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	11.5	42.7	13.5	45.1	9.5	44.7	10.5	* 48
Max Q Clear Time (g_c+I1), s	11.3	22.9	9.7	34.5	11.0	43.3	7.9	24.8
Green Ext Time (p_c), s	0.0	18.5	0.0	4.8	0.0	1.4	1.6	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	49.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	125	467	174	159	446	74	154	347	85	75	470	164
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.84	1.00		0.85	0.97		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	152	570	212	194	544	90	188	423	104	91	573	200
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	703	260	214	920	151	245	916	661	351	916	671
Arrive On Green	0.10	0.29	0.28	0.12	0.31	0.30	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1774	2442	904	1774	2951	485	694	1863	1345	850	1863	1364
Grp Volume(v), veh/h	152	412	370	194	324	310	188	423	104	91	573	200
Grp Sat Flow(s),veh/h/ln	1774	1770	1577	1774	1770	1666	694	1863	1345	850	1863	1364
Q Serve(g_s), s	10.2	26.0	26.2	13.0	18.5	18.9	31.9	17.9	5.1	9.5	27.1	10.5
Cycle Q Clear(g_c), s	10.2	26.0	26.2	13.0	18.5	18.9	59.0	17.9	5.1	27.4	27.1	10.5
Prop In Lane	1.00		0.57	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	509	454	214	551	519	245	916	661	351	916	671
V/C Ratio(X)	0.89	0.81	0.81	0.91	0.59	0.60	0.77	0.46	0.16	0.26	0.63	0.30
Avail Cap(c_a), veh/h	216	509	454	237	551	519	245	916	661	351	916	671
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.72	0.72
Uniform Delay (d), s/veh	53.5	39.7	40.0	52.1	34.8	35.0	44.3	20.1	16.8	29.1	22.4	18.2
Incr Delay (d2), s/veh	3.1	1.3	1.5	31.4	4.6	5.0	12.5	0.1	0.0	0.1	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.1	12.9	11.6	8.2	9.8	9.4	7.1	9.2	1.9	2.2	14.0	4.0
LnGrp Delay(d),s/veh	56.7	41.0	41.5	83.5	39.4	40.0	56.9	20.2	16.8	29.2	23.1	18.2
LnGrp LOS	E	D	D	F	D	D	E	C	B	C	C	B
Approach Vol, veh/h		934			828			715			864	
Approach Delay, s/veh		43.8			50.0			29.4			22.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		63.0	15.6	41.4		63.0	18.5	38.5
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		58.1	15.1	33.5		58.1	16.5	32.1
Max Q Clear Time (g_c+I1), s		61.0	12.2	20.9		29.4	15.0	28.2
Green Ext Time (p_c), s		0.0	0.0	3.9		5.2	0.0	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	36.8
HCM 2010 LOS	D

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	82	125	60	516	938	66
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	89	136	65	561	1020	72
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	248	222	79	2231	1622	114
Arrive On Green	0.14	0.14	0.04	0.63	0.48	0.48
Sat Flow, veh/h	1774	1583	1774	3632	3447	237
Grp Volume(v), veh/h	89	136	65	561	538	554
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1821
Q Serve(g_s), s	1.8	3.2	1.4	2.7	8.8	8.8
Cycle Q Clear(g_c), s	1.8	3.2	1.4	2.7	8.8	8.8
Prop In Lane	1.00	1.00	1.00			0.13
Lane Grp Cap(c), veh/h	248	222	79	2231	856	881
V/C Ratio(X)	0.36	0.61	0.82	0.25	0.63	0.63
Avail Cap(c_a), veh/h	1268	1132	226	2982	1084	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	15.8	18.6	3.2	7.5	7.5
Incr Delay (d2), s/veh	0.9	2.7	18.6	0.1	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.9	2.9	1.1	1.3	4.4	4.5
LnGrp Delay(d),s/veh	16.1	18.6	37.2	3.2	8.3	8.2
LnGrp LOS	B	B	D	A	A	A
Approach Vol, veh/h	225			626	1092	
Approach Delay, s/veh	17.6			6.8	8.3	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		29.7		9.5	5.7	23.9		
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0		
Max Green Setting (Gmax), s		33.0		28.0	5.0	24.0		
Max Q Clear Time (g_c+I1), s		4.7		5.2	3.4	10.8		
Green Ext Time (p_c), s		12.7		0.7	0.0	8.1		

Intersection Summary	
HCM 2010 Ctrl Delay	8.9
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	85	64	606	82	58	973
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	105	79	748	101	72	1201
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	131	98	1944	262	77	2585
Arrive On Green	0.14	0.14	0.62	0.61	0.04	0.73
Sat Flow, veh/h	958	721	3228	423	1774	3632
Grp Volume(v), veh/h	185	0	422	427	72	1201
Grp Sat Flow(s),veh/h/ln	1688	0	1770	1788	1774	1770
Q Serve(g_s), s	6.4	0.0	7.1	7.2	2.4	8.3
Cycle Q Clear(g_c), s	6.4	0.0	7.1	7.2	2.4	8.3
Prop In Lane	0.57	0.43		0.24	1.00	
Lane Grp Cap(c), veh/h	230	0	1097	1109	77	2585
V/C Ratio(X)	0.80	0.00	0.38	0.38	0.94	0.46
Avail Cap(c_a), veh/h	534	0	1097	1109	237	2585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.82	0.82	0.86	0.86
Uniform Delay (d), s/veh	25.1	0.0	5.7	5.7	28.6	3.3
Incr Delay (d2), s/veh	2.5	0.0	0.8	0.8	15.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	0.0	3.7	3.7	1.5	4.2
LnGrp Delay(d),s/veh	27.6	0.0	6.5	6.6	43.9	3.8
LnGrp LOS	C		A	A	D	A
Approach Vol, veh/h	185		849			1273
Approach Delay, s/veh	27.6		6.6			6.1
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.6	41.2				47.8		12.2
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	20.1				32.1		19.0
Max Q Clear Time (g_c+I1), s	4.4	9.2				10.3		8.4
Green Ext Time (p_c), s	0.0	5.5				7.6		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	8.0
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	440	100	60	620	60	100	300	60	110	520	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	42	463	105	63	653	63	105	316	63	116	547	116
Adj No. of Lanes	1	2	0	1	2	0	0	2	0	0	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	1033	233	136	1053	101	144	454	94	127	624	139
Arrive On Green	0.10	0.36	0.35	0.08	0.32	0.32	0.06	0.06	0.06	0.49	0.49	0.48
Sat Flow, veh/h	1774	2866	645	1774	3259	314	749	2361	490	513	2524	563
Grp Volume(v), veh/h	42	285	283	63	354	362	256	0	228	416	0	363
Grp Sat Flow(s),veh/h/ln	1774	1770	1742	1774	1770	1803	1825	0	1775	1837	0	1763
Q Serve(g_s), s	2.8	15.9	16.2	4.4	22.0	22.1	17.9	0.0	16.3	27.1	0.0	23.1
Cycle Q Clear(g_c), s	2.8	15.9	16.2	4.4	22.0	22.1	17.9	0.0	16.3	27.1	0.0	23.1
Prop In Lane	1.00		0.37	1.00		0.17	0.41		0.28	0.28		0.32
Lane Grp Cap(c), veh/h	183	638	628	136	572	583	351	0	341	454	0	436
V/C Ratio(X)	0.23	0.45	0.45	0.46	0.62	0.62	0.73	0.00	0.67	0.91	0.00	0.83
Avail Cap(c_a), veh/h	183	638	628	136	572	583	351	0	341	551	0	529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.50	0.50	0.50	0.55	0.55	0.55	0.96	0.00	0.96	0.30	0.00	0.30
Uniform Delay (d), s/veh	53.5	31.7	31.9	57.4	37.2	37.3	57.5	0.0	56.9	31.6	0.0	30.8
Incr Delay (d2), s/veh	0.1	1.1	1.2	6.1	2.8	2.7	12.1	0.0	9.6	5.9	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	7.9	8.0	2.4	11.2	11.4	10.2	0.0	9.0	14.4	0.0	11.4
LnGrp Delay(d),s/veh	53.6	32.8	33.1	63.5	40.0	40.1	69.6	0.0	66.4	37.5	0.0	33.3
LnGrp LOS	D	C	C	E	D	D	E		E	D		C
Approach Vol, veh/h		610			779			484			779	
Approach Delay, s/veh		34.4			41.9			68.1			35.6	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	14.0	50.8		36.2	18.8	46.0
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	4.9	* 4.9
Max Green Setting (Gmax), s		24.1	10.5	39.1		38.1	8.5	* 41
Max Q Clear Time (g_c+I1), s		19.9	6.4	18.2		29.1	4.8	24.1
Green Ext Time (p_c), s		0.7	0.0	1.5		2.1	0.7	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	43.1
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	90	50	710	60	20	1160
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.83		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	97	54	763	65	22	1247
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	235	131	2166	184	31	2496
Arrive On Green	0.23	0.23	0.66	0.65	0.02	0.71
Sat Flow, veh/h	1007	561	3388	281	1774	3632
Grp Volume(v), veh/h	152	0	410	418	22	1247
Grp Sat Flow(s),veh/h/ln	1578	0	1770	1806	1774	1770
Q Serve(g_s), s	10.6	0.0	13.4	13.5	1.6	20.8
Cycle Q Clear(g_c), s	10.6	0.0	13.4	13.5	1.6	20.8
Prop In Lane	0.64	0.36		0.16	1.00	
Lane Grp Cap(c), veh/h	368	0	1163	1187	31	2496
V/C Ratio(X)	0.41	0.00	0.35	0.35	0.72	0.50
Avail Cap(c_a), veh/h	389	0	1163	1187	109	2496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.55	0.55	0.46	0.46
Uniform Delay (d), s/veh	42.3	0.0	9.9	10.0	63.6	8.7
Incr Delay (d2), s/veh	0.3	0.0	0.5	0.5	5.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.7	0.0	6.6	6.8	0.8	10.2
LnGrp Delay(d),s/veh	42.6	0.0	10.4	10.4	68.9	9.0
LnGrp LOS	D		B	B	E	A
Approach Vol, veh/h	152		828			1269
Approach Delay, s/veh	42.6		10.4			10.1
Approach LOS	D		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.2	89.4				95.7		34.3
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	77.1				89.1		32.0
Max Q Clear Time (g_c+I1), s	3.6	15.5				22.8		12.6
Green Ext Time (p_c), s	0.0	9.0				9.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	12.4
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	60	47	41	58	42	46	561	12	30	870	99
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	87	65	51	45	63	46	50	610	13	33	946	108
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	229	132	81	172	172	101	60	1611	34	40	1421	162
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.03	0.45	0.45	0.02	0.44	0.44
Sat Flow, veh/h	554	657	406	325	860	505	1774	3544	75	1774	3202	366
Grp Volume(v), veh/h	203	0	0	154	0	0	50	304	319	33	523	531
Grp Sat Flow(s),veh/h/ln	1617	0	0	1689	0	0	1774	1770	1849	1774	1770	1798
Q Serve(g_s), s	1.4	0.0	0.0	0.0	0.0	0.0	1.2	4.9	4.9	0.8	10.1	10.1
Cycle Q Clear(g_c), s	4.7	0.0	0.0	3.3	0.0	0.0	1.2	4.9	4.9	0.8	10.1	10.1
Prop In Lane	0.43		0.25	0.29		0.30	1.00		0.04	1.00		0.20
Lane Grp Cap(c), veh/h	442	0	0	445	0	0	60	805	841	40	785	798
V/C Ratio(X)	0.46	0.00	0.00	0.35	0.00	0.00	0.84	0.38	0.38	0.82	0.67	0.67
Avail Cap(c_a), veh/h	1110	0	0	1142	0	0	204	937	980	204	937	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.7	0.0	0.0	15.2	0.0	0.0	20.9	7.8	7.8	21.1	9.5	9.5
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.5	0.0	0.0	25.0	0.3	0.3	31.6	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.3	0.0	0.0	1.7	0.0	0.0	1.0	2.4	2.5	0.7	5.1	5.2
LnGrp Delay(d),s/veh	16.4	0.0	0.0	15.7	0.0	0.0	45.8	8.1	8.1	52.8	10.9	10.9
LnGrp LOS	B			B			D	A	A	D	B	B
Approach Vol, veh/h		203			154			673			1087	
Approach Delay, s/veh		16.4			15.7			10.9			12.2	
Approach LOS		B			B			B			B	

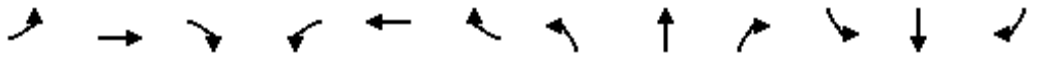
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	24.7		13.7	5.5	24.3		13.7
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	23.0		28.0	5.0	23.0		28.0
Max Q Clear Time (g_c+I1), s	2.8	6.9		6.7	3.2	12.1		5.3
Green Ext Time (p_c), s	0.0	9.4		2.2	0.0	7.1		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	12.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	14	22	95	133	25	27	58	570	86	27	919	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	15	24	104	146	27	30	64	626	95	30	1010	5
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	101	72	235	334	56	45	79	1490	226	37	1659	8
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.04	0.48	0.48	0.02	0.46	0.46
Sat Flow, veh/h	82	364	1189	1021	281	226	1774	3083	467	1774	3611	18
Grp Volume(v), veh/h	143	0	0	203	0	0	64	359	362	30	495	520
Grp Sat Flow(s),veh/h/ln	1635	0	0	1528	0	0	1774	1770	1780	1774	1770	1860
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	0.0	1.7	6.2	6.2	0.8	9.8	9.8
Cycle Q Clear(g_c), s	3.6	0.0	0.0	5.2	0.0	0.0	1.7	6.2	6.2	0.8	9.8	9.8
Prop In Lane	0.10		0.73	0.72		0.15	1.00		0.26	1.00		0.01
Lane Grp Cap(c), veh/h	408	0	0	434	0	0	79	855	860	37	813	854
V/C Ratio(X)	0.35	0.00	0.00	0.47	0.00	0.00	0.81	0.42	0.42	0.82	0.61	0.61
Avail Cap(c_a), veh/h	1044	0	0	976	0	0	189	1057	1063	189	1057	1110
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	0.0	17.1	0.0	0.0	22.2	7.9	7.9	22.9	9.5	9.5
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.8	0.0	0.0	17.5	0.3	0.3	33.6	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	0.0	0.0	2.5	0.0	0.0	1.2	3.1	3.1	0.7	4.8	5.1
LnGrp Delay(d),s/veh	17.0	0.0	0.0	17.8	0.0	0.0	39.7	8.2	8.2	56.5	10.3	10.2
LnGrp LOS	B			B			D	A	A	E	B	B
Approach Vol, veh/h		143			203			785			1045	
Approach Delay, s/veh		17.0			17.8			10.8			11.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	27.7		14.3	6.1	26.5		14.3
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	28.0		28.0	5.0	28.0		28.0
Max Q Clear Time (g_c+I1), s	2.8	8.2		5.6	3.7	11.8		7.2
Green Ext Time (p_c), s	0.0	11.0		2.2	0.0	9.7		2.1

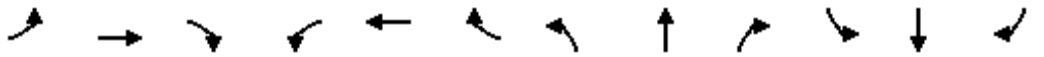
Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	58	439	6	9	433	30	13	1	52	59	4	59
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	61	462	6	9	456	32	14	1	55	62	4	62
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	436	1260	16	440	1247	552	262	12	663	286	13	663
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	900	3577	46	917	3539	1568	154	29	1573	211	30	1573
Grp Volume(v), veh/h	61	228	240	9	456	32	15	0	55	66	0	62
Grp Sat Flow(s),veh/h/ln	900	1770	1854	917	1770	1568	183	0	1573	241	0	1573
Q Serve(g_s), s	1.9	3.4	3.4	0.3	3.4	0.5	0.2	0.0	0.7	1.5	0.0	0.8
Cycle Q Clear(g_c), s	5.2	3.4	3.4	3.6	3.4	0.5	13.3	0.0	0.7	14.0	0.0	0.8
Prop In Lane	1.00		0.03	1.00		1.00	0.93		1.00	0.94		1.00
Lane Grp Cap(c), veh/h	436	623	653	440	1247	552	274	0	663	299	0	663
V/C Ratio(X)	0.14	0.37	0.37	0.02	0.37	0.06	0.05	0.00	0.08	0.22	0.00	0.09
Avail Cap(c_a), veh/h	678	1100	1152	687	2199	974	467	0	889	494	0	889
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.4	8.5	8.5	9.8	8.5	7.6	9.4	0.0	6.1	14.7	0.0	6.2
Incr Delay (d2), s/veh	0.1	0.4	0.3	0.0	0.2	0.0	0.1	0.0	0.1	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.5	1.7	1.8	0.1	1.7	0.2	0.1	0.0	0.3	0.7	0.0	0.4
LnGrp Delay(d),s/veh	10.6	8.9	8.9	9.9	8.7	7.6	9.5	0.0	6.2	15.0	0.0	6.2
LnGrp LOS	B	A	A	A	A	A	A		A	B		A
Approach Vol, veh/h		529			497			70			128	
Approach Delay, s/veh		9.1			8.7			6.9			10.8	
Approach LOS		A			A			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		19.6		16.6		19.6		16.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		22.0		20.0		22.0
Max Q Clear Time (g_c+I1), s		15.3		7.2		16.0		5.6
Green Ext Time (p_c), s		0.3		5.2		0.3		5.5

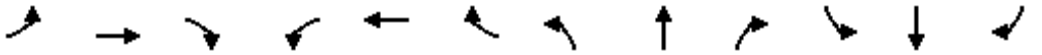
Intersection Summary	
HCM 2010 Ctrl Delay	9.0
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	67	319	78	144	347	52	68	243	74	54	569	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	81	384	94	173	418	63	82	293	89	65	686	114
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	922	223	260	1008	151	97	1423	424	77	1574	261
Arrive On Green	0.33	0.33	0.32	0.33	0.33	0.32	0.05	0.53	0.52	0.04	0.52	0.51
Sat Flow, veh/h	907	2817	682	909	3081	461	1774	2688	801	1774	3038	504
Grp Volume(v), veh/h	81	240	238	173	239	242	82	191	191	65	399	401
Grp Sat Flow(s),veh/h/ln	907	1770	1729	909	1770	1772	1774	1770	1720	1774	1770	1773
Q Serve(g_s), s	9.2	12.6	12.9	22.0	12.6	12.8	5.5	6.8	7.1	4.4	16.8	16.9
Cycle Q Clear(g_c), s	22.0	12.6	12.9	35.0	12.6	12.8	5.5	6.8	7.1	4.4	16.8	16.9
Prop In Lane	1.00		0.39	1.00		0.26	1.00		0.47	1.00		0.28
Lane Grp Cap(c), veh/h	260	579	566	260	579	580	97	937	911	77	917	919
V/C Ratio(X)	0.31	0.41	0.42	0.67	0.41	0.42	0.85	0.20	0.21	0.85	0.44	0.44
Avail Cap(c_a), veh/h	273	605	591	273	605	605	163	937	911	310	917	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	0.96	0.96	0.96	0.91	0.91	0.91	0.77	0.77	0.77
Uniform Delay (d), s/veh	40.0	31.4	31.6	45.1	31.4	31.5	56.2	14.9	15.1	57.0	18.0	18.1
Incr Delay (d2), s/veh	0.2	0.1	0.2	4.2	0.2	0.2	7.5	0.4	0.5	7.4	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.3	6.2	6.2	5.8	6.2	6.3	2.9	3.5	3.5	2.3	8.5	8.6
LnGrp Delay(d),s/veh	40.2	31.5	31.7	49.4	31.6	31.7	63.8	15.3	15.5	64.4	19.1	19.2
LnGrp LOS	D	C	C	D	C	C	E	B	B	E	B	B
Approach Vol, veh/h		559			654			464			865	
Approach Delay, s/veh		32.9			36.3			24.0			22.6	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.2	67.5		43.3	10.5	66.2		43.3
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	21.5	45.1		40.4	11.5	55.1		40.4
Max Q Clear Time (g_c+I1), s	6.4	9.1		24.0	7.5	18.9		37.0
Green Ext Time (p_c), s	0.0	4.8		4.5	0.0	4.8		1.7

Intersection Summary			
HCM 2010 Ctrl Delay		28.6	
HCM 2010 LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	952	7	12	883	44	6	1	17	22	1	75
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	90	1070	8	13	992	49	7	1	19	25	1	84
Adj No. of Lanes	1	2	0	1	3	1	0	1	1	0	1	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	2323	17	8	3000	896	158	19	384	183	6	384
Arrive On Green	0.02	0.21	0.21	0.00	0.59	0.59	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3599	27	1774	5085	1519	407	76	1538	497	25	1538
Grp Volume(v), veh/h	90	526	552	13	992	49	8	0	19	26	0	84
Grp Sat Flow(s),veh/h/ln	1774	1770	1857	1774	1695	1519	482	0	1538	522	0	1538
Q Serve(g_s), s	6.1	31.1	31.1	0.6	11.9	1.6	0.3	0.0	1.1	2.0	0.0	5.2
Cycle Q Clear(g_c), s	6.1	31.1	31.1	0.6	11.9	1.6	19.8	0.0	1.1	20.7	0.0	5.2
Prop In Lane	1.00		0.01	1.00		1.00	0.87		1.00	0.96		1.00
Lane Grp Cap(c), veh/h	106	1142	1198	8	3000	896	177	0	384	189	0	384
V/C Ratio(X)	0.85	0.46	0.46	1.58	0.33	0.05	0.05	0.00	0.05	0.14	0.00	0.22
Avail Cap(c_a), veh/h	237	1142	1198	148	3000	896	177	0	384	189	0	384
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.63	0.63	0.63	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.3	29.0	29.0	59.7	12.5	10.4	39.3	0.0	34.2	49.2	0.0	35.7
Incr Delay (d2), s/veh	6.3	1.2	1.2	290.3	0.2	0.1	0.0	0.0	0.0	1.5	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	74.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.2	15.7	16.4	0.9	5.6	0.7	0.2	0.0	0.5	0.9	0.0	2.4
LnGrp Delay(d),s/veh	64.5	30.2	30.2	424.8	12.7	10.5	39.3	0.0	34.2	50.7	0.0	37.0
LnGrp LOS	E	C	C	F	B	B	D		C	D		D
Approach Vol, veh/h		1168			1054			27			110	
Approach Delay, s/veh		32.8			17.7			35.7			40.2	
Approach LOS		C			B			D			D	

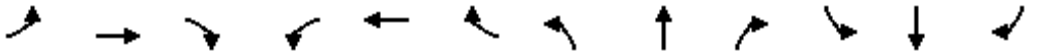
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	4.6	81.4		34.0	11.2	74.8
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	16.5	61.4
Max Q Clear Time (g_c+I1), s		21.8	2.6	33.1		22.7	8.1	13.9
Green Ext Time (p_c), s		0.2	0.0	23.2		0.2	0.0	28.5

Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	676	340	173	737	88	225	335	164	173	483	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	103	777	391	199	847	101	259	385	189	199	555	155
Adj No. of Lanes	1	2	0	1	3	0	2	2	0	1	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	820	411	216	1913	227	301	588	283	220	798	222
Arrive On Green	0.02	0.12	0.12	0.24	0.83	0.82	0.09	0.26	0.25	0.04	0.10	0.09
Sat Flow, veh/h	1774	2262	1134	1774	4597	545	3442	2276	1097	1774	2707	753
Grp Volume(v), veh/h	103	607	561	199	623	325	259	298	276	199	362	348
Grp Sat Flow(s),veh/h/ln	1774	1770	1627	1774	1695	1752	1721	1770	1603	1774	1770	1690
Q Serve(g_s), s	6.9	40.9	41.1	13.1	5.9	6.1	8.9	18.0	18.6	13.4	23.8	23.9
Cycle Q Clear(g_c), s	6.9	40.9	41.1	13.1	5.9	6.1	8.9	18.0	18.6	13.4	23.8	23.9
Prop In Lane	1.00		0.70	1.00		0.31	1.00		0.68	1.00		0.45
Lane Grp Cap(c), veh/h	121	641	589	216	1411	729	301	457	414	220	522	498
V/C Ratio(X)	0.85	0.95	0.95	0.92	0.44	0.45	0.86	0.65	0.67	0.90	0.69	0.70
Avail Cap(c_a), veh/h	163	641	589	237	1411	729	373	457	414	222	522	498
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.87	0.87	0.87	0.94	0.94	0.94	0.90	0.90	0.90	0.97	0.97	0.97
Uniform Delay (d), s/veh	58.1	51.7	51.9	44.8	6.4	6.6	54.0	39.7	40.2	56.8	48.9	49.1
Incr Delay (d2), s/veh	18.9	22.4	24.5	33.1	0.9	1.8	12.2	6.4	7.5	33.9	7.2	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.1	24.1	22.6	8.4	2.8	3.1	4.8	9.6	9.1	8.7	12.7	12.3
LnGrp Delay(d),s/veh	77.0	74.1	76.4	77.9	7.3	8.4	66.2	46.1	47.7	90.8	56.1	56.7
LnGrp LOS	E	E	E	E	A	A	E	D	D	F	E	E
Approach Vol, veh/h		1271			1147			833			909	
Approach Delay, s/veh		75.3			19.9			52.9			63.9	
Approach LOS		E			B			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	35.0	18.6	47.5	14.5	39.4	12.2	53.9
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	3.5	4.9
Max Green Setting (Gmax), s	15.5	30.1	16.5	41.1	13.5	32.1	11.5	46.1
Max Q Clear Time (g_c+I1), s	15.4	20.6	15.1	43.1	10.9	25.9	8.9	8.1
Green Ext Time (p_c), s	0.0	3.0	0.0	0.0	0.1	2.3	0.0	25.9

Intersection Summary	
HCM 2010 Ctrl Delay	53.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	176	620	213	236	557	70	202	761	160	148	1249	198
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.93	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	200	705	55	268	633	12	230	865	154	168	1419	207
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	243	856	364	326	974	417	269	1788	316	377	2042	298
Arrive On Green	0.05	0.16	0.16	0.03	0.09	0.09	0.15	0.82	0.80	0.22	0.90	0.89
Sat Flow, veh/h	3510	3610	1535	3510	3610	1545	3510	4379	774	3510	4529	660
Grp Volume(v), veh/h	200	705	55	268	633	12	230	682	337	168	1083	543
Grp Sat Flow(s),veh/h/ln	1755	1805	1535	1755	1805	1545	1755	1729	1695	1755	1729	1731
Q Serve(g_s), s	6.8	22.7	3.0	9.1	20.3	0.6	7.7	7.2	7.5	5.0	9.9	10.4
Cycle Q Clear(g_c), s	6.8	22.7	3.0	9.1	20.3	0.6	7.7	7.2	7.5	5.0	9.9	10.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.46	1.00		0.38
Lane Grp Cap(c), veh/h	243	856	364	326	974	417	269	1412	692	377	1559	780
V/C Ratio(X)	0.82	0.82	0.15	0.82	0.65	0.03	0.85	0.48	0.49	0.45	0.69	0.70
Avail Cap(c_a), veh/h	351	993	422	351	993	425	351	1412	692	377	1559	780
HCM Platoon Ratio	0.67	0.67	0.67	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.89	0.89	0.89	0.90	0.90	0.90	0.93	0.93	0.93	0.91	0.91	0.91
Uniform Delay (d), s/veh	56.5	48.0	25.6	57.2	49.2	21.6	50.1	7.2	7.5	44.0	3.7	4.0
Incr Delay (d2), s/veh	5.9	3.9	0.1	11.4	1.0	0.0	11.4	1.1	2.3	0.3	2.3	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.5	11.8	1.3	4.9	10.3	0.3	4.1	3.4	3.7	2.4	4.7	5.3
LnGrp Delay(d),s/veh	62.3	51.9	25.6	68.5	50.2	21.6	61.5	8.3	9.8	44.3	6.1	8.6
LnGrp LOS	E	D	C	E	D	C	E	A	A	D	A	A
Approach Vol, veh/h		960			913			1249			1794	
Approach Delay, s/veh		52.6			55.2			18.5			10.4	
Approach LOS		D			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	53.0	16.2	32.5	13.2	58.1	12.3	36.4
Change Period (Y+Rc), s	4.9	* 4.9	4.6	* 4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	10.5	* 48	12.5	* 32	12.5	46.1	12.5	32.4
Max Q Clear Time (g_c+I1), s	7.0	9.5	11.1	24.7	9.7	12.4	8.8	22.3
Green Ext Time (p_c), s	0.2	4.7	0.5	2.1	0.1	8.9	0.1	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	29.0
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	102	791	52	77	700	103	83	244	50	102	573	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	124	965	63	94	854	126	101	298	61	124	699	146
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	1292	84	111	1160	171	118	973	196	141	970	202
Arrive On Green	0.16	0.77	0.76	0.06	0.38	0.37	0.02	0.11	0.11	0.16	0.67	0.65
Sat Flow, veh/h	1774	3371	220	1774	3091	456	1774	2929	591	1774	2910	607
Grp Volume(v), veh/h	124	507	521	94	489	491	101	178	181	124	425	420
Grp Sat Flow(s),veh/h/ln	1774	1770	1821	1774	1770	1777	1774	1770	1751	1774	1770	1748
Q Serve(g_s), s	8.2	18.7	18.8	6.3	28.6	28.6	6.8	11.1	11.4	8.2	18.5	18.7
Cycle Q Clear(g_c), s	8.2	18.7	18.8	6.3	28.6	28.6	6.8	11.1	11.4	8.2	18.5	18.7
Prop In Lane	1.00		0.12	1.00		0.26	1.00		0.34	1.00		0.35
Lane Grp Cap(c), veh/h	142	678	698	111	664	667	118	588	582	141	590	583
V/C Ratio(X)	0.88	0.75	0.75	0.85	0.74	0.74	0.85	0.30	0.31	0.88	0.72	0.72
Avail Cap(c_a), veh/h	237	678	698	148	664	667	118	588	582	148	590	583
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.85	0.85	0.85	0.67	0.67	0.67	0.99	0.99	0.99	0.85	0.85	0.85
Uniform Delay (d), s/veh	49.8	10.8	10.9	55.7	32.4	32.4	58.1	40.6	40.8	49.9	16.4	16.7
Incr Delay (d2), s/veh	8.3	6.3	6.1	16.1	4.9	4.8	40.0	1.3	1.4	34.0	6.3	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.3	9.9	10.2	3.6	14.9	15.0	4.7	5.7	5.8	5.3	9.8	9.7
LnGrp Delay(d),s/veh	58.1	17.1	17.0	71.8	37.2	37.3	98.1	41.9	42.2	83.9	22.7	23.1
LnGrp LOS	E	B	B	E	D	D	F	D	D	F	C	C
Approach Vol, veh/h		1152			1074			460			969	
Approach Delay, s/veh		21.5			40.3			54.4			30.7	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	43.9	12.6	50.0	13.4	44.0	13.6	49.0
Change Period (Y+Rc), s	3.5	4.9	4.6	* 4.6	4.9	* 4.9	3.5	4.6
Max Green Setting (Gmax), s	10.5	37.1	10.5	* 45	8.5	* 39	16.5	39.4
Max Q Clear Time (g_c+I1), s	10.2	13.4	8.3	20.8	8.8	20.7	10.2	30.6
Green Ext Time (p_c), s	0.0	2.6	0.1	8.9	0.0	6.6	0.0	4.6

Intersection Summary	
HCM 2010 Ctrl Delay	33.6
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	143	733	66	128	472	266	75	886	130	274	1278	90
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	152	780	70	136	502	283	80	943	138	291	1360	96
Adj No. of Lanes	1	3	0	1	3	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	1097	98	170	818	372	95	1639	239	308	2337	165
Arrive On Green	0.10	0.23	0.22	0.10	0.24	0.23	0.05	0.37	0.36	0.17	0.48	0.48
Sat Flow, veh/h	1774	4753	424	1774	3390	1541	1774	4482	654	1774	4838	342
Grp Volume(v), veh/h	152	555	295	136	502	283	80	712	369	291	953	503
Grp Sat Flow(s),veh/h/ln	1774	1695	1787	1774	1695	1541	1774	1695	1746	1774	1695	1789
Q Serve(g_s), s	11.0	19.6	19.8	9.8	17.1	22.3	5.8	21.9	22.1	21.1	26.3	26.3
Cycle Q Clear(g_c), s	11.0	19.6	19.8	9.8	17.1	22.3	5.8	21.9	22.1	21.1	26.3	26.3
Prop In Lane	1.00		0.24	1.00		1.00	1.00		0.37	1.00		0.19
Lane Grp Cap(c), veh/h	171	782	412	170	818	372	95	1239	638	308	1637	864
V/C Ratio(X)	0.89	0.71	0.71	0.80	0.61	0.76	0.85	0.57	0.58	0.94	0.58	0.58
Avail Cap(c_a), veh/h	232	782	412	246	818	372	273	1239	638	314	1637	864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	46.0	46.2	57.5	43.9	46.3	61.0	33.1	33.4	53.1	24.2	24.2
Incr Delay (d2), s/veh	21.6	5.4	10.1	7.0	3.4	13.7	7.5	1.9	3.8	35.4	1.5	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.4	9.8	10.9	5.1	8.4	10.9	3.0	10.6	11.3	13.4	12.7	13.7
LnGrp Delay(d),s/veh	79.6	51.4	56.3	64.5	47.4	60.0	68.6	35.1	37.2	88.4	25.7	27.1
LnGrp LOS	E	D	E	E	D	E	E	D	D	F	C	C
Approach Vol, veh/h		1002			921			1161			1747	
Approach Delay, s/veh		57.1			53.8			38.0			36.5	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.6	51.5	16.5	35.4	10.9	67.2	17.9	34.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	* 5.3	4.9	* 4.9
Max Green Setting (Gmax), s	23.5	41.7	17.5	30.1	20.5	* 45	18.5	* 29
Max Q Clear Time (g_c+I1), s	23.1	24.1	13.0	24.3	7.8	28.3	11.8	21.8
Green Ext Time (p_c), s	0.0	16.1	0.1	3.0	0.1	15.4	1.3	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	44.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	23	629	5	5	741	62	13	2	12	169	1	47
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	27	749	6	6	882	74	15	2	14	201	1	56
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	1499	12	372	1377	116	395	74	313	597	16	140
Arrive On Green	0.83	0.83	0.79	0.42	0.42	0.40	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	585	3598	29	705	3304	277	680	165	696	1090	35	312
Grp Volume(v), veh/h	27	368	387	6	472	484	31	0	0	258	0	0
Grp Sat Flow(s),veh/h/ln	585	1770	1857	705	1770	1812	1541	0	0	1437	0	0
Q Serve(g_s), s	1.8	3.6	3.6	0.3	12.7	12.8	0.0	0.0	0.0	6.5	0.0	0.0
Cycle Q Clear(g_c), s	14.6	3.6	3.6	3.9	12.7	12.8	0.6	0.0	0.0	7.1	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.15	0.48		0.45	0.78		0.22
Lane Grp Cap(c), veh/h	239	737	774	372	737	755	782	0	0	753	0	0
V/C Ratio(X)	0.11	0.50	0.50	0.02	0.64	0.64	0.04	0.00	0.00	0.34	0.00	0.00
Avail Cap(c_a), veh/h	239	737	774	372	737	755	782	0	0	753	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.89	0.89	0.89	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.3	3.2	3.2	12.5	13.9	14.0	9.2	0.0	0.0	11.0	0.0	0.0
Incr Delay (d2), s/veh	0.9	2.3	2.2	0.1	3.8	3.7	0.0	0.0	0.0	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.3	1.9	2.0	0.1	6.9	7.1	0.3	0.0	0.0	3.1	0.0	0.0
LnGrp Delay(d),s/veh	9.2	5.5	5.5	12.6	17.7	17.7	9.2	0.0	0.0	12.2	0.0	0.0
LnGrp LOS	A	A	A	B	B	B	A			B		
Approach Vol, veh/h		782			962			31			258	
Approach Delay, s/veh		5.6			17.7			9.2			12.2	
Approach LOS		A			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.0		29.0		31.0		29.0
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		27.0		23.7		27.0		23.7
Max Q Clear Time (g_c+I1), s		9.1		14.8		2.6		16.6
Green Ext Time (p_c), s		1.1		7.4		1.2		6.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

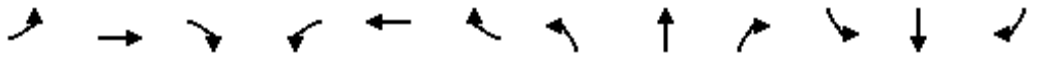
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	13	709	114	123	695	46	47	24	54	106	92	53
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.96		0.94	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	15	815	131	141	799	53	54	28	62	122	106	61
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	22	1812	291	159	2263	150	212	107	236	269	234	134
Arrive On Green	0.01	0.59	0.59	0.18	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3046	490	1774	3366	223	1170	496	1097	1244	1085	624
Grp Volume(v), veh/h	15	473	473	141	420	432	54	0	90	122	0	167
Grp Sat Flow(s),veh/h/ln	1774	1770	1766	1774	1770	1819	1170	0	1593	1244	0	1709
Q Serve(g_s), s	1.0	17.8	17.8	9.3	0.0	0.0	5.0	0.0	5.6	10.8	0.0	10.2
Cycle Q Clear(g_c), s	1.0	17.8	17.8	9.3	0.0	0.0	15.2	0.0	5.6	16.5	0.0	10.2
Prop In Lane	1.00		0.28	1.00		0.12	1.00		0.69	1.00		0.37
Lane Grp Cap(c), veh/h	22	1053	1051	159	1190	1223	212	0	343	269	0	368
V/C Ratio(X)	0.69	0.45	0.45	0.89	0.35	0.35	0.25	0.00	0.26	0.45	0.00	0.45
Avail Cap(c_a), veh/h	89	1053	1051	296	1190	1223	234	0	372	292	0	399
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.47	0.47	0.47	0.88	0.88	0.88	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.0	13.4	13.5	48.6	0.0	0.0	47.6	0.0	39.2	46.0	0.0	41.0
Incr Delay (d2), s/veh	6.7	0.7	0.7	5.5	0.7	0.7	0.2	0.0	0.1	0.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.5	8.9	8.9	4.8	0.2	0.2	1.6	0.0	2.5	3.8	0.0	4.9
LnGrp Delay(d),s/veh	65.8	14.1	14.2	54.2	0.7	0.7	47.8	0.0	39.3	46.5	0.0	41.3
LnGrp LOS	E	B	B	D	A	A	D		D	D		D
Approach Vol, veh/h		961			993			144			289	
Approach Delay, s/veh		14.9			8.3			42.5			43.5	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.8	75.4		29.8	5.5	84.7		29.8
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	20.5	59.4		28.0	6.5	73.4		28.0
Max Q Clear Time (g_c+I1), s	11.3	19.8		18.5	3.0	2.0		17.2
Green Ext Time (p_c), s	0.1	22.5		1.1	0.0	29.3		1.1

Intersection Summary		
HCM 2010 Ctrl Delay		17.3
HCM 2010 LOS		B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	77	712	99	150	630	70	122	356	118	214	667	69
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.92	1.00		0.86	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	82	757	105	160	670	74	130	379	126	228	710	73
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	1362	545	180	1530	621	149	605	196	248	947	97
Arrive On Green	0.11	0.77	0.75	0.10	0.43	0.42	0.08	0.24	0.23	0.14	0.30	0.29
Sat Flow, veh/h	1774	3539	1445	1774	3539	1460	1774	2514	814	1774	3195	328
Grp Volume(v), veh/h	82	757	105	160	670	74	130	264	241	228	393	390
Grp Sat Flow(s),veh/h/ln	1774	1770	1445	1774	1770	1460	1774	1770	1558	1774	1770	1754
Q Serve(g_s), s	5.5	10.3	2.5	10.7	15.9	3.7	8.7	16.0	16.7	15.2	24.1	24.2
Cycle Q Clear(g_c), s	5.5	10.3	2.5	10.7	15.9	3.7	8.7	16.0	16.7	15.2	24.1	24.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.52	1.00		0.19
Lane Grp Cap(c), veh/h	96	1362	545	180	1530	621	149	426	375	248	524	520
V/C Ratio(X)	0.86	0.56	0.19	0.89	0.44	0.12	0.87	0.62	0.64	0.92	0.75	0.75
Avail Cap(c_a), veh/h	157	1362	545	296	1530	621	207	442	389	281	524	520
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	0.98	0.98	0.98	0.77	0.77	0.77
Uniform Delay (d), s/veh	53.1	9.7	9.5	53.2	23.8	20.9	54.3	40.7	41.2	51.0	38.2	38.3
Incr Delay (d2), s/veh	10.5	1.5	0.7	10.2	0.9	0.4	19.2	1.7	2.5	24.8	4.1	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.9	5.1	1.1	5.8	7.9	1.5	5.1	8.0	7.4	9.2	12.4	12.3
LnGrp Delay(d),s/veh	63.5	11.2	10.2	63.4	24.8	21.3	73.5	42.4	43.7	75.8	42.3	42.5
LnGrp LOS	E	B	B	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		944			904			635			1011	
Approach Delay, s/veh		15.6			31.3			49.3			49.9	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.8	32.9	16.2	50.2	14.1	39.5	10.5	55.9
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	3.5	4.9
Max Green Setting (Gmax), s	19.5	29.1	20.5	34.1	14.5	34.1	11.1	43.5
Max Q Clear Time (g_c+I1), s	17.2	18.7	12.7	12.3	10.7	26.2	7.5	17.9
Green Ext Time (p_c), s	0.0	2.2	0.1	13.7	0.0	2.6	0.0	15.3

Intersection Summary	
HCM 2010 Ctrl Delay	35.7
HCM 2010 LOS	D

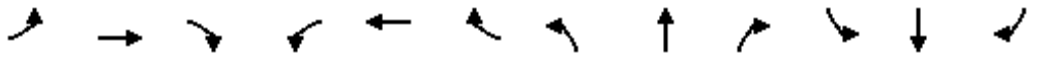
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	26	814	68	78	799	16	43	45	88	42	133	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.96	0.97		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	33	1044	87	100	1024	21	55	58	113	54	171	86
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	42	1846	154	138	2204	45	132	125	386	76	201	92
Arrive On Green	0.02	0.56	0.55	0.16	1.00	1.00	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3306	275	1774	3546	73	343	490	1513	160	788	362
Grp Volume(v), veh/h	33	559	572	100	511	534	113	0	113	311	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1811	1774	1770	1849	832	0	1513	1311	0	0
Q Serve(g_s), s	2.2	24.5	24.5	6.4	0.0	0.0	0.0	0.0	7.2	15.5	0.0	0.0
Cycle Q Clear(g_c), s	2.2	24.5	24.5	6.4	0.0	0.0	13.0	0.0	7.2	28.4	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.04	0.49		1.00	0.17		0.28
Lane Grp Cap(c), veh/h	42	988	1011	138	1100	1149	257	0	386	369	0	0
V/C Ratio(X)	0.79	0.57	0.57	0.73	0.46	0.46	0.44	0.00	0.29	0.84	0.00	0.00
Avail Cap(c_a), veh/h	148	988	1011	148	1100	1149	262	0	391	375	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	0.55	0.55	0.55	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.3	17.1	17.1	49.5	0.0	0.0	37.2	0.0	36.0	44.7	0.0	0.0
Incr Delay (d2), s/veh	6.6	1.3	1.3	7.3	0.8	0.7	0.4	0.0	0.2	14.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	12.2	12.6	3.4	0.2	0.2	3.2	0.0	3.0	11.6	0.0	0.0
LnGrp Delay(d),s/veh	64.9	18.4	18.4	56.8	0.8	0.7	37.6	0.0	36.2	59.5	0.0	0.0
LnGrp LOS	E	B	B	E	A	A	D		D	E		
Approach Vol, veh/h		1164			1145			226			311	
Approach Delay, s/veh		19.7			5.7			36.9			59.5	
Approach LOS		B			A			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.6	14.4	71.0		34.6	6.8	78.6
Change Period (Y+Rc), s		4.0	4.6	* 4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		31.0	10.5	* 66		31.0	10.5	66.4
Max Q Clear Time (g_c+I1), s		15.0	8.4	26.5		30.4	4.2	2.0
Green Ext Time (p_c), s		2.0	0.1	12.0		0.2	0.0	11.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.8
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	2	769	54	151	772	49	35	6	119	151	19	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2	845	59	166	848	54	38	7	131	166	21	10
Adj No. of Lanes	1	2	1	2	2	0	0	1	1	0	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	0	0	0	0	0	0
Cap, veh/h	13	1664	741	256	1815	116	525	91	666	452	55	23
Arrive On Green	0.01	0.47	0.47	0.07	0.54	0.52	0.36	0.36	0.34	0.36	0.36	0.35
Sat Flow, veh/h	1774	3539	1577	3442	3379	215	1268	255	1605	1063	155	65
Grp Volume(v), veh/h	2	845	59	166	444	458	45	0	131	197	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1577	1721	1770	1825	1523	0	1605	1283	0	0
Q Serve(g_s), s	0.1	15.0	1.9	4.2	14.0	14.0	0.0	0.0	4.7	9.8	0.0	0.0
Cycle Q Clear(g_c), s	0.1	15.0	1.9	4.2	14.0	14.0	1.6	0.0	4.7	11.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.12	0.84		1.00	0.84		0.05
Lane Grp Cap(c), veh/h	13	1664	741	256	951	980	615	0	666	530	0	0
V/C Ratio(X)	0.16	0.51	0.08	0.65	0.47	0.47	0.07	0.00	0.20	0.37	0.00	0.00
Avail Cap(c_a), veh/h	158	1664	741	421	951	980	615	0	666	530	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	0.82	0.82	0.82	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.4	16.6	13.1	40.5	12.9	12.9	19.2	0.0	16.8	22.7	0.0	0.0
Incr Delay (d2), s/veh	1.8	0.9	0.2	0.9	1.4	1.3	0.2	0.0	0.7	2.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	7.5	0.8	2.0	7.1	7.4	0.8	0.0	2.2	4.1	0.0	0.0
LnGrp Delay(d),s/veh	46.2	17.5	13.3	41.4	14.2	14.2	19.4	0.0	17.5	24.7	0.0	0.0
LnGrp LOS	D	B	B	D	B	B	B		B	C		
Approach Vol, veh/h		906			1068			176			197	
Approach Delay, s/veh		17.3			18.4			18.0			24.7	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	9.7	45.3		35.0	3.6	51.4
Change Period (Y+Rc), s		4.9	3.5	5.3		4.9	3.5	5.3
Max Green Setting (Gmax), s		30.1	10.5	35.7		30.1	7.5	38.7
Max Q Clear Time (g_c+I1), s		6.7	6.2	17.0		13.4	2.1	16.0
Green Ext Time (p_c), s		1.0	0.1	13.7		1.0	0.0	15.8

Intersection Summary	
HCM 2010 Ctrl Delay	18.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	121	752	225	310	667	238	155	347	536	269	1073	165
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	134	836	201	344	741	71	172	445	213	299	1192	91
Adj No. of Lanes	2	3	0	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	1312	313	388	1209	536	355	1243	524	343	1180	523
Arrive On Green	0.08	0.32	0.31	0.11	0.34	0.34	0.10	0.33	0.33	0.10	0.33	0.33
Sat Flow, veh/h	3442	4092	977	3442	3539	1569	3548	3725	1569	3442	3539	1569
Grp Volume(v), veh/h	134	692	345	344	741	71	172	445	213	299	1192	91
Grp Sat Flow(s),veh/h/ln	1721	1695	1679	1721	1770	1569	1774	1863	1569	1721	1770	1569
Q Serve(g_s), s	4.5	20.9	21.2	11.8	20.9	2.7	5.5	10.8	12.6	10.3	40.0	3.6
Cycle Q Clear(g_c), s	4.5	20.9	21.2	11.8	20.9	2.7	5.5	10.8	12.6	10.3	40.0	3.6
Prop In Lane	1.00		0.58	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	1087	538	388	1209	536	355	1243	524	343	1180	523
V/C Ratio(X)	0.49	0.64	0.64	0.89	0.61	0.13	0.48	0.36	0.41	0.87	1.01	0.17
Avail Cap(c_a), veh/h	315	1087	538	516	1209	536	355	1243	524	459	1180	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	0.70	0.70	0.70
Uniform Delay (d), s/veh	52.8	34.8	35.1	52.5	32.9	14.3	51.1	30.2	30.8	53.3	40.0	15.1
Incr Delay (d2), s/veh	0.4	2.5	5.1	11.4	2.3	0.5	4.7	0.8	2.3	7.9	24.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.1	10.2	10.6	6.3	10.6	1.2	2.9	5.7	5.8	5.3	23.5	1.6
LnGrp Delay(d),s/veh	53.3	37.3	40.2	63.9	35.2	14.8	55.8	31.0	33.2	61.2	64.5	15.2
LnGrp LOS	D	D	D	E	D	B	E	C	C	E	F	B
Approach Vol, veh/h		1171			1156			830			1582	
Approach Delay, s/veh		40.0			42.5			36.7			61.0	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	44.1	17.5	42.5	16.0	44.0	15.0	45.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	16.5	34.7	18.5	33.1	12.5	38.7	11.5	* 40
Max Q Clear Time (g_c+I1), s	12.3	14.6	13.8	23.2	7.5	42.0	6.5	22.9
Green Ext Time (p_c), s	0.2	14.9	0.2	5.5	0.1	0.0	0.4	6.2

Intersection Summary	
HCM 2010 Ctrl Delay	47.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	440	9	23	602	177	22	20	54	160	11	43
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	33	484	10	25	662	195	24	22	59	176	12	47
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	372	1596	33	445	1212	357	91	57	659	116	4	659
Arrive On Green	0.45	0.45	0.43	0.90	0.90	0.86	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	641	3546	73	897	2693	793	0	137	1582	0	10	1582
Grp Volume(v), veh/h	33	241	253	25	435	422	46	0	59	188	0	47
Grp Sat Flow(s),veh/h/ln	641	1770	1849	897	1770	1716	137	0	1582	10	0	1582
Q Serve(g_s), s	2.0	5.2	5.2	0.5	2.9	3.4	0.0	0.0	1.4	0.0	0.0	1.1
Cycle Q Clear(g_c), s	5.4	5.2	5.2	5.7	2.9	3.4	25.0	0.0	1.4	25.0	0.0	1.1
Prop In Lane	1.00		0.04	1.00		0.46	0.52		1.00	0.94		1.00
Lane Grp Cap(c), veh/h	372	796	832	445	796	772	148	0	659	120	0	659
V/C Ratio(X)	0.09	0.30	0.30	0.06	0.55	0.55	0.31	0.00	0.09	1.56	0.00	0.07
Avail Cap(c_a), veh/h	372	796	832	445	796	772	148	0	659	120	0	659
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	0.71	0.71	0.71	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.6	10.5	10.5	2.7	1.8	2.2	14.9	0.0	10.6	29.1	0.0	10.5
Incr Delay (d2), s/veh	0.4	0.9	0.9	0.2	1.9	2.0	5.4	0.0	0.3	289.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	2.7	2.9	0.1	1.4	1.7	0.7	0.0	0.6	11.6	0.0	0.5
LnGrp Delay(d),s/veh	12.1	11.4	11.4	2.9	3.7	4.2	20.3	0.0	10.9	318.1	0.0	10.7
LnGrp LOS	B	B	B	A	A	A	C		B	F		B
Approach Vol, veh/h		527			882			105			235	
Approach Delay, s/veh		11.4			3.9			15.0			256.6	
Approach LOS		B			A			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		31.0		29.0		31.0
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		25.0		25.7		25.0		25.7
Max Q Clear Time (g_c+I1), s		27.0		7.4		27.0		7.7
Green Ext Time (p_c), s		0.0		11.3		0.0		11.2

Intersection Summary	
HCM 2010 Ctrl Delay	40.8
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	114	904	2	2	900	68	6	0	1	44	0	72
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	127	1004	2	2	1000	76	7	0	1	49	0	80
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	2425	5	1	2768	210	276	4	32	394	0	360
Arrive On Green	0.16	1.00	1.00	0.00	0.19	0.19	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1774	3624	7	1774	4813	365	942	16	137	1378	0	1543
Grp Volume(v), veh/h	127	490	516	2	704	372	8	0	0	49	0	80
Grp Sat Flow(s),veh/h/ln	1774	1770	1861	1774	1695	1788	1096	0	0	1378	0	1543
Q Serve(g_s), s	8.4	0.0	0.0	0.1	21.7	21.7	0.2	0.0	0.0	0.0	0.0	5.0
Cycle Q Clear(g_c), s	8.4	0.0	0.0	0.1	21.7	21.7	5.2	0.0	0.0	2.8	0.0	5.0
Prop In Lane	1.00		0.00	1.00		0.20	0.87		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	146	1184	1246	1	1949	1028	312	0	0	394	0	360
V/C Ratio(X)	0.87	0.41	0.41	1.35	0.36	0.36	0.03	0.00	0.00	0.12	0.00	0.22
Avail Cap(c_a), veh/h	163	1184	1246	163	1949	1028	312	0	0	394	0	360
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.23	0.23	0.23	0.95	0.95	0.95	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.5	0.0	0.0	60.0	29.4	29.5	36.6	0.0	0.0	36.3	0.0	37.2
Incr Delay (d2), s/veh	9.7	0.2	0.2	330.0	0.5	0.9	0.0	0.0	0.0	0.6	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	42.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	0.1	0.1	0.3	10.3	11.0	0.2	0.0	0.0	1.4	0.0	2.3
LnGrp Delay(d),s/veh	59.1	0.2	0.2	432.9	29.9	30.4	36.6	0.0	0.0	37.0	0.0	38.6
LnGrp LOS	E	A	A	F	C	C	D			D		D
Approach Vol, veh/h		1133			1078			8			129	
Approach Delay, s/veh		6.8			30.9			36.6			38.0	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.0	3.7	84.3		32.0	15.0	73.0
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	4.6	* 4.6
Max Green Setting (Gmax), s		28.0	11.5	68.4		28.0	11.5	* 68
Max Q Clear Time (g_c+I1), s		7.2	2.1	2.0		7.0	10.4	23.7
Green Ext Time (p_c), s		0.4	0.0	10.3		0.4	0.1	11.4

Intersection Summary	
HCM 2010 Ctrl Delay	19.7
HCM 2010 LOS	B

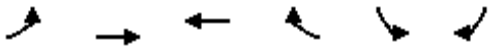
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	918	14	30	1092	62	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1541	1770	3539	1770	1508
Flt Permitted	1.00	1.00	0.18	1.00	0.95	1.00
Satd. Flow (perm)	3539	1541	327	3539	1770	1508
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1043	16	34	1241	70	151
RTOR Reduction (vph)	0	4	0	0	0	138
Lane Group Flow (vph)	1043	12	34	1241	70	13
Confl. Peds. (#/hr)		2	2			10
Turn Type	NA	Perm	D.P+P	NA	Prot	Perm
Protected Phases	1		2 4	1 2 4	3	
Permitted Phases		1	1			3
Actuated Green, G (s)	59.9	59.9	91.6	101.4	9.4	9.4
Effective Green, g (s)	60.8	60.8	94.3	102.3	10.0	10.0
Actuated g/C Ratio	0.51	0.51	0.79	0.85	0.08	0.08
Clearance Time (s)	4.9	4.9			4.6	4.6
Vehicle Extension (s)	1.5	1.5			2.5	2.5
Lane Grp Cap (vph)	1793	780	659	3016	147	125
v/s Ratio Prot	c0.29		0.01	c0.35	c0.04	
v/s Ratio Perm		0.01	0.03			0.01
v/c Ratio	0.58	0.02	0.05	0.41	0.48	0.10
Uniform Delay, d1	20.7	14.7	5.0	2.0	52.5	50.8
Progression Factor	1.00	1.00	0.09	0.05	1.00	1.00
Incremental Delay, d2	1.4	0.0	0.0	0.1	1.8	0.3
Delay (s)	22.1	14.8	0.4	0.1	54.3	51.1
Level of Service	C	B	A	A	D	D
Approach Delay (s)	22.0			0.2	52.1	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	41.9%	ICU Level of Service	A
Analysis Period (min)	15		

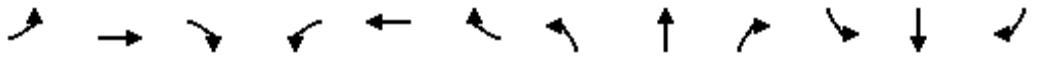
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	57	977	987	67	130	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.93	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1770	3539	3539	1541	1696	
Flt Permitted	0.16	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	294	3539	3539	1541	1696	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	63	1086	1097	74	144	138
RTOR Reduction (vph)	0	0	0	27	30	0
Lane Group Flow (vph)	63	1086	1097	47	252	0
Confl. Peds. (#/hr)	2			2	10	
Turn Type	D.P+P	NA	NA	Perm	Prot	
Protected Phases	2 3	1 2 3	1		4	
Permitted Phases	1			1		
Actuated Green, G (s)	81.0	85.9	59.9	59.9	24.6	
Effective Green, g (s)	79.1	83.1	60.8	60.8	25.2	
Actuated g/C Ratio	0.66	0.69	0.51	0.51	0.21	
Clearance Time (s)			4.9	4.9	4.6	
Vehicle Extension (s)			1.5	1.5	2.5	
Lane Grp Cap (vph)	418	2450	1793	780	356	
v/s Ratio Prot	0.02	c0.31	c0.31		c0.15	
v/s Ratio Perm	0.08			0.03		
v/c Ratio	0.15	0.44	0.61	0.06	0.71	
Uniform Delay, d1	10.0	8.2	21.2	15.1	44.0	
Progression Factor	0.22	0.15	0.63	0.77	1.00	
Incremental Delay, d2	0.1	0.1	1.3	0.1	5.9	
Delay (s)	2.3	1.3	14.7	11.8	49.8	
Level of Service	A	A	B	B	D	
Approach Delay (s)		1.4	14.5		49.8	
Approach LOS		A	B		D	

Intersection Summary			
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	164	573	418	170	479	113	275	2035	13	152	2614	158
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	171	597	264	177	499	21	286	2120	13	158	2723	158
Adj No. of Lanes	1	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	710	318	152	657	294	480	3085	19	294	2507	145
Arrive On Green	0.11	0.20	0.20	0.09	0.19	0.19	0.28	0.93	0.93	0.11	0.53	0.53
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	6621	41	3442	6245	360
Grp Volume(v), veh/h	171	597	264	177	499	21	286	1539	594	158	2092	789
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	1602	1856	1721	1602	1799
Q Serve(g_s), s	13.3	22.7	22.4	12.0	18.7	1.5	10.1	8.5	8.5	6.1	56.2	56.2
Cycle Q Clear(g_c), s	13.3	22.7	22.4	12.0	18.7	1.5	10.1	8.5	8.5	6.1	56.2	56.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.02	1.00		0.20
Lane Grp Cap(c), veh/h	195	710	318	152	657	294	480	2240	865	294	1929	722
V/C Ratio(X)	0.88	0.84	0.83	1.16	0.76	0.07	0.60	0.69	0.69	0.54	1.08	1.09
Avail Cap(c_a), veh/h	228	877	392	152	726	325	480	2240	865	295	1929	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	0.83	0.83	0.83	0.39	0.39	0.39	0.65	0.65	0.65	0.37	0.37	0.37
Uniform Delay (d), s/veh	61.4	53.8	53.7	64.0	54.0	47.0	47.1	2.8	2.8	59.4	32.6	32.6
Incr Delay (d2), s/veh	23.4	5.2	10.0	98.6	1.7	0.0	1.3	1.1	2.9	0.7	41.9	50.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.8	11.6	10.7	10.0	9.3	0.7	4.9	3.4	4.3	2.9	32.0	37.7
LnGrp Delay(d),s/veh	84.8	59.0	63.7	162.6	55.7	47.1	48.4	4.0	5.8	60.1	74.5	83.3
LnGrp LOS	F	E	E	F	E	D	D	A	A	E	F	F
Approach Vol, veh/h		1032			697			2419			3039	
Approach Delay, s/veh		64.5			82.6			9.7			76.1	
Approach LOS		E			F			A			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	71.0	18.3	34.4	25.3	62.0	20.4	32.3
Change Period (Y+Rc), s	* 4.3	5.8	6.3	* 6.3	5.8	* 5.8	5.0	6.3
Max Green Setting (Gmax), s	* 12	59.9	12.0	* 35	15.7	* 56	18.0	28.7
Max Q Clear Time (g_c+I1), s	8.1	10.5	14.0	24.7	12.1	58.2	15.3	20.7
Green Ext Time (p_c), s	0.2	26.1	0.0	3.4	2.2	0.0	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	52.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

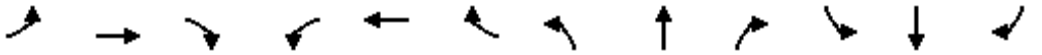
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	156	422	0	2120	2870	855
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	159	188	0	2163	2929	0
Adj No. of Lanes	2	2	0	4	4	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	320	259	0	5296	5296	1309
Arrive On Green	0.09	0.09	0.00	1.00	1.00	0.00
Sat Flow, veh/h	3442	2787	0	6929	6669	1583
Grp Volume(v), veh/h	159	188	0	2163	2929	0
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1602	1602	1583
Q Serve(g_s), s	6.2	9.2	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.2	9.2	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	320	259	0	5296	5296	1309
V/C Ratio(X)	0.50	0.73	0.00	0.41	0.55	0.00
Avail Cap(c_a), veh/h	361	293	0	5296	5296	1309
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	0.47	0.16	0.00
Uniform Delay (d), s/veh	60.4	61.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.2	7.6	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.0	7.2	0.0	0.0	0.0	0.0
LnGrp Delay(d),s/veh	61.6	69.4	0.0	0.1	0.1	0.0
LnGrp LOS	E	E		A	A	
Approach Vol, veh/h	347			2163	2929	
Approach Delay, s/veh	65.8			0.1	0.1	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		121.7		18.3		121.7		
Change Period (Y+Rc), s		6.0		* 5.3		6.0		
Max Green Setting (Gmax), s		114.0		* 15		73.0		
Max Q Clear Time (g_c+I1), s		2.0		11.2		2.0		
Green Ext Time (p_c), s		35.7		0.5		54.2		

Intersection Summary	
HCM 2010 Ctrl Delay	4.3
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



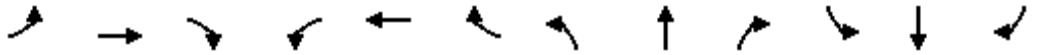
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	202	875	122	114	428	266	136	1647	227	412	2446	426
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	206	893	124	116	437	271	139	1681	232	420	2496	435
Adj No. of Lanes	2	3	1	2	2	1	2	3	1	2	4	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	1134	488	316	811	363	294	1954	608	470	2790	1452
Arrive On Green	0.09	0.22	0.22	0.09	0.23	0.23	0.17	0.77	0.77	0.18	0.58	0.58
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	5085	1583	3442	6408	2787
Grp Volume(v), veh/h	206	893	124	116	437	271	139	1681	232	420	2496	435
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1695	1583	1721	1602	1393
Q Serve(g_s), s	8.1	23.2	8.2	4.4	15.2	22.3	5.1	31.6	6.7	16.7	47.6	9.8
Cycle Q Clear(g_c), s	8.1	23.2	8.2	4.4	15.2	22.3	5.1	31.6	6.7	16.7	47.6	9.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	295	1134	488	316	811	363	294	1954	608	470	2790	1452
V/C Ratio(X)	0.70	0.79	0.25	0.37	0.54	0.75	0.47	0.86	0.38	0.89	0.89	0.30
Avail Cap(c_a), veh/h	295	1246	523	320	910	407	295	1954	608	526	2790	1452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.85	0.85	0.85	0.49	0.49	0.49
Uniform Delay (d), s/veh	62.2	51.3	36.3	59.7	47.4	50.2	55.2	13.6	10.8	56.3	26.7	13.7
Incr Delay (d2), s/veh	7.1	3.2	0.3	0.7	0.6	6.6	1.0	4.5	1.5	9.0	2.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	11.2	3.6	2.1	7.5	10.4	2.5	15.1	3.1	8.5	21.3	3.8
LnGrp Delay(d),s/veh	69.3	54.4	36.6	60.5	48.0	56.7	56.2	18.1	12.3	65.3	29.2	14.0
LnGrp LOS	E	D	D	E	D	E	E	B	B	E	C	B
Approach Vol, veh/h		1223			824			2052			3351	
Approach Delay, s/veh		55.1			52.6			20.1			31.7	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.7	59.6	18.2	37.5	17.5	66.8	17.3	38.4
Change Period (Y+Rc), s	* 5.6	5.8	* 5.3	* 6.3	* 5.6	5.8	* 5.3	* 6.3
Max Green Setting (Gmax), s	* 21	48.3	* 13	* 34	* 12	57.7	* 12	* 36
Max Q Clear Time (g_c+I1), s	18.7	33.6	6.4	25.2	7.1	49.6	10.1	24.3
Green Ext Time (p_c), s	0.4	14.5	0.1	6.1	0.2	8.0	0.1	7.3

Intersection Summary	
HCM 2010 Ctrl Delay	34.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



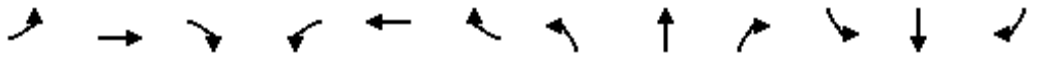
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	159	430	311	285	521	167	177	1949	261	151	2323	69
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	173	467	183	310	566	29	192	2118	232	164	2525	72
Adj No. of Lanes	1	2	1	1	2	1	1	4	1	1	4	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	599	268	247	721	323	167	2632	858	260	3020	86
Arrive On Green	0.11	0.17	0.17	0.14	0.20	0.20	0.13	0.55	0.54	0.15	0.47	0.46
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6408	1583	1774	6452	184
Grp Volume(v), veh/h	173	467	183	310	566	29	192	2118	232	164	1880	717
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1583	1774	1602	1830
Q Serve(g_s), s	13.4	17.7	12.1	19.5	21.2	1.5	13.2	37.5	0.0	12.2	47.8	48.0
Cycle Q Clear(g_c), s	13.4	17.7	12.1	19.5	21.2	1.5	13.2	37.5	0.0	12.2	47.8	48.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	198	599	268	247	721	323	167	2632	858	260	2249	857
V/C Ratio(X)	0.87	0.78	0.68	1.25	0.78	0.09	1.15	0.80	0.27	0.63	0.84	0.84
Avail Cap(c_a), veh/h	231	733	328	247	758	339	167	2632	858	260	2249	857
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	55.7	34.5	60.3	52.8	22.9	61.2	27.2	12.9	56.2	32.5	32.6
Incr Delay (d2), s/veh	21.5	4.5	4.8	143.3	5.6	0.2	108.2	2.2	0.6	3.7	3.9	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.8	9.0	5.6	19.4	10.9	0.7	11.5	16.9	3.7	6.2	21.9	26.4
LnGrp Delay(d),s/veh	82.7	60.2	39.3	203.5	58.4	23.0	169.4	29.4	13.5	59.9	36.4	42.2
LnGrp LOS	F	E	D	F	E	C	F	C	B	E	D	D
Approach Vol, veh/h		823			905			2542			2761	
Approach Delay, s/veh		60.3			107.0			38.6			39.3	
Approach LOS		E			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.6	61.5	24.9	28.0	17.6	69.5	19.8	33.1
Change Period (Y+Rc), s	5.3	* 5.3	* 5.6	* 5.3	* 4.6	5.3	* 4.3	* 5.6
Max Green Setting (Gmax), s	17.0	* 56	* 19	* 28	* 13	60.2	* 18	* 29
Max Q Clear Time (g_c+I1), s	14.2	39.5	21.5	19.7	15.2	50.0	15.4	23.2
Green Ext Time (p_c), s	2.2	15.0	0.0	3.0	0.0	10.0	0.0	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	50.2
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



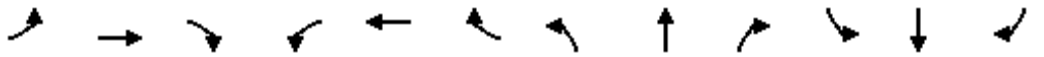
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	62	393	135	84	364	110	99	2372	73	107	2646	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	68	432	148	92	400	121	109	2607	80	118	2908	80
Adj No. of Lanes	1	2	1	1	2	1	1	4	0	1	4	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	563	252	135	567	254	162	2883	88	264	3328	822
Arrive On Green	0.08	0.16	0.16	0.08	0.16	0.16	0.03	0.15	0.15	0.30	1.00	1.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6437	197	1774	6408	1583
Grp Volume(v), veh/h	68	432	148	92	400	121	109	1945	742	118	2908	80
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1828	1774	1602	1583
Q Serve(g_s), s	5.1	16.4	12.1	7.1	15.0	7.0	8.5	55.7	55.9	7.5	0.0	0.0
Cycle Q Clear(g_c), s	5.1	16.4	12.1	7.1	15.0	7.0	8.5	55.7	55.9	7.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	141	563	252	135	567	254	162	2152	819	264	3328	822
V/C Ratio(X)	0.48	0.77	0.59	0.68	0.71	0.48	0.67	0.90	0.91	0.45	0.87	0.10
Avail Cap(c_a), veh/h	152	683	305	170	733	328	165	2152	819	264	3328	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.87	0.87	0.87	0.85	0.85	0.85	0.57	0.57	0.57	0.82	0.82	0.82
Uniform Delay (d), s/veh	61.7	56.4	54.6	63.0	55.7	27.6	65.8	56.7	56.8	44.5	0.0	0.0
Incr Delay (d2), s/veh	2.2	3.7	1.9	6.5	1.8	1.2	5.8	4.1	9.8	1.0	2.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.6	8.3	5.5	3.7	7.5	3.1	4.5	25.6	30.6	3.7	0.7	0.0
LnGrp Delay(d),s/veh	63.9	60.1	56.5	69.4	57.5	28.8	71.6	60.8	66.6	45.5	2.9	0.2
LnGrp LOS	E	E	E	E	E	C	E	E	E	D	A	A
Approach Vol, veh/h		648			613			2796			3106	
Approach Delay, s/veh		59.7			53.6			62.7			4.5	
Approach LOS		E			D			E			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.1	69.0	15.6	28.3	17.1	79.0	15.4	28.4
Change Period (Y+Rc), s	6.3	* 6.3	4.9	6.0	* 4.3	6.3	* 4.3	6.0
Max Green Setting (Gmax), s	15.1	* 63	13.4	27.0	* 13	65.1	* 12	29.0
Max Q Clear Time (g_c+I1), s	9.5	57.9	9.1	18.4	10.5	2.0	7.1	17.0
Green Ext Time (p_c), s	3.9	4.5	0.1	3.9	0.0	50.4	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	36.4
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	212	400	308	62	193	128	114	1628	54	102	2332	156
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	219	412	318	64	199	132	118	1678	56	105	2404	161
Adj No. of Lanes	1	2	0	1	1	1	1	4	0	1	4	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	384	294	128	236	201	171	3268	109	137	2999	200
Arrive On Green	0.15	0.20	0.20	0.07	0.13	0.13	0.10	0.51	0.51	0.08	0.49	0.49
Sat Flow, veh/h	1774	1911	1463	1774	1863	1583	1774	6417	214	1774	6183	413
Grp Volume(v), veh/h	219	381	349	64	199	132	118	1257	477	105	1867	698
Grp Sat Flow(s),veh/h/ln	1774	1770	1605	1774	1863	1583	1774	1602	1825	1774	1602	1790
Q Serve(g_s), s	16.8	28.1	28.1	4.9	14.6	9.3	9.0	24.3	24.3	8.1	45.8	46.1
Cycle Q Clear(g_c), s	16.8	28.1	28.1	4.9	14.6	9.3	9.0	24.3	24.3	8.1	45.8	46.1
Prop In Lane	1.00		0.91	1.00		1.00	1.00		0.12	1.00		0.23
Lane Grp Cap(c), veh/h	263	355	322	128	236	201	171	2448	929	137	2331	868
V/C Ratio(X)	0.83	1.07	1.08	0.50	0.84	0.66	0.69	0.51	0.51	0.77	0.80	0.80
Avail Cap(c_a), veh/h	263	355	322	139	386	328	171	2448	929	139	2331	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00	0.77	0.77	0.77
Uniform Delay (d), s/veh	58.0	56.0	56.0	62.5	59.7	40.7	61.2	22.8	22.8	63.4	30.4	30.4
Incr Delay (d2), s/veh	20.1	68.7	74.0	2.6	7.7	3.2	11.1	0.8	2.0	17.5	2.3	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.7	20.5	19.1	2.5	8.0	4.3	5.0	10.9	12.7	4.7	20.7	24.2
LnGrp Delay(d),s/veh	78.0	124.6	130.0	65.2	67.4	43.9	72.3	23.6	24.9	80.9	32.7	36.6
LnGrp LOS	E	F	F	E	E	D	E	C	C	F	C	D
Approach Vol, veh/h		949			395			1852			2670	
Approach Delay, s/veh		115.9			59.2			27.0			35.6	
Approach LOS		F			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	76.6	15.0	33.0	18.8	73.2	25.6	22.4
Change Period (Y+Rc), s	* 4.6	5.3	4.9	* 4.9	5.3	* 5.3	4.9	* 4.6
Max Green Setting (Gmax), s	* 11	70.2	11.0	* 28	13.0	* 68	11.0	* 29
Max Q Clear Time (g_c+I1), s	10.1	26.3	6.9	30.1	11.0	48.1	18.8	16.6
Green Ext Time (p_c), s	0.0	16.9	0.0	0.0	1.5	16.0	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	47.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

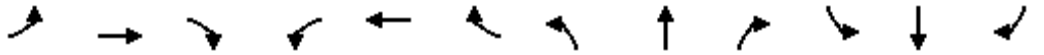
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	1	45	74	0	35	36	1816	37	122	2485	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	25	1	46	87	0	24	37	1872	38	126	2562	3
Adj No. of Lanes	1	1	0	2	0	1	1	4	0	2	4	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	3	117	217	0	119	98	3293	67	1116	5187	6
Arrive On Green	0.07	0.07	0.07	0.07	0.00	0.07	0.06	0.51	0.51	0.32	0.78	0.78
Sat Flow, veh/h	1381	34	1555	2706	0	1583	1774	6513	132	3442	6659	8
Grp Volume(v), veh/h	25	0	47	87	0	24	37	1381	529	126	1849	716
Grp Sat Flow(s),veh/h/ln	1381	0	1588	1353	0	1583	1774	1602	1839	1721	1602	1861
Q Serve(g_s), s	2.7	0.0	4.5	5.1	0.0	2.3	3.2	31.9	31.9	4.1	22.1	22.1
Cycle Q Clear(g_c), s	2.7	0.0	4.5	9.6	0.0	2.3	3.2	31.9	31.9	4.1	22.1	22.1
Prop In Lane	1.00		0.98	1.00		1.00	1.00		0.07	1.00		0.00
Lane Grp Cap(c), veh/h	149	0	119	217	0	119	98	2430	930	1116	3743	1450
V/C Ratio(X)	0.17	0.00	0.39	0.40	0.00	0.20	0.38	0.57	0.57	0.11	0.49	0.49
Avail Cap(c_a), veh/h	304	0	298	284	0	158	122	2430	930	1116	3743	1450
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.80	0.80	0.80	0.74	0.74	0.74
Uniform Delay (d), s/veh	69.7	0.0	70.5	75.1	0.0	69.5	72.9	27.4	27.4	37.9	6.4	6.4
Incr Delay (d2), s/veh	0.5	0.0	2.1	1.2	0.0	0.8	1.9	0.8	2.0	0.0	0.3	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	0.0	2.1	1.9	0.0	1.0	1.6	14.2	16.7	2.0	9.7	11.5
LnGrp Delay(d),s/veh	70.2	0.0	72.7	76.3	0.0	70.3	74.8	28.2	29.5	37.9	6.7	7.2
LnGrp LOS	E		E	E		E	E	C	C	D	A	A
Approach Vol, veh/h		72			111			1947			2691	
Approach Delay, s/veh		71.8			75.0			29.4			8.3	
Approach LOS		E			E			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	57.2	86.2		16.6	13.5	129.9		16.6
Change Period (Y+Rc), s	5.3	* 5.3		* 4.6	* 4.6	5.3		* 4.6
Max Green Setting (Gmax), s	15.0	* 81		* 30	* 11	84.9		* 16
Max Q Clear Time (g_c+I1), s	6.1	33.9		6.5	5.2	24.1		11.6
Green Ext Time (p_c), s	6.2	19.2		0.7	0.0	36.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



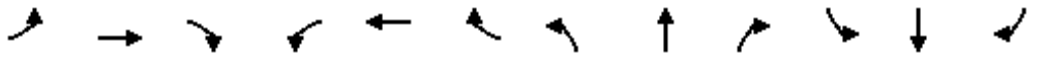
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	231	377	133	361	391	142	205	1959	147	203	2475	350
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	241	393	139	376	407	148	214	2041	153	211	2578	365
Adj No. of Lanes	2	2	0	2	2	0	2	4	0	2	4	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	374	465	162	369	464	167	270	2823	212	370	2834	395
Arrive On Green	0.11	0.18	0.18	0.11	0.18	0.18	0.03	0.15	0.15	0.14	0.66	0.66
Sat Flow, veh/h	3442	2574	899	3442	2553	918	3442	6128	459	3442	5730	798
Grp Volume(v), veh/h	241	269	263	376	281	274	214	1600	594	211	2155	788
Grp Sat Flow(s),veh/h/ln	1721	1770	1704	1721	1770	1701	1721	1602	1782	1721	1602	1722
Q Serve(g_s), s	9.4	20.5	21.0	15.0	21.6	22.0	8.7	44.4	44.4	8.0	53.2	56.0
Cycle Q Clear(g_c), s	9.4	20.5	21.0	15.0	21.6	22.0	8.7	44.4	44.4	8.0	53.2	56.0
Prop In Lane	1.00		0.53	1.00		0.54	1.00		0.26	1.00		0.46
Lane Grp Cap(c), veh/h	374	319	307	369	322	309	270	2214	821	370	2377	852
V/C Ratio(X)	0.64	0.84	0.86	1.02	0.87	0.89	0.79	0.72	0.72	0.57	0.91	0.93
Avail Cap(c_a), veh/h	411	379	365	369	367	352	270	2214	821	370	2377	852
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.34	0.34	0.34	0.77	0.77	0.77	0.91	0.91	0.91	0.09	0.09	0.09
Uniform Delay (d), s/veh	59.8	55.4	55.6	62.5	55.7	55.9	67.0	50.8	50.9	57.0	21.2	21.7
Incr Delay (d2), s/veh	1.0	5.1	6.0	46.2	14.9	17.2	13.6	1.9	5.0	0.2	0.7	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	10.5	10.4	9.5	11.9	11.8	4.6	20.1	23.1	3.8	23.3	26.8
LnGrp Delay(d),s/veh	60.8	60.5	61.6	108.7	70.6	73.1	80.6	52.7	55.9	57.2	21.9	23.9
LnGrp LOS	E	E	E	F	E	E	F	D	E	E	C	C
Approach Vol, veh/h		773			931			2408			3154	
Approach Delay, s/veh		61.0			86.7			56.0			24.7	
Approach LOS		E			F			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.3	69.8	20.0	29.9	15.6	74.5	19.8	30.0
Change Period (Y+Rc), s	5.3	* 5.3	5.0	4.6	* 4.6	5.3	4.6	* 4.6
Max Green Setting (Gmax), s	11.0	* 65	15.0	30.0	* 11	64.5	16.7	* 29
Max Q Clear Time (g_c+I1), s	10.0	46.4	17.0	23.0	10.7	58.0	11.4	24.0
Green Ext Time (p_c), s	0.3	13.2	0.0	2.3	0.0	6.2	1.9	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	46.9
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



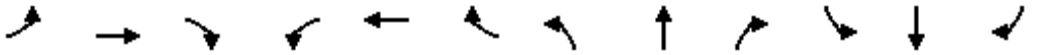
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	22	24	24	51	11	89	48	1856	56	125	2415	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	22	24	24	52	11	91	49	1894	57	128	2464	10
Adj No. of Lanes	1	1	0	1	1	1	1	4	0	2	4	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	67	67	132	185	157	108	3041	92	794	4280	17
Arrive On Green	0.05	0.08	0.08	0.07	0.10	0.10	0.06	0.47	0.47	0.46	1.00	1.00
Sat Flow, veh/h	1774	856	856	1774	1863	1583	1774	6441	194	3442	6637	27
Grp Volume(v), veh/h	22	0	48	52	11	91	49	1413	538	128	1784	690
Grp Sat Flow(s),veh/h/ln	1774	0	1712	1774	1863	1583	1774	1602	1829	1721	1602	1858
Q Serve(g_s), s	1.7	0.0	3.7	3.9	0.7	5.1	3.7	30.8	30.8	3.0	0.0	0.0
Cycle Q Clear(g_c), s	1.7	0.0	3.7	3.9	0.7	5.1	3.7	30.8	30.8	3.0	0.0	0.0
Prop In Lane	1.00		0.50	1.00		1.00	1.00		0.11	1.00		0.01
Lane Grp Cap(c), veh/h	95	0	134	132	185	157	108	2269	863	794	3099	1198
V/C Ratio(X)	0.23	0.00	0.36	0.39	0.06	0.58	0.45	0.62	0.62	0.16	0.58	0.58
Avail Cap(c_a), veh/h	165	0	384	152	399	339	128	2269	863	794	3099	1198
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	0.43	0.43	0.43
Uniform Delay (d), s/veh	63.5	0.0	61.2	61.8	57.1	26.2	63.5	27.6	27.6	29.8	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	1.6	1.9	0.1	3.3	2.6	1.1	3.0	0.0	0.3	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.9	0.0	1.8	2.0	0.4	2.4	1.9	13.8	16.2	1.4	0.1	0.3
LnGrp Delay(d),s/veh	64.8	0.0	62.8	63.7	57.2	29.5	66.1	28.8	30.6	29.9	0.3	0.9
LnGrp LOS	E		E	E	E	C	E	C	C	C	A	A
Approach Vol, veh/h		70			154			2000			2602	
Approach Delay, s/veh		63.4			43.0			30.2			1.9	
Approach LOS		E			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.6	71.4	14.7	16.3	13.4	95.6	11.8	19.2
Change Period (Y+Rc), s	5.3	* 5.3	* 4.3	* 5.3	4.9	5.3	* 4.3	* 5.3
Max Green Setting (Gmax), s	11.4	* 66	* 12	* 31	10.1	67.1	* 13	* 30
Max Q Clear Time (g_c+I1), s	5.0	32.8	5.9	5.7	5.7	2.0	3.7	7.1
Green Ext Time (p_c), s	4.0	17.2	0.0	0.6	0.0	35.8	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	15.8
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



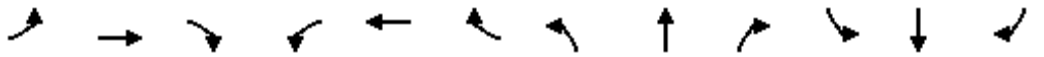
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	234	232	120	133	257	127	91	2044	77	87	2855	105
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	246	244	126	140	271	134	96	2152	81	92	3005	111
Adj No. of Lanes	2	2	0	1	2	0	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	310	155	164	337	162	148	3387	127	135	3371	124
Arrive On Green	0.08	0.14	0.14	0.09	0.15	0.15	0.08	0.53	0.53	0.15	1.00	1.00
Sat Flow, veh/h	3442	2287	1143	1774	2320	1116	1774	6386	240	1774	6393	235
Grp Volume(v), veh/h	246	187	183	140	205	200	96	1619	614	92	2255	861
Grp Sat Flow(s),veh/h/ln	1721	1770	1661	1774	1770	1666	1774	1602	1820	1774	1602	1821
Q Serve(g_s), s	9.9	14.3	15.0	10.9	15.7	16.3	7.3	33.4	33.4	6.9	0.0	0.0
Cycle Q Clear(g_c), s	9.9	14.3	15.0	10.9	15.7	16.3	7.3	33.4	33.4	6.9	0.0	0.0
Prop In Lane	1.00		0.69	1.00		0.67	1.00		0.13	1.00		0.13
Lane Grp Cap(c), veh/h	286	240	225	164	257	242	148	2549	965	135	2534	960
V/C Ratio(X)	0.86	0.78	0.81	0.85	0.80	0.83	0.65	0.64	0.64	0.68	0.89	0.90
Avail Cap(c_a), veh/h	286	341	320	233	430	405	152	2549	965	144	2534	960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.95	0.95	0.95	0.94	0.94	0.94	0.46	0.46	0.46	0.71	0.71	0.71
Uniform Delay (d), s/veh	63.4	58.5	58.8	62.6	57.9	58.1	62.1	23.3	23.3	57.7	0.0	0.0
Incr Delay (d2), s/veh	21.4	6.9	9.7	17.4	5.3	6.7	4.2	0.6	1.5	8.1	3.8	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.6	7.5	7.5	6.1	8.1	8.0	3.8	14.8	17.1	3.7	0.9	2.6
LnGrp Delay(d),s/veh	84.8	65.4	68.5	80.0	63.2	64.8	66.4	23.9	24.8	65.8	3.8	9.6
LnGrp LOS	F	E	E	F	E	E	E	C	C	E	A	A
Approach Vol, veh/h		616			545			2329			3208	
Approach Delay, s/veh		74.1			68.1			25.9			7.1	
Approach LOS		E			E			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	80.6	18.6	24.6	16.7	80.1	17.2	25.9
Change Period (Y+Rc), s	* 5.6	6.3	* 5.6	* 5.6	5.0	6.3	5.6	* 5.6
Max Green Setting (Gmax), s	* 11	60.1	* 18	* 27	12.0	60.1	11.4	* 34
Max Q Clear Time (g_c+I1), s	8.9	35.4	12.9	17.0	9.3	2.0	11.9	18.3
Green Ext Time (p_c), s	0.0	24.5	0.1	2.0	0.0	57.0	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.8
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	213	613	126	222	524	123	204	2126	86	188	2342	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	227	652	134	236	557	131	217	2262	91	200	2491	121
Adj No. of Lanes	2	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	727	325	190	813	364	296	2812	113	295	2731	132
Arrive On Green	0.09	0.21	0.21	0.11	0.23	0.23	0.06	0.30	0.30	0.03	0.14	0.14
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	6368	256	3442	6309	306
Grp Volume(v), veh/h	227	652	134	236	557	131	217	1707	646	200	1896	716
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1602	1818	1721	1602	1809
Q Serve(g_s), s	9.0	25.1	10.3	15.0	20.1	9.7	8.7	45.9	46.0	8.1	54.4	54.6
Cycle Q Clear(g_c), s	9.0	25.1	10.3	15.0	20.1	9.7	8.7	45.9	46.0	8.1	54.4	54.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.17
Lane Grp Cap(c), veh/h	320	727	325	190	813	364	296	2123	803	295	2080	783
V/C Ratio(X)	0.71	0.90	0.41	1.24	0.68	0.36	0.73	0.80	0.80	0.68	0.91	0.91
Avail Cap(c_a), veh/h	320	784	351	190	834	373	296	2123	803	344	2080	783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	0.33	0.33	0.33
Upstream Filter(I)	0.54	0.54	0.54	0.95	0.95	0.95	0.80	0.80	0.80	0.09	0.09	0.09
Uniform Delay (d), s/veh	61.7	54.2	48.3	62.5	49.3	45.3	64.4	43.7	43.7	66.1	57.4	57.4
Incr Delay (d2), s/veh	4.0	7.4	0.5	143.8	2.2	0.6	7.4	2.7	6.8	0.4	0.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	13.1	4.6	14.9	10.1	4.3	4.4	20.9	24.6	3.9	24.3	27.8
LnGrp Delay(d),s/veh	65.6	61.5	48.7	206.3	51.4	45.8	71.8	46.4	50.6	66.5	58.1	59.5
LnGrp LOS	E	E	D	F	D	D	E	D	D	E	E	E
Approach Vol, veh/h		1013			924			2570			2812	
Approach Delay, s/veh		60.8			90.2			49.6			59.1	
Approach LOS		E			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	67.6	21.0	34.8	17.8	66.4	17.6	38.2
Change Period (Y+Rc), s	* 4.6	5.8	6.0	* 6	5.8	* 5.8	* 4.6	6.0
Max Green Setting (Gmax), s	* 14	59.0	15.0	* 31	12.0	* 61	* 13	33.0
Max Q Clear Time (g_c+I1), s	10.1	48.0	17.0	27.1	10.7	56.6	11.0	22.1
Green Ext Time (p_c), s	0.2	9.4	0.0	1.7	0.1	3.7	0.1	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	59.9
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	15	21	30	60	8	22	8	2147	207	98	2665	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	16	22	32	64	9	23	9	2284	220	104	2835	9
Adj No. of Lanes	1	1	0	0	1	1	1	4	0	1	4	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	91	73	106	142	17	169	37	4262	409	127	5075	16
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.04	1.00	1.00	0.14	1.00	1.00
Sat Flow, veh/h	1372	687	999	883	159	1583	1774	5992	575	1774	6644	21
Grp Volume(v), veh/h	16	0	54	73	0	23	9	1830	674	104	2050	794
Grp Sat Flow(s),veh/h/ln	1372	0	1686	1043	0	1583	1774	1602	1761	1774	1602	1859
Q Serve(g_s), s	1.6	0.0	4.1	6.8	0.0	1.8	0.7	0.0	0.0	8.0	0.0	0.0
Cycle Q Clear(g_c), s	12.5	0.0	4.1	10.9	0.0	1.8	0.7	0.0	0.0	8.0	0.0	0.0
Prop In Lane	1.00		0.59	0.88		1.00	1.00		0.33	1.00		0.01
Lane Grp Cap(c), veh/h	91	0	180	159	0	169	37	3419	1253	127	3671	1420
V/C Ratio(X)	0.18	0.00	0.30	0.46	0.00	0.14	0.24	0.54	0.54	0.82	0.56	0.56
Avail Cap(c_a), veh/h	179	0	288	249	0	270	128	3419	1253	374	3671	1420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.44	0.44	0.44	0.24	0.24	0.24
Uniform Delay (d), s/veh	66.8	0.0	57.7	62.4	0.0	56.7	66.0	0.0	0.0	59.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.9	2.0	0.0	0.4	1.5	0.3	0.7	3.3	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.6	0.0	2.0	2.8	0.0	0.8	0.4	0.1	0.3	4.0	0.1	0.2
LnGrp Delay(d),s/veh	67.7	0.0	58.7	64.4	0.0	57.1	67.4	0.3	0.7	62.4	0.2	0.4
LnGrp LOS	E		E	E		E	E	A	A	E	A	A
Approach Vol, veh/h		70			96			2513			2948	
Approach Delay, s/veh		60.7			62.7			0.6			2.4	
Approach LOS		E			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.9	104.9		20.2	7.6	112.2		20.2
Change Period (Y+Rc), s	4.9	5.3		* 5.3	* 4.6	5.3		* 5.3
Max Green Setting (Gmax), s	29.5	71.1		* 24	* 10	90.8		* 24
Max Q Clear Time (g_c+I1), s	10.0	2.0		14.5	2.7	2.0		12.9
Green Ext Time (p_c), s	0.2	67.5		0.5	0.0	86.2		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	3.4
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	914	667	1523	0	0	2757
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863
Adj Flow Rate, veh/h	1004	733	1674	0	0	3030
Adj No. of Lanes	2	2	4	0	0	4
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	0	0	2
Cap, veh/h	971	786	4060	0	0	4060
Arrive On Green	0.28	0.28	0.21	0.00	0.00	1.00
Sat Flow, veh/h	3442	2787	6929	0	0	6929
Grp Volume(v), veh/h	1004	733	1674	0	0	3030
Grp Sat Flow(s),veh/h/ln	1721	1393	1602	0	0	1602
Q Serve(g_s), s	39.5	35.9	31.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	39.5	35.9	31.7	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	0.00	
Lane Grp Cap(c), veh/h	971	786	4060	0	0	4060
V/C Ratio(X)	1.03	0.93	0.41	0.00	0.00	0.75
Avail Cap(c_a), veh/h	971	786	4060	0	0	4060
HCM Platoon Ratio	1.00	1.00	0.33	1.00	1.00	2.00
Upstream Filter(I)	1.00	1.00	0.94	0.00	0.00	0.25
Uniform Delay (d), s/veh	50.3	48.9	32.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	38.0	17.8	0.3	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	23.9	15.8	14.2	0.0	0.0	0.1
LnGrp Delay(d),s/veh	88.2	66.7	33.1	0.0	0.0	0.3
LnGrp LOS	F	E	C			A
Approach Vol, veh/h	1737		1674			3030
Approach Delay, s/veh	79.2		33.1			0.3
Approach LOS	E		C			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		95.0				95.0		45.0
Change Period (Y+Rc), s		6.3				6.3		5.5
Max Green Setting (Gmax), s		88.7				88.7		39.5
Max Q Clear Time (g_c+I1), s		33.7				2.0		41.5
Green Ext Time (p_c), s		54.8				86.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	217	330	0	1680	2968	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0
Adj Flow Rate, veh/h	226	344	0	1750	3092	0
Adj No. of Lanes	2	2	0	4	4	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	505	409	0	4927	4927	0
Arrive On Green	0.15	0.15	0.00	1.00	1.00	0.00
Sat Flow, veh/h	3442	2787	0	6929	6929	0
Grp Volume(v), veh/h	226	344	0	1750	3092	0
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1602	1602	0
Q Serve(g_s), s	8.4	16.8	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.4	16.8	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	505	409	0	4927	4927	0
V/C Ratio(X)	0.45	0.84	0.00	0.36	0.63	0.00
Avail Cap(c_a), veh/h	750	607	0	4927	4927	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.33	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.62	0.47	0.00
Uniform Delay (d), s/veh	54.5	58.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	6.8	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.0	6.9	0.0	0.0	0.1	0.0
LnGrp Delay(d),s/veh	55.2	64.9	0.0	0.1	0.3	0.0
LnGrp LOS	E	E		A	A	
Approach Vol, veh/h	570			1750	3092	
Approach Delay, s/veh	61.1			0.1	0.3	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		113.9		26.1		113.9		
Change Period (Y+Rc), s		6.3		5.5		6.3		
Max Green Setting (Gmax), s		97.7		30.5		97.7		
Max Q Clear Time (g_c+I1), s		2.0		18.8		2.0		
Green Ext Time (p_c), s		92.8		1.7		92.8		

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A

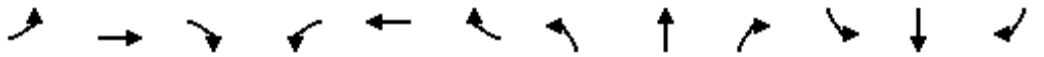
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	115	1053	1151	515	582	1867
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	117	1074	1174	526	594	1905
Adj No. of Lanes	1	2	3	0	2	2
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	266	955	1774	792	664	2658
Arrive On Green	0.15	0.15	0.52	0.52	0.19	0.75
Sat Flow, veh/h	1774	2787	3612	1537	3442	3632
Grp Volume(v), veh/h	117	1074	1155	545	594	1905
Grp Sat Flow(s),veh/h/ln	1774	1393	1695	1591	1721	1770
Q Serve(g_s), s	6.0	15.0	25.1	25.2	16.8	29.0
Cycle Q Clear(g_c), s	6.0	15.0	25.1	25.2	16.8	29.0
Prop In Lane	1.00	1.00		0.97	1.00	
Lane Grp Cap(c), veh/h	266	955	1747	820	664	2658
V/C Ratio(X)	0.44	1.12	0.66	0.66	0.90	0.72
Avail Cap(c_a), veh/h	266	955	1747	820	723	2658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.83	0.83	1.00	1.00
Uniform Delay (d), s/veh	38.7	32.9	17.8	17.9	39.4	6.7
Incr Delay (d2), s/veh	0.3	65.4	1.7	3.5	12.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.9	21.8	12.1	11.8	9.2	14.4
LnGrp Delay(d),s/veh	39.0	98.3	19.5	21.4	52.1	8.4
LnGrp LOS	D	F	B	C	D	A
Approach Vol, veh/h	1191		1700			2499
Approach Delay, s/veh	92.5		20.1			18.8
Approach LOS	F		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	23.6	56.8				80.4		19.6
Change Period (Y+Rc), s	* 4.3	5.3				5.3		4.6
Max Green Setting (Gmax), s	* 21	49.8				75.1		15.0
Max Q Clear Time (g_c+I1), s	18.8	27.2				31.0		17.0
Green Ext Time (p_c), s	0.4	22.5				43.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	328	632	157	475	470	649	53	515	583	398	714	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	327	657	47	540	403	616	54	526	544	406	729	100
Adj No. of Lanes	1	2	1	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	350	735	310	714	375	673	69	698	630	397	1195	164
Arrive On Green	0.41	0.41	0.41	0.07	0.07	0.07	0.01	0.07	0.07	0.23	0.40	0.40
Sat Flow, veh/h	1714	3600	1517	3429	1800	1528	1714	3420	1523	1714	3022	414
Grp Volume(v), veh/h	327	657	47	540	403	616	54	526	544	406	412	417
Grp Sat Flow(s),veh/h/ln	1714	1800	1517	1714	1800	1528	1714	1710	1523	1714	1710	1726
Q Serve(g_s), s	21.9	20.4	2.3	18.6	25.0	25.0	3.8	18.1	24.5	27.8	23.1	23.1
Cycle Q Clear(g_c), s	21.9	20.4	2.3	18.6	25.0	25.0	3.8	18.1	24.5	27.8	23.1	23.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	350	735	310	714	375	673	69	698	630	397	676	683
V/C Ratio(X)	0.93	0.89	0.15	0.76	1.07	0.92	0.78	0.75	0.86	1.02	0.61	0.61
Avail Cap(c_a), veh/h	357	750	316	714	375	673	111	698	630	397	676	683
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.31	0.31	0.31	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	34.3	28.9	52.9	55.9	35.0	58.7	53.0	32.7	46.1	28.9	28.9
Incr Delay (d2), s/veh	28.4	11.7	0.2	1.5	48.5	6.7	15.7	6.7	13.3	51.0	4.1	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	12.9	11.2	1.0	9.0	17.5	19.8	2.1	9.2	20.4	18.7	11.6	11.8
LnGrp Delay(d),s/veh	63.1	46.0	29.1	54.4	104.4	41.7	74.4	59.7	46.0	97.1	33.0	32.9
LnGrp LOS	E	D	C	D	F	D	E	E	D	F	C	C
Approach Vol, veh/h		1031			1559			1124			1235	
Approach Delay, s/veh		50.7			62.3			53.8			54.0	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	32.0	29.5		28.5	9.0	52.5		30.0
Change Period (Y+Rc), s	* 4.2	5.0		4.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s	* 28	24.0		25.0	* 7.8	44.0		25.0
Max Q Clear Time (g_c+I1), s	29.8	26.5		23.9	5.8	25.1		27.0
Green Ext Time (p_c), s	0.0	0.0		0.6	0.0	10.3		0.0

Intersection Summary			
HCM 2010 Ctrl Delay		55.9	
HCM 2010 LOS		E	

Notes

User approved volume balancing among the lanes for turning movement.

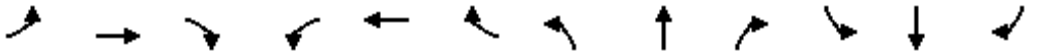
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	928	179	0	0	209	90	741	91	36	199	0	218
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	987	190	0	0	222	0	891	0	0	212	0	26
Adj No. of Lanes	2	1	0	0	2	1	2	1	0	1	0	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	1120	995	0	0	442	198	1056	554	0	0	0	0
Arrive On Green	0.33	0.53	0.00	0.00	0.12	0.00	0.30	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	3632	1583	3548	1863	0		0	
Grp Volume(v), veh/h	987	190	0	0	222	0	891	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1583	1774	1863	0			
Q Serve(g_s), s	15.2	3.0	0.0	0.0	3.3	0.0	13.2	0.0	0.0			
Cycle Q Clear(g_c), s	15.2	3.0	0.0	0.0	3.3	0.0	13.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00			
Lane Grp Cap(c), veh/h	1120	995	0	0	442	198	1056	554	0			
V/C Ratio(X)	0.88	0.19	0.00	0.00	0.50	0.00	0.84	0.00	0.00			
Avail Cap(c_a), veh/h	1556	1508	0	0	968	433	3190	1675	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	17.8	6.8	0.0	0.0	22.9	0.0	18.4	0.0	0.0			
Incr Delay (d2), s/veh	3.6	0.0	0.0	0.0	0.3	0.0	0.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(0%),veh/ln	7.7	1.5	0.0	0.0	1.6	0.0	6.5	0.0	0.0			
LnGrp Delay(d),s/veh	21.5	6.8	0.0	0.0	23.2	0.0	19.2	0.0	0.0			
LnGrp LOS	C	A			C		B					
Approach Vol, veh/h		1177			222			891				
Approach Delay, s/veh		19.1			23.2			19.2				
Approach LOS		B			C			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		21.4		34.6			22.9	11.7
Change Period (Y+Rc), s		* 4.7		* 4.7			* 4.7	* 4.7
Max Green Setting (Gmax), s		* 50		* 45			* 25	* 15
Max Q Clear Time (g_c+I1), s		15.2		5.0			17.2	5.3
Green Ext Time (p_c), s		1.5		1.2			1.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.5
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



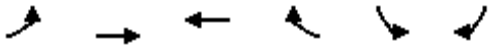
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	23	507	0	0	509	13	1038	41	205	7	0	26
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	0	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	24	539	0	0	541	11	1104	44	48	7	0	0
Adj No. of Lanes	1	3	0	0	3	0	2	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	47	2363	0	0	1901	39	887	480	408	16	0	14
Arrive On Green	0.01	0.16	0.00	0.00	0.38	0.38	0.27	0.27	0.27	0.01	0.00	0.00
Sat Flow, veh/h	1714	5076	0	0	5120	101	3326	1800	1530	1714	0	1530
Grp Volume(v), veh/h	24	539	0	0	357	195	1104	44	48	7	0	0
Grp Sat Flow(s),veh/h/ln	1714	1638	0	0	1638	1782	1663	1800	1530	1714	0	1530
Q Serve(g_s), s	0.8	5.7	0.0	0.0	4.5	4.5	16.0	1.1	1.4	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.8	5.7	0.0	0.0	4.5	4.5	16.0	1.1	1.4	0.2	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.06	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	47	2363	0	0	1256	683	887	480	408	16	0	14
V/C Ratio(X)	0.51	0.23	0.00	0.00	0.28	0.29	1.24	0.09	0.12	0.44	0.00	0.00
Avail Cap(c_a), veh/h	223	2363	0	0	1256	683	887	480	408	211	0	189
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.96	0.96	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.3	15.5	0.0	0.0	12.8	12.8	22.0	16.5	16.7	29.6	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.5	1.0	119.7	0.1	0.1	18.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	2.6	0.0	0.0	2.1	2.4	22.0	0.6	0.6	0.2	0.0	0.0
LnGrp Delay(d),s/veh	30.1	15.5	0.0	0.0	13.4	13.8	141.7	16.6	16.8	48.0	0.0	0.0
LnGrp LOS	C	B			B	B	F	B	B	D		
Approach Vol, veh/h		563			552			1196			7	
Approach Delay, s/veh		16.2			13.5			132.1			48.0	
Approach LOS		B			B			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		33.8		5.2	5.8	28.0		21.0
Change Period (Y+Rc), s		5.0		4.6	* 4.2	5.0		5.0
Max Green Setting (Gmax), s		22.0		7.4	* 7.8	10.0		16.0
Max Q Clear Time (g_c+I1), s		7.7		2.2	2.8	6.5		18.0
Green Ext Time (p_c), s		5.6		0.0	0.0	2.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	75.4
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	669	641	0	419	25
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1800	1800
Adj Flow Rate, veh/h	0	735	704	0	485	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2208	2208	0	650	290
Arrive On Green	0.00	1.00	0.65	0.00	0.19	0.00
Sat Flow, veh/h	0	3600	3600	0	3429	1530
Grp Volume(v), veh/h	0	735	704	0	485	0
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1714	1530
Q Serve(g_s), s	0.0	0.0	5.5	0.0	8.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	5.5	0.0	8.0	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2208	2208	0	650	290
V/C Ratio(X)	0.00	0.33	0.32	0.00	0.75	0.00
Avail Cap(c_a), veh/h	0	2208	2208	0	1166	520
HCM Platoon Ratio	1.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.94	0.25	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	4.7	0.0	23.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.1	0.0	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.1	2.6	0.0	3.9	0.0
LnGrp Delay(d),s/veh	0.0	0.4	4.8	0.0	24.7	0.0
LnGrp LOS		A	A		C	
Approach Vol, veh/h		735	704		485	
Approach Delay, s/veh		0.4	4.8		24.7	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		44.0		16.0		44.0		
Change Period (Y+Rc), s		5.3		4.6		5.3		
Max Green Setting (Gmax), s		29.7		20.4		29.7		
Max Q Clear Time (g_c+I1), s		2.0		10.0		7.5		
Green Ext Time (p_c), s		10.6		1.4		9.7		

Intersection Summary	
HCM 2010 Ctrl Delay	8.1
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	91	440	0	1497	1191	321
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	99	424	0	1627	1295	0
Adj No. of Lanes	1	2	0	3	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	325	580	0	3180	2213	990
Arrive On Green	0.19	0.19	0.00	1.00	0.65	0.00
Sat Flow, veh/h	1714	3060	0	5238	3510	1530
Grp Volume(v), veh/h	99	424	0	1627	1295	0
Grp Sat Flow(s),veh/h/ln	1714	1530	0	1638	1710	1530
Q Serve(g_s), s	3.0	7.8	0.0	0.0	12.9	0.0
Cycle Q Clear(g_c), s	3.0	7.8	0.0	0.0	12.9	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	325	580	0	3180	2213	990
V/C Ratio(X)	0.30	0.73	0.00	0.51	0.59	0.00
Avail Cap(c_a), veh/h	577	1030	0	3180	2213	990
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.00	0.62	0.58	0.00
Uniform Delay (d), s/veh	20.9	22.9	0.0	0.0	6.0	0.0
Incr Delay (d2), s/veh	0.5	1.7	0.0	0.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	3.4	0.0	0.1	6.1	0.0
LnGrp Delay(d),s/veh	21.4	24.6	0.0	0.4	6.7	0.0
LnGrp LOS	C	C		A	A	
Approach Vol, veh/h	523			1627	1295	
Approach Delay, s/veh	24.0			0.4	6.7	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.8		16.2		43.8		
Change Period (Y+Rc), s		5.0		* 4.8		5.0		
Max Green Setting (Gmax), s		30.0		* 20		30.0		
Max Q Clear Time (g_c+I1), s		2.0		9.8		14.9		
Green Ext Time (p_c), s		23.4		1.5		13.6		

Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

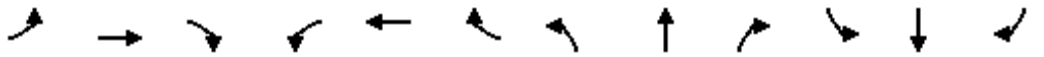
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	21	87	3	11	132	174	0	0	0	443	25	25
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800				1800	1800	1800
Adj Flow Rate, veh/h	24	98	3	12	148	196				518	0	28
Adj No. of Lanes	1	2	0	0	2	1				2	0	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89				0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	603	1025	31	221	971	463				1019	0	455
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30				0.30	0.00	0.30
Sat Flow, veh/h	998	3388	103	101	3210	1530				3429	0	1530
Grp Volume(v), veh/h	24	49	52	87	73	196				518	0	28
Grp Sat Flow(s),veh/h/ln	998	1710	1782	1755	1556	1530				1714	0	1530
Q Serve(g_s), s	0.4	0.4	0.4	0.0	0.7	2.2				2.7	0.0	0.3
Cycle Q Clear(g_c), s	1.1	0.4	0.4	0.8	0.7	2.2				2.7	0.0	0.3
Prop In Lane	1.00		0.06	0.14		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	603	517	539	721	471	463				1019	0	455
V/C Ratio(X)	0.04	0.10	0.10	0.12	0.15	0.42				0.51	0.00	0.06
Avail Cap(c_a), veh/h	1726	2443	2546	2632	2223	2186				4101	0	1830
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	5.9	5.4	5.4	5.5	5.5	6.0				6.2	0.0	5.4
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.1	0.2	0.6				0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	0.2	0.2	0.4	0.3	1.0				1.3	0.0	0.1
LnGrp Delay(d),s/veh	5.9	5.5	5.5	5.6	5.6	6.6				6.6	0.0	5.5
LnGrp LOS	A	A	A	A	A	A				A		A
Approach Vol, veh/h		125			356						546	
Approach Delay, s/veh		5.5			6.2						6.6	
Approach LOS		A			A						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		10.8		10.7		10.8		
Change Period (Y+Rc), s		* 4.3		* 4.3		* 4.3		
Max Green Setting (Gmax), s		* 31		* 26		* 31		
Max Q Clear Time (g_c+I1), s		3.1		4.7		4.2		
Green Ext Time (p_c), s		2.3		2.0		2.3		

Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	910	270	90	950	140	190	520	160	140	980	130
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1937	1863	1863	1937	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	158	958	284	95	1000	147	200	547	168	147	1032	137
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	1400	627	141	1213	564	248	914	280	197	980	130
Arrive On Green	0.12	0.38	0.38	0.16	0.69	0.69	0.14	0.33	0.33	0.11	0.30	0.30
Sat Flow, veh/h	1774	3681	1647	1774	3539	1647	1774	2778	850	1774	3268	433
Grp Volume(v), veh/h	158	958	284	95	1000	147	200	362	353	147	581	588
Grp Sat Flow(s),veh/h/ln	1774	1840	1647	1774	1770	1647	1774	1840	1787	1774	1840	1861
Q Serve(g_s), s	11.2	28.3	16.8	6.6	26.6	4.4	14.2	21.3	21.5	10.4	39.0	39.0
Cycle Q Clear(g_c), s	11.2	28.3	16.8	6.6	26.6	4.4	14.2	21.3	21.5	10.4	39.0	39.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.48	1.00		0.23
Lane Grp Cap(c), veh/h	208	1400	627	141	1213	564	248	605	588	197	552	558
V/C Ratio(X)	0.76	0.68	0.45	0.67	0.82	0.26	0.81	0.60	0.60	0.75	1.05	1.05
Avail Cap(c_a), veh/h	252	1400	627	252	1213	564	252	605	588	252	552	558
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.63	0.63	0.63	0.98	0.98	0.98	0.77	0.77	0.77	0.47	0.47	0.47
Uniform Delay (d), s/veh	55.6	33.7	30.1	53.1	17.6	14.1	54.2	36.4	36.5	56.0	45.5	45.5
Incr Delay (d2), s/veh	5.1	1.7	1.5	2.0	6.3	1.1	12.5	1.5	1.6	2.9	41.1	41.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.8	14.7	7.9	3.3	13.5	2.2	7.8	11.1	10.9	5.3	26.1	26.4
LnGrp Delay(d),s/veh	60.7	35.4	31.6	55.1	23.9	15.2	66.7	37.9	38.1	58.9	86.6	87.1
LnGrp LOS	E	D	C	E	C	B	E	D	D	E	F	F
Approach Vol, veh/h		1400			1242			915			1316	
Approach Delay, s/veh		37.5			25.3			44.3			83.7	
Approach LOS		D			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	53.5	20.7	43.0	17.7	48.6	16.9	46.8
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0
Max Green Setting (Gmax), s	16.5	39.0	16.5	37.0	16.5	39.0	16.5	37.0
Max Q Clear Time (g_c+I1), s	8.6	30.3	16.2	41.0	13.2	28.6	12.4	23.5
Green Ext Time (p_c), s	0.1	8.3	0.0	0.0	0.1	9.9	0.1	10.8

Intersection Summary	
HCM 2010 Ctrl Delay	48.1
HCM 2010 LOS	D

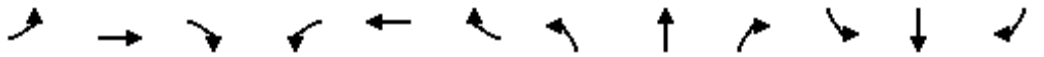
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	97	869	233	326	736	138	57	703	196	196	1857	109
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1863	1863	1863	1863	1863	1863	1788
Adj Flow Rate, veh/h	103	924	248	347	783	147	61	748	209	209	1976	116
Adj No. of Lanes	2	2	0	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	875	234	258	1316	589	2673	5752	1791	271	2076	621
Arrive On Green	0.04	0.32	0.32	0.08	0.37	0.37	0.78	1.00	1.00	0.03	0.13	0.13
Sat Flow, veh/h	3442	2762	740	3442	3539	1583	3442	5085	1583	3442	5085	1520
Grp Volume(v), veh/h	103	591	581	347	783	147	61	748	209	209	1976	116
Grp Sat Flow(s),veh/h/ln	1721	1770	1732	1721	1770	1583	1721	1695	1583	1721	1695	1520
Q Serve(g_s), s	3.5	38.0	38.0	9.0	21.4	7.7	0.5	0.0	0.0	7.2	46.3	17.1
Cycle Q Clear(g_c), s	3.5	38.0	38.0	9.0	21.4	7.7	0.5	0.0	0.0	7.2	46.3	17.1
Prop In Lane	1.00		0.43	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	560	549	258	1316	589	2673	5752	1791	271	2076	621
V/C Ratio(X)	0.67	1.06	1.06	1.34	0.60	0.25	0.02	0.13	0.12	0.77	0.95	0.19
Avail Cap(c_a), veh/h	258	560	549	258	1316	589	2673	5752	1791	488	2076	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.48	0.48	0.48	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84
Uniform Delay (d), s/veh	56.4	41.0	41.0	55.5	30.4	26.1	3.0	0.0	0.0	57.4	50.7	152.4
Incr Delay (d2), s/veh	0.9	42.2	43.5	178.6	0.5	0.1	0.0	0.0	0.1	1.5	9.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	25.1	24.8	10.7	10.5	3.4	0.2	0.0	0.1	3.5	23.7	7.3
LnGrp Delay(d),s/veh	57.3	83.2	84.5	234.1	30.9	26.2	3.1	0.0	0.1	58.9	60.6	152.9
LnGrp LOS	E	F	F	F	C	C	A	A	A	E	E	F
Approach Vol, veh/h		1275			1277			1018			2301	
Approach Delay, s/veh		81.7			85.6			0.2			65.1	
Approach LOS		F			F			A			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	44.0	101.2	55.0	8.4	50.6	12.4	143.8
Change Period (Y+Rc), s	* 6	* 6	* 6	* 6	3.0	* 6	3.0	* 6
Max Green Setting (Gmax), s	* 9	* 38	* 6	* 49	9.0	* 38	17.0	* 38
Max Q Clear Time (g_c+I1), s	11.0	40.0	2.5	48.3	5.5	23.4	9.2	2.0
Green Ext Time (p_c), s	0.0	0.0	0.1	0.6	0.0	3.7	0.2	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	61.9
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	419	119	121	407	161	92	893	67	116	1596	109
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	188	436	124	126	424	168	96	930	70	121	1662	114
Adj No. of Lanes	1	2	0	1	2	0	1	3	1	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	544	153	242	516	202	326	2611	738	147	1822	567
Arrive On Green	0.03	0.07	0.07	0.09	0.21	0.21	0.06	0.15	0.15	0.08	0.36	0.36
Sat Flow, veh/h	1774	2721	767	1774	2478	971	1774	5588	1580	1774	5085	1582
Grp Volume(v), veh/h	188	282	278	126	301	291	96	930	70	121	1662	114
Grp Sat Flow(s),veh/h/ln	1774	1770	1718	1774	1770	1680	1774	1863	1580	1774	1695	1582
Q Serve(g_s), s	11.0	18.9	19.1	2.5	19.5	19.9	6.2	17.9	3.1	8.1	37.4	4.4
Cycle Q Clear(g_c), s	11.0	18.9	19.1	2.5	19.5	19.9	6.2	17.9	3.1	8.1	37.4	4.4
Prop In Lane	1.00		0.45	1.00		0.58	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	354	344	242	368	350	326	2611	738	147	1822	567
V/C Ratio(X)	0.84	0.80	0.81	0.52	0.82	0.83	0.29	0.36	0.09	0.82	0.91	0.20
Avail Cap(c_a), veh/h	223	501	487	242	501	476	326	2611	738	266	1822	567
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.73	1.00	1.00	1.00	0.76	0.76	0.76	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	53.6	53.8	49.6	45.4	45.5	48.9	34.6	13.1	54.2	36.7	14.6
Incr Delay (d2), s/veh	18.1	2.8	3.3	0.9	5.5	6.6	0.1	0.3	0.2	4.3	8.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.7	9.5	9.5	3.9	10.1	9.8	3.1	9.3	1.4	4.1	18.8	2.1
LnGrp Delay(d),s/veh	66.8	56.4	57.0	50.6	50.9	52.1	49.1	34.9	13.3	58.5	45.1	15.4
LnGrp LOS	E	E	E	D	D	D	D	C	B	E	D	B
Approach Vol, veh/h		748			718			1096			1897	
Approach Delay, s/veh		59.3			51.3			34.7			44.2	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	29.0	27.0	48.0	15.0	30.0	14.0	61.1
Change Period (Y+Rc), s	5.0	* 5	5.0	* 5	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	11.0	* 34	14.0	* 43	11.0	34.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	4.5	21.1	8.2	39.4	13.0	21.9	10.1	19.9
Green Ext Time (p_c), s	1.4	1.7	0.2	2.5	0.0	2.0	0.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	45.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

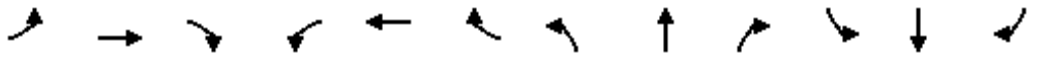
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	81	935	113	146	601	69	61	347	162	175	835	71
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	974	118	152	626	72	64	361	169	182	870	74
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	488	1346	163	177	744	85	82	487	224	207	915	78
Arrive On Green	0.28	0.42	0.42	0.10	0.23	0.23	0.05	0.21	0.21	0.12	0.28	0.28
Sat Flow, veh/h	1774	3179	385	1774	3200	367	1774	2356	1085	1774	3302	281
Grp Volume(v), veh/h	84	542	550	152	346	352	64	270	260	182	466	478
Grp Sat Flow(s),veh/h/ln	1774	1770	1795	1774	1770	1798	1774	1770	1671	1774	1770	1813
Q Serve(g_s), s	4.7	33.1	33.1	11.0	24.2	24.3	4.6	18.5	19.0	13.1	33.6	33.6
Cycle Q Clear(g_c), s	4.7	33.1	33.1	11.0	24.2	24.3	4.6	18.5	19.0	13.1	33.6	33.6
Prop In Lane	1.00		0.21	1.00		0.20	1.00		0.65	1.00		0.15
Lane Grp Cap(c), veh/h	488	749	760	177	412	418	82	366	346	207	490	502
V/C Ratio(X)	0.17	0.72	0.72	0.86	0.84	0.84	0.78	0.74	0.75	0.88	0.95	0.95
Avail Cap(c_a), veh/h	488	749	760	246	667	678	177	422	399	246	490	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.39	0.39	0.39	0.77	0.77	0.77	1.00	1.00	1.00	0.83	0.83	0.83
Uniform Delay (d), s/veh	35.9	31.1	31.2	57.6	47.6	47.6	61.4	48.3	48.4	56.5	46.1	46.1
Incr Delay (d2), s/veh	0.0	2.4	2.4	12.2	14.7	14.7	6.0	5.7	6.8	20.4	25.4	25.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.3	16.6	16.8	6.0	13.5	13.7	2.4	9.6	9.5	7.6	19.9	20.3
LnGrp Delay(d),s/veh	35.9	33.6	33.5	69.8	62.3	62.3	67.3	54.0	55.3	76.9	71.5	71.1
LnGrp LOS	D	C	C	E	E	E	E	D	E	E	E	E
Approach Vol, veh/h		1176			850			594			1126	
Approach Delay, s/veh		33.7			63.7			56.0			72.2	
Approach LOS		C			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	61.1	10.0	42.0	41.8	36.2	19.1	32.9
Change Period (Y+Rc), s	4.0	* 6	4.0	* 6	* 6	* 6	4.0	* 6
Max Green Setting (Gmax), s	18.0	* 43	13.0	* 36	* 12	* 49	18.0	* 31
Max Q Clear Time (g_c+I1), s	13.0	35.1	6.6	35.6	6.7	26.3	15.1	21.0
Green Ext Time (p_c), s	0.0	3.9	0.0	0.3	2.9	3.9	0.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay	55.6
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



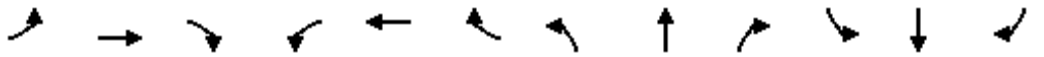
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	890	100	230	880	170	220	580	250	370	920	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	64	947	106	245	936	181	234	617	266	394	979	117
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	846	95	234	1035	200	234	783	337	234	1035	124
Arrive On Green	0.05	0.26	0.26	0.13	0.35	0.35	0.13	0.32	0.32	0.13	0.32	0.32
Sat Flow, veh/h	1774	3210	359	1774	2960	572	1774	2411	1039	1774	3185	380
Grp Volume(v), veh/h	64	522	531	245	559	558	234	453	430	394	544	552
Grp Sat Flow(s),veh/h/ln	1774	1770	1799	1774	1770	1762	1774	1770	1679	1774	1770	1796
Q Serve(g_s), s	5.4	39.9	39.9	20.0	45.5	45.6	20.0	35.1	35.2	20.0	45.3	45.4
Cycle Q Clear(g_c), s	5.4	39.9	39.9	20.0	45.5	45.6	20.0	35.1	35.2	20.0	45.3	45.4
Prop In Lane	1.00		0.20	1.00		0.32	1.00		0.62	1.00		0.21
Lane Grp Cap(c), veh/h	81	466	474	234	619	616	234	575	546	234	575	583
V/C Ratio(X)	0.79	1.12	1.12	1.05	0.90	0.90	1.00	0.79	0.79	1.68	0.95	0.95
Avail Cap(c_a), veh/h	234	466	474	234	619	616	234	582	552	234	582	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.5	55.7	55.7	65.7	46.8	46.8	65.7	46.4	46.4	65.7	49.8	49.8
Incr Delay (d2), s/veh	6.1	78.5	78.2	71.2	16.3	16.5	58.3	6.4	6.8	324.4	24.1	24.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.8	29.6	30.1	14.4	25.0	25.0	13.5	18.3	17.4	30.9	26.1	26.4
LnGrp Delay(d),s/veh	77.6	134.2	134.0	136.9	63.1	63.3	124.0	52.8	53.2	390.1	74.0	73.8
LnGrp LOS	E	F	F	F	E	E	F	D	D	F	E	E
Approach Vol, veh/h		1117			1362			1117			1490	
Approach Delay, s/veh		130.9			76.5			67.9			157.5	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	46.0	25.0	55.4	11.9	59.1	25.0	55.4
Change Period (Y+Rc), s	5.0	* 6.1	5.0	* 6.2	5.0	* 6.1	5.0	* 6.2
Max Green Setting (Gmax), s	20.0	* 40	20.0	* 50	20.0	* 40	20.0	* 50
Max Q Clear Time (g_c+I1), s	22.0	41.9	22.0	47.4	7.4	47.6	22.0	37.2
Green Ext Time (p_c), s	0.0	0.0	0.0	1.8	0.0	0.0	0.0	6.7

Intersection Summary	
HCM 2010 Ctrl Delay	110.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



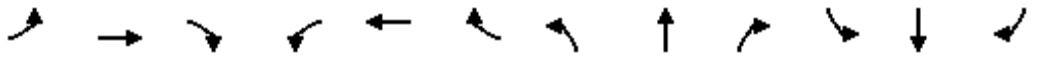
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	161	556	182	142	411	140	74	923	81	301	1465	94
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	183	632	207	161	467	159	84	1049	92	342	1665	107
Adj No. of Lanes	1	3	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	259	849	273	254	554	187	105	1307	114	361	2045	131
Arrive On Green	0.10	0.23	0.23	0.09	0.22	0.22	0.06	0.28	0.28	0.42	0.87	0.87
Sat Flow, veh/h	1714	3675	1180	1714	2505	846	1714	4597	403	1714	4717	303
Grp Volume(v), veh/h	183	562	277	161	318	308	84	747	394	342	1156	616
Grp Sat Flow(s),veh/h/ln	1714	1638	1579	1714	1710	1641	1714	1638	1724	1714	1638	1744
Q Serve(g_s), s	9.8	19.1	19.6	8.6	21.3	21.6	5.8	25.4	25.4	23.1	19.1	19.2
Cycle Q Clear(g_c), s	9.8	19.1	19.6	8.6	21.3	21.6	5.8	25.4	25.4	23.1	19.1	19.2
Prop In Lane	1.00		0.75	1.00		0.52	1.00		0.23	1.00		0.17
Lane Grp Cap(c), veh/h	259	757	365	254	378	363	105	931	490	361	1420	756
V/C Ratio(X)	0.71	0.74	0.76	0.63	0.84	0.85	0.80	0.80	0.80	0.95	0.81	0.82
Avail Cap(c_a), veh/h	263	757	365	274	395	379	171	931	490	386	1420	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	1.00	1.00	1.00	0.85	0.85	0.85
Uniform Delay (d), s/veh	33.6	42.8	43.0	33.5	44.7	44.8	55.6	39.8	39.8	34.1	5.8	5.8
Incr Delay (d2), s/veh	8.2	4.0	9.0	4.0	13.6	15.1	12.7	7.2	13.1	28.6	4.5	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.2	9.1	9.5	4.3	11.5	11.3	3.1	12.4	13.9	13.7	8.6	9.9
LnGrp Delay(d),s/veh	41.8	46.8	52.0	37.5	58.3	59.9	68.3	47.1	52.9	62.6	10.3	14.0
LnGrp LOS	D	D	D	D	E	E	E	D	D	E	B	B
Approach Vol, veh/h		1022			787			1225			2114	
Approach Delay, s/veh		47.3			54.7			50.4			19.8	
Approach LOS		D			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.3	40.1	15.6	34.0	12.4	58.0	16.7	32.9
Change Period (Y+Rc), s	5.0	* 6	5.0	* 6.3	5.0	* 6	5.0	* 6.3
Max Green Setting (Gmax), s	27.0	* 31	12.0	* 28	12.0	* 46	12.0	* 28
Max Q Clear Time (g_c+I1), s	25.1	27.4	10.6	21.6	7.8	21.2	11.8	23.6
Green Ext Time (p_c), s	0.2	3.4	0.1	4.0	0.1	20.1	0.0	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	37.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	109	450	34	55	387	124	32	401	35	170	733	188
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	130	536	40	65	461	148	38	477	42	202	873	224
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	1335	99	314	1056	337	195	879	747	332	1317	338
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	809	3340	249	834	2642	842	512	1863	1583	879	2791	716
Grp Volume(v), veh/h	130	283	293	65	308	301	38	477	42	202	553	544
Grp Sat Flow(s),veh/h/ln	809	1770	1819	834	1770	1714	512	1863	1583	879	1770	1736
Q Serve(g_s), s	13.1	10.7	10.8	5.7	11.8	12.0	5.8	17.0	1.3	19.8	22.5	22.5
Cycle Q Clear(g_c), s	25.0	10.7	10.8	16.4	11.8	12.0	28.3	17.0	1.3	36.8	22.5	22.5
Prop In Lane	1.00		0.14	1.00		0.49	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	297	708	727	314	708	685	195	879	747	332	835	820
V/C Ratio(X)	0.44	0.40	0.40	0.21	0.43	0.44	0.19	0.54	0.06	0.61	0.66	0.66
Avail Cap(c_a), veh/h	362	851	874	382	851	824	200	895	761	340	851	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	20.1	20.1	26.0	20.4	20.5	29.9	17.5	13.4	30.6	19.0	19.0
Incr Delay (d2), s/veh	1.4	0.5	0.5	0.5	0.6	0.6	0.7	0.9	0.0	3.6	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.0	5.3	5.5	1.3	5.8	5.7	0.8	9.0	0.6	5.2	11.4	11.2
LnGrp Delay(d),s/veh	31.0	20.6	20.6	26.4	21.0	21.1	30.6	18.4	13.5	34.2	21.1	21.2
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	C	C
Approach Vol, veh/h		706			674			557			1299	
Approach Delay, s/veh		22.5			21.6			18.9			23.2	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		50.2		43.4		50.2		43.4
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		38.8		18.4		30.3		27.0
Green Ext Time (p_c), s		5.3		13.1		11.6		10.4

Intersection Summary	
HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

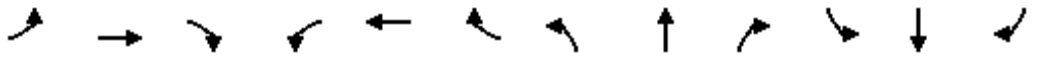
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	126	0	30	0	782	129	40	2059	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1976	1863	1824	0	1863	1824	1863	1863	0
Adj Flow Rate, veh/h				131	0	31	0	815	134	42	2145	0
Adj No. of Lanes				0	1	0	0	3	0	1	3	0
Peak Hour Factor				0.96	0.92	0.96	0.92	0.96	0.96	0.96	0.96	0.92
Percent Heavy Veh, %				0	2	0	0	2	2	2	2	0
Cap, veh/h				222	0	53	0	2888	472	506	3334	0
Arrive On Green				0.18	0.00	0.18	0.00	1.00	1.00	0.66	0.66	0.00
Sat Flow, veh/h				1251	0	296	0	4572	719	588	5253	0
Grp Volume(v), veh/h				162	0	0	0	626	323	42	2145	0
Grp Sat Flow(s),veh/h/ln				1548	0	0	0	1695	1734	588	1695	0
Q Serve(g_s), s				5.8	0.0	0.0	0.0	0.0	0.0	1.6	15.1	0.0
Cycle Q Clear(g_c), s				5.8	0.0	0.0	0.0	0.0	0.0	1.6	15.1	0.0
Prop In Lane				0.81		0.19	0.00		0.41	1.00		0.00
Lane Grp Cap(c), veh/h				275	0	0	0	2223	1137	506	3334	0
V/C Ratio(X)				0.59	0.00	0.00	0.00	0.28	0.28	0.08	0.64	0.00
Avail Cap(c_a), veh/h				696	0	0	0	2223	1137	506	3334	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.94	0.94	0.23	0.23	0.00
Uniform Delay (d), s/veh				22.7	0.0	0.0	0.0	0.0	0.0	3.8	6.2	0.0
Incr Delay (d2), s/veh				0.7	0.0	0.0	0.0	0.3	0.6	0.1	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln				2.5	0.0	0.0	0.0	0.1	0.2	0.3	7.0	0.0
LnGrp Delay(d),s/veh				23.4	0.0	0.0	0.0	0.3	0.6	3.9	6.4	0.0
LnGrp LOS				C				A	A	A	A	
Approach Vol, veh/h					162			949			2187	
Approach Delay, s/veh					23.4			0.4			6.3	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		45.3				45.3		14.7
Change Period (Y+Rc), s		* 6				* 6		4.0
Max Green Setting (Gmax), s		* 23				* 23		27.0
Max Q Clear Time (g_c+I1), s		2.0				17.1		7.8
Green Ext Time (p_c), s		20.1				5.8		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	26	26	119	260	18	67	33	795	70	82	2076	37
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1863	1863	1863	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	27	27	125	274	19	71	35	837	74	86	2185	39
Adj No. of Lanes	0	1	0	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	83	290	352	520	440	92	2142	189	215	2779	50
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.05	0.45	0.45	0.24	1.00	1.00
Sat Flow, veh/h	151	298	1041	1229	1863	1578	1774	4760	419	1774	5145	92
Grp Volume(v), veh/h	179	0	0	274	19	71	35	595	316	86	1439	785
Grp Sat Flow(s),veh/h/ln	1490	0	0	1229	1863	1578	1774	1695	1789	1774	1695	1846
Q Serve(g_s), s	0.8	0.0	0.0	19.8	0.9	4.1	2.3	14.1	14.2	4.9	0.0	0.0
Cycle Q Clear(g_c), s	11.4	0.0	0.0	31.2	0.9	4.1	2.3	14.1	14.2	4.9	0.0	0.0
Prop In Lane	0.15		0.70	1.00		1.00	1.00		0.23	1.00		0.05
Lane Grp Cap(c), veh/h	450	0	0	352	520	440	92	1526	805	215	1831	997
V/C Ratio(X)	0.40	0.00	0.00	0.78	0.04	0.16	0.38	0.39	0.39	0.40	0.79	0.79
Avail Cap(c_a), veh/h	457	0	0	358	528	447	251	1526	805	215	1831	997
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.78	0.78	0.78
Uniform Delay (d), s/veh	35.3	0.0	0.0	44.3	31.5	32.7	55.0	22.0	22.0	41.8	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	11.3	0.0	0.3	1.0	0.8	1.4	0.3	2.7	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.9	0.0	0.0	10.0	0.5	1.8	1.2	6.7	7.3	2.4	0.7	1.4
LnGrp Delay(d),s/veh	35.8	0.0	0.0	55.6	31.6	33.0	56.0	22.8	23.5	42.2	2.7	4.9
LnGrp LOS	D			E	C	C	E	C	C	D	A	A
Approach Vol, veh/h		179			364			946			2310	
Approach Delay, s/veh		35.8			49.9			24.2			4.9	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		39.5	9.7	70.8		39.5	20.5	60.0
Change Period (Y+Rc), s		* 6	3.5	* 6		* 6	* 6	* 6
Max Green Setting (Gmax), s		* 34	17.0	* 54		* 34	* 14	* 54
Max Q Clear Time (g_c+I1), s		13.4	4.3	2.0		33.2	6.9	16.2
Green Ext Time (p_c), s		3.5	0.0	40.7		0.3	0.2	11.1

Intersection Summary	
HCM 2010 Ctrl Delay	15.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	614	324	277	609	11	139	8	147	38	34	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1900	1863	1900	1863	1900
Adj Flow Rate, veh/h	1	740	332	334	734	0	167	10	176	46	41	2
Adj No. of Lanes	1	2	0	1	2	0	2	0	1	0	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	2	813	364	365	1936	0	549	0	253	61	54	3
Arrive On Green	0.00	0.34	0.34	0.21	0.55	0.00	0.16	0.16	0.16	0.07	0.07	0.07
Sat Flow, veh/h	1774	2378	1066	1774	3632	0	3442	0	1583	935	833	41
Grp Volume(v), veh/h	1	551	521	334	734	0	167	0	176	89	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1675	1774	1770	0	1721	0	1583	1809	0	0
Q Serve(g_s), s	0.1	27.9	28.0	17.3	11.1	0.0	4.0	0.0	9.9	4.5	0.0	0.0
Cycle Q Clear(g_c), s	0.1	27.9	28.0	17.3	11.1	0.0	4.0	0.0	9.9	4.5	0.0	0.0
Prop In Lane	1.00		0.64	1.00		0.00	1.00		1.00	0.52		0.02
Lane Grp Cap(c), veh/h	2	605	572	365	1936	0	549	0	253	118	0	0
V/C Ratio(X)	0.53	0.91	0.91	0.91	0.38	0.00	0.30	0.00	0.70	0.76	0.00	0.00
Avail Cap(c_a), veh/h	378	667	631	378	1936	0	934	0	430	475	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.9	29.6	29.6	36.5	12.2	0.0	34.9	0.0	37.3	43.2	0.0	0.0
Incr Delay (d2), s/veh	65.8	15.0	15.8	25.1	0.0	0.0	0.1	0.0	1.3	3.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	16.1	15.4	11.0	5.4	0.0	1.9	0.0	4.4	2.4	0.0	0.0
LnGrp Delay(d),s/veh	112.7	44.5	45.3	61.6	12.2	0.0	35.0	0.0	38.6	46.9	0.0	0.0
LnGrp LOS	F	D	D	E	B		C		D	D		
Approach Vol, veh/h		1073			1068			343			89	
Approach Delay, s/veh		45.0			27.7			36.9			46.9	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		20.5	24.4	37.7		11.4	5.1	57.0
Change Period (Y+Rc), s		5.5	5.0	* 5.6		5.3	5.0	* 5.6
Max Green Setting (Gmax), s		25.5	20.0	* 35		24.7	20.0	* 36
Max Q Clear Time (g_c+I1), s		11.9	19.3	30.0		6.5	2.1	13.1
Green Ext Time (p_c), s		0.5	0.0	2.1		0.2	0.0	8.5

Intersection Summary	
HCM 2010 Ctrl Delay	36.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	141	49	304	20	59	40	222	352	10	26	438	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	148	52	52	21	62	16	234	371	9	27	461	97
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	382	375	319	394	288	74	299	1453	35	34	764	160
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.17	0.41	0.41	0.02	0.26	0.26
Sat Flow, veh/h	1316	1863	1583	1285	1429	369	1774	3532	86	1774	2915	610
Grp Volume(v), veh/h	148	52	52	21	0	78	234	186	194	27	279	279
Grp Sat Flow(s),veh/h/ln	1316	1863	1583	1285	0	1798	1774	1770	1848	1774	1770	1755
Q Serve(g_s), s	4.6	1.0	1.2	0.6	0.0	1.6	5.5	3.0	3.0	0.7	6.0	6.1
Cycle Q Clear(g_c), s	6.2	1.0	1.2	1.6	0.0	1.6	5.5	3.0	3.0	0.7	6.0	6.1
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.05	1.00		0.35
Lane Grp Cap(c), veh/h	382	375	319	394	0	362	299	728	760	34	464	460
V/C Ratio(X)	0.39	0.14	0.16	0.05	0.00	0.22	0.78	0.25	0.26	0.79	0.60	0.61
Avail Cap(c_a), veh/h	1035	1299	1104	1037	0	1262	1217	1230	1284	811	1230	1220
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	14.4	14.4	15.0	0.0	14.6	17.4	8.5	8.5	21.4	14.1	14.2
Incr Delay (d2), s/veh	0.2	0.1	0.1	0.0	0.0	0.1	1.7	0.1	0.1	14.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	0.5	0.5	0.2	0.0	0.8	2.8	1.5	1.5	0.4	3.0	3.0
LnGrp Delay(d),s/veh	17.4	14.4	14.5	15.0	0.0	14.7	19.1	8.5	8.5	35.5	14.6	14.6
LnGrp LOS	B	B	B	B		B	B	A	A	D	B	B
Approach Vol, veh/h		252			99			614			585	
Approach Delay, s/veh		16.2			14.8			12.6			15.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	23.6		14.3	12.4	17.1		14.3
Change Period (Y+Rc), s	5.0	* 5.6		5.5	5.0	* 5.6		* 5.5
Max Green Setting (Gmax), s	20.0	* 30		30.5	30.0	* 30		* 31
Max Q Clear Time (g_c+I1), s	2.7	5.0		8.2	7.5	8.1		3.6
Green Ext Time (p_c), s	0.0	3.4		0.7	0.3	3.4		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	14.4
HCM 2010 LOS	B

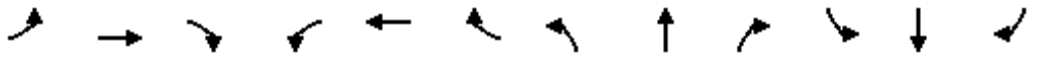
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	19	73	23	20	71	108	6	372	12	80	747	16
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	23	90	28	25	88	133	7	459	15	99	922	20
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	258	71	94	138	184	220	1033	34	531	1046	23
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	151	1257	349	91	672	898	593	1794	59	916	1816	39
Grp Volume(v), veh/h	141	0	0	246	0	0	7	0	474	99	0	942
Grp Sat Flow(s),veh/h/ln	1757	0	0	1661	0	0	593	0	1852	916	0	1856
Q Serve(g_s), s	0.0	0.0	0.0	2.4	0.0	0.0	0.5	0.0	7.7	3.6	0.0	22.9
Cycle Q Clear(g_c), s	3.5	0.0	0.0	7.2	0.0	0.0	23.5	0.0	7.7	11.3	0.0	22.9
Prop In Lane	0.16		0.20	0.10		0.54	1.00		0.03	1.00		0.02
Lane Grp Cap(c), veh/h	440	0	0	416	0	0	220	0	1067	531	0	1069
V/C Ratio(X)	0.32	0.00	0.00	0.59	0.00	0.00	0.03	0.00	0.44	0.19	0.00	0.88
Avail Cap(c_a), veh/h	1214	0	0	1185	0	0	273	0	1236	615	0	1238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	0.0	19.4	0.0	0.0	19.7	0.0	6.3	9.6	0.0	9.6
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.1	0.1	0.0	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	0.0	0.0	3.3	0.0	0.0	0.1	0.0	3.9	0.9	0.0	13.4
LnGrp Delay(d),s/veh	18.2	0.0	0.0	19.9	0.0	0.0	19.7	0.0	6.4	9.6	0.0	15.8
LnGrp LOS	B			B			B		A	A		B
Approach Vol, veh/h		141			246			481			1041	
Approach Delay, s/veh		18.2			19.9			6.6			15.3	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		36.2		16.2		36.2		16.2
Change Period (Y+Rc), s		6.0		5.5		6.0		5.5
Max Green Setting (Gmax), s		35.0		35.5		35.0		35.5
Max Q Clear Time (g_c+I1), s		24.9		5.5		25.5		9.2
Green Ext Time (p_c), s		4.9		1.6		4.7		1.6

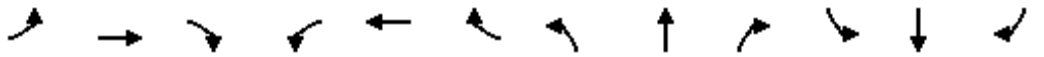
Intersection Summary	
HCM 2010 Ctrl Delay	13.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	74	269	85	124	318	58	59	330	71	135	723	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	83	302	96	139	357	65	66	371	80	152	812	201
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	381	991	309	390	1118	202	255	1399	299	483	1356	336
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	961	2657	829	983	2997	540	554	2903	620	936	2813	696
Grp Volume(v), veh/h	83	199	199	139	209	213	66	225	226	152	511	502
Grp Sat Flow(s),veh/h/ln	961	1770	1716	983	1770	1767	554	1770	1753	936	1770	1740
Q Serve(g_s), s	4.7	5.5	5.7	8.1	5.8	5.9	6.8	5.2	5.3	8.0	14.5	14.5
Cycle Q Clear(g_c), s	10.6	5.5	5.7	13.7	5.8	5.9	21.3	5.2	5.3	13.3	14.5	14.5
Prop In Lane	1.00		0.48	1.00		0.31	1.00		0.35	1.00		0.40
Lane Grp Cap(c), veh/h	381	660	641	390	660	660	255	853	845	483	853	839
V/C Ratio(X)	0.22	0.30	0.31	0.36	0.32	0.32	0.26	0.26	0.27	0.31	0.60	0.60
Avail Cap(c_a), veh/h	509	897	870	522	897	896	269	897	889	507	897	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	15.3	15.3	20.2	15.4	15.4	20.8	10.6	10.6	14.6	13.0	13.0
Incr Delay (d2), s/veh	0.6	0.5	0.6	1.2	0.6	0.6	1.1	0.3	0.4	0.8	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	2.8	2.8	2.3	2.9	3.0	1.1	2.6	2.6	2.1	7.3	7.2
LnGrp Delay(d),s/veh	19.8	15.8	15.9	21.4	16.0	16.0	21.9	11.0	11.0	15.4	14.7	14.7
LnGrp LOS	B	B	B	C	B	B	C	B	B	B	B	B
Approach Vol, veh/h		481			561			517			1165	
Approach Delay, s/veh		16.6			17.3			12.4			14.8	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		38.3		30.8		38.3		30.8
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		35.0		35.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		23.3		12.6		16.5		15.7
Green Ext Time (p_c), s		10.0		11.0		14.9		10.0

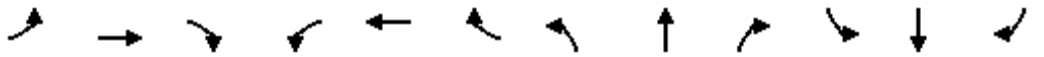
Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	880	196	329	900	0	229	0	336	0	0	0
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.98		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	989	204	370	1011	0	257	0	378	0	0	0
Adj No. of Lanes	1	2	0	1	3	0	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	358	1583	326	515	3475	0	418	0	413	0	498	0
Arrive On Green	0.00	1.00	1.00	0.12	0.68	0.00	0.27	0.00	0.27	0.00	0.00	0.00
Sat Flow, veh/h	1774	2919	601	1774	5253	0	1380	0	1548	0	1863	0
Grp Volume(v), veh/h	0	599	594	370	1011	0	257	0	378	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1750	1774	1695	0	1380	0	1548	0	1863	0
Q Serve(g_s), s	0.0	0.0	0.0	10.5	9.4	0.0	20.1	0.0	28.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	10.5	9.4	0.0	20.1	0.0	28.4	0.0	0.0	0.0
Prop In Lane	1.00		0.34	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	358	960	949	515	3475	0	428	0	413	0	498	0
V/C Ratio(X)	0.00	0.62	0.63	0.72	0.29	0.00	0.60	0.00	0.92	0.00	0.00	0.00
Avail Cap(c_a), veh/h	519	960	949	634	3475	0	428	0	413	0	498	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.85	1.00	1.00	0.00	0.94	0.00	0.94	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	8.5	7.5	0.0	40.0	0.0	42.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	2.7	2.0	0.2	0.0	1.6	0.0	23.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.7	0.7	5.3	4.5	0.0	7.8	0.0	14.9	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	2.6	2.7	10.6	7.7	0.0	41.5	0.0	66.0	0.0	0.0	0.0
LnGrp LOS		A	A	B	A		D		E			
Approach Vol, veh/h		1193			1381			635			0	
Approach Delay, s/veh		2.6			8.5			56.1			0.0	
Approach LOS		A			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	85.0		35.0	16.9	68.1		35.0
Change Period (Y+Rc), s	4.0	5.0		4.9	4.0	5.0		4.9
Max Green Setting (Gmax), s	10.0	66.0		30.1	21.0	55.0		30.1
Max Q Clear Time (g_c+I1), s	0.0	11.4		30.4	12.5	2.0		0.0
Green Ext Time (p_c), s	0.0	14.4		0.0	0.4	14.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	906	12	27	820	283	9	10	31	143	3	44
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	179	1162	15	35	1051	363	12	13	40	183	4	56
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	403	2616	34	384	2612	902	66	74	167	297	0	266
Arrive On Green	0.05	0.73	0.72	0.03	0.93	0.92	0.17	0.17	0.16	0.17	0.16	0.17
Sat Flow, veh/h	1774	3577	46	1774	3716	1283	179	437	986	1334	0	1567
Grp Volume(v), veh/h	179	575	602	35	959	455	65	0	0	183	0	56
Grp Sat Flow(s),veh/h/ln	1774	1770	1854	1774	1695	1610	1603	0	0	1334	0	1567
Q Serve(g_s), s	3.2	15.5	15.5	0.7	3.6	4.0	0.0	0.0	0.0	10.6	0.0	3.7
Cycle Q Clear(g_c), s	3.2	15.5	15.5	0.7	3.6	4.0	4.1	0.0	0.0	14.7	0.0	3.7
Prop In Lane	1.00		0.02	1.00		0.80	0.18		0.62	1.00		1.00
Lane Grp Cap(c), veh/h	403	1294	1356	384	2382	1131	308	0	0	297	0	266
V/C Ratio(X)	0.44	0.44	0.44	0.09	0.40	0.40	0.21	0.00	0.00	0.62	0.00	0.21
Avail Cap(c_a), veh/h	502	1294	1356	534	2382	1131	459	0	0	427	0	418
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.96	0.96	0.96	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.0	6.4	6.4	5.5	1.3	1.5	43.3	0.0	0.0	47.1	0.0	42.9
Incr Delay (d2), s/veh	0.3	1.1	1.1	0.0	0.5	1.0	0.1	0.0	0.0	0.8	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	7.9	8.3	0.3	1.6	2.0	1.9	0.0	0.0	5.9	0.0	1.6
LnGrp Delay(d),s/veh	4.3	7.5	7.5	5.5	1.8	2.5	43.4	0.0	0.0	47.9	0.0	43.0
LnGrp LOS	A	A	A	A	A	A	D			D		D
Approach Vol, veh/h		1356			1449			65			239	
Approach Delay, s/veh		7.1			2.1			43.4			46.8	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	87.3		23.4	5.9	90.8		23.4
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	12.0	64.0		30.0	12.0	64.0		30.0
Max Q Clear Time (g_c+I1), s	5.2	6.0		6.1	2.7	17.5		16.7
Green Ext Time (p_c), s	0.1	18.8		0.6	0.0	17.8		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	8.6
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	15	20	2233	24	14	1776
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	16	21	2326	25	15	1850
Adj No. of Lanes	1	1	3	1	1	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	79	70	4264	1322	50	4558
Arrive On Green	0.04	0.04	1.00	1.00	0.06	1.00
Sat Flow, veh/h	1774	1583	5253	1577	1774	5253
Grp Volume(v), veh/h	16	21	2326	25	15	1850
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1577	1774	1695
Q Serve(g_s), s	1.2	1.7	0.0	0.0	1.1	0.0
Cycle Q Clear(g_c), s	1.2	1.7	0.0	0.0	1.1	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	79	70	4264	1322	50	4558
V/C Ratio(X)	0.20	0.30	0.55	0.02	0.30	0.41
Avail Cap(c_a), veh/h	434	387	4264	1322	315	4558
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.82	0.82	0.91	0.91
Uniform Delay (d), s/veh	62.2	62.5	0.0	0.0	62.4	0.0
Incr Delay (d2), s/veh	0.5	0.9	0.4	0.0	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.6	0.8	0.2	0.0	0.6	0.1
LnGrp Delay(d),s/veh	62.7	63.3	0.4	0.0	63.5	0.2
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	37		2351			1865
Approach Delay, s/veh	63.0		0.4			0.8
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.8	117.2				125.0		10.0
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	64.7				92.7		33.0
Max Q Clear Time (g_c+I1), s	3.1	2.0				2.0		3.7
Green Ext Time (p_c), s	0.0	62.2				89.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.1
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	23	95	1703	45	163	1791
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	24	99	1774	47	170	1866
Adj No. of Lanes	1	1	2	1	1	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	136	121	2582	1155	187	4395
Arrive On Green	0.08	0.08	1.00	1.00	0.21	1.00
Sat Flow, veh/h	1774	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	24	99	1774	47	170	1866
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1695
Q Serve(g_s), s	1.7	8.3	0.0	0.0	12.6	0.0
Cycle Q Clear(g_c), s	1.7	8.3	0.0	0.0	12.6	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	136	121	2582	1155	187	4395
V/C Ratio(X)	0.18	0.82	0.69	0.04	0.91	0.42
Avail Cap(c_a), veh/h	394	352	2582	1155	315	4395
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.70	0.70	0.90	0.90
Uniform Delay (d), s/veh	58.4	61.4	0.0	0.0	52.7	0.0
Incr Delay (d2), s/veh	0.2	5.0	1.1	0.0	10.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	3.8	0.4	0.0	6.7	0.1
LnGrp Delay(d),s/veh	58.6	66.4	1.1	0.0	63.4	0.3
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	123		1821			2036
Approach Delay, s/veh	64.9		1.0			5.5
Approach LOS	E		A			A

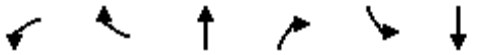
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	18.2	102.5				120.7		14.3
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	67.7				95.7		30.0
Max Q Clear Time (g_c+I1), s	14.6	2.0				2.0		10.3
Green Ext Time (p_c), s	0.1	64.3				90.9		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	5.3
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	15	15	14	1784	1928	17
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	16	16	15	1858	2008	18
Adj No. of Lanes	1	1	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	55	49	10	3220	4446	1384
Arrive On Green	0.03	0.03	0.01	1.00	0.87	0.87
Sat Flow, veh/h	1774	1583	1774	3632	5253	1583
Grp Volume(v), veh/h	16	16	15	1858	2008	18
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1695	1583
Q Serve(g_s), s	1.2	1.3	0.8	0.0	11.1	0.2
Cycle Q Clear(g_c), s	1.2	1.3	0.8	0.0	11.1	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	55	49	10	3220	4446	1384
V/C Ratio(X)	0.29	0.33	1.44	0.58	0.45	0.01
Avail Cap(c_a), veh/h	407	364	105	3220	4446	1384
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.69	0.69	0.59	0.59
Uniform Delay (d), s/veh	63.9	64.0	66.7	0.0	1.8	1.1
Incr Delay (d2), s/veh	1.1	1.4	226.9	0.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	50.8	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.6	1.2	1.0	0.2	5.1	0.1
LnGrp Delay(d),s/veh	65.0	65.4	344.4	0.5	2.0	1.1
LnGrp LOS	E	E	F	A	A	A
Approach Vol, veh/h	32			1873	2026	
Approach Delay, s/veh	65.2			3.3	2.0	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		126.8		8.2	4.8	122.0		
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		
Max Green Setting (Gmax), s		94.7		31.0	8.5	82.7		
Max Q Clear Time (g_c+I1), s		2.0		3.3	2.8	13.1		
Green Ext Time (p_c), s		90.9		0.0	0.0	68.6		

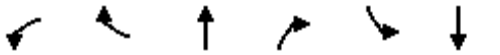
Intersection Summary	
HCM 2010 Ctrl Delay	3.1
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	119	157	2108	191	27	1766
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	124	164	2196	199	28	1840
Adj No. of Lanes	1	1	3	1	2	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	202	180	3998	1245	39	4206
Arrive On Green	0.11	0.11	0.79	0.79	0.02	1.00
Sat Flow, veh/h	1774	1583	5253	1583	3442	5253
Grp Volume(v), veh/h	124	164	2196	199	28	1840
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1583	1721	1695
Q Serve(g_s), s	9.0	13.8	21.9	4.1	1.1	0.0
Cycle Q Clear(g_c), s	9.0	13.8	21.9	4.1	1.1	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	202	180	3998	1245	39	4206
V/C Ratio(X)	0.61	0.91	0.55	0.16	0.73	0.44
Avail Cap(c_a), veh/h	210	188	3998	1245	204	4206
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.93	0.93
Uniform Delay (d), s/veh	57.0	59.1	5.4	3.5	65.8	0.0
Incr Delay (d2), s/veh	3.4	39.5	0.5	0.3	8.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	8.0	10.4	1.9	0.6	0.1
LnGrp Delay(d),s/veh	60.4	98.7	6.0	3.8	74.4	0.3
LnGrp LOS	E	F	A	A	E	A
Approach Vol, veh/h	288		2395			1868
Approach Delay, s/veh	82.2		5.8			1.4
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.5	110.1				115.6		19.4
Change Period (Y+Rc), s	3.5	5.3				5.3		3.5
Max Green Setting (Gmax), s	8.5	97.7				109.7		16.5
Max Q Clear Time (g_c+I1), s	3.1	23.9				2.0		15.8
Green Ext Time (p_c), s	0.0	73.0				106.1		0.0

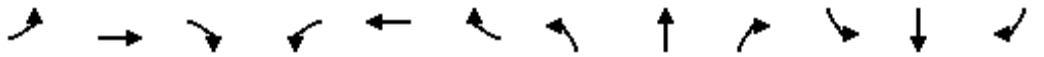
Intersection Summary	
HCM 2010 Ctrl Delay	8.8
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	9	30	2078	10	36	1904
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	9	31	2165	10	38	1983
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	61	55	4305	20	93	4608
Arrive On Green	0.03	0.03	1.00	1.00	0.11	1.00
Sat Flow, veh/h	1774	1583	5392	24	1774	5253
Grp Volume(v), veh/h	9	31	1405	770	38	1983
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1858	1774	1695
Q Serve(g_s), s	0.7	2.6	0.0	0.0	2.7	0.0
Cycle Q Clear(g_c), s	0.7	2.6	0.0	0.0	2.7	0.0
Prop In Lane	1.00	1.00		0.01	1.00	
Lane Grp Cap(c), veh/h	61	55	2794	1531	93	4608
V/C Ratio(X)	0.15	0.57	0.50	0.50	0.41	0.43
Avail Cap(c_a), veh/h	407	364	2794	1531	315	4608
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.85	0.85	0.58	0.58
Uniform Delay (d), s/veh	63.2	64.2	0.0	0.0	58.4	0.0
Incr Delay (d2), s/veh	0.4	3.4	0.6	1.0	0.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.3	1.2	0.2	0.4	1.3	0.1
LnGrp Delay(d),s/veh	63.6	67.6	0.6	1.0	59.1	0.2
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	40		2175			2021
Approach Delay, s/veh	66.7		0.7			1.3
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.1	115.2				126.3		8.7
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	66.7				94.7		31.0
Max Q Clear Time (g_c+I1), s	4.7	2.0				2.0		4.6
Green Ext Time (p_c), s	0.0	64.0				91.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.6
HCM 2010 LOS	A



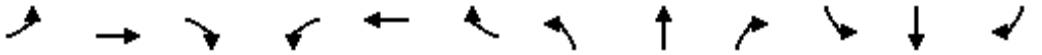
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	202	677	492	67	387	57	582	1472	68	145	1387	242
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	208	698	260	69	399	11	600	1518	67	149	1430	172
Adj No. of Lanes	1	2	1	1	2	1	2	3	0	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	861	382	81	638	282	630	2686	119	187	2082	645
Arrive On Green	0.10	0.24	0.24	0.05	0.18	0.18	0.37	1.00	1.00	0.02	0.14	0.14
Sat Flow, veh/h	1774	3539	1568	1774	3539	1562	3442	4993	220	3442	5085	1576
Grp Volume(v), veh/h	208	698	260	69	399	11	600	1031	554	149	1430	172
Grp Sat Flow(s),veh/h/ln	1774	1770	1568	1774	1770	1562	1721	1695	1823	1721	1695	1576
Q Serve(g_s), s	14.0	25.1	20.3	5.2	14.1	0.8	22.9	0.0	0.0	5.8	36.2	13.2
Cycle Q Clear(g_c), s	14.0	25.1	20.3	5.2	14.1	0.8	22.9	0.0	0.0	5.8	36.2	13.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	184	861	382	81	638	282	630	1824	981	187	2082	645
V/C Ratio(X)	1.13	0.81	0.68	0.85	0.63	0.04	0.95	0.57	0.57	0.80	0.69	0.27
Avail Cap(c_a), veh/h	184	1049	465	145	970	428	765	1824	981	408	2082	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	0.86	0.86	0.86	0.92	0.92	0.92
Uniform Delay (d), s/veh	60.5	48.1	46.3	64.0	51.1	45.7	42.2	0.0	0.0	65.5	50.1	40.2
Incr Delay (d2), s/veh	105.8	3.3	1.9	8.7	0.4	0.0	16.7	1.1	2.0	2.7	1.7	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	12.3	12.7	9.0	2.8	6.9	0.3	12.2	0.3	0.6	2.8	17.3	5.9
LnGrp Delay(d),s/veh	166.3	51.4	48.2	72.7	51.5	45.7	59.0	1.1	2.0	68.2	51.8	41.1
LnGrp LOS	F	D	D	E	D	D	E	A	A	E	D	D
Approach Vol, veh/h		1166			479			2185			1751	
Approach Delay, s/veh		71.2			54.4			17.2			52.2	
Approach LOS		E			D			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	76.6	10.2	36.9	28.7	59.3	18.0	29.0
Change Period (Y+Rc), s	3.5	5.3	3.5	6.0	3.5	5.3	3.5	* 6
Max Green Setting (Gmax), s	16.5	50.7	11.5	38.0	30.5	36.7	14.5	* 36
Max Q Clear Time (g_c+I1), s	7.8	2.0	7.2	27.1	24.9	38.2	16.0	16.1
Green Ext Time (p_c), s	0.1	24.4	0.0	3.8	0.3	0.0	0.0	4.7

Intersection Summary	
HCM 2010 Ctrl Delay	42.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



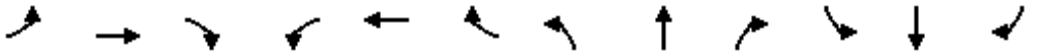
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	214	850	92	178	839	268	150	782	113	163	479	131
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1863	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	228	904	88	189	893	80	160	832	110	173	510	119
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	1927	187	242	1569	488	205	901	119	226	853	198
Arrive On Green	0.42	0.79	0.79	0.04	0.10	0.10	0.23	0.55	0.55	0.04	0.09	0.09
Sat Flow, veh/h	1774	4903	476	1774	5085	1583	1774	3269	432	1774	2967	689
Grp Volume(v), veh/h	228	649	343	189	893	80	160	468	474	173	315	314
Grp Sat Flow(s),veh/h/ln	1774	1763	1853	1774	1695	1583	1774	1840	1861	1774	1840	1816
Q Serve(g_s), s	13.0	8.1	8.2	13.7	21.8	4.3	11.0	30.2	30.2	12.5	21.4	21.6
Cycle Q Clear(g_c), s	13.0	8.1	8.2	13.7	21.8	4.3	11.0	30.2	30.2	12.5	21.4	21.6
Prop In Lane	1.00		0.26	1.00		1.00	1.00		0.23	1.00		0.38
Lane Grp Cap(c), veh/h	373	1385	728	242	1569	488	205	507	513	226	529	522
V/C Ratio(X)	0.61	0.47	0.47	0.78	0.57	0.16	0.78	0.92	0.92	0.77	0.60	0.60
Avail Cap(c_a), veh/h	373	1385	728	266	1569	488	266	525	531	266	529	522
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	0.95	0.95	0.95	0.96	0.96	0.96	0.94	0.94	0.94	0.93	0.93	0.93
Uniform Delay (d), s/veh	33.6	9.3	9.3	60.2	50.1	22.5	48.4	27.9	27.9	60.3	51.6	51.7
Incr Delay (d2), s/veh	2.0	1.1	2.1	10.7	1.4	0.7	7.3	20.3	20.1	8.0	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.5	4.0	4.4	7.5	10.4	2.0	5.7	17.9	18.1	6.7	11.1	11.1
LnGrp Delay(d),s/veh	35.6	10.4	11.4	70.9	51.6	23.2	55.8	48.2	48.0	68.3	52.8	52.9
LnGrp LOS	D	B	B	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1220			1162			1102			802	
Approach Delay, s/veh		15.4			52.8			49.2			56.2	
Approach LOS		B			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.1	38.7	19.2	54.0	16.5	40.3	30.2	43.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	17.5	35.1	17.5	43.1	17.5	35.1	22.5	* 38
Max Q Clear Time (g_c+I1), s	14.5	32.2	15.7	10.2	13.0	23.6	15.0	23.8
Green Ext Time (p_c), s	0.0	1.6	0.0	9.9	0.1	4.9	4.3	6.7

Intersection Summary	
HCM 2010 Ctrl Delay	41.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



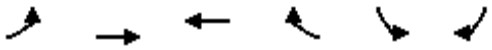
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	315	711	210	257	796	225	244	1324	192	154	1045	245
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1788	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	328	741	178	268	829	85	254	1379	185	160	1089	226
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	431	1190	283	362	1374	411	356	1581	212	577	2372	870
Arrive On Green	0.13	0.29	0.29	0.21	0.54	0.54	0.10	0.35	0.35	0.16	0.42	0.42
Sat Flow, veh/h	3442	4105	976	3442	5085	1520	3442	4537	609	3548	5588	1583
Grp Volume(v), veh/h	328	611	308	268	829	85	254	1030	534	160	1089	226
Grp Sat Flow(s),veh/h/ln	1721	1695	1691	1721	1695	1520	1721	1695	1755	1774	1863	1583
Q Serve(g_s), s	12.0	20.3	20.6	9.5	14.5	2.5	9.3	37.0	37.0	5.1	18.1	9.8
Cycle Q Clear(g_c), s	12.0	20.3	20.6	9.5	14.5	2.5	9.3	37.0	37.0	5.1	18.1	9.8
Prop In Lane	1.00		0.58	1.00		1.00	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	431	983	490	362	1374	411	356	1181	612	577	2372	870
V/C Ratio(X)	0.76	0.62	0.63	0.74	0.60	0.21	0.71	0.87	0.87	0.28	0.46	0.26
Avail Cap(c_a), veh/h	649	983	490	569	1374	411	516	1181	612	577	2372	870
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	0.97	0.97	0.97	0.87	0.87	0.87	0.68	0.68	0.68
Uniform Delay (d), s/veh	55.0	40.0	40.1	49.7	25.1	9.9	56.4	39.6	39.6	47.7	26.7	15.4
Incr Delay (d2), s/veh	1.1	2.8	5.7	1.1	1.9	1.1	0.9	7.9	14.0	0.1	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.8	9.9	10.4	4.5	6.8	1.2	4.5	18.6	20.3	2.5	9.4	4.4
LnGrp Delay(d),s/veh	56.1	42.8	45.8	50.8	27.1	11.0	57.3	47.6	53.7	47.8	27.2	15.9
LnGrp LOS	E	D	D	D	C	B	E	D	D	D	C	B
Approach Vol, veh/h		1247			1182			1818			1475	
Approach Delay, s/veh		47.0			31.3			50.7			27.7	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	58.9	17.8	38.4	24.8	49.0	15.2	41.0
Change Period (Y+Rc), s	3.5	5.7	3.5	5.3	5.7	* 5.7	3.5	5.3
Max Green Setting (Gmax), s	17.5	39.3	22.5	32.7	13.5	* 43	19.5	35.7
Max Q Clear Time (g_c+I1), s	11.3	20.1	14.0	16.5	7.1	39.0	11.5	22.6
Green Ext Time (p_c), s	0.2	11.2	0.3	12.2	0.5	3.7	0.2	10.2

Intersection Summary	
HCM 2010 Ctrl Delay	40.0
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



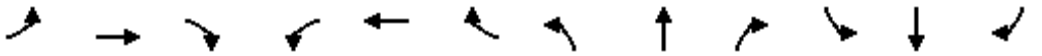
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	33	800	780	58	54	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.2	5.2	5.2	5.5	5.5
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	3539	3539	1583	1770	1558
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	3539	3539	1583	1770	1558
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	38	909	886	66	61	166
RTOR Reduction (vph)	0	0	0	0	0	154
Lane Group Flow (vph)	38	909	886	66	61	12
Confl. Peds. (#/hr)						1
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	4.7	67.0	72.2	72.2	8.8	8.8
Effective Green, g (s)	4.2	68.3	73.5	73.5	9.0	9.0
Actuated g/C Ratio	0.04	0.57	0.61	0.61	0.08	0.08
Clearance Time (s)	3.5	6.5	6.5	6.5	5.7	5.7
Vehicle Extension (s)	1.5	4.3	4.3	4.3	2.0	2.0
Lane Grp Cap (vph)	61	2014	2167	969	132	116
v/s Ratio Prot	c0.02	c0.26	c0.25		c0.03	
v/s Ratio Perm				0.04		0.01
v/c Ratio	0.62	0.45	0.41	0.07	0.46	0.11
Uniform Delay, d1	57.1	15.0	12.0	9.4	53.2	51.8
Progression Factor	1.00	1.00	0.55	0.41	1.00	1.00
Incremental Delay, d2	13.4	0.7	0.6	0.1	0.9	0.1
Delay (s)	70.5	15.7	7.2	4.0	54.1	51.9
Level of Service	E	B	A	A	D	D
Approach Delay (s)		17.9	7.0		52.5	
Approach LOS		B	A		D	

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	750	104	77	733	109	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2		4.0	5.2	5.5	5.5
Lane Util. Factor	0.95		1.00	0.91	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3474		1770	5085	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	3474		1770	5085	1770	1583
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	862	120	89	843	125	94
RTOR Reduction (vph)	6	0	0	0	0	84
Lane Group Flow (vph)	976	0	89	843	125	10
Turn Type	NA		Prot	NA	Prot	Perm
Protected Phases	4		3	8	5	
Permitted Phases						5
Actuated Green, G (s)	67.0		9.9	72.2	12.9	12.9
Effective Green, g (s)	68.3		9.4	73.5	13.1	13.1
Actuated g/C Ratio	0.57		0.08	0.61	0.11	0.11
Clearance Time (s)	6.5		3.5	6.5	5.7	5.7
Vehicle Extension (s)	4.3		1.5	4.3	2.0	2.0
Lane Grp Cap (vph)	1977		138	3114	193	172
v/s Ratio Prot	c0.28		c0.05	0.17	c0.07	
v/s Ratio Perm						0.01
v/c Ratio	0.49		0.64	0.27	0.65	0.06
Uniform Delay, d1	15.5		53.7	10.8	51.2	47.9
Progression Factor	0.25		1.05	1.11	1.00	1.00
Incremental Delay, d2	0.8		7.4	0.2	5.5	0.1
Delay (s)	4.7		63.8	12.2	56.7	48.0
Level of Service	A		E	B	E	D
Approach Delay (s)	4.7			17.1	53.0	
Approach LOS	A			B	D	

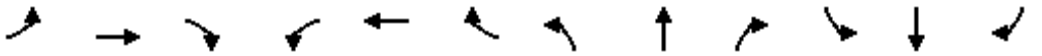
Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	164	839	90	67	1012	106	37	10	35	84	5	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	11	10	11	11	11	11	11	11
Total Lost time (s)	1.5	3.0		1.5	3.0	3.0		2.6			1.5	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00			1.00	
Frt	1.00	0.99		1.00	1.00	0.85		0.94			0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.96	
Satd. Flow (prot)	3204	5011		1652	4916	1478		1659			1707	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.87			0.71	
Satd. Flow (perm)	3204	5011		1652	4916	1478		1474			1271	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	167	856	92	68	1033	108	38	10	36	86	5	8
RTOR Reduction (vph)	0	6	0	0	0	25	0	30	0	0	3	0
Lane Group Flow (vph)	167	942	0	68	1033	83	0	54	0	0	96	0
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2 5			1 6	
Permitted Phases						8	2 5			1 6		
Actuated Green, G (s)	10.7	83.1		9.9	82.3	82.3		18.8			22.0	
Effective Green, g (s)	12.7	85.1		11.9	84.3	84.3		22.8			25.9	
Actuated g/C Ratio	0.10	0.65		0.09	0.65	0.65		0.18			0.20	
Clearance Time (s)	3.5	5.0		3.5	5.0	5.0						
Vehicle Extension (s)	1.5	3.9		1.5	3.9	3.9						
Lane Grp Cap (vph)	313	3280		151	3187	958		258			253	
v/s Ratio Prot	c0.05	0.19		0.04	c0.21							
v/s Ratio Perm						0.06		0.04			c0.08	
v/c Ratio	0.53	0.29		0.45	0.32	0.09		0.21			0.38	
Uniform Delay, d1	55.8	9.6		56.0	10.2	8.5		45.9			45.1	
Progression Factor	1.00	1.00		1.20	0.39	0.09		1.00			1.00	
Incremental Delay, d2	0.9	0.2		0.8	0.3	0.2		0.1			0.3	
Delay (s)	56.7	9.8		67.9	4.2	0.9		46.0			45.4	
Level of Service	E	A		E	A	A		D			D	
Approach Delay (s)		16.8			7.5			46.0			45.4	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

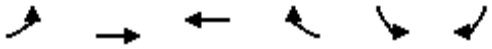
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	901	55	73	1026	20	80	24	106	101	29	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	13	13	10	10	10	10	14	14
Total Lost time (s)	1.5	3.0		1.5	3.0		1.5	2.6		1.5	2.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.88		1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	4874		1652	5240		1652	1526		1652	1774	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1652	4874		1652	5240		1652	1526		1652	1774	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	46	939	57	76	1069	21	83	25	110	105	30	75
RTOR Reduction (vph)	0	3	0	0	1	0	0	101	0	0	68	0
Lane Group Flow (vph)	46	993	0	76	1089	0	83	34	0	105	37	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	10.7	83.1		9.9	82.3		10.4	8.4		12.0	10.0	
Effective Green, g (s)	12.7	85.1		11.9	84.3		12.4	10.4		14.0	12.0	
Actuated g/C Ratio	0.10	0.65		0.09	0.65		0.10	0.08		0.11	0.09	
Clearance Time (s)	3.5	5.0		3.5	5.0		3.5	4.6		3.5	4.6	
Vehicle Extension (s)	1.5	3.9		1.5	3.9		1.5	2.0		1.5	2.0	
Lane Grp Cap (vph)	161	3190		151	3397		157	122		177	163	
v/s Ratio Prot	0.03	0.20		c0.05	c0.21		0.05	c0.02		c0.06	0.02	
v/s Ratio Perm												
v/c Ratio	0.29	0.31		0.50	0.32		0.53	0.28		0.59	0.23	
Uniform Delay, d1	54.4	9.7		56.2	10.1		56.0	56.3		55.3	54.7	
Progression Factor	1.43	0.51		1.10	0.18		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.2		0.8	0.2		1.5	0.5		3.5	0.3	
Delay (s)	78.1	5.3		62.7	2.1		57.5	56.7		58.8	55.0	
Level of Service	E	A		E	A		E	E		E	D	
Approach Delay (s)		8.5			6.0			57.0			56.9	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



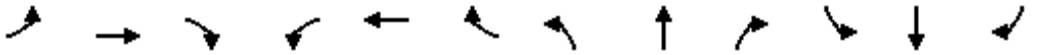
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	18	1284	788	242	72	18
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	19	1352	829	255	48	50
Adj No. of Lanes	1	3	3	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	50	4531	4318	1447	115	105
Arrive On Green	0.06	1.00	0.85	0.85	0.06	0.06
Sat Flow, veh/h	1703	5253	5253	1583	1774	1615
Grp Volume(v), veh/h	19	1352	829	255	48	50
Grp Sat Flow(s),veh/h/ln	1703	1695	1695	1583	1774	1615
Q Serve(g_s), s	1.3	0.0	3.5	2.0	3.1	3.6
Cycle Q Clear(g_c), s	1.3	0.0	3.5	2.0	3.1	3.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	50	4531	4318	1447	115	105
V/C Ratio(X)	0.38	0.30	0.19	0.18	0.42	0.48
Avail Cap(c_a), veh/h	206	4531	4318	1447	503	458
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.89	0.89	1.00	1.00
Uniform Delay (d), s/veh	55.4	0.0	1.6	0.5	53.9	54.2
Incr Delay (d2), s/veh	1.6	0.2	0.1	0.2	0.9	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.6	0.1	1.6	1.6	1.6	3.2
LnGrp Delay(d),s/veh	57.0	0.2	1.7	0.8	54.8	55.4
LnGrp LOS	E	A	A	A	D	E
Approach Vol, veh/h		1371	1084		98	
Approach Delay, s/veh		0.9	1.5		55.1	
Approach LOS		A	A		E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				110.2		9.8	5.0	105.2
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				78.7		32.0	12.5	62.7
Max Q Clear Time (g_c+I1), s				2.0		5.6	3.3	5.5
Green Ext Time (p_c), s				53.3		0.1	0.0	43.2

Intersection Summary	
HCM 2010 Ctrl Delay	3.3
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	125	882	56	158	390	169	66	638	125	103	559	56
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1937	1863	1937	1976
Adj Flow Rate, veh/h	130	919	58	165	406	176	69	665	130	107	582	58
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	1414	89	223	1582	493	117	1478	687	162	1498	149
Arrive On Green	0.10	0.29	0.29	0.04	0.10	0.10	0.07	0.42	0.42	0.03	0.15	0.15
Sat Flow, veh/h	1774	4891	308	1774	5085	1583	1774	3539	1647	1774	3382	336
Grp Volume(v), veh/h	130	636	341	165	406	176	69	665	130	107	316	324
Grp Sat Flow(s),veh/h/ln	1774	1695	1808	1774	1695	1583	1774	1770	1647	1774	1840	1878
Q Serve(g_s), s	8.5	19.7	19.8	11.0	8.8	12.4	4.5	16.2	6.0	7.2	18.7	18.7
Cycle Q Clear(g_c), s	8.5	19.7	19.8	11.0	8.8	12.4	4.5	16.2	6.0	7.2	18.7	18.7
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	184	980	523	223	1582	493	117	1478	687	162	815	832
V/C Ratio(X)	0.71	0.65	0.65	0.74	0.26	0.36	0.59	0.45	0.19	0.66	0.39	0.39
Avail Cap(c_a), veh/h	333	980	523	333	1582	493	214	1478	687	288	815	832
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	52.0	37.3	37.4	55.6	41.1	42.7	54.5	25.1	22.1	56.4	36.5	36.5
Incr Delay (d2), s/veh	1.9	3.3	6.2	1.8	0.4	2.0	1.8	1.0	0.6	1.6	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.3	9.6	10.7	5.6	4.2	5.7	2.3	8.1	2.8	3.6	9.8	10.1
LnGrp Delay(d),s/veh	53.9	40.7	43.5	57.4	41.4	44.7	56.2	26.1	22.7	58.0	37.8	37.8
LnGrp LOS	D	D	D	E	D	D	E	C	C	E	D	D
Approach Vol, veh/h		1107			747			864			747	
Approach Delay, s/veh		43.1			45.7			28.0			40.7	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	53.0	16.6	38.0	9.4	56.0	13.9	40.6
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	17.5	32.1	20.5	32.7	12.5	37.1	20.5	32.7
Max Q Clear Time (g_c+I1), s	9.2	18.2	13.0	21.8	6.5	20.7	10.5	14.4
Green Ext Time (p_c), s	0.0	9.5	0.1	8.2	0.0	10.7	0.1	12.2

Intersection Summary	
HCM 2010 Ctrl Delay	39.4
HCM 2010 LOS	D

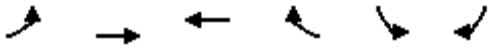
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	198	1041	155	400	683	468	181	1342	261	122	1234	77
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1788	1937	1976
Adj Flow Rate, veh/h	206	1084	69	417	711	323	189	1398	247	127	1285	75
Adj No. of Lanes	2	3	1	2	3	1	2	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	1420	582	519	1857	578	305	1483	262	356	2468	144
Arrive On Green	0.18	0.56	0.56	0.15	0.37	0.37	0.03	0.11	0.11	0.42	0.97	0.97
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	4350	768	1703	5112	298
Grp Volume(v), veh/h	206	1084	69	417	711	323	189	1089	556	127	886	474
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1727	1703	1763	1885
Q Serve(g_s), s	6.7	19.7	1.8	14.0	12.4	13.7	6.5	38.3	38.3	6.1	2.1	2.1
Cycle Q Clear(g_c), s	6.7	19.7	1.8	14.0	12.4	13.7	6.5	38.3	38.3	6.1	2.1	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		0.16
Lane Grp Cap(c), veh/h	310	1420	582	519	1857	578	305	1155	589	356	1702	910
V/C Ratio(X)	0.66	0.76	0.12	0.80	0.38	0.56	0.62	0.94	0.94	0.36	0.52	0.52
Avail Cap(c_a), veh/h	473	1420	582	531	1857	578	531	1155	589	356	1702	910
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	0.89	0.89	0.89	0.85	0.85	0.85
Uniform Delay (d), s/veh	47.5	23.5	10.6	49.2	28.1	14.9	56.3	52.1	52.1	29.4	1.1	1.1
Incr Delay (d2), s/veh	0.9	3.8	0.4	7.9	0.6	3.9	0.7	14.5	23.6	0.2	1.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.2	9.5	0.8	7.2	5.9	6.6	3.1	20.3	22.2	2.8	1.0	1.2
LnGrp Delay(d),s/veh	48.4	27.3	11.0	57.1	28.7	18.7	56.9	66.6	75.7	29.6	2.1	2.9
LnGrp LOS	D	C	B	E	C	B	E	E	E	C	A	A
Approach Vol, veh/h		1359			1451			1834			1487	
Approach Delay, s/veh		29.6			34.6			68.4			4.7	
Approach LOS		C			C			E			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.2	45.0	22.6	38.0	12.1	62.0	12.3	48.3
Change Period (Y+Rc), s	6.1	* 6.1	6.5	* 6.5	3.5	6.1	3.5	6.5
Max Green Setting (Gmax), s	13.5	* 39	16.5	* 32	16.5	35.9	14.5	33.5
Max Q Clear Time (g_c+I1), s	8.1	40.3	16.0	21.7	8.5	4.1	8.7	15.7
Green Ext Time (p_c), s	0.3	0.0	0.1	6.4	0.1	16.5	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.4
HCM 2010 LOS	D

Notes

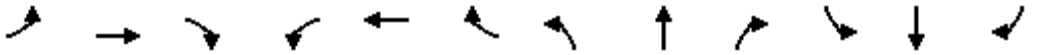
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	163	755	648	234	224	176
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1863	1788	1863	1937
Adj Flow Rate, veh/h	166	770	661	239	229	180
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	500	2532	2435	1046	347	322
Arrive On Green	0.91	0.91	0.69	0.69	0.20	0.20
Sat Flow, veh/h	616	3778	3632	1520	1774	1647
Grp Volume(v), veh/h	166	770	661	239	229	180
Grp Sat Flow(s),veh/h/ln	616	1840	1770	1520	1774	1647
Q Serve(g_s), s	4.5	1.5	4.3	3.5	7.2	5.9
Cycle Q Clear(g_c), s	8.8	1.5	4.3	3.5	7.2	5.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	500	2532	2435	1046	347	322
V/C Ratio(X)	0.33	0.30	0.27	0.23	0.66	0.56
Avail Cap(c_a), veh/h	500	2532	2435	1046	967	897
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.47	0.47	0.99	0.99
Uniform Delay (d), s/veh	1.8	0.9	3.6	3.5	22.3	21.8
Incr Delay (d2), s/veh	1.6	0.3	0.1	0.2	0.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.0	0.7	2.1	1.5	3.6	2.8
LnGrp Delay(d),s/veh	3.3	1.1	3.7	3.7	23.1	22.4
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		936	900		409	
Approach Delay, s/veh		1.5	3.7		22.8	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				45.0		15.0		45.0
Change Period (Y+Rc), s				5.7		5.3		5.7
Max Green Setting (Gmax), s				18.3		30.7		18.3
Max Q Clear Time (g_c+I1), s				10.8		9.2		6.3
Green Ext Time (p_c), s				6.5		0.6		9.9

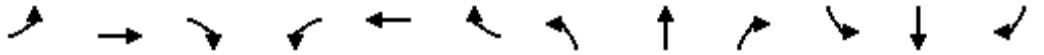
Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	935	25	13	1134	13	12	1	16	10	2	37
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1900	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	37	944	25	13	1145	13	12	1	16	10	2	37
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	1	1	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	4547	120	43	4357	49	107	6	95	126	5	96
Arrive On Green	0.04	0.86	0.86	0.05	1.00	1.00	0.06	0.06	0.06	0.06	0.06	0.06
Sat Flow, veh/h	1774	5298	140	1774	5184	59	1363	98	1564	1390	85	1574
Grp Volume(v), veh/h	37	628	341	13	749	409	12	0	17	10	0	39
Grp Sat Flow(s),veh/h/ln	1774	1763	1913	1774	1695	1852	1363	0	1661	1390	0	1659
Q Serve(g_s), s	2.7	4.0	4.0	0.9	0.0	0.0	1.1	0.0	1.3	0.9	0.0	2.9
Cycle Q Clear(g_c), s	2.7	4.0	4.0	0.9	0.0	0.0	4.0	0.0	1.3	2.2	0.0	2.9
Prop In Lane	1.00		0.07	1.00		0.03	1.00		0.94	1.00		0.95
Lane Grp Cap(c), veh/h	74	3026	1642	43	2849	1557	107	0	101	126	0	101
V/C Ratio(X)	0.50	0.21	0.21	0.30	0.26	0.26	0.11	0.00	0.17	0.08	0.00	0.39
Avail Cap(c_a), veh/h	198	3026	1642	198	2849	1557	406	0	465	431	0	465
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.9	1.6	1.6	60.8	0.0	0.0	60.7	0.0	57.9	59.0	0.0	58.7
Incr Delay (d2), s/veh	1.5	0.1	0.2	1.4	0.2	0.4	0.2	0.0	0.3	0.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	2.0	2.2	0.5	0.1	0.2	0.4	0.0	0.6	0.3	0.0	1.4
LnGrp Delay(d),s/veh	62.5	1.7	1.8	62.2	0.2	0.4	60.8	0.0	58.2	59.1	0.0	59.6
LnGrp LOS	E	A	A	E	A	A	E		E	E		E
Approach Vol, veh/h		1006			1171			29			49	
Approach Delay, s/veh		4.0			1.0			59.3			59.5	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		10.5	4.6	114.9		10.5	6.9	112.6
Change Period (Y+Rc), s		4.6	3.5	5.3		4.6	3.5	5.3
Max Green Setting (Gmax), s		34.4	12.5	69.7		34.4	12.5	69.7
Max Q Clear Time (g_c+I1), s		6.0	2.9	6.0		4.9	4.7	2.0
Green Ext Time (p_c), s		0.2	0.0	35.3		0.2	0.0	36.4

Intersection Summary	
HCM 2010 Ctrl Delay	4.3
HCM 2010 LOS	A



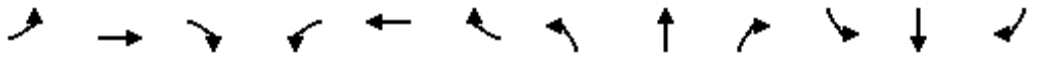
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	242	667	108	296	699	292	213	1137	104	252	911	108
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	249	688	111	305	721	301	220	1172	107	260	939	111
Adj No. of Lanes	2	3	0	2	3	1	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	1032	165	415	1333	860	477	1276	116	498	1379	162
Arrive On Green	0.10	0.23	0.23	0.12	0.26	0.26	0.27	0.27	0.27	0.28	0.28	0.28
Sat Flow, veh/h	3442	4422	706	3442	5085	1583	1774	4744	433	1774	4908	578
Grp Volume(v), veh/h	249	526	273	305	721	301	220	837	442	260	712	338
Grp Sat Flow(s),veh/h/ln	1721	1695	1738	1721	1695	1583	1774	1695	1786	1774	1863	1761
Q Serve(g_s), s	9.0	18.2	18.5	11.0	15.7	13.8	13.3	30.9	31.0	15.9	21.9	22.0
Cycle Q Clear(g_c), s	9.0	18.2	18.5	11.0	15.7	13.8	13.3	30.9	31.0	15.9	21.9	22.0
Prop In Lane	1.00		0.41	1.00		1.00	1.00		0.24	1.00		0.33
Lane Grp Cap(c), veh/h	353	791	406	415	1333	860	477	912	481	498	1047	495
V/C Ratio(X)	0.70	0.66	0.67	0.73	0.54	0.35	0.46	0.92	0.92	0.52	0.68	0.68
Avail Cap(c_a), veh/h	494	791	406	494	1333	860	477	912	481	498	1047	495
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.96	0.96	0.96	0.75	0.75	0.75	0.48	0.48	0.48
Uniform Delay (d), s/veh	56.0	44.9	45.0	54.7	40.9	16.6	39.3	45.8	45.8	39.1	41.2	41.3
Incr Delay (d2), s/veh	1.1	4.4	8.7	3.3	1.5	1.1	2.4	12.4	20.4	1.9	1.7	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.3	9.0	9.9	5.4	7.5	10.0	6.9	16.0	17.9	8.1	11.5	11.2
LnGrp Delay(d),s/veh	57.0	49.3	53.6	58.0	42.4	17.7	41.7	58.2	66.2	41.0	43.0	45.0
LnGrp LOS	E	D	D	E	D	B	D	E	E	D	D	D
Approach Vol, veh/h		1048			1327			1499			1310	
Approach Delay, s/veh		52.2			40.4			58.1			43.1	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		39.5	14.7	36.7		38.0	18.5	33.0
Change Period (Y+Rc), s		5.3	3.5	4.9		5.3	4.9	* 4.9
Max Green Setting (Gmax), s		32.7	16.5	28.1		32.7	16.5	* 28
Max Q Clear Time (g_c+I1), s		24.0	11.0	17.7		33.0	13.0	20.5
Green Ext Time (p_c), s		5.9	0.2	5.6		0.0	0.5	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	48.6
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



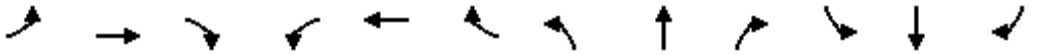
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	105	1005	39	155	1073	79	49	4	88	78	11	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	106	1015	39	157	1084	80	49	4	89	79	11	81
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	2336	90	544	3396	250	150	12	277	208	26	288
Arrive On Green	0.03	0.15	0.15	0.61	1.00	1.00	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1774	5227	201	1774	5027	371	1299	69	1525	855	141	1583
Grp Volume(v), veh/h	106	684	370	157	760	404	49	0	93	90	0	81
Grp Sat Flow(s),veh/h/ln	1774	1763	1902	1774	1763	1872	1299	0	1594	996	0	1583
Q Serve(g_s), s	7.7	23.0	23.0	5.4	0.0	0.0	4.7	0.0	6.6	7.7	0.0	5.7
Cycle Q Clear(g_c), s	7.7	23.0	23.0	5.4	0.0	0.0	18.9	0.0	6.6	14.2	0.0	5.7
Prop In Lane	1.00		0.11	1.00		0.20	1.00		0.96	0.88		1.00
Lane Grp Cap(c), veh/h	158	1576	850	544	2382	1264	150	0	290	233	0	288
V/C Ratio(X)	0.67	0.43	0.43	0.29	0.32	0.32	0.33	0.00	0.32	0.39	0.00	0.28
Avail Cap(c_a), veh/h	389	1576	850	544	2382	1264	278	0	446	365	0	443
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	0.83	0.83	0.83	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.2	40.4	40.5	18.5	0.0	0.0	58.0	0.0	46.2	51.9	0.0	45.9
Incr Delay (d2), s/veh	1.5	0.7	1.3	0.1	0.3	0.6	0.5	0.0	0.2	0.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.9	11.4	12.4	2.6	0.1	0.2	1.7	0.0	2.9	3.0	0.0	2.5
LnGrp Delay(d),s/veh	62.8	41.2	41.8	18.6	0.3	0.6	58.5	0.0	46.4	52.3	0.0	46.0
LnGrp LOS	E	D	D	B	A	A	E		D	D		D
Approach Vol, veh/h		1160			1321			142			171	
Approach Delay, s/veh		43.3			2.5			50.6			49.3	
Approach LOS		D			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		26.3	42.7	61.0		26.3	13.0	90.7
Change Period (Y+Rc), s		4.6	4.9	* 4.9		4.6	3.5	4.9
Max Green Setting (Gmax), s		34.4	26.5	* 56		34.4	26.5	56.1
Max Q Clear Time (g_c+I1), s		20.9	7.4	25.0		16.2	9.7	2.0
Green Ext Time (p_c), s		0.8	1.8	10.6		0.9	0.1	13.9

Intersection Summary	
HCM 2010 Ctrl Delay	24.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	820	49	5	914	92	45	20	7	52	13	29
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	24	837	50	5	933	94	46	20	7	53	13	30
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	2956	177	34	2747	277	145	123	43	160	47	108
Arrive On Green	0.09	1.00	1.00	0.02	0.81	0.81	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	1774	3530	211	1774	3377	340	1358	1372	480	1378	521	1203
Grp Volume(v), veh/h	24	436	451	5	508	519	46	0	27	53	0	43
Grp Sat Flow(s),veh/h/ln	1774	1840	1900	1774	1840	1877	1358	0	1853	1378	0	1725
Q Serve(g_s), s	1.7	0.0	0.0	0.4	9.3	9.3	4.3	0.0	1.8	4.8	0.0	3.0
Cycle Q Clear(g_c), s	1.7	0.0	0.0	0.4	9.3	9.3	7.3	0.0	1.8	6.6	0.0	3.0
Prop In Lane	1.00		0.11	1.00		0.18	1.00		0.26	1.00		0.70
Lane Grp Cap(c), veh/h	77	1542	1591	34	1497	1527	145	0	166	160	0	154
V/C Ratio(X)	0.31	0.28	0.28	0.15	0.34	0.34	0.32	0.00	0.16	0.33	0.00	0.28
Avail Cap(c_a), veh/h	198	1542	1591	198	1497	1527	341	0	433	359	0	403
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.5	0.0	0.0	62.7	3.1	3.1	58.7	0.0	54.7	57.7	0.0	55.3
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.7	0.6	0.6	0.5	0.0	0.2	0.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	0.0	0.0	0.2	4.9	5.0	1.6	0.0	0.9	1.8	0.0	1.5
LnGrp Delay(d),s/veh	57.6	0.0	0.0	63.4	3.7	3.7	59.1	0.0	54.9	58.2	0.0	55.6
LnGrp LOS	E	A	A	E	A	A	E		D	E		E
Approach Vol, veh/h		911			1032			73			96	
Approach Delay, s/veh		1.6			4.0			57.6			57.0	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.0	111.8		14.2	7.2	108.6		14.2
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	12.5	76.1		28.4	12.5	76.1		28.4
Max Q Clear Time (g_c+I1), s	2.4	2.0		8.6	3.7	11.3		9.3
Green Ext Time (p_c), s	0.0	37.1		0.4	0.0	34.9		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	7.2
HCM 2010 LOS	A

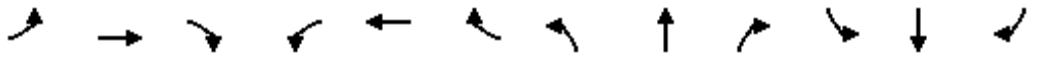
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	28	1113	16	54	676	84	5	6	43	121	15	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1900	1863	1863	1900	1976	1937	1976	1900	1863	1863
Adj Flow Rate, veh/h	29	1172	17	57	712	88	5	6	45	127	16	29
Adj No. of Lanes	1	3	0	1	4	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	3029	44	101	3049	370	33	46	189	137	14	475
Arrive On Green	0.14	0.78	0.78	0.11	1.00	1.00	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1703	5165	75	1774	5836	708	0	154	629	268	47	1583
Grp Volume(v), veh/h	29	769	420	57	584	216	56	0	0	143	0	29
Grp Sat Flow(s),veh/h/ln	1703	1695	1850	1774	1602	1738	783	0	0	315	0	1583
Q Serve(g_s), s	1.8	8.6	8.6	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Cycle Q Clear(g_c), s	1.8	8.6	8.6	3.7	0.0	0.0	36.0	0.0	0.0	36.0	0.0	1.6
Prop In Lane	1.00		0.04	1.00		0.41	0.09		0.80	0.89		1.00
Lane Grp Cap(c), veh/h	180	1988	1085	101	2511	908	268	0	0	151	0	475
V/C Ratio(X)	0.16	0.39	0.39	0.57	0.23	0.24	0.21	0.00	0.00	0.95	0.00	0.06
Avail Cap(c_a), veh/h	206	1988	1085	214	2511	908	268	0	0	151	0	475
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.99	0.99	0.99	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.9	6.4	6.4	51.8	0.0	0.0	32.0	0.0	0.0	47.7	0.0	29.9
Incr Delay (d2), s/veh	0.1	0.6	1.0	1.8	0.2	0.6	0.1	0.0	0.0	56.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.9	4.0	4.5	1.8	0.0	0.2	1.3	0.0	0.0	7.1	0.0	0.7
LnGrp Delay(d),s/veh	47.0	7.0	7.4	53.6	0.2	0.6	32.1	0.0	0.0	104.3	0.0	30.0
LnGrp LOS	D	A	A	D	A	A	C			F		C
Approach Vol, veh/h		1218			857			56			172	
Approach Delay, s/veh		8.1			3.9			32.1			91.8	
Approach LOS		A			A			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.0	8.3	73.7		38.0	16.0	66.0
Change Period (Y+Rc), s		4.0	3.5	5.3		4.0	5.3	* 5.3
Max Green Setting (Gmax), s		34.0	12.5	60.7		34.0	12.5	* 61
Max Q Clear Time (g_c+I1), s		38.0	5.7	10.6		38.0	3.8	2.0
Green Ext Time (p_c), s		0.0	0.0	16.6		0.0	3.0	9.9

Intersection Summary	
HCM 2010 Ctrl Delay	13.3
HCM 2010 LOS	B

Notes

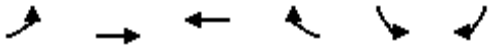
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	93	818	95	93	965	124	80	524	112	62	311	84
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	97	852	99	97	1005	129	83	546	117	65	324	88
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	2790	323	146	2763	354	235	841	180	146	800	214
Arrive On Green	0.16	1.00	1.00	0.08	0.58	0.58	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1774	4809	556	1774	4748	608	970	3019	645	769	2873	769
Grp Volume(v), veh/h	97	624	327	97	746	388	83	332	331	65	206	206
Grp Sat Flow(s),veh/h/ln	1774	1763	1839	1774	1763	1830	970	1840	1823	769	1840	1802
Q Serve(g_s), s	6.7	0.0	0.0	6.9	14.6	14.6	9.9	20.6	20.8	10.6	11.8	12.1
Cycle Q Clear(g_c), s	6.7	0.0	0.0	6.9	14.6	14.6	22.0	20.6	20.8	31.4	11.8	12.1
Prop In Lane	1.00		0.30	1.00		0.33	1.00		0.35	1.00		0.43
Lane Grp Cap(c), veh/h	143	2046	1067	146	2052	1065	235	512	508	146	512	502
V/C Ratio(X)	0.68	0.30	0.31	0.67	0.36	0.36	0.35	0.65	0.65	0.44	0.40	0.41
Avail Cap(c_a), veh/h	198	2046	1067	307	2052	1065	242	525	520	152	525	514
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.52	0.52	0.52	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	0.0	0.0	57.9	14.4	14.4	47.2	41.3	41.3	55.2	38.1	38.2
Incr Delay (d2), s/veh	2.1	0.4	0.7	1.9	0.5	1.0	0.2	1.1	1.1	0.8	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.4	0.1	0.2	3.5	7.2	7.6	2.7	10.7	10.6	2.3	6.0	6.0
LnGrp Delay(d),s/veh	55.1	0.4	0.7	59.9	14.9	15.4	47.4	42.4	42.5	56.0	38.3	38.4
LnGrp LOS	E	A	A	E	B	B	D	D	D	E	D	D
Approach Vol, veh/h		1048			1231			746			477	
Approach Delay, s/veh		5.6			18.6			43.0			40.8	
Approach LOS		A			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	78.7		39.1	12.0	78.9		39.1
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	20.5	60.7		35.1	12.5	68.7		35.1
Max Q Clear Time (g_c+I1), s	8.9	2.0		33.4	8.7	16.6		24.0
Green Ext Time (p_c), s	0.0	33.2		0.8	0.0	31.0		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.9
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	74	1099	644	49	94	75
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	78	1157	678	52	89	90
Adj No. of Lanes	1	3	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	125	4408	4799	363	158	144
Arrive On Green	0.14	1.00	1.00	1.00	0.09	0.09
Sat Flow, veh/h	1774	5253	6384	463	1774	1615
Grp Volume(v), veh/h	78	1157	530	200	89	90
Grp Sat Flow(s),veh/h/ln	1774	1695	1602	1781	1774	1615
Q Serve(g_s), s	5.0	0.0	0.0	0.0	5.8	6.5
Cycle Q Clear(g_c), s	5.0	0.0	0.0	0.0	5.8	6.5
Prop In Lane	1.00			0.26	1.00	1.00
Lane Grp Cap(c), veh/h	125	4408	3766	1396	158	144
V/C Ratio(X)	0.62	0.26	0.14	0.14	0.56	0.63
Avail Cap(c_a), veh/h	214	4408	3766	1396	517	471
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.99	0.99	1.00	1.00
Uniform Delay (d), s/veh	50.0	0.0	0.0	0.0	52.4	52.7
Incr Delay (d2), s/veh	1.6	0.1	0.1	0.2	1.2	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.5	0.0	0.0	0.1	2.9	5.8
LnGrp Delay(d),s/veh	51.6	0.1	0.1	0.2	53.6	54.4
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		1235	730		179	
Approach Delay, s/veh		3.4	0.1		54.0	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				107.3		12.7	10.0	97.3
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				77.7		33.0	12.5	61.7
Max Q Clear Time (g_c+I1), s				2.0		8.5	7.0	2.0
Green Ext Time (p_c), s				38.2		0.3	0.0	33.9

Intersection Summary	
HCM 2010 Ctrl Delay	6.5
HCM 2010 LOS	A

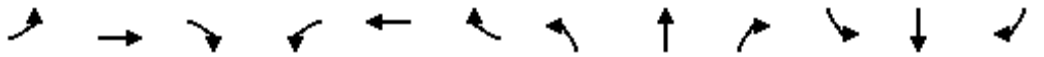
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	92	9	95	10	2	4	70	1761	20	19	1305	152
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	98	10	101	11	2	4	74	1873	21	20	1388	162
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	14	137	73	17	13	93	4060	46	29	3449	402
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.11	1.00	1.00	0.02	0.75	0.75
Sat Flow, veh/h	1404	145	1460	255	178	133	1774	5185	58	1774	4619	539
Grp Volume(v), veh/h	98	0	111	17	0	0	74	1225	669	20	1019	531
Grp Sat Flow(s),veh/h/ln	1404	0	1605	567	0	0	1774	1695	1852	1774	1695	1768
Q Serve(g_s), s	0.5	0.0	8.1	0.1	0.0	0.0	4.9	0.0	0.0	1.3	13.1	13.1
Cycle Q Clear(g_c), s	8.6	0.0	8.1	8.2	0.0	0.0	4.9	0.0	0.0	1.3	13.1	13.1
Prop In Lane	1.00		0.91	0.65		0.24	1.00		0.03	1.00		0.30
Lane Grp Cap(c), veh/h	187	0	151	103	0	0	93	2655	1451	29	2531	1320
V/C Ratio(X)	0.52	0.00	0.74	0.17	0.00	0.00	0.79	0.46	0.46	0.70	0.40	0.40
Avail Cap(c_a), veh/h	546	0	562	459	0	0	200	2655	1451	200	2531	1320
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.39	0.39	0.39	0.67	0.67	0.67
Uniform Delay (d), s/veh	53.2	0.0	52.9	49.9	0.0	0.0	53.0	0.0	0.0	58.7	5.5	5.5
Incr Delay (d2), s/veh	0.8	0.0	2.6	0.3	0.0	0.0	2.2	0.2	0.4	7.2	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.2	0.0	3.7	0.5	0.0	0.0	2.4	0.1	0.2	0.7	6.2	6.6
LnGrp Delay(d),s/veh	54.0	0.0	55.5	50.2	0.0	0.0	55.3	0.2	0.4	65.9	5.8	6.1
LnGrp LOS	D		E	D			E	A	A	E	A	A
Approach Vol, veh/h		209			17			1968			1570	
Approach Delay, s/veh		54.8			50.2			2.4			6.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	94.9		15.3	5.4	99.3		15.3
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	13.5	51.7		42.0	13.5	51.7		42.0
Max Q Clear Time (g_c+I1), s	6.9	15.1		10.6	3.3	2.0		10.2
Green Ext Time (p_c), s	0.0	35.2		0.7	0.0	47.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A



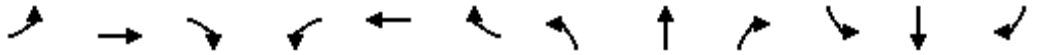
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	61	8	29	23	1	17	44	1750	27	51	1211	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	62	8	29	23	1	17	44	1768	27	52	1223	47
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	14	36	105	16	52	56	2696	41	492	3935	151
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.06	1.00	1.00	0.55	1.00	1.00
Sat Flow, veh/h	931	177	459	741	197	664	1774	5160	79	1774	5026	193
Grp Volume(v), veh/h	99	0	0	41	0	0	44	1161	634	52	825	445
Grp Sat Flow(s),veh/h/ln	1568	0	0	1602	0	0	1774	1695	1849	1774	1695	1829
Q Serve(g_s), s	4.6	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	1.7	0.0	0.0
Cycle Q Clear(g_c), s	7.3	0.0	0.0	2.8	0.0	0.0	2.9	0.0	0.0	1.7	0.0	0.0
Prop In Lane	0.63		0.29	0.56		0.41	1.00		0.04	1.00		0.11
Lane Grp Cap(c), veh/h	172	0	0	173	0	0	56	1771	966	492	2654	1432
V/C Ratio(X)	0.57	0.00	0.00	0.24	0.00	0.00	0.78	0.66	0.66	0.11	0.31	0.31
Avail Cap(c_a), veh/h	449	0	0	447	0	0	170	1771	966	492	2654	1432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.66	0.66	0.66	0.76	0.76	0.76
Uniform Delay (d), s/veh	54.1	0.0	0.0	52.2	0.0	0.0	55.8	0.0	0.0	19.7	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.3	0.0	0.0	5.7	1.3	2.3	0.0	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	0.0	0.0	1.3	0.0	0.0	1.5	0.3	0.6	0.8	0.1	0.2
LnGrp Delay(d),s/veh	55.2	0.0	0.0	52.4	0.0	0.0	61.5	1.3	2.3	19.7	0.2	0.4
LnGrp LOS	E			D			E	A	A	B	A	A
Approach Vol, veh/h		99			41			1839			1322	
Approach Delay, s/veh		55.2			52.4			3.1			1.1	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	38.5	68.0		13.5	7.3	99.2		13.5
Change Period (Y+Rc), s	5.3	* 5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	* 63		32.0	11.5	63.7		32.0
Max Q Clear Time (g_c+I1), s	3.7	2.0		9.3	4.9	2.0		4.8
Green Ext Time (p_c), s	1.3	32.9		0.5	0.0	18.6		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	4.4
HCM 2010 LOS	A

Notes

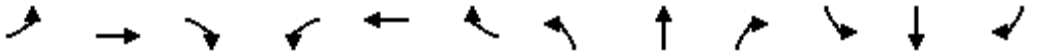
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	94	492	148	115	571	119	205	1551	161	167	1091	128
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.91	1.00		0.98	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	98	512	154	120	595	124	214	1616	168	174	1136	133
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	566	169	146	651	135	238	2097	218	198	2169	634
Arrive On Green	0.07	0.21	0.21	0.08	0.23	0.23	0.27	0.90	0.90	0.22	0.85	0.85
Sat Flow, veh/h	1774	2644	790	1774	2861	594	1774	4672	485	1774	5085	1486
Grp Volume(v), veh/h	98	341	325	120	367	352	214	1172	612	174	1136	133
Grp Sat Flow(s),veh/h/ln	1774	1770	1664	1774	1770	1685	1774	1695	1766	1774	1695	1486
Q Serve(g_s), s	6.5	22.5	22.8	8.0	24.3	24.5	14.0	13.7	13.9	11.4	7.1	1.9
Cycle Q Clear(g_c), s	6.5	22.5	22.8	8.0	24.3	24.5	14.0	13.7	13.9	11.4	7.1	1.9
Prop In Lane	1.00		0.47	1.00		0.35	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	122	379	356	146	403	383	238	1522	793	198	2169	634
V/C Ratio(X)	0.80	0.90	0.91	0.82	0.91	0.92	0.90	0.77	0.77	0.88	0.52	0.21
Avail Cap(c_a), veh/h	214	394	370	214	403	383	392	1522	793	259	2169	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.94	0.94	0.94	0.92	0.92	0.92	0.86	0.86	0.86	0.91	0.91	0.91
Uniform Delay (d), s/veh	55.1	45.9	46.0	54.2	45.2	45.2	43.2	4.1	4.1	45.8	5.6	5.2
Incr Delay (d2), s/veh	4.4	22.1	24.7	9.1	23.4	25.3	8.2	3.3	6.3	18.0	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.4	13.3	12.9	4.3	14.4	14.0	7.3	6.2	7.1	6.5	3.3	0.8
LnGrp Delay(d),s/veh	59.4	68.0	70.8	63.3	68.5	70.5	51.4	7.4	10.3	63.8	6.4	5.9
LnGrp LOS	E	E	E	E	E	E	D	A	B	E	A	A
Approach Vol, veh/h		764			839			1998			1443	
Approach Delay, s/veh		68.1			68.6			13.0			13.3	
Approach LOS		E			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.6	56.1	11.7	32.6	16.9	58.8	13.3	31.0
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	26.5	35.1	14.5	26.7	17.5	44.1	14.5	26.7
Max Q Clear Time (g_c+I1), s	16.0	9.1	8.5	26.5	13.4	15.9	10.0	24.8
Green Ext Time (p_c), s	0.1	24.6	0.0	0.2	0.1	26.6	0.0	0.9

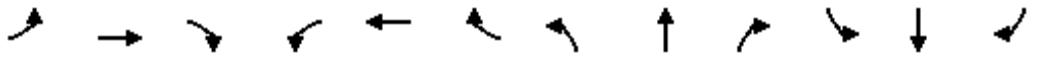
Intersection Summary	
HCM 2010 Ctrl Delay	30.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	52	81	69	30	109	68	71	811	20	45	516	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	55	86	73	32	116	72	76	863	21	48	549	59
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	154	111	93	195	109	610	2412	59	474	2203	236
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.68	0.68	0.67	0.68	0.68	0.67
Sat Flow, veh/h	312	795	574	152	1005	563	809	3531	86	625	3225	346
Grp Volume(v), veh/h	214	0	0	220	0	0	76	432	452	48	301	307
Grp Sat Flow(s),veh/h/ln	1681	0	0	1720	0	0	809	1770	1847	625	1770	1801
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	2.6	6.7	6.7	2.3	4.2	4.3
Cycle Q Clear(g_c), s	7.2	0.0	0.0	7.4	0.0	0.0	6.9	6.7	6.7	8.9	4.2	4.3
Prop In Lane	0.26		0.34	0.15		0.33	1.00		0.05	1.00		0.19
Lane Grp Cap(c), veh/h	396	0	0	397	0	0	610	1209	1262	474	1209	1230
V/C Ratio(X)	0.54	0.00	0.00	0.55	0.00	0.00	0.12	0.36	0.36	0.10	0.25	0.25
Avail Cap(c_a), veh/h	713	0	0	734	0	0	610	1209	1262	474	1209	1230
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.68	0.68	0.68	0.70	0.70	0.70
Uniform Delay (d), s/veh	24.0	0.0	0.0	24.1	0.0	0.0	5.3	4.3	4.3	6.2	3.9	4.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.5	0.0	0.0	0.3	0.6	0.5	0.3	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	0.0	0.0	3.7	0.0	0.0	0.6	3.4	3.6	0.4	2.1	2.2
LnGrp Delay(d),s/veh	24.5	0.0	0.0	24.6	0.0	0.0	5.5	4.9	4.9	6.5	4.3	4.3
LnGrp LOS	C			C			A	A	A	A	A	A
Approach Vol, veh/h		214			220			960			656	
Approach Delay, s/veh		24.5			24.6			4.9			4.5	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		48.4		16.6		48.4		16.6
Change Period (Y+Rc), s		4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s		30.1		26.0		30.1		26.0
Max Q Clear Time (g_c+I1), s		8.9		9.2		10.9		9.4
Green Ext Time (p_c), s		4.9		1.8		4.8		1.8

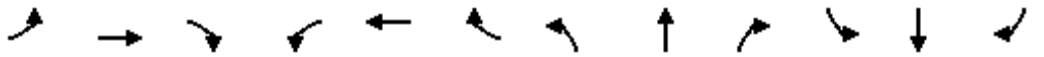
Intersection Summary	
HCM 2010 Ctrl Delay	8.9
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	147	771	96	64	452	63	85	550	113	88	507	102
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	162	847	105	70	497	69	93	604	124	97	557	112
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	980	121	82	822	114	397	1615	331	455	1622	325
Arrive On Green	0.09	0.31	0.30	0.05	0.26	0.26	1.00	1.00	1.00	0.55	0.55	0.55
Sat Flow, veh/h	1774	3168	393	1774	3122	432	765	2925	599	723	2938	589
Grp Volume(v), veh/h	162	473	479	70	281	285	93	365	363	97	335	334
Grp Sat Flow(s),veh/h/ln	1774	1770	1792	1774	1770	1784	765	1770	1755	723	1770	1757
Q Serve(g_s), s	11.9	32.8	32.8	5.1	18.1	18.2	3.9	0.0	0.0	9.0	13.6	13.7
Cycle Q Clear(g_c), s	11.9	32.8	32.8	5.1	18.1	18.2	17.6	0.0	0.0	9.0	13.6	13.7
Prop In Lane	1.00		0.22	1.00		0.24	1.00		0.34	1.00		0.34
Lane Grp Cap(c), veh/h	164	547	554	82	466	470	397	977	969	455	977	970
V/C Ratio(X)	0.99	0.86	0.86	0.85	0.60	0.61	0.23	0.37	0.37	0.21	0.34	0.34
Avail Cap(c_a), veh/h	164	803	813	177	817	823	397	977	969	455	977	970
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.71	0.67	0.67	0.67	0.51	0.51	0.51	0.41	0.41	0.41
Uniform Delay (d), s/veh	58.9	42.3	42.4	61.5	41.9	42.1	1.7	0.0	0.0	15.1	16.1	16.2
Incr Delay (d2), s/veh	55.9	3.4	3.4	6.0	0.3	0.3	0.7	0.6	0.6	0.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.3	16.6	16.8	2.6	8.9	9.0	0.9	0.2	0.2	1.9	6.7	6.7
LnGrp Delay(d),s/veh	114.8	45.8	45.8	67.5	42.2	42.4	2.4	0.6	0.6	15.5	16.5	16.6
LnGrp LOS	F	D	D	E	D	D	A	A	A	B	B	B
Approach Vol, veh/h		1114			636			821			766	
Approach Delay, s/veh		55.8			45.1			0.8			16.4	
Approach LOS		E			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		75.8	10.0	44.2		75.8	16.0	38.2
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	13.5	58.1		45.1	12.5	59.1
Max Q Clear Time (g_c+I1), s		19.6	7.1	34.8		15.7	13.9	20.2
Green Ext Time (p_c), s		5.1	0.0	4.5		5.2	0.0	4.7

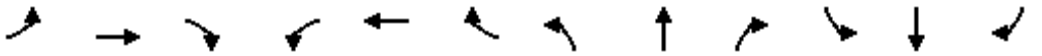
Intersection Summary	
HCM 2010 Ctrl Delay	31.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	77	497	85	43	643	128	101	757	64	67	416	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	79	507	87	44	656	131	103	772	65	68	424	94
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	1590	272	50	1475	294	311	1169	98	158	1020	224
Arrive On Green	0.05	0.53	0.52	0.03	0.50	0.49	0.35	0.35	0.35	0.71	0.71	0.69
Sat Flow, veh/h	1774	3024	517	1774	2941	587	878	3304	278	654	2883	634
Grp Volume(v), veh/h	79	296	298	44	394	393	103	413	424	68	259	259
Grp Sat Flow(s),veh/h/ln	1774	1770	1771	1774	1770	1758	878	1770	1812	654	1770	1747
Q Serve(g_s), s	5.7	12.4	12.5	3.2	18.6	18.7	12.2	25.6	25.6	11.7	7.9	8.1
Cycle Q Clear(g_c), s	5.7	12.4	12.5	3.2	18.6	18.7	20.4	25.6	25.6	37.4	7.9	8.1
Prop In Lane	1.00		0.29	1.00		0.33	1.00		0.15	1.00		0.36
Lane Grp Cap(c), veh/h	93	930	931	50	887	882	311	626	641	158	626	618
V/C Ratio(X)	0.85	0.32	0.32	0.88	0.44	0.45	0.33	0.66	0.66	0.43	0.41	0.42
Avail Cap(c_a), veh/h	164	930	931	123	887	882	311	626	641	158	626	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.61	0.61	0.61	0.55	0.55	0.55	0.46	0.46	0.46	0.98	0.98	0.98
Uniform Delay (d), s/veh	61.1	17.6	17.7	63.0	20.8	20.9	37.0	35.4	35.5	28.9	13.4	13.7
Incr Delay (d2), s/veh	5.0	0.5	0.6	10.0	0.9	0.9	1.3	2.5	2.5	8.2	2.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.9	6.1	6.3	1.7	9.3	9.3	3.1	13.0	13.3	2.5	4.1	4.1
LnGrp Delay(d),s/veh	66.1	18.1	18.2	72.9	21.7	21.8	38.3	38.0	38.0	37.0	15.4	15.7
LnGrp LOS	E	B	B	E	C	C	D	D	D	D	B	B
Approach Vol, veh/h		673			831			940			586	
Approach Delay, s/veh		23.8			24.5			38.0			18.1	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		50.0	7.7	72.3		50.0	10.8	69.2
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	9.5	62.1		45.1	12.5	59.1
Max Q Clear Time (g_c+I1), s		27.6	5.2	14.5		39.4	7.7	20.7
Green Ext Time (p_c), s		4.4	0.0	5.0		2.6	0.0	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C



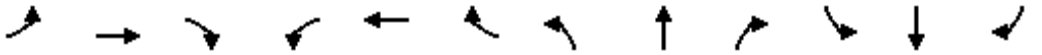
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	145	0	82	0	584	116	50	530	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor					1.00	1.00		0.95		1.00	0.95	
Frt					1.00	0.85		0.98		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1770	1583		3451		1770	3539	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1770	1583		3451		1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	158	0	89	0	635	126	54	576	0
RTOR Reduction (vph)	0	0	0	0	0	78	0	6	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	158	11	0	755	0	54	576	0
Turn Type				Split	NA	Perm		NA		Prot	NA	
Protected Phases				8	8			2		1	6	
Permitted Phases						8						
Actuated Green, G (s)					14.7	14.7		86.1		6.8	96.4	
Effective Green, g (s)					14.7	14.7		87.0		6.3	97.3	
Actuated g/C Ratio					0.12	0.12		0.72		0.05	0.81	
Clearance Time (s)					4.0	4.0		4.9		3.5	4.9	
Vehicle Extension (s)					1.5	1.5		1.5		1.5	1.5	
Lane Grp Cap (vph)					216	193		2501		92	2869	
v/s Ratio Prot					c0.09			c0.22		c0.03	0.16	
v/s Ratio Perm						0.01						
v/c Ratio					0.73	0.06		0.30		0.59	0.20	
Uniform Delay, d1					50.7	46.5		5.8		55.6	2.6	
Progression Factor					0.73	0.74		0.46		0.85	0.94	
Incremental Delay, d2					10.1	0.0		0.2		5.3	0.1	
Delay (s)					47.1	34.3		2.9		52.7	2.5	
Level of Service					D	C		A		D	A	
Approach Delay (s)		0.0			42.5			2.9			6.8	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	14	11	50	98	15	109	75	715	147	74	571	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	15	11	52	102	16	114	78	745	153	77	595	19
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	57	116	347	54	353	91	1826	811	90	1803	58
Arrive On Green	0.08	0.08	0.08	0.22	0.22	0.22	0.10	1.00	1.00	0.10	1.00	1.00
Sat Flow, veh/h	1045	766	1545	1543	242	1571	1774	3539	1571	1774	3500	112
Grp Volume(v), veh/h	26	0	52	118	0	114	78	745	153	77	301	313
Grp Sat Flow(s),veh/h/ln	1811	0	1545	1786	0	1571	1774	1770	1571	1774	1770	1842
Q Serve(g_s), s	1.6	0.0	3.9	6.6	0.0	7.3	5.2	0.0	0.0	5.1	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	3.9	6.6	0.0	7.3	5.2	0.0	0.0	5.1	0.0	0.0
Prop In Lane	0.58		1.00	0.86		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	136	0	116	402	0	353	91	1826	811	90	912	949
V/C Ratio(X)	0.19	0.00	0.45	0.29	0.00	0.32	0.85	0.41	0.19	0.85	0.33	0.33
Avail Cap(c_a), veh/h	136	0	116	402	0	353	281	1826	811	163	912	949
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.83	0.83	0.83	0.98	0.98	0.98
Uniform Delay (d), s/veh	52.1	0.0	53.1	38.6	0.0	38.9	53.4	0.0	0.0	53.5	0.0	0.0
Incr Delay (d2), s/veh	3.1	0.0	12.1	1.9	0.0	2.4	6.9	0.6	0.4	8.2	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.9	0.0	2.0	3.5	0.0	3.4	2.7	0.1	0.1	2.7	0.2	0.2
LnGrp Delay(d),s/veh	55.2	0.0	65.2	40.4	0.0	41.3	60.3	0.6	0.4	61.7	1.0	0.9
LnGrp LOS	E		E	D		D	E	A	A	E	A	A
Approach Vol, veh/h		78			232			976			691	
Approach Delay, s/veh		61.9			40.8			5.3			7.7	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.1	65.9		13.0	10.2	65.8		31.0
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	11.5	56.1		9.0	19.5	48.1		27.0
Max Q Clear Time (g_c+I1), s	7.1	2.0		5.9	7.2	2.0		9.3
Green Ext Time (p_c), s	0.0	4.7		0.0	0.0	4.7		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	38	16	15	58	17	150	27	778	40	121	586	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.98		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	39	16	6	59	17	11	28	794	39	123	598	37
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	131	49	155	38	158	28	2464	121	142	2647	164
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.03	1.00	1.00	0.08	0.78	0.77
Sat Flow, veh/h	1354	1283	481	995	374	1546	1774	3433	169	1774	3386	209
Grp Volume(v), veh/h	39	0	22	76	0	11	28	409	424	123	312	323
Grp Sat Flow(s),veh/h/ln	1354	0	1764	1370	0	1546	1774	1770	1832	1774	1770	1825
Q Serve(g_s), s	3.4	0.0	1.4	5.3	0.0	0.8	1.9	0.0	0.0	8.2	5.6	5.6
Cycle Q Clear(g_c), s	10.0	0.0	1.4	6.6	0.0	0.8	1.9	0.0	0.0	8.2	5.6	5.6
Prop In Lane	1.00		0.27	0.78		1.00	1.00		0.09	1.00		0.11
Lane Grp Cap(c), veh/h	123	0	180	193	0	158	28	1270	1315	142	1383	1427
V/C Ratio(X)	0.32	0.00	0.12	0.39	0.00	0.07	0.98	0.32	0.32	0.87	0.23	0.23
Avail Cap(c_a), veh/h	245	0	338	322	0	296	118	1270	1315	281	1383	1427
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93	0.69	0.69	0.69
Uniform Delay (d), s/veh	56.1	0.0	49.0	51.6	0.0	48.7	58.1	0.0	0.0	54.6	3.5	3.5
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.5	0.0	0.1	41.8	0.6	0.6	4.2	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	0.0	0.7	2.4	0.0	0.3	1.2	0.2	0.2	4.2	2.8	2.9
LnGrp Delay(d),s/veh	56.7	0.0	49.1	52.0	0.0	48.8	99.9	0.6	0.6	58.8	3.7	3.7
LnGrp LOS	E		D	D		D	F	A	A	E	A	A
Approach Vol, veh/h		61			87			861			758	
Approach Delay, s/veh		53.9			51.6			3.8			12.7	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.6	90.1		16.3	5.9	97.8		16.3
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	19.5	65.1		23.0	8.5	76.1		23.0
Max Q Clear Time (g_c+I1), s	10.2	2.0		12.0	3.9	7.6		8.6
Green Ext Time (p_c), s	0.1	4.4		0.3	0.0	4.4		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	11.7
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	300	106	360	338	115	385
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863
Adj Flow Rate, veh/h	316	87	379	356	121	124
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1625	440	398	1580	151	484
Arrive On Green	0.59	0.58	0.22	0.85	0.09	0.08
Sat Flow, veh/h	2845	746	1774	1863	1774	1583
Grp Volume(v), veh/h	201	202	379	356	121	124
Grp Sat Flow(s),veh/h/ln	1770	1728	1774	1863	1774	1583
Q Serve(g_s), s	6.3	6.6	25.3	4.3	8.0	7.1
Cycle Q Clear(g_c), s	6.3	6.6	25.3	4.3	8.0	7.1
Prop In Lane		0.43	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1045	1020	398	1580	151	484
V/C Ratio(X)	0.19	0.20	0.95	0.23	0.80	0.26
Avail Cap(c_a), veh/h	1045	1020	458	1580	340	652
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.95	0.95	0.96	0.96
Uniform Delay (d), s/veh	11.4	11.5	45.9	1.7	53.9	31.4
Incr Delay (d2), s/veh	0.4	0.4	26.1	0.3	3.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.2	3.2	15.3	2.3	4.1	3.1
LnGrp Delay(d),s/veh	11.8	12.0	72.0	2.0	57.4	31.5
LnGrp LOS	B	B	E	A	E	C
Approach Vol, veh/h	403			735	245	
Approach Delay, s/veh	11.9			38.1	44.3	
Approach LOS	B			D	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	30.9	74.8				105.8		14.2
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	31.5	52.7				87.7		23.0
Max Q Clear Time (g_c+I1), s	27.3	8.6				6.3		10.0
Green Ext Time (p_c), s	0.2	8.0				8.3		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	31.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	11	733	330	204	493	14	316	7	243	20	17	24
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	12	788	303	219	530	14	346	0	66	22	18	0
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	7	1969	751	239	3437	90	509	0	420	79	83	0
Arrive On Green	0.00	0.54	0.53	0.13	0.67	0.66	0.14	0.00	0.13	0.04	0.04	0.00
Sat Flow, veh/h	1774	3620	1381	1774	5094	134	3548	0	1565	1774	1863	0
Grp Volume(v), veh/h	12	738	353	219	352	192	346	0	66	22	18	0
Grp Sat Flow(s),veh/h/ln	1774	1695	1610	1774	1695	1838	1774	0	1565	1774	1863	0
Q Serve(g_s), s	0.5	15.2	15.6	14.6	4.5	4.6	11.1	0.0	3.9	1.4	1.1	0.0
Cycle Q Clear(g_c), s	0.5	15.2	15.6	14.6	4.5	4.6	11.1	0.0	3.9	1.4	1.1	0.0
Prop In Lane	1.00		0.86	1.00		0.07	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	7	1844	876	239	2287	1240	509	0	420	79	83	0
V/C Ratio(X)	1.66	0.40	0.40	0.92	0.15	0.15	0.68	0.00	0.16	0.28	0.22	0.00
Avail Cap(c_a), veh/h	148	1844	876	296	2287	1240	976	0	626	237	248	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	0.94	0.94	0.94	0.96	0.00	0.96	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.8	16.0	16.4	51.2	7.1	7.1	48.8	0.0	33.7	55.5	55.3	0.0
Incr Delay (d2), s/veh	335.3	0.6	1.2	24.3	0.1	0.2	2.1	0.0	0.2	0.7	0.5	0.0
Initial Q Delay(d3),s/veh	91.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.9	7.2	7.2	8.8	2.1	2.4	5.6	0.0	1.7	0.7	0.6	0.0
LnGrp Delay(d),s/veh	486.9	16.5	17.6	75.6	7.2	7.4	50.9	0.0	33.9	56.2	55.8	0.0
LnGrp LOS	F	B	B	E	A	A	D		C	E	E	
Approach Vol, veh/h		1103			763			412			40	
Approach Delay, s/veh		22.0			26.9			48.2			56.0	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.2	69.3		9.3	4.5	85.0		21.2
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	20.5	33.7		15.1	10.5	43.7		32.1
Max Q Clear Time (g_c+I1), s	16.6	17.6		3.4	2.5	6.6		13.1
Green Ext Time (p_c), s	0.1	11.9		0.0	0.0	21.5		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	45	978	9	19	621	44	2	0	1	38	4	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	49	1075	10	21	682	48	2	0	1	42	4	131
Adj No. of Lanes	1	3	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	446	2457	23	341	2294	160	117	0	58	256	0	226
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.10	0.00	0.10	0.14	0.14	0.14
Sat Flow, veh/h	720	5195	48	517	4850	339	1130	0	565	1774	0	1564
Grp Volume(v), veh/h	49	701	384	21	476	254	3	0	0	42	0	131
Grp Sat Flow(s),veh/h/ln	720	1695	1854	517	1695	1799	1695	0	0	1774	0	1564
Q Serve(g_s), s	1.9	5.9	5.9	1.2	3.7	3.7	0.1	0.0	0.0	0.9	0.0	3.4
Cycle Q Clear(g_c), s	5.7	5.9	5.9	7.1	3.7	3.7	0.1	0.0	0.0	0.9	0.0	3.4
Prop In Lane	1.00		0.03	1.00		0.19	0.67		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	446	1604	877	341	1604	851	175	0	0	256	0	226
V/C Ratio(X)	0.11	0.44	0.44	0.06	0.30	0.30	0.02	0.00	0.00	0.16	0.00	0.58
Avail Cap(c_a), veh/h	558	2131	1165	422	2131	1131	987	0	0	1033	0	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.7	7.5	7.5	9.9	6.9	6.9	17.3	0.0	0.0	16.1	0.0	17.2
Incr Delay (d2), s/veh	0.1	0.2	0.3	0.1	0.1	0.2	0.0	0.0	0.0	0.3	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	2.8	3.1	0.2	1.7	1.9	0.0	0.0	0.0	0.5	0.0	1.6
LnGrp Delay(d),s/veh	8.8	7.7	7.9	10.0	7.0	7.1	17.3	0.0	0.0	16.4	0.0	19.5
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		1134			751			3			173	
Approach Delay, s/veh		7.8			7.2			17.3			18.8	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		8.4		24.3		10.2		24.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		27.0		25.0		27.0
Max Q Clear Time (g_c+I1), s		2.1		7.9		5.4		9.1
Green Ext Time (p_c), s		0.0		11.7		0.5		11.2

Intersection Summary	
HCM 2010 Ctrl Delay	8.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	288	430	1	2	375	427	3	1	2	645	1	162
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	303	453	1	2	395	149	3	1	0	680	0	72
Adj No. of Lanes	1	3	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	327	3765	8	529	1755	777	16	5	0	566	0	251
Arrive On Green	0.18	0.72	0.71	0.50	0.50	0.50	0.01	0.01	0.00	0.16	0.00	0.16
Sat Flow, veh/h	1774	5239	12	928	3539	1567	1347	449	0	3548	0	1574
Grp Volume(v), veh/h	303	293	161	2	395	149	4	0	0	680	0	72
Grp Sat Flow(s),veh/h/ln	1774	1695	1861	928	1770	1567	1795	0	0	1774	0	1574
Q Serve(g_s), s	17.5	2.8	2.8	0.1	6.6	5.5	0.2	0.0	0.0	16.6	0.0	4.2
Cycle Q Clear(g_c), s	17.5	2.8	2.8	0.1	6.6	5.5	0.2	0.0	0.0	16.6	0.0	4.2
Prop In Lane	1.00		0.01	1.00		1.00	0.75		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	327	2437	1337	529	1755	777	22	0	0	566	0	251
V/C Ratio(X)	0.93	0.12	0.12	0.00	0.23	0.19	0.18	0.00	0.00	1.20	0.00	0.29
Avail Cap(c_a), veh/h	529	2437	1337	529	1755	777	155	0	0	566	0	251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.97	0.97	0.97	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.7	4.5	4.5	13.2	14.9	14.6	50.9	0.0	0.0	43.7	0.0	38.5
Incr Delay (d2), s/veh	10.8	0.1	0.2	0.0	0.3	0.5	1.5	0.0	0.0	106.5	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.6	1.3	1.5	0.0	3.3	2.5	0.1	0.0	0.0	16.5	0.0	1.9
LnGrp Delay(d),s/veh	52.5	4.6	4.7	13.3	15.2	15.1	52.4	0.0	0.0	150.2	0.0	39.1
LnGrp LOS	D	A	A	B	B	B	D			F		D
Approach Vol, veh/h		757			546			4			752	
Approach Delay, s/veh		23.8			15.2			52.4			139.5	
Approach LOS		C			B			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		78.7		20.0	23.2	55.6		5.3
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		4.6
Max Green Setting (Gmax), s		65.7		16.0	31.5	30.7		8.4
Max Q Clear Time (g_c+I1), s		4.8		18.6	19.5	8.6		2.2
Green Ext Time (p_c), s		11.9		0.0	0.2	8.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	63.8
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

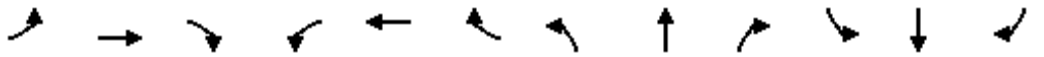
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	25	42	90	61	40	63	68	1407	71	37	1273	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	26	43	92	62	41	64	69	1436	72	38	1299	24
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	69	109	191	137	92	117	87	3125	157	48	3129	58
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.10	1.00	1.00	0.02	0.42	0.42
Sat Flow, veh/h	159	511	893	449	431	547	1714	4788	240	1714	4966	92
Grp Volume(v), veh/h	161	0	0	167	0	0	69	983	525	38	857	466
Grp Sat Flow(s),veh/h/ln	1563	0	0	1427	0	0	1714	1638	1752	1714	1638	1781
Q Serve(g_s), s	0.0	0.0	0.0	1.8	0.0	0.0	4.7	0.0	0.0	2.6	22.0	22.0
Cycle Q Clear(g_c), s	10.4	0.0	0.0	12.2	0.0	0.0	4.7	0.0	0.0	2.6	22.0	22.0
Prop In Lane	0.16		0.57	0.37		0.38	1.00		0.14	1.00		0.05
Lane Grp Cap(c), veh/h	370	0	0	347	0	0	87	2139	1143	48	2064	1122
V/C Ratio(X)	0.44	0.00	0.00	0.48	0.00	0.00	0.79	0.46	0.46	0.79	0.42	0.42
Avail Cap(c_a), veh/h	458	0	0	430	0	0	150	2139	1143	107	2064	1122
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.88	0.88	0.88	0.88	0.88	0.88
Uniform Delay (d), s/veh	41.2	0.0	0.0	41.6	0.0	0.0	53.3	0.0	0.0	58.5	19.2	19.2
Incr Delay (d2), s/veh	0.8	0.0	0.0	1.0	0.0	0.0	13.4	0.6	1.2	22.4	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.7	0.0	0.0	5.0	0.0	0.0	2.5	0.2	0.4	1.6	10.1	11.2
LnGrp Delay(d),s/veh	42.0	0.0	0.0	42.7	0.0	0.0	66.7	0.6	1.2	80.9	19.7	20.2
LnGrp LOS	D			D			E	A	A	F	B	C
Approach Vol, veh/h		161			167			1577			1361	
Approach Delay, s/veh		42.0			42.7			3.7			21.6	
Approach LOS		D			D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	83.2		29.9	9.6	80.5		29.9
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	67.1		* 33	10.5	64.1		* 33
Max Q Clear Time (g_c+I1), s	4.6	2.0		12.4	6.7	24.0		14.2
Green Ext Time (p_c), s	0.0	36.7		2.1	0.0	27.4		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.0
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	27	9	18	15	5	61	16	1635	11	69	1582	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	28	9	19	16	5	64	17	1721	12	73	1665	47
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	99	36	46	51	17	100	20	3763	26	92	3880	109
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.02	1.00	1.00	0.05	0.79	0.79
Sat Flow, veh/h	622	408	529	177	199	1148	1714	5035	35	1714	4912	139
Grp Volume(v), veh/h	56	0	0	85	0	0	17	1120	613	73	1110	602
Grp Sat Flow(s),veh/h/ln	1560	0	0	1524	0	0	1714	1638	1794	1714	1638	1775
Q Serve(g_s), s	0.0	0.0	0.0	2.5	0.0	0.0	1.2	0.0	0.0	5.1	12.9	12.9
Cycle Q Clear(g_c), s	3.8	0.0	0.0	6.4	0.0	0.0	1.2	0.0	0.0	5.1	12.9	12.9
Prop In Lane	0.50		0.34	0.19		0.75	1.00		0.02	1.00		0.08
Lane Grp Cap(c), veh/h	181	0	0	168	0	0	20	2449	1341	92	2587	1402
V/C Ratio(X)	0.31	0.00	0.00	0.50	0.00	0.00	0.86	0.46	0.46	0.79	0.43	0.43
Avail Cap(c_a), veh/h	417	0	0	416	0	0	121	2449	1341	121	2587	1402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.36	0.36	0.36	0.65	0.65	0.65
Uniform Delay (d), s/veh	51.7	0.0	0.0	52.9	0.0	0.0	58.5	0.0	0.0	56.1	4.0	4.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	2.3	0.0	0.0	30.0	0.2	0.4	15.6	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	0.0	0.0	2.8	0.0	0.0	0.7	0.1	0.2	2.8	5.8	6.4
LnGrp Delay(d),s/veh	52.7	0.0	0.0	55.2	0.0	0.0	88.5	0.2	0.4	71.7	4.4	4.6
LnGrp LOS	D			E			F	A	A	E	A	A
Approach Vol, veh/h		56			85			1750			1785	
Approach Delay, s/veh		52.7			55.2			1.1			7.2	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	95.0		15.1	4.9	100.1		15.1
Change Period (Y+Rc), s	3.5	5.3		4.6	3.5	5.3		4.6
Max Green Setting (Gmax), s	8.5	67.7		30.4	8.5	67.7		30.4
Max Q Clear Time (g_c+I1), s	7.1	2.0		5.8	3.2	14.9		8.4
Green Ext Time (p_c), s	0.0	50.2		0.8	0.0	42.3		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	6.1
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	58	34	13	154	42	131	19	1322	149	107	1185	37
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	59	35	13	157	43	134	19	1349	152	109	1209	38
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	132	93	35	283	61	191	23	1855	209	338	2983	94
Arrive On Green	0.08	0.08	0.08	0.17	0.17	0.17	0.01	0.41	0.41	0.20	0.61	0.61
Sat Flow, veh/h	1714	1213	450	1714	372	1159	1714	4473	504	1714	4892	154
Grp Volume(v), veh/h	59	0	48	157	0	177	19	988	513	109	810	437
Grp Sat Flow(s),veh/h/ln	1714	0	1663	1714	0	1531	1714	1638	1701	1714	1638	1769
Q Serve(g_s), s	4.2	0.0	3.5	10.8	0.0	14.0	1.4	32.3	32.3	7.0	16.4	16.4
Cycle Q Clear(g_c), s	4.2	0.0	3.5	10.8	0.0	14.0	1.4	32.3	32.3	7.0	16.4	16.4
Prop In Lane	1.00		0.27	1.00		0.76	1.00		0.30	1.00		0.09
Lane Grp Cap(c), veh/h	132	0	128	283	0	253	23	1359	705	338	1998	1079
V/C Ratio(X)	0.45	0.00	0.38	0.55	0.00	0.70	0.84	0.73	0.73	0.32	0.41	0.41
Avail Cap(c_a), veh/h	214	0	208	376	0	336	114	1359	705	338	1998	1079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.56	0.00	0.56	0.66	0.66	0.66	0.94	0.94	0.94
Uniform Delay (d), s/veh	56.5	0.0	56.2	49.1	0.0	50.5	63.0	31.4	31.4	44.0	12.9	12.9
Incr Delay (d2), s/veh	2.4	0.0	1.8	1.0	0.0	2.4	39.5	2.3	4.3	0.5	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.1	0.0	1.7	5.2	0.0	6.1	0.9	15.0	16.0	3.3	7.6	8.3
LnGrp Delay(d),s/veh	58.9	0.0	58.0	50.1	0.0	52.8	102.5	33.7	35.7	44.6	13.5	14.0
LnGrp LOS	E		E	D		D	F	C	D	D	B	B
Approach Vol, veh/h		107			334			1520			1356	
Approach Delay, s/veh		58.5			51.5			35.2			16.2	
Approach LOS		E			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.1	58.0		13.8	5.2	83.0		26.0
Change Period (Y+Rc), s	4.9	* 4.9		4.0	3.5	4.9		4.9
Max Green Setting (Gmax), s	13.5	* 53		16.0	8.5	58.1		28.1
Max Q Clear Time (g_c+I1), s	9.0	34.3		6.2	3.4	18.4		16.0
Green Ext Time (p_c), s	0.2	9.1		0.2	0.0	9.7		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	29.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	56	17	17	25	14	53	15	1447	46	35	1265	43
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.93	0.94		0.93	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	59	18	18	26	15	56	16	1523	48	37	1332	45
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	312	170	170	102	67	179	18	3202	101	46	3273	111
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.01	0.65	0.65	0.05	1.00	1.00
Sat Flow, veh/h	1212	797	797	300	312	836	1714	4893	154	1714	4881	165
Grp Volume(v), veh/h	59	0	36	97	0	0	16	1020	551	37	894	483
Grp Sat Flow(s),veh/h/ln	1212	0	1593	1448	0	0	1714	1638	1771	1714	1638	1769
Q Serve(g_s), s	0.0	0.0	2.2	1.0	0.0	0.0	1.1	18.7	18.7	2.6	0.0	0.0
Cycle Q Clear(g_c), s	5.4	0.0	2.2	6.3	0.0	0.0	1.1	18.7	18.7	2.6	0.0	0.0
Prop In Lane	1.00		0.50	0.27		0.58	1.00		0.09	1.00		0.09
Lane Grp Cap(c), veh/h	312	0	340	347	0	0	18	2144	1159	46	2197	1187
V/C Ratio(X)	0.19	0.00	0.11	0.28	0.00	0.00	0.87	0.48	0.48	0.80	0.41	0.41
Avail Cap(c_a), veh/h	364	0	409	408	0	0	107	2144	1159	107	2197	1187
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.80	0.80	0.80	0.82	0.82	0.82
Uniform Delay (d), s/veh	39.2	0.0	38.0	39.6	0.0	0.0	59.3	10.4	10.4	56.4	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.4	0.0	0.0	56.8	0.6	1.1	22.1	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	0.0	1.0	2.7	0.0	0.0	0.8	8.5	9.4	1.5	0.1	0.3
LnGrp Delay(d),s/veh	39.5	0.0	38.1	40.0	0.0	0.0	116.1	11.0	11.5	78.6	0.5	0.9
LnGrp LOS	D		D	D			F	B	B	E	A	A
Approach Vol, veh/h		95			97			1587			1414	
Approach Delay, s/veh		39.0			40.0			12.3			2.6	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	83.4		29.8	4.8	85.4		29.8
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	69.1		* 31	7.5	69.1		* 31
Max Q Clear Time (g_c+I1), s	4.6	20.7		7.4	3.1	2.0		8.3
Green Ext Time (p_c), s	0.0	32.6		1.0	0.0	39.8		1.0

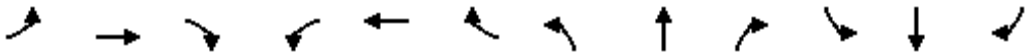
Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

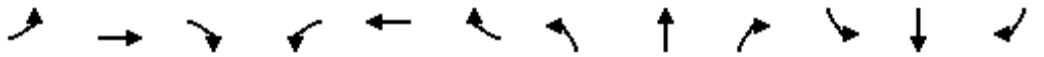
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	61	70	1206	69	101	1273
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2		4.9		3.5	4.9
Lane Util. Factor	1.00		0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.93		0.99		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1612		4874		1710	4914
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1612		4874		1710	4914
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	63	72	1243	71	104	1312
RTOR Reduction (vph)	41	0	4	0	0	0
Lane Group Flow (vph)	94	0	1310	0	104	1312
Confl. Peds. (#/hr)		9				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Prot		NA		Prot	NA
Protected Phases	4		2 9		1	6
Permitted Phases						
Actuated Green, G (s)	12.2		73.0		12.7	70.6
Effective Green, g (s)	12.2		73.0		12.7	70.6
Actuated g/C Ratio	0.10		0.61		0.11	0.59
Clearance Time (s)	4.2				3.5	4.9
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	163		2965		180	2891
v/s Ratio Prot	c0.06		c0.27		c0.06	c0.27
v/s Ratio Perm						
v/c Ratio	0.57		0.44		0.58	0.45
Uniform Delay, d1	51.4		12.6		51.1	13.9
Progression Factor	1.00		0.04		1.00	1.00
Incremental Delay, d2	4.8		0.4		4.4	0.5
Delay (s)	56.3		0.9		55.5	14.4
Level of Service	E		A		E	B
Approach Delay (s)	56.3		0.9			17.4
Approach LOS	E		A			B

Intersection Summary			
HCM 2000 Control Delay	11.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	0	41	3	2	4	28	1256	7	13	1260	53
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.90		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1710	1530		1710	1620		1710	4909		1710	4876	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1710	1530		1710	1620		1710	4909		1710	4876	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	20	0	42	3	2	4	29	1295	7	13	1299	55
RTOR Reduction (vph)	0	40	0	0	4	0	0	0	0	0	2	0
Lane Group Flow (vph)	20	2	0	3	2	0	29	1302	0	13	1352	0
Confl. Peds. (#/hr)							5		7	7		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6 10	
Permitted Phases												
Actuated Green, G (s)	5.7	5.7		12.2	12.2		5.2	61.6		12.7	80.5	
Effective Green, g (s)	5.7	5.7		12.2	12.2		5.2	61.6		12.7	80.5	
Actuated g/C Ratio	0.05	0.05		0.10	0.10		0.04	0.51		0.11	0.67	
Clearance Time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	81	72		173	164		74	2519		180	3270	
v/s Ratio Prot	c0.01	0.00		c0.00	0.00		c0.02	c0.27		0.01	c0.28	
v/s Ratio Perm												
v/c Ratio	0.25	0.03		0.02	0.01		0.39	0.52		0.07	0.41	
Uniform Delay, d1	55.1	54.5		48.5	48.5		55.9	19.3		48.3	9.0	
Progression Factor	1.00	1.00		1.00	1.00		1.46	0.33		1.76	0.06	
Incremental Delay, d2	1.6	0.2		0.0	0.0		3.0	0.7		0.2	0.4	
Delay (s)	56.7	54.7		48.5	48.5		84.4	7.1		85.2	0.9	
Level of Service	E	D		D	D		F	A		F	A	
Approach Delay (s)		55.3			48.5			8.8			1.7	
Approach LOS		E			D			A			A	

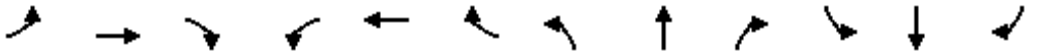
Intersection Summary			
HCM 2000 Control Delay	6.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	51	119	52	137	163	72	63	1234	150	86	1177	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	53	123	54	141	168	74	65	1272	155	89	1213	49
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	68	331	138	167	465	196	83	2483	303	109	2787	113
Arrive On Green	0.04	0.14	0.14	0.10	0.20	0.20	0.02	0.18	0.18	0.13	1.00	1.00
Sat Flow, veh/h	1714	2341	973	1714	2335	983	1714	4435	540	1714	4844	196
Grp Volume(v), veh/h	53	88	89	141	121	121	65	940	487	89	820	442
Grp Sat Flow(s),veh/h/ln	1714	1710	1604	1714	1710	1609	1714	1638	1700	1714	1638	1764
Q Serve(g_s), s	3.7	5.6	6.1	9.7	7.3	7.8	4.5	31.0	31.0	6.1	0.0	0.0
Cycle Q Clear(g_c), s	3.7	5.6	6.1	9.7	7.3	7.8	4.5	31.0	31.0	6.1	0.0	0.0
Prop In Lane	1.00		0.61	1.00		0.61	1.00		0.32	1.00		0.11
Lane Grp Cap(c), veh/h	68	242	227	167	341	321	83	1834	952	109	1885	1015
V/C Ratio(X)	0.78	0.36	0.39	0.84	0.36	0.38	0.78	0.51	0.51	0.81	0.44	0.44
Avail Cap(c_a), veh/h	207	476	446	207	476	448	121	1834	952	121	1885	1015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.84	0.84	0.84	0.68	0.68	0.68	0.90	0.90	0.90	0.92	0.92	0.92
Uniform Delay (d), s/veh	57.1	46.6	46.8	53.3	41.4	41.6	58.4	34.2	34.2	51.7	0.0	0.0
Incr Delay (d2), s/veh	15.0	0.8	0.9	16.2	0.4	0.5	16.5	0.9	1.8	28.7	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.0	2.7	2.8	5.4	3.5	3.5	2.5	14.3	15.1	3.7	0.2	0.4
LnGrp Delay(d),s/veh	72.1	47.4	47.8	69.5	41.8	42.1	75.0	35.1	35.9	80.3	0.7	1.3
LnGrp LOS	E	D	D	E	D	D	E	D	D	F	A	A
Approach Vol, veh/h		230			383			1492			1351	
Approach Delay, s/veh		53.2			52.1			37.1			6.1	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	72.1	15.2	21.6	9.3	73.9	8.2	28.5
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	8.5	47.1	14.5	33.4	8.5	47.1	14.5	33.4
Max Q Clear Time (g_c+I1), s	8.1	33.0	11.7	8.1	6.5	2.0	5.7	9.8
Green Ext Time (p_c), s	0.0	11.7	0.1	2.4	0.0	27.8	0.0	2.4

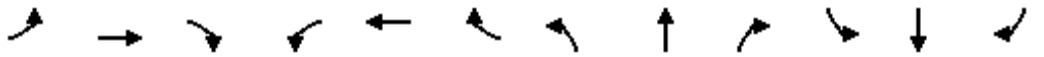
Intersection Summary	
HCM 2010 Ctrl Delay	27.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	213	39	36	34	32	35	62	1279	39	41	1231	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	222	41	38	35	33	36	65	1332	41	43	1282	164
Adj No. of Lanes	0	1	1	0	1	0	1	3	0	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	213	29	405	40	36	19	82	2901	89	54	2832	866
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.10	1.00	1.00	0.06	1.00	1.00
Sat Flow, veh/h	574	106	1472	0	130	69	1714	4896	151	1714	4914	1502
Grp Volume(v), veh/h	263	0	38	104	0	0	65	891	482	43	1282	164
Grp Sat Flow(s),veh/h/ln	680	0	1472	199	0	0	1714	1638	1770	1714	1638	1502
Q Serve(g_s), s	0.0	0.0	2.3	0.0	0.0	0.0	4.5	0.0	0.0	3.0	0.0	0.0
Cycle Q Clear(g_c), s	33.0	0.0	2.3	33.0	0.0	0.0	4.5	0.0	0.0	3.0	0.0	0.0
Prop In Lane	0.84		1.00	0.34		0.35	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	242	0	405	95	0	0	82	1941	1049	54	2832	866
V/C Ratio(X)	1.09	0.00	0.09	1.10	0.00	0.00	0.79	0.46	0.46	0.79	0.45	0.19
Avail Cap(c_a), veh/h	242	0	405	95	0	0	179	1941	1049	121	2832	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.82	0.82	0.82	0.92	0.92	0.92
Uniform Delay (d), s/veh	47.3	0.0	32.4	42.1	0.0	0.0	53.7	0.0	0.0	55.8	0.0	0.0
Incr Delay (d2), s/veh	82.6	0.0	0.1	120.5	0.0	0.0	13.0	0.6	1.2	20.8	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	13.6	0.0	1.0	6.3	0.0	0.0	2.4	0.2	0.3	1.7	0.1	0.1
LnGrp Delay(d),s/veh	129.9	0.0	32.5	162.7	0.0	0.0	66.6	0.6	1.2	76.6	0.5	0.4
LnGrp LOS	F		C	F			E	A	A	E	A	A
Approach Vol, veh/h		301			104			1438			1489	
Approach Delay, s/veh		117.6			162.7			3.8			2.7	
Approach LOS		F			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	75.7		37.0	9.3	73.7		37.0
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	8.5	66.4		33.0	12.5	62.4		33.0
Max Q Clear Time (g_c+I1), s	5.0	2.0		35.0	6.5	2.0		35.0
Green Ext Time (p_c), s	0.0	35.9		0.0	0.0	34.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.5
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	57	268	33	18	332	150	27	369	38	99	331	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	65	305	0	20	377	170	31	419	43	112	376	45
Adj No. of Lanes	0	2	1	0	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	557	447	50	635	279	32	1766	180	130	1912	227
Arrive On Green	0.28	0.28	0.00	0.28	0.28	0.27	0.02	0.54	0.54	0.07	0.60	0.59
Sat Flow, veh/h	283	1974	1583	63	2252	991	1774	3242	331	1774	3185	379
Grp Volume(v), veh/h	125	245	0	307	0	260	31	228	234	112	208	213
Grp Sat Flow(s),veh/h/ln	646	1610	1583	1793	0	1513	1774	1770	1803	1774	1770	1795
Q Serve(g_s), s	9.3	15.4	0.0	2.2	0.0	17.9	2.1	8.1	8.2	7.5	6.4	6.5
Cycle Q Clear(g_c), s	27.2	15.4	0.0	17.6	0.0	17.9	2.1	8.1	8.2	7.5	6.4	6.5
Prop In Lane	0.52		1.00	0.07		0.66	1.00		0.18	1.00		0.21
Lane Grp Cap(c), veh/h	228	454	447	538	0	427	32	964	982	130	1062	1077
V/C Ratio(X)	0.55	0.54	0.00	0.57	0.00	0.61	0.98	0.24	0.24	0.86	0.20	0.20
Avail Cap(c_a), veh/h	441	751	739	866	0	706	148	964	982	148	1062	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.00	0.89	0.00	0.89	0.97	0.97	0.97	0.84	0.84	0.84
Uniform Delay (d), s/veh	44.2	36.5	0.0	37.1	0.0	37.6	58.9	14.3	14.3	55.0	10.9	10.9
Incr Delay (d2), s/veh	0.7	0.3	0.0	0.3	0.0	0.5	39.5	0.6	0.6	28.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.0	6.9	0.0	8.8	0.0	7.5	1.4	4.1	4.2	4.7	3.2	3.3
LnGrp Delay(d),s/veh	44.8	36.8	0.0	37.4	0.0	38.1	98.4	14.8	14.9	83.1	11.2	11.3
LnGrp LOS	D	D		D		D	F	B	B	F	B	B
Approach Vol, veh/h		370			567			493			533	
Approach Delay, s/veh		39.5			37.7			20.1			26.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.8	69.4		37.8	6.1	76.0		37.8
Change Period (Y+Rc), s	3.5	4.9		4.9	3.5	4.9		4.9
Max Green Setting (Gmax), s	10.5	41.1		55.1	10.5	41.1		55.1
Max Q Clear Time (g_c+I1), s	9.5	10.2		29.2	4.1	8.5		19.9
Green Ext Time (p_c), s	0.0	2.3		3.8	0.0	2.3		3.9

Intersection Summary	
HCM 2010 Ctrl Delay	30.5
HCM 2010 LOS	C

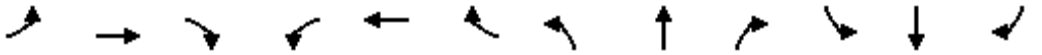
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	26	38	62	110	61	162	53	1382	90	94	1078	56
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1824	1863	1863	1863	1863	1863	1863	1863	1824
Adj Flow Rate, veh/h	26	38	32	111	62	28	54	1396	77	95	1089	54
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	49	65	40	168	83	396	136	2063	921	119	2775	137
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.08	0.58	0.58	0.07	0.56	0.56
Sat Flow, veh/h	55	260	158	486	329	1576	1774	3539	1581	1774	4962	246
Grp Volume(v), veh/h	96	0	0	173	0	28	54	1396	77	95	744	399
Grp Sat Flow(s),veh/h/ln	473	0	0	814	0	1576	1774	1770	1581	1774	1695	1818
Q Serve(g_s), s	2.3	0.0	0.0	0.0	0.0	1.8	3.8	35.3	2.8	6.9	16.1	16.1
Cycle Q Clear(g_c), s	30.5	0.0	0.0	28.2	0.0	1.8	3.8	35.3	2.8	6.9	16.1	16.1
Prop In Lane	0.27		0.33	0.64		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	154	0	0	250	0	396	136	2063	921	119	1896	1016
V/C Ratio(X)	0.62	0.00	0.00	0.69	0.00	0.07	0.40	0.68	0.08	0.80	0.39	0.39
Avail Cap(c_a), veh/h	169	0	0	265	0	412	143	2063	921	198	1896	1016
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.46	0.46	0.46
Uniform Delay (d), s/veh	42.9	0.0	0.0	46.3	0.0	37.1	57.1	18.7	11.9	59.8	16.2	16.2
Incr Delay (d2), s/veh	3.9	0.0	0.0	5.6	0.0	0.0	0.7	1.8	0.2	2.2	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	0.0	0.0	6.4	0.0	0.8	1.9	17.8	1.3	3.4	7.6	8.2
LnGrp Delay(d),s/veh	46.7	0.0	0.0	51.9	0.0	37.1	57.8	20.5	12.1	62.0	16.5	16.7
LnGrp LOS	D			D		D	E	C	B	E	B	B
Approach Vol, veh/h		96			201			1527			1238	
Approach Delay, s/veh		46.7			49.8			21.4			20.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	81.1		36.7	15.3	78.0		36.7
Change Period (Y+Rc), s	3.5	5.3		4.0	5.3	* 5.3		4.0
Max Green Setting (Gmax), s	14.5	68.7		34.0	10.5	* 73		34.0
Max Q Clear Time (g_c+I1), s	8.9	37.3		32.5	5.8	18.1		30.2
Green Ext Time (p_c), s	0.0	18.5		0.2	0.1	15.5		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	23.5
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



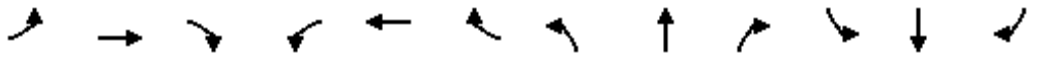
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	538	59	130	616	284	156	1155	127	169	807	97
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1788	1863	1863	1788	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	179	566	13	137	648	59	164	1216	125	178	849	90
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	933	396	160	856	364	395	1853	190	205	1283	135
Arrive On Green	0.11	0.26	0.26	0.18	0.48	0.48	0.22	0.40	0.40	0.04	0.09	0.09
Sat Flow, veh/h	1774	3539	1503	1774	3539	1505	1774	4684	481	1774	4671	493
Grp Volume(v), veh/h	179	566	13	137	648	59	164	880	461	178	615	324
Grp Sat Flow(s),veh/h/ln	1774	1770	1503	1774	1770	1505	1774	1695	1775	1774	1695	1773
Q Serve(g_s), s	13.0	18.2	0.8	9.7	19.4	1.7	10.3	27.5	27.6	13.0	22.8	23.0
Cycle Q Clear(g_c), s	13.0	18.2	0.8	9.7	19.4	1.7	10.3	27.5	27.6	13.0	22.8	23.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.28
Lane Grp Cap(c), veh/h	198	933	396	160	856	364	395	1341	702	205	931	487
V/C Ratio(X)	0.90	0.61	0.03	0.86	0.76	0.16	0.42	0.66	0.66	0.87	0.66	0.66
Avail Cap(c_a), veh/h	198	988	420	217	1026	436	395	1341	702	280	931	487
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.09	0.09	0.09	0.62	0.62	0.62	0.95	0.95	0.95	0.75	0.75	0.75
Uniform Delay (d), s/veh	57.1	42.0	35.6	52.5	30.4	9.4	43.3	32.1	32.1	61.5	53.3	53.3
Incr Delay (d2), s/veh	5.7	0.1	0.0	11.6	2.1	0.2	0.2	2.4	4.5	12.0	2.8	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.7	8.9	0.3	5.2	9.6	0.7	5.1	13.3	14.3	7.1	11.1	12.0
LnGrp Delay(d),s/veh	62.7	42.1	35.6	64.1	32.5	9.6	43.5	34.5	36.6	73.5	56.0	58.6
LnGrp LOS	E	D	D	E	C	A	D	C	D	E	E	E
Approach Vol, veh/h		758			844			1505			1117	
Approach Delay, s/veh		46.8			36.0			36.1			59.6	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	56.7	18.0	36.8	34.2	41.0	15.2	39.6
Change Period (Y+Rc), s	3.5	5.3	3.5	5.3	5.3	* 5.3	3.5	5.3
Max Green Setting (Gmax), s	20.5	39.7	14.5	37.7	24.5	* 36	15.9	36.3
Max Q Clear Time (g_c+I1), s	15.0	29.6	15.0	21.4	12.3	25.0	11.7	20.2
Green Ext Time (p_c), s	0.1	7.3	0.0	9.9	5.3	5.7	0.0	9.8

Intersection Summary	
HCM 2010 Ctrl Delay	44.2
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



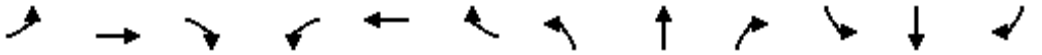
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	437	48	85	529	181	132	1474	126	201	1171	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1824	1863	1863	1824	1863	1863	1824	1863	1863	1863
Adj Flow Rate, veh/h	116	460	51	89	557	191	139	1552	133	212	1233	125
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	864	95	118	637	218	196	1953	167	237	1481	656
Arrive On Green	0.08	0.26	0.26	0.02	0.08	0.08	0.11	0.41	0.41	0.13	0.42	0.42
Sat Flow, veh/h	1774	3342	369	1774	2586	884	1774	4771	409	1774	3539	1567
Grp Volume(v), veh/h	116	252	259	89	381	367	139	1103	582	212	1233	125
Grp Sat Flow(s),veh/h/ln	1774	1840	1871	1774	1770	1700	1774	1695	1789	1774	1770	1567
Q Serve(g_s), s	8.4	15.3	15.5	6.5	27.6	27.8	9.8	37.0	37.1	15.3	40.4	4.9
Cycle Q Clear(g_c), s	8.4	15.3	15.5	6.5	27.6	27.8	9.8	37.0	37.1	15.3	40.4	4.9
Prop In Lane	1.00		0.20	1.00		0.52	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	140	476	484	118	436	419	196	1388	732	237	1481	656
V/C Ratio(X)	0.83	0.53	0.53	0.75	0.87	0.88	0.71	0.79	0.80	0.90	0.83	0.19
Avail Cap(c_a), veh/h	171	504	512	135	449	432	196	1388	732	280	1481	656
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	0.85	0.85	0.85	0.45	0.45	0.45	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.0	41.4	41.5	62.5	57.7	57.8	55.8	33.6	33.6	55.4	33.7	13.4
Incr Delay (d2), s/veh	19.0	0.8	0.9	13.2	14.6	15.6	4.6	2.2	4.1	24.0	5.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.9	7.9	8.1	3.6	15.3	14.9	5.1	17.7	19.1	9.1	20.9	2.2
LnGrp Delay(d),s/veh	78.0	42.3	42.3	75.8	72.3	73.4	60.4	35.8	37.8	79.5	39.4	14.0
LnGrp LOS	E	D	D	E	E	E	E	D	D	E	D	B
Approach Vol, veh/h		627			837			1824			1570	
Approach Delay, s/veh		48.9			73.1			38.3			42.8	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.8	58.5	12.1	38.5	19.7	59.7	13.7	36.9
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	5.3	* 5.3	3.5	4.9
Max Green Setting (Gmax), s	20.5	46.8	9.9	35.6	12.9	* 54	12.5	33.0
Max Q Clear Time (g_c+I1), s	17.3	39.1	8.5	17.5	11.8	42.4	10.4	29.8
Green Ext Time (p_c), s	0.1	6.6	0.0	7.2	0.1	8.5	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	47.1
HCM 2010 LOS	D

Notes

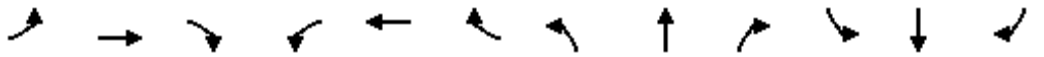
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	96	590	106	62	612	132	154	1255	104	135	952	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1824	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	100	615	110	65	638	138	160	1307	108	141	992	156
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	827	148	111	776	168	185	2088	173	165	1885	296
Arrive On Green	0.09	0.37	0.37	0.13	0.54	0.54	0.10	0.44	0.44	0.09	0.43	0.43
Sat Flow, veh/h	1774	3001	536	1774	2885	623	1774	4787	396	1774	4430	695
Grp Volume(v), veh/h	100	362	363	65	391	385	160	926	489	141	759	389
Grp Sat Flow(s),veh/h/ln	1774	1770	1768	1774	1770	1739	1774	1695	1792	1774	1695	1734
Q Serve(g_s), s	7.2	23.2	23.3	4.5	23.8	23.9	11.5	27.5	27.5	10.2	21.5	21.6
Cycle Q Clear(g_c), s	7.2	23.2	23.3	4.5	23.8	23.9	11.5	27.5	27.5	10.2	21.5	21.6
Prop In Lane	1.00		0.30	1.00		0.36	1.00		0.22	1.00		0.40
Lane Grp Cap(c), veh/h	123	488	487	111	476	468	185	1479	782	165	1442	738
V/C Ratio(X)	0.82	0.74	0.75	0.59	0.82	0.82	0.87	0.63	0.63	0.85	0.53	0.53
Avail Cap(c_a), veh/h	225	573	572	184	532	523	212	1479	782	198	1442	738
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.62	0.62	0.62	0.89	0.89	0.89	0.63	0.63	0.63	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.2	37.2	37.2	55.3	27.4	27.4	57.3	28.4	28.4	58.1	27.6	27.7
Incr Delay (d2), s/veh	3.1	3.1	3.2	1.6	8.7	9.0	17.2	1.3	2.4	22.2	1.4	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	11.6	11.8	2.3	12.7	12.5	6.5	13.1	14.1	6.0	10.3	10.9
LnGrp Delay(d),s/veh	61.3	40.3	40.4	56.9	36.1	36.5	74.5	29.7	30.8	80.2	29.0	30.4
LnGrp LOS	E	D	D	E	D	D	E	C	C	F	C	C
Approach Vol, veh/h		825			841			1575			1289	
Approach Delay, s/veh		42.9			37.9			34.6			35.0	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	62.0	11.6	40.7	17.0	60.6	12.5	39.9
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	3.5	4.9
Max Green Setting (Gmax), s	14.5	42.7	13.5	42.1	15.5	41.7	16.5	39.1
Max Q Clear Time (g_c+I1), s	12.2	29.5	6.5	25.3	13.5	23.6	9.2	25.9
Green Ext Time (p_c), s	0.0	12.3	0.0	10.6	0.0	16.5	0.0	8.9

Intersection Summary	
HCM 2010 Ctrl Delay	36.8
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	49	725	20	68	637	99	29	538	119	134	351	79
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	51	755	21	71	664	103	30	560	124	140	366	82
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	1428	40	84	1286	199	356	846	713	221	846	713
Arrive On Green	0.03	0.41	0.40	0.05	0.42	0.41	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1774	3516	98	1774	3061	474	937	1863	1569	754	1863	1569
Grp Volume(v), veh/h	51	380	396	71	384	383	30	560	124	140	366	82
Grp Sat Flow(s),veh/h/ln	1774	1770	1844	1774	1770	1765	937	1863	1569	754	1863	1569
Q Serve(g_s), s	3.7	21.1	21.1	5.2	20.9	21.0	2.9	30.5	6.1	23.1	17.3	3.9
Cycle Q Clear(g_c), s	3.7	21.1	21.1	5.2	20.9	21.0	20.3	30.5	6.1	53.6	17.3	3.9
Prop In Lane	1.00		0.05	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	719	749	84	744	742	356	846	713	221	846	713
V/C Ratio(X)	0.87	0.53	0.53	0.85	0.52	0.52	0.08	0.66	0.17	0.63	0.43	0.12
Avail Cap(c_a), veh/h	131	719	749	164	744	742	392	917	772	250	917	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.46	0.46	0.46	1.00	1.00	1.00	1.00	1.00	1.00	0.87	0.87	0.87
Uniform Delay (d), s/veh	62.5	29.2	29.2	61.5	27.9	28.0	31.0	27.7	21.0	48.6	24.1	20.4
Incr Delay (d2), s/veh	6.5	1.3	1.2	8.6	2.5	2.6	0.0	1.2	0.0	2.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.9	10.6	11.0	2.7	10.6	10.8	0.8	16.0	2.7	5.0	9.0	1.7
LnGrp Delay(d),s/veh	69.0	30.5	30.4	70.1	30.4	30.6	31.0	28.8	21.1	50.9	24.2	20.4
LnGrp LOS	E	C	C	E	C	C	C	C	C	D	C	C
Approach Vol, veh/h		827			838			714			588	
Approach Delay, s/veh		32.8			33.9			27.6			30.0	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		63.1	8.3	58.6		63.1	10.1	56.8
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		63.1	10.1	43.5		63.1	12.5	41.1
Max Q Clear Time (g_c+I1), s		32.5	5.7	23.0		55.6	7.2	23.1
Green Ext Time (p_c), s		3.8	0.0	5.2		2.5	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.3
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	53	95	65	894	844	67
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	56	100	68	941	888	71
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	223	199	83	2274	1637	131
Arrive On Green	0.13	0.13	0.05	0.64	0.49	0.49
Sat Flow, veh/h	1774	1583	1774	3632	3413	265
Grp Volume(v), veh/h	56	100	68	941	473	486
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1816
Q Serve(g_s), s	1.1	2.3	1.5	5.0	7.2	7.2
Cycle Q Clear(g_c), s	1.1	2.3	1.5	5.0	7.2	7.2
Prop In Lane	1.00	1.00	1.00			0.15
Lane Grp Cap(c), veh/h	223	199	83	2274	872	895
V/C Ratio(X)	0.25	0.50	0.82	0.41	0.54	0.54
Avail Cap(c_a), veh/h	1278	1141	228	3006	1093	1122
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	15.9	18.4	3.4	6.8	6.8
Incr Delay (d2), s/veh	0.6	2.0	17.6	0.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.6	2.1	1.1	2.4	3.5	3.6
LnGrp Delay(d),s/veh	15.9	17.8	36.0	3.5	7.3	7.3
LnGrp LOS	B	B	D	A	A	A
Approach Vol, veh/h	156			1009	959	
Approach Delay, s/veh	17.1			5.7	7.3	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		30.0		8.9	5.8	24.2		
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0		
Max Green Setting (Gmax), s		33.0		28.0	5.0	24.0		
Max Q Clear Time (g_c+I1), s		7.0		4.3	3.5	9.2		
Green Ext Time (p_c), s		14.4		0.4	0.0	10.0		

Intersection Summary	
HCM 2010 Ctrl Delay	7.3
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	21	40	1023	45	66	818
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	22	43	1088	48	70	870
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	37	72	2388	105	74	2831
Arrive On Green	0.07	0.07	0.69	0.68	0.04	0.80
Sat Flow, veh/h	549	1072	3546	152	1774	3632
Grp Volume(v), veh/h	66	0	557	579	70	870
Grp Sat Flow(s),veh/h/ln	1646	0	1770	1836	1774	1770
Q Serve(g_s), s	2.3	0.0	8.5	8.5	2.4	3.9
Cycle Q Clear(g_c), s	2.3	0.0	8.5	8.5	2.4	3.9
Prop In Lane	0.33	0.65		0.08	1.00	
Lane Grp Cap(c), veh/h	110	0	1224	1269	74	2831
V/C Ratio(X)	0.60	0.00	0.46	0.46	0.94	0.31
Avail Cap(c_a), veh/h	466	0	1224	1269	237	2831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.60	0.60	0.89	0.89
Uniform Delay (d), s/veh	27.2	0.0	4.2	4.2	28.7	1.6
Incr Delay (d2), s/veh	2.0	0.0	0.7	0.7	17.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	0.0	4.3	4.4	1.5	1.9
LnGrp Delay(d),s/veh	29.2	0.0	4.9	4.9	45.7	1.8
LnGrp LOS	C		A	A	D	A
Approach Vol, veh/h	66		1136			940
Approach Delay, s/veh	29.2		4.9			5.1
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.5	45.5				52.0		8.0
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	22.1				34.1		17.0
Max Q Clear Time (g_c+I1), s	4.4	10.5				5.9		4.3
Green Ext Time (p_c), s	0.0	5.4				7.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	5.7
HCM 2010 LOS	A

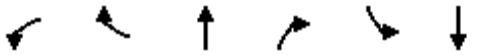
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	600	90	60	540	100	90	580	80	130	430	80
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	62	625	94	62	562	104	94	604	83	135	448	83
Adj No. of Lanes	1	2	0	1	2	0	0	2	0	0	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	899	135	123	953	176	125	842	122	151	524	101
Arrive On Green	0.04	0.29	0.29	0.07	0.32	0.31	0.10	0.10	0.10	0.14	0.14	0.14
Sat Flow, veh/h	1774	3076	462	1774	2973	548	418	2808	405	699	2434	471
Grp Volume(v), veh/h	62	359	360	62	334	332	414	0	367	353	0	313
Grp Sat Flow(s),veh/h/ln	1774	1770	1768	1774	1770	1751	1842	0	1789	1828	0	1776
Q Serve(g_s), s	4.5	23.4	23.5	4.4	20.5	20.7	28.5	0.0	25.7	24.7	0.0	22.2
Cycle Q Clear(g_c), s	4.5	23.4	23.5	4.4	20.5	20.7	28.5	0.0	25.7	24.7	0.0	22.2
Prop In Lane	1.00		0.26	1.00		0.31	0.23		0.23	0.38		0.27
Lane Grp Cap(c), veh/h	73	517	517	123	567	561	553	0	537	394	0	383
V/C Ratio(X)	0.85	0.69	0.70	0.50	0.59	0.59	0.75	0.00	0.68	0.90	0.00	0.82
Avail Cap(c_a), veh/h	123	517	517	123	567	561	553	0	537	408	0	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.67	0.67	0.67
Upstream Filter(I)	0.42	0.42	0.42	0.40	0.40	0.40	0.81	0.00	0.81	0.43	0.00	0.43
Uniform Delay (d), s/veh	61.9	40.8	41.0	58.4	37.0	37.2	53.8	0.0	52.6	54.2	0.0	53.2
Incr Delay (d2), s/veh	5.0	3.2	3.3	5.8	1.8	1.8	7.4	0.0	5.6	10.5	0.0	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.3	11.9	12.0	2.4	10.3	10.3	15.7	0.0	13.6	13.6	0.0	11.5
LnGrp Delay(d),s/veh	66.9	44.1	44.3	64.2	38.8	39.0	61.2	0.0	58.2	64.7	0.0	58.5
LnGrp LOS	E	D	D	E	D	D	E		E	E		E
Approach Vol, veh/h		781			728			781			666	
Approach Delay, s/veh		46.0			41.1			59.8			61.7	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		43.0	9.3	45.7		32.0	13.0	42.0
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		38.1	9.5	36.1		28.1	9.5	36.1
Max Q Clear Time (g_c+I1), s		30.5	6.5	22.7		26.7	6.4	25.5
Green Ext Time (p_c), s		1.9	0.0	4.0		0.4	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	52.0
HCM 2010 LOS	D



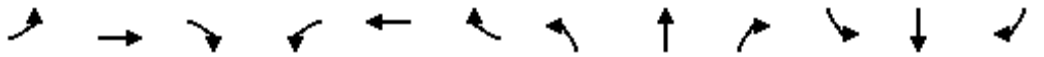
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	60	60	1280	80	50	1100
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	67	67	1422	89	56	1222
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	95	95	2556	159	65	2913
Arrive On Green	0.12	0.12	0.76	0.75	0.04	0.82
Sat Flow, veh/h	822	822	3477	211	1774	3632
Grp Volume(v), veh/h	135	0	742	769	56	1222
Grp Sat Flow(s),veh/h/ln	1656	0	1770	1825	1774	1770
Q Serve(g_s), s	10.2	0.0	22.9	23.2	4.1	12.1
Cycle Q Clear(g_c), s	10.2	0.0	22.9	23.2	4.1	12.1
Prop In Lane	0.50	0.50		0.12	1.00	
Lane Grp Cap(c), veh/h	191	0	1337	1379	65	2913
V/C Ratio(X)	0.71	0.00	0.55	0.56	0.86	0.42
Avail Cap(c_a), veh/h	408	0	1337	1379	109	2913
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.09	0.09	0.38	0.38
Uniform Delay (d), s/veh	55.4	0.0	6.7	6.7	62.3	3.1
Incr Delay (d2), s/veh	1.8	0.0	0.2	0.1	6.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.8	0.0	11.2	11.6	2.1	5.8
LnGrp Delay(d),s/veh	57.2	0.0	6.8	6.9	68.3	3.3
LnGrp LOS	E		A	A	E	A
Approach Vol, veh/h	135		1511			1278
Approach Delay, s/veh	57.2		6.9			6.1
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.8	102.2				111.0		19.0
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	77.1				89.1		32.0
Max Q Clear Time (g_c+I1), s	6.1	25.2				14.1		12.2
Green Ext Time (p_c), s	0.0	14.7				15.3		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	8.9
HCM 2010 LOS	A

Notes

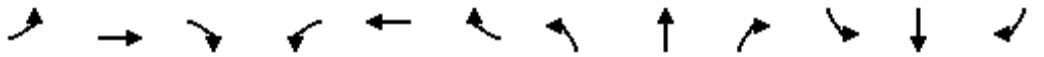
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	18	11	27	29	8	42	23	1108	41	32	766	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	20	12	30	33	9	47	26	1245	46	36	861	29
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	83	121	174	56	129	33	1726	64	43	1752	59
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.02	0.50	0.50	0.02	0.50	0.50
Sat Flow, veh/h	295	536	779	382	361	832	1774	3481	129	1774	3494	118
Grp Volume(v), veh/h	62	0	0	89	0	0	26	632	659	36	436	454
Grp Sat Flow(s),veh/h/ln	1611	0	0	1575	0	0	1774	1770	1840	1774	1770	1842
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.6	12.1	12.1	0.9	7.0	7.0
Cycle Q Clear(g_c), s	1.4	0.0	0.0	2.0	0.0	0.0	0.6	12.1	12.1	0.9	7.0	7.0
Prop In Lane	0.32		0.48	0.37		0.53	1.00		0.07	1.00		0.06
Lane Grp Cap(c), veh/h	360	0	0	359	0	0	33	877	912	43	888	924
V/C Ratio(X)	0.17	0.00	0.00	0.25	0.00	0.00	0.79	0.72	0.72	0.83	0.49	0.49
Avail Cap(c_a), veh/h	1121	0	0	1107	0	0	206	944	982	206	944	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	0.0	0.0	16.2	0.0	0.0	21.1	8.5	8.5	20.9	7.1	7.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.0	32.5	2.5	2.4	31.5	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.0	0.0	1.0	0.0	0.0	0.6	6.4	6.7	0.8	3.5	3.6
LnGrp Delay(d),s/veh	16.2	0.0	0.0	16.6	0.0	0.0	53.6	11.0	11.0	52.5	7.5	7.5
LnGrp LOS	B			B			D	B	B	D	A	A
Approach Vol, veh/h		62			89			1317			926	
Approach Delay, s/veh		16.2			16.6			11.8			9.3	
Approach LOS		B			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	26.4		11.7	4.8	26.6		11.7
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	23.0		28.0	5.0	23.0		28.0
Max Q Clear Time (g_c+I1), s	2.9	14.1		3.4	2.6	9.0		4.0
Green Ext Time (p_c), s	0.0	7.3		0.8	0.0	10.6		0.8

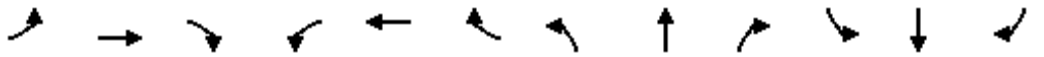
Intersection Summary	
HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	10	40	61	15	40	72	1120	120	41	744	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	7	11	42	64	16	42	76	1179	126	43	783	11
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	62	175	213	57	81	96	1688	180	51	1778	25
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.05	0.52	0.52	0.03	0.50	0.50
Sat Flow, veh/h	84	405	1140	633	373	528	1774	3227	344	1774	3573	50
Grp Volume(v), veh/h	60	0	0	122	0	0	76	645	660	43	388	406
Grp Sat Flow(s),veh/h/ln	1629	0	0	1535	0	0	1774	1770	1802	1774	1770	1854
Q Serve(g_s), s	0.0	0.0	0.0	1.8	0.0	0.0	2.0	13.0	13.1	1.1	6.7	6.7
Cycle Q Clear(g_c), s	1.5	0.0	0.0	3.3	0.0	0.0	2.0	13.0	13.1	1.1	6.7	6.7
Prop In Lane	0.12		0.70	0.52		0.34	1.00		0.19	1.00		0.03
Lane Grp Cap(c), veh/h	334	0	0	351	0	0	96	926	943	51	881	923
V/C Ratio(X)	0.18	0.00	0.00	0.35	0.00	0.00	0.79	0.70	0.70	0.84	0.44	0.44
Avail Cap(c_a), veh/h	1030	0	0	995	0	0	336	1044	1063	187	895	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	0.0	0.0	18.4	0.0	0.0	22.2	8.5	8.5	22.9	7.7	7.7
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.6	0.0	0.0	13.4	1.8	1.8	29.0	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.0	0.0	1.5	0.0	0.0	1.3	6.7	6.9	1.0	3.3	3.5
LnGrp Delay(d),s/veh	17.9	0.0	0.0	18.9	0.0	0.0	35.6	10.3	10.3	52.0	8.0	8.0
LnGrp LOS	B			B			D	B	B	D	A	A
Approach Vol, veh/h		60			122			1381			837	
Approach Delay, s/veh		17.9			18.9			11.7			10.3	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.4	29.8		12.3	6.6	28.6		12.3
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	28.0		28.0	9.0	24.0		28.0
Max Q Clear Time (g_c+I1), s	3.1	15.1		3.5	4.0	8.7		5.3
Green Ext Time (p_c), s	0.0	9.8		1.0	0.1	11.2		1.0

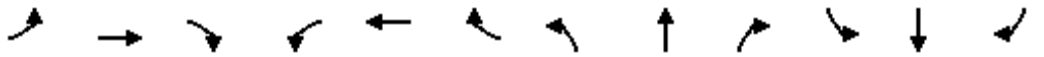
Intersection Summary	
HCM 2010 Ctrl Delay	11.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	87	471	4	12	399	63	9	5	42	128	5	123
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	92	496	4	13	420	66	9	5	44	135	5	129
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	285	1071	9	267	1054	460	84	30	928	101	2	928
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	899	3597	29	888	3539	1546	0	50	1578	0	3	1578
Grp Volume(v), veh/h	92	244	256	13	420	66	14	0	44	140	0	129
Grp Sat Flow(s),veh/h/ln	899	1770	1857	888	1770	1546	50	0	1578	3	0	1578
Q Serve(g_s), s	6.4	7.9	7.9	0.8	6.6	2.2	0.0	0.0	0.8	0.0	0.0	2.6
Cycle Q Clear(g_c), s	13.0	7.9	7.9	8.7	6.6	2.2	41.2	0.0	0.8	41.2	0.0	2.6
Prop In Lane	1.00		0.02	1.00		1.00	0.64		1.00	0.96		1.00
Lane Grp Cap(c), veh/h	285	527	553	267	1054	460	114	0	928	103	0	928
V/C Ratio(X)	0.32	0.46	0.46	0.05	0.40	0.14	0.12	0.00	0.05	1.36	0.00	0.14
Avail Cap(c_a), veh/h	429	809	849	409	1618	707	114	0	928	103	0	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	0.77	0.77	0.77	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.8	20.0	20.0	23.6	19.6	18.0	17.4	0.0	6.1	34.2	0.0	6.5
Incr Delay (d2), s/veh	0.5	0.5	0.5	0.1	0.2	0.1	2.2	0.0	0.1	212.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	3.9	4.1	0.2	3.2	0.9	0.2	0.0	0.4	8.0	0.0	1.2
LnGrp Delay(d),s/veh	25.3	20.5	20.5	23.6	19.8	18.1	19.6	0.0	6.2	246.2	0.0	6.8
LnGrp LOS	C	C	C	C	B	B	B		A	F		A
Approach Vol, veh/h		592			499			58			269	
Approach Delay, s/veh		21.3			19.7			9.5			131.4	
Approach LOS		C			B			A			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		45.2		24.8		45.2		24.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		30.0		32.0		30.0		32.0
Max Q Clear Time (g_c+I1), s		43.2		15.0		43.2		10.7
Green Ext Time (p_c), s		0.0		5.9		0.0		6.4

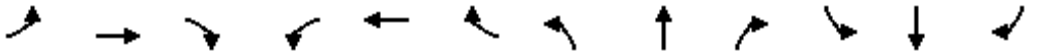
Intersection Summary	
HCM 2010 Ctrl Delay	41.1
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	54	286	38	98	330	81	63	477	139	53	431	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	55	292	39	100	337	83	64	487	142	54	440	82
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	686	91	203	616	150	75	1750	507	62	1906	353
Arrive On Green	0.22	0.22	0.21	0.22	0.22	0.21	0.04	0.65	0.64	0.04	0.64	0.63
Sat Flow, veh/h	959	3139	415	1040	2818	684	1774	2707	784	1774	2981	552
Grp Volume(v), veh/h	55	163	168	100	210	210	64	317	312	54	260	262
Grp Sat Flow(s),veh/h/ln	959	1770	1784	1040	1770	1733	1774	1770	1722	1774	1770	1764
Q Serve(g_s), s	6.5	9.5	9.7	11.0	12.6	13.0	4.3	9.3	9.5	3.6	7.5	7.6
Cycle Q Clear(g_c), s	19.5	9.5	9.7	20.8	12.6	13.0	4.3	9.3	9.5	3.6	7.5	7.6
Prop In Lane	1.00		0.23	1.00		0.39	1.00		0.46	1.00		0.31
Lane Grp Cap(c), veh/h	166	387	390	203	387	379	75	1144	1113	62	1131	1127
V/C Ratio(X)	0.33	0.42	0.43	0.49	0.54	0.56	0.85	0.28	0.28	0.87	0.23	0.23
Avail Cap(c_a), veh/h	244	531	535	287	531	520	163	1144	1113	163	1131	1127
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	0.91	0.91	0.91	0.80	0.80	0.80	0.62	0.62	0.62
Uniform Delay (d), s/veh	50.4	40.4	40.5	49.4	41.6	41.8	57.1	9.1	9.3	57.6	9.2	9.2
Incr Delay (d2), s/veh	0.4	0.2	0.2	0.6	0.4	0.4	8.0	0.5	0.5	8.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	4.7	4.8	3.2	6.2	6.2	2.3	4.6	4.6	1.9	3.7	3.8
LnGrp Delay(d),s/veh	50.7	40.6	40.7	50.0	42.0	42.2	65.1	9.6	9.8	65.7	9.4	9.5
LnGrp LOS	D	D	D	D	D	D	E	A	A	E	A	A
Approach Vol, veh/h		386			520			693			576	
Approach Delay, s/veh		42.1			43.6			14.8			14.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	81.6		30.2	9.1	80.7		30.2
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	11.5	60.1		35.4	11.5	60.1		35.4
Max Q Clear Time (g_c+I1), s	5.6	11.5		21.5	6.3	9.6		22.8
Green Ext Time (p_c), s	0.0	4.7		3.0	0.0	4.7		2.9

Intersection Summary		
HCM 2010 Ctrl Delay		26.5
HCM 2010 LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	161	899	7	10	946	131	2	2	5	76	1	155
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	169	946	7	11	996	138	2	2	5	80	1	163
Adj No. of Lanes	1	2	0	1	3	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	2327	17	6	2769	824	45	31	384	60	0	384
Arrive On Green	0.21	1.00	1.00	0.00	0.54	0.54	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3600	27	1774	5085	1514	0	124	1538	0	2	1538
Grp Volume(v), veh/h	169	465	488	11	996	138	4	0	5	81	0	163
Grp Sat Flow(s),veh/h/ln	1774	1770	1857	1774	1695	1514	124	0	1538	2	0	1538
Q Serve(g_s), s	11.1	0.0	0.0	0.4	13.3	5.5	0.0	0.0	0.3	0.0	0.0	10.7
Cycle Q Clear(g_c), s	11.1	0.0	0.0	0.4	13.3	5.5	30.0	0.0	0.3	30.0	0.0	10.7
Prop In Lane	1.00		0.01	1.00		1.00	0.50		1.00	0.99		1.00
Lane Grp Cap(c), veh/h	187	1144	1200	6	2769	824	76	0	384	60	0	384
V/C Ratio(X)	0.90	0.41	0.41	1.77	0.36	0.17	0.05	0.00	0.01	1.35	0.00	0.42
Avail Cap(c_a), veh/h	251	1144	1200	148	2769	824	76	0	384	60	0	384
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.46	0.46	0.46	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.8	0.0	0.0	59.8	15.5	13.7	37.1	0.0	33.9	59.8	0.0	37.8
Incr Delay (d2), s/veh	21.8	1.0	0.9	368.6	0.2	0.2	0.1	0.0	0.0	234.9	0.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	116.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.6	0.3	0.3	0.8	6.2	2.3	0.1	0.0	0.1	5.9	0.0	4.9
LnGrp Delay(d),s/veh	68.6	1.0	0.9	544.9	15.6	13.9	37.2	0.0	33.9	294.7	0.0	41.2
LnGrp LOS	E	A	A	F	B	B	D		C	F		D
Approach Vol, veh/h		1122			1145			9			244	
Approach Delay, s/veh		11.1			20.5			35.3			125.3	
Approach LOS		B			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	4.4	81.6		34.0	16.7	69.3
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	17.5	60.4
Max Q Clear Time (g_c+I1), s		32.0	2.4	2.0		32.0	13.1	15.3
Green Ext Time (p_c), s		0.0	0.0	31.8		0.0	0.1	26.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	761	263	178	787	120	245	423	195	92	377	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	181	810	280	189	837	128	261	450	207	98	401	117
Adj No. of Lanes	1	2	0	1	3	0	2	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	323	1068	369	211	1516	230	304	620	282	115	650	187
Arrive On Green	0.06	0.14	0.13	0.04	0.11	0.11	0.09	0.27	0.26	0.06	0.24	0.24
Sat Flow, veh/h	1774	2566	886	1774	4437	674	3442	2325	1058	1774	2677	770
Grp Volume(v), veh/h	181	558	532	189	638	327	261	341	316	98	263	255
Grp Sat Flow(s),veh/h/ln	1774	1770	1682	1774	1695	1721	1721	1770	1614	1774	1770	1677
Q Serve(g_s), s	11.9	36.5	36.5	12.7	21.4	21.6	9.0	21.0	21.4	6.6	15.9	16.3
Cycle Q Clear(g_c), s	11.9	36.5	36.5	12.7	21.4	21.6	9.0	21.0	21.4	6.6	15.9	16.3
Prop In Lane	1.00		0.53	1.00		0.39	1.00		0.66	1.00		0.46
Lane Grp Cap(c), veh/h	323	737	700	211	1158	588	304	472	430	115	430	407
V/C Ratio(X)	0.56	0.76	0.76	0.90	0.55	0.56	0.86	0.72	0.73	0.85	0.61	0.63
Avail Cap(c_a), veh/h	323	737	700	296	1158	588	430	472	430	177	430	407
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.93	0.93	0.93	0.94	0.94	0.94	0.99	0.99	0.99
Uniform Delay (d), s/veh	51.7	45.9	46.0	56.9	44.5	44.7	53.9	40.0	40.4	55.6	40.4	40.8
Incr Delay (d2), s/veh	1.2	6.5	6.9	16.8	1.8	3.5	8.2	8.7	10.0	13.3	6.3	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.0	19.2	18.4	7.3	10.3	10.9	4.6	11.4	10.8	3.6	8.5	8.4
LnGrp Delay(d),s/veh	52.9	52.5	52.9	73.7	46.3	48.2	62.1	48.7	50.4	68.9	46.7	47.8
LnGrp LOS	D	D	D	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1271			1154			918			616	
Approach Delay, s/veh		52.7			51.3			53.1			50.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	36.0	18.3	54.0	14.6	33.1	27.2	45.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	12.5	31.1	20.5	39.1	15.5	28.1	19.5	* 40
Max Q Clear Time (g_c+I1), s	8.6	23.4	14.7	38.5	11.0	18.3	13.9	23.6
Green Ext Time (p_c), s	0.0	2.4	0.1	0.4	0.1	2.8	0.5	6.9

Intersection Summary	
HCM 2010 Ctrl Delay	52.1
HCM 2010 LOS	D

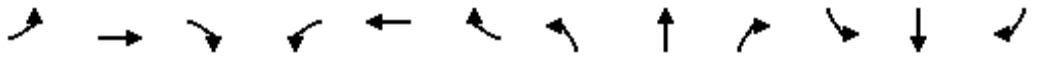
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	196	597	173	166	663	119	312	1053	165	151	993	147
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	209	635	37	177	705	24	332	1120	160	161	1056	141
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	249	971	407	221	942	394	370	2180	311	201	1978	264
Arrive On Green	0.14	0.54	0.54	0.02	0.09	0.09	0.21	0.96	0.94	0.11	0.86	0.84
Sat Flow, veh/h	3510	3610	1514	3510	3610	1511	3510	4565	652	3510	4608	614
Grp Volume(v), veh/h	209	635	37	177	705	24	332	848	432	161	792	405
Grp Sat Flow(s),veh/h/ln	1755	1805	1514	1755	1805	1511	1755	1729	1759	1755	1729	1764
Q Serve(g_s), s	7.0	15.1	1.4	6.0	22.9	1.8	11.0	2.6	2.9	5.4	7.2	7.4
Cycle Q Clear(g_c), s	7.0	15.1	1.4	6.0	22.9	1.8	11.0	2.6	2.9	5.4	7.2	7.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.37	1.00		0.35
Lane Grp Cap(c), veh/h	249	971	407	221	942	394	370	1651	840	201	1485	757
V/C Ratio(X)	0.84	0.65	0.09	0.80	0.75	0.06	0.90	0.51	0.51	0.80	0.53	0.53
Avail Cap(c_a), veh/h	380	993	416	380	993	416	468	1651	840	322	1485	757
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.92	0.92	0.92	0.93	0.93	0.93	0.91	0.91	0.91	0.90	0.90	0.90
Uniform Delay (d), s/veh	50.8	23.8	20.6	58.0	51.0	41.3	46.7	1.5	1.7	52.5	5.3	5.6
Incr Delay (d2), s/veh	5.5	1.1	0.0	2.4	2.4	0.0	13.8	1.0	2.0	2.6	1.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	7.5	0.6	3.0	11.8	0.7	6.1	1.2	1.5	2.7	3.3	3.9
LnGrp Delay(d),s/veh	56.3	24.8	20.6	60.4	53.4	41.3	60.5	2.5	3.7	55.0	6.6	8.0
LnGrp LOS	E	C	C	E	D	D	E	A	A	E	A	A
Approach Vol, veh/h		881			906			1612			1358	
Approach Delay, s/veh		32.1			54.5			14.8			12.7	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	61.3	11.6	36.3	16.6	55.5	12.5	35.3
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	11.5	46.1	13.5	32.4	16.5	41.1	13.5	32.4
Max Q Clear Time (g_c+I1), s	7.4	4.9	8.0	17.1	13.0	9.4	9.0	24.9
Green Ext Time (p_c), s	0.0	16.1	0.1	5.7	0.1	14.6	0.1	3.8

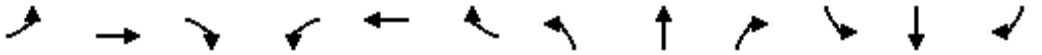
Intersection Summary	
HCM 2010 Ctrl Delay	25.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	104	771	58	47	817	129	74	395	61	110	410	97
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	107	795	60	48	842	133	76	407	63	113	423	100
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	1702	128	54	1442	228	90	771	118	132	781	183
Arrive On Green	0.14	1.00	1.00	0.03	0.47	0.47	0.02	0.08	0.08	0.02	0.09	0.09
Sat Flow, veh/h	1774	3334	252	1774	3059	483	1774	3069	472	1774	2839	665
Grp Volume(v), veh/h	107	422	433	48	487	488	76	233	237	113	262	261
Grp Sat Flow(s),veh/h/ln	1774	1770	1816	1774	1770	1773	1774	1770	1771	1774	1770	1735
Q Serve(g_s), s	7.1	0.0	0.0	3.2	24.1	24.1	5.1	15.2	15.4	7.6	17.0	17.3
Cycle Q Clear(g_c), s	7.1	0.0	0.0	3.2	24.1	24.1	5.1	15.2	15.4	7.6	17.0	17.3
Prop In Lane	1.00		0.14	1.00		0.27	1.00		0.27	1.00		0.38
Lane Grp Cap(c), veh/h	123	903	927	54	834	836	90	445	445	132	487	477
V/C Ratio(X)	0.87	0.47	0.47	0.88	0.58	0.58	0.85	0.52	0.53	0.86	0.54	0.55
Avail Cap(c_a), veh/h	177	903	927	148	834	836	148	445	445	192	487	477
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.95	0.95	0.95	0.60	0.60	0.60	0.98	0.98	0.98	0.95	0.95	0.95
Uniform Delay (d), s/veh	51.1	0.0	0.0	57.9	23.1	23.2	58.5	48.2	48.3	57.9	47.3	47.5
Incr Delay (d2), s/veh	18.6	1.6	1.6	10.0	1.8	1.8	10.1	4.3	4.4	15.3	4.0	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.1	0.4	0.4	1.7	12.2	12.2	2.8	8.0	8.1	4.3	8.9	8.9
LnGrp Delay(d),s/veh	69.7	1.6	1.6	67.9	24.9	25.0	68.6	52.5	52.7	73.2	51.3	51.7
LnGrp LOS	E	A	A	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		962			1023			546			636	
Approach Delay, s/veh		9.2			27.0			54.8			55.4	
Approach LOS		A			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	34.2	7.7	65.2	10.1	37.0	12.4	60.6
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	13.5	29.1	10.5	50.4	10.5	32.1	12.5	48.4
Max Q Clear Time (g_c+I1), s	9.6	17.4	5.2	2.0	7.1	19.3	9.1	26.1
Green Ext Time (p_c), s	0.0	5.6	0.0	23.1	0.0	6.0	0.0	14.8

Intersection Summary	
HCM 2010 Ctrl Delay	32.1
HCM 2010 LOS	C



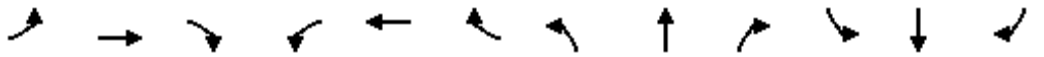
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	223	701	100	215	868	347	78	1201	134	200	1128	97
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	237	746	106	229	923	369	83	1278	143	213	1200	103
Adj No. of Lanes	1	3	0	1	3	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	1281	181	246	1031	411	98	1450	162	232	1847	158
Arrive On Green	0.14	0.28	0.28	0.14	0.29	0.28	0.06	0.31	0.30	0.13	0.39	0.38
Sat Flow, veh/h	1774	4502	635	1774	3556	1419	1774	4641	519	1774	4760	408
Grp Volume(v), veh/h	237	560	292	229	880	412	83	933	488	213	855	448
Grp Sat Flow(s),veh/h/ln	1774	1695	1747	1774	1695	1585	1774	1695	1770	1774	1695	1778
Q Serve(g_s), s	17.2	18.4	18.7	16.6	32.4	32.5	6.0	34.0	34.0	15.4	26.8	26.9
Cycle Q Clear(g_c), s	17.2	18.4	18.7	16.6	32.4	32.5	6.0	34.0	34.0	15.4	26.8	26.9
Prop In Lane	1.00		0.36	1.00		0.90	1.00		0.29	1.00		0.23
Lane Grp Cap(c), veh/h	256	965	497	246	982	459	98	1059	553	232	1315	690
V/C Ratio(X)	0.93	0.58	0.59	0.93	0.90	0.90	0.85	0.88	0.88	0.92	0.65	0.65
Avail Cap(c_a), veh/h	300	965	497	246	982	459	314	1059	553	287	1315	690
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	39.9	40.1	55.4	44.3	44.7	60.9	42.4	42.6	55.8	32.6	32.7
Incr Delay (d2), s/veh	29.1	2.5	5.0	38.8	12.4	22.9	7.4	10.5	18.1	26.8	2.5	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	10.5	9.0	9.7	10.8	16.8	17.1	3.2	17.4	19.4	9.3	13.0	14.1
LnGrp Delay(d),s/veh	84.1	42.4	45.1	94.2	56.7	67.6	68.3	52.9	60.7	82.6	35.1	37.4
LnGrp LOS	F	D	D	F	E	E	E	D	E	F	D	D
Approach Vol, veh/h		1089			1521			1504			1516	
Approach Delay, s/veh		52.2			65.3			56.3			42.4	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	44.6	22.7	41.7	11.2	54.4	23.4	41.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	21.5	36.7	22.5	32.1	23.5	34.7	18.5	* 36
Max Q Clear Time (g_c+I1), s	17.4	36.0	19.2	34.5	8.0	28.9	18.6	20.7
Green Ext Time (p_c), s	0.1	0.7	0.1	0.0	0.0	5.6	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	54.2
HCM 2010 LOS	D

Notes

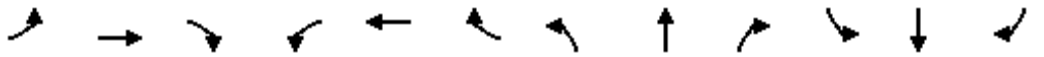
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	39	867	8	11	589	107	0	1	6	88	0	17
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	41	922	9	12	627	114	0	1	6	94	0	18
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	654	2983	29	557	2485	451	0	24	142	173	1	23
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.10	0.10	0.10	0.00	0.10
Sat Flow, veh/h	714	3591	35	598	2992	543	0	230	1380	1147	14	222
Grp Volume(v), veh/h	41	454	477	12	370	371	0	0	7	112	0	0
Grp Sat Flow(s),veh/h/ln	714	1770	1856	598	1770	1765	0	0	1610	1383	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	9.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	9.6	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.31	0.00		0.86	0.84		0.16
Lane Grp Cap(c), veh/h	654	1470	1542	557	1470	1466	0	0	165	197	0	0
V/C Ratio(X)	0.06	0.31	0.31	0.02	0.25	0.25	0.00	0.00	0.04	0.57	0.00	0.00
Avail Cap(c_a), veh/h	654	1470	1542	557	1470	1466	0	0	483	478	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.94	0.94	0.94	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.5	52.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.5	0.5	0.1	0.4	0.4	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.0	0.2	3.7	0.0	0.0
LnGrp Delay(d),s/veh	0.2	0.5	0.5	0.1	0.4	0.4	0.0	0.0	48.6	53.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A			D	D		
Approach Vol, veh/h		972			753			7			112	
Approach Delay, s/veh		0.5			0.4			48.6			53.7	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		16.3		103.7		16.3		103.7
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		36.0		74.7		36.0		74.7
Max Q Clear Time (g_c+I1), s		11.6		2.0		2.5		2.0
Green Ext Time (p_c), s		0.4		29.7		0.5		29.7

Intersection Summary	
HCM 2010 Ctrl Delay	3.9
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	29	933	73	127	868	81	51	27	87	57	20	49
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.95		0.95	0.96		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	30	962	75	131	895	84	53	28	90	59	21	51
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	38	2031	158	136	2178	204	285	82	263	245	102	247
Arrive On Green	0.02	0.61	0.61	0.15	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3322	259	1774	3266	307	1263	373	1197	1218	463	1125
Grp Volume(v), veh/h	30	512	525	131	485	494	53	0	118	59	0	72
Grp Sat Flow(s),veh/h/ln	1774	1770	1812	1774	1770	1803	1263	0	1570	1218	0	1588
Q Serve(g_s), s	2.2	20.6	20.6	9.5	0.0	0.0	4.7	0.0	8.2	5.6	0.0	4.8
Cycle Q Clear(g_c), s	2.2	20.6	20.6	9.5	0.0	0.0	9.5	0.0	8.2	13.8	0.0	4.8
Prop In Lane	1.00		0.14	1.00		0.17	1.00		0.76	1.00		0.71
Lane Grp Cap(c), veh/h	38	1082	1108	136	1180	1202	285	0	344	245	0	348
V/C Ratio(X)	0.78	0.47	0.47	0.96	0.41	0.41	0.19	0.00	0.34	0.24	0.00	0.21
Avail Cap(c_a), veh/h	136	1082	1108	136	1180	1202	329	0	399	287	0	403
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.51	0.51	0.82	0.82	0.82	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.3	13.8	13.8	54.8	0.0	0.0	45.4	0.0	42.8	48.7	0.0	41.5
Incr Delay (d2), s/veh	6.5	0.8	0.7	57.4	0.9	0.9	0.1	0.0	0.2	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	10.2	10.4	6.8	0.3	0.3	1.6	0.0	3.6	1.9	0.0	2.1
LnGrp Delay(d),s/veh	69.8	14.6	14.6	112.2	0.9	0.9	45.5	0.0	43.1	48.9	0.0	41.6
LnGrp LOS	E	B	B	F	A	A	D		D	D		D
Approach Vol, veh/h		1067			1110			171			131	
Approach Delay, s/veh		16.1			14.0			43.8			44.9	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	83.5		32.5	6.8	90.7		32.5
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	10.5	74.4		33.0	10.5	74.4		33.0
Max Q Clear Time (g_c+I1), s	11.5	22.6		15.8	4.2	2.0		11.5
Green Ext Time (p_c), s	0.0	30.5		0.9	0.0	36.1		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	159	863	122	163	732	206	146	678	122	141	605	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.86	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	166	899	127	170	762	215	152	706	127	147	630	94
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	1521	617	189	1534	623	177	721	130	166	693	103
Arrive On Green	0.21	0.86	0.85	0.11	0.43	0.43	0.10	0.25	0.24	0.09	0.23	0.22
Sat Flow, veh/h	1774	3539	1460	1774	3539	1461	1774	2916	524	1774	3012	448
Grp Volume(v), veh/h	166	899	127	170	762	215	152	428	405	147	369	355
Grp Sat Flow(s),veh/h/ln	1774	1770	1460	1774	1770	1461	1774	1770	1670	1774	1770	1690
Q Serve(g_s), s	11.9	9.4	1.5	12.3	20.2	12.9	11.0	31.2	31.3	10.6	26.4	26.6
Cycle Q Clear(g_c), s	11.9	9.4	1.5	12.3	20.2	12.9	11.0	31.2	31.3	10.6	26.4	26.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.31	1.00		0.26
Lane Grp Cap(c), veh/h	183	1521	617	189	1534	623	177	438	413	166	407	389
V/C Ratio(X)	0.91	0.59	0.21	0.90	0.50	0.35	0.86	0.98	0.98	0.89	0.91	0.91
Avail Cap(c_a), veh/h	205	1521	617	246	1534	623	246	438	413	232	422	403
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	0.94	0.94	0.94	0.87	0.87	0.87
Uniform Delay (d), s/veh	51.0	5.9	2.8	57.4	26.6	25.1	57.6	48.6	48.7	58.3	48.7	48.9
Incr Delay (d2), s/veh	32.6	1.5	0.7	24.3	1.2	1.5	14.1	35.6	37.4	18.0	19.6	21.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.5	4.6	0.7	7.3	10.1	5.4	6.1	19.6	18.7	6.1	15.1	14.7
LnGrp Delay(d),s/veh	83.6	7.4	3.5	81.7	27.8	26.6	71.7	84.2	86.1	76.3	68.3	70.1
LnGrp LOS	F	A	A	F	C	C	E	F	F	E	E	E
Approach Vol, veh/h		1192			1147			985			871	
Approach Delay, s/veh		17.6			35.5			83.1			70.4	
Approach LOS		B			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	36.2	17.8	59.9	18.4	33.9	17.4	60.3
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	4.9	* 4.9	3.5	4.9
Max Green Setting (Gmax), s	17.5	31.1	18.5	46.1	18.5	* 30	15.5	49.1
Max Q Clear Time (g_c+I1), s	12.6	33.3	14.3	11.4	13.0	28.6	13.9	22.2
Green Ext Time (p_c), s	0.0	0.0	0.1	22.8	0.6	0.4	0.0	19.1

Intersection Summary	
HCM 2010 Ctrl Delay	48.8
HCM 2010 LOS	D

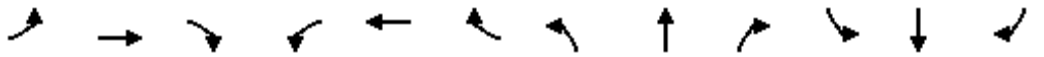
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	793	36	66	889	49	32	57	44	43	56	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.96		0.95	0.96		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	32	844	38	70	946	52	34	61	47	46	60	38
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	2212	100	82	2266	125	142	237	318	120	151	83
Arrive On Green	0.02	0.64	0.64	0.09	1.00	1.00	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1774	3448	155	1774	3410	187	477	1117	1498	380	709	390
Grp Volume(v), veh/h	32	433	449	70	491	507	95	0	47	144	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1834	1774	1770	1828	1594	0	1498	1479	0	0
Q Serve(g_s), s	2.2	13.9	14.0	4.7	0.0	0.0	0.0	0.0	3.1	5.1	0.0	0.0
Cycle Q Clear(g_c), s	2.2	13.9	14.0	4.7	0.0	0.0	5.5	0.0	3.1	10.6	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.10	0.36		1.00	0.32		0.26
Lane Grp Cap(c), veh/h	41	1135	1177	82	1176	1215	379	0	318	354	0	0
V/C Ratio(X)	0.78	0.38	0.38	0.86	0.42	0.42	0.25	0.00	0.15	0.41	0.00	0.00
Avail Cap(c_a), veh/h	148	1135	1177	148	1176	1215	439	0	375	411	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	0.74	0.74	0.74	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.3	10.2	10.2	54.1	0.0	0.0	39.3	0.0	38.4	41.3	0.0	0.0
Incr Delay (d2), s/veh	7.4	0.6	0.6	7.0	0.8	0.8	0.1	0.0	0.1	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	6.9	7.2	2.5	0.3	0.3	2.7	0.0	1.3	4.2	0.0	0.0
LnGrp Delay(d),s/veh	65.7	10.8	10.8	61.0	0.8	0.8	39.4	0.0	38.5	41.5	0.0	0.0
LnGrp LOS	E	B	B	E	A	A	D		D	D		
Approach Vol, veh/h		914			1068			142			144	
Approach Delay, s/veh		12.8			4.7			39.1			41.5	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.5	9.5	81.0		29.5	6.8	83.7
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	10.5	67.4
Max Q Clear Time (g_c+I1), s		7.5	6.7	16.0		12.6	4.2	2.0
Green Ext Time (p_c), s		1.1	0.0	24.5		1.0	0.0	26.9

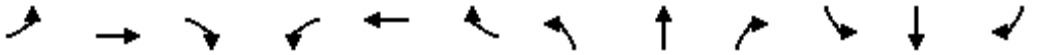
Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	975	32	150	618	96	34	17	258	87	15	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	8	1060	35	163	672	104	37	18	280	95	16	5
Adj No. of Lanes	1	2	1	2	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	0	0	0	0	0	0
Cap, veh/h	18	1977	882	228	1890	292	359	166	569	322	52	14
Arrive On Green	0.02	1.00	1.00	0.13	1.00	1.00	0.30	0.30	0.29	0.30	0.30	0.29
Sat Flow, veh/h	1774	3539	1578	3442	3073	475	1029	552	1603	892	172	48
Grp Volume(v), veh/h	8	1060	35	163	387	389	55	0	280	116	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1578	1721	1770	1778	1581	0	1603	1112	0	0
Q Serve(g_s), s	0.5	0.0	0.0	5.4	0.0	0.0	0.0	0.0	16.4	8.7	0.0	0.0
Cycle Q Clear(g_c), s	0.5	0.0	0.0	5.4	0.0	0.0	2.7	0.0	16.4	11.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.27	0.67		1.00	0.82		0.04
Lane Grp Cap(c), veh/h	18	1977	882	228	1088	1094	524	0	569	388	0	0
V/C Ratio(X)	0.45	0.54	0.04	0.71	0.36	0.36	0.10	0.00	0.49	0.30	0.00	0.00
Avail Cap(c_a), veh/h	163	1977	882	315	1088	1094	524	0	569	388	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.85	0.85	0.85	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.5	0.0	0.0	50.9	0.0	0.0	30.3	0.0	30.3	34.1	0.0	0.0
Incr Delay (d2), s/veh	6.0	1.0	0.1	1.8	0.8	0.8	0.4	0.0	3.0	2.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.3	0.3	0.0	2.6	0.2	0.2	1.4	0.0	7.7	3.3	0.0	0.0
LnGrp Delay(d),s/veh	64.5	1.0	0.1	52.8	0.8	0.8	30.7	0.0	33.3	36.1	0.0	0.0
LnGrp LOS	E	A	A	D	A	A	C		C	D		
Approach Vol, veh/h		1103			939			335			116	
Approach Delay, s/veh		1.4			9.8			32.9			36.1	
Approach LOS		A			A			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		39.0	11.0	70.0		39.0	4.2	76.8
Change Period (Y+Rc), s		4.9	3.5	5.3		4.9	3.5	5.3
Max Green Setting (Gmax), s		34.1	10.5	61.7		34.1	10.5	61.7
Max Q Clear Time (g_c+I1), s		18.4	7.4	2.0		13.4	2.5	2.0
Green Ext Time (p_c), s		0.9	0.1	30.7		0.9	0.0	30.7

Intersection Summary	
HCM 2010 Ctrl Delay	10.4
HCM 2010 LOS	B



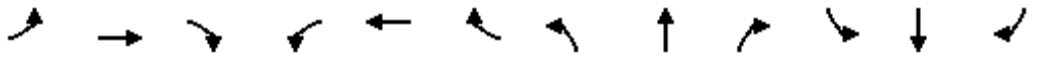
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	202	1068	132	182	690	423	159	620	621	282	761	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	213	1124	126	192	726	276	167	738	355	297	801	73
Adj No. of Lanes	2	3	0	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	1852	207	235	1298	576	296	1119	471	339	1117	495
Arrive On Green	0.18	0.80	0.78	0.07	0.37	0.37	0.08	0.30	0.30	0.10	0.32	0.32
Sat Flow, veh/h	3442	4637	519	3442	3539	1570	3548	3725	1568	3442	3539	1568
Grp Volume(v), veh/h	213	822	428	192	726	276	167	738	355	297	801	73
Grp Sat Flow(s),veh/h/ln	1721	1695	1766	1721	1770	1570	1774	1863	1568	1721	1770	1568
Q Serve(g_s), s	7.0	11.4	11.6	6.6	19.6	11.6	5.4	20.7	24.6	10.2	24.0	2.9
Cycle Q Clear(g_c), s	7.0	11.4	11.6	6.6	19.6	11.6	5.4	20.7	24.6	10.2	24.0	2.9
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	1354	706	235	1298	576	296	1119	471	339	1117	495
V/C Ratio(X)	0.69	0.61	0.61	0.82	0.56	0.48	0.56	0.66	0.75	0.88	0.72	0.15
Avail Cap(c_a), veh/h	308	1354	706	402	1298	576	296	1119	471	402	1180	523
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	47.7	8.4	8.6	55.2	30.3	14.9	52.9	36.6	38.0	53.4	36.3	15.4
Incr Delay (d2), s/veh	4.6	1.7	3.2	2.6	1.7	2.8	7.6	3.1	10.7	14.3	2.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.5	5.3	5.9	3.2	9.9	5.5	3.0	11.1	12.0	5.5	12.0	1.3
LnGrp Delay(d),s/veh	52.3	10.1	11.8	57.8	32.0	17.8	60.5	39.7	48.6	67.7	38.5	15.6
LnGrp LOS	D	B	B	E	C	B	E	D	D	E	D	B
Approach Vol, veh/h		1463			1194			1260			1171	
Approach Delay, s/veh		16.8			32.9			45.0			44.5	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	40.0	12.2	51.9	14.0	41.9	16.1	48.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	14.5	34.7	14.5	39.1	10.5	38.7	10.5	* 43
Max Q Clear Time (g_c+I1), s	12.2	26.6	8.6	13.6	7.4	26.0	9.0	21.6
Green Ext Time (p_c), s	0.1	7.1	0.1	11.9	0.1	10.5	0.2	7.9

Intersection Summary	
HCM 2010 Ctrl Delay	33.9
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	23	821	12	35	472	91	12	0	39	64	0	17
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	25	892	13	38	513	99	13	0	42	70	0	18
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	635	2553	37	443	2116	407	64	0	345	64	0	345
Arrive On Green	0.71	0.71	0.70	1.00	1.00	1.00	0.22	0.00	0.22	0.22	0.00	0.22
Sat Flow, veh/h	805	3571	52	613	2960	569	19	0	1581	19	0	1581
Grp Volume(v), veh/h	25	442	463	38	306	306	13	0	42	70	0	18
Grp Sat Flow(s),veh/h/ln	805	1770	1853	613	1770	1760	19	0	1581	19	0	1581
Q Serve(g_s), s	1.1	11.4	11.4	1.0	0.0	0.0	0.4	0.0	2.6	0.4	0.0	1.1
Cycle Q Clear(g_c), s	1.1	11.4	11.4	11.8	0.0	0.0	26.2	0.0	2.6	26.2	0.0	1.1
Prop In Lane	1.00		0.03	1.00		0.32	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	635	1265	1325	443	1265	1258	64	0	345	64	0	345
V/C Ratio(X)	0.04	0.35	0.35	0.09	0.24	0.24	0.20	0.00	0.12	1.09	0.00	0.05
Avail Cap(c_a), veh/h	635	1265	1325	443	1265	1258	177	0	474	175	0	474
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	0.60	0.96	0.96	0.96	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.0	6.5	6.5	0.7	0.0	0.0	59.9	0.0	37.7	60.0	0.0	37.1
Incr Delay (d2), s/veh	0.1	0.5	0.4	0.4	0.4	0.4	0.6	0.0	0.1	59.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.3	5.7	6.0	0.2	0.2	0.2	0.4	0.0	1.1	3.2	0.0	0.5
LnGrp Delay(d),s/veh	5.1	7.0	6.9	1.1	0.4	0.4	60.5	0.0	37.7	121.3	0.0	37.1
LnGrp LOS	A	A	A	A	A	A	E		D	F		D
Approach Vol, veh/h		930			650			55			88	
Approach Delay, s/veh		6.9			0.5			43.1			104.1	
Approach LOS		A			A			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.5		89.5		30.5		89.5
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		36.0		74.7		36.0		74.7
Max Q Clear Time (g_c+I1), s		28.2		13.4		28.2		13.8
Green Ext Time (p_c), s		0.2		24.3		0.2		24.2

Intersection Summary	
HCM 2010 Ctrl Delay	10.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	133	881	24	34	967	80	23	3	15	84	1	116
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	139	918	25	35	1007	83	24	3	16	88	1	121
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	2052	56	132	2760	227	175	30	94	363	3	357
Arrive On Green	0.09	0.58	0.58	0.15	1.00	1.00	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1774	3517	96	1774	4780	393	550	130	403	1359	13	1532
Grp Volume(v), veh/h	139	462	481	35	714	376	43	0	0	88	0	122
Grp Sat Flow(s),veh/h/ln	1774	1770	1843	1774	1695	1783	1084	0	0	1359	0	1545
Q Serve(g_s), s	9.3	17.7	17.7	2.1	0.0	0.0	1.2	0.0	0.0	0.0	0.0	7.9
Cycle Q Clear(g_c), s	9.3	17.7	17.7	2.1	0.0	0.0	9.1	0.0	0.0	7.5	0.0	7.9
Prop In Lane	1.00		0.05	1.00		0.22	0.56		0.37	1.00		0.99
Lane Grp Cap(c), veh/h	158	1032	1075	132	1958	1030	300	0	0	363	0	360
V/C Ratio(X)	0.88	0.45	0.45	0.27	0.36	0.37	0.14	0.00	0.00	0.24	0.00	0.34
Avail Cap(c_a), veh/h	177	1032	1075	148	1958	1030	300	0	0	363	0	360
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.49	0.49	0.49	0.94	0.94	0.94	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.0	14.1	14.1	48.2	0.0	0.0	38.0	0.0	0.0	38.1	0.0	38.3
Incr Delay (d2), s/veh	18.1	0.7	0.7	0.4	0.5	0.9	0.1	0.0	0.0	1.6	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.4	8.8	9.2	1.0	0.1	0.3	1.2	0.0	0.0	2.6	0.0	3.6
LnGrp Delay(d),s/veh	72.1	14.8	14.8	48.6	0.5	0.9	38.1	0.0	0.0	39.7	0.0	40.8
LnGrp LOS	E	B	B	D	A	A	D			D		D
Approach Vol, veh/h		1082			1125			43			210	
Approach Delay, s/veh		22.1			2.1			38.1			40.4	
Approach LOS		C			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.0	14.0	74.0		32.0	14.7	73.3
Change Period (Y+Rc), s		4.0	4.6	* 4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		28.0	10.5	* 69		28.0	12.5	67.4
Max Q Clear Time (g_c+I1), s		11.1	4.1	19.7		9.9	11.3	2.0
Green Ext Time (p_c), s		0.7	4.0	9.4		0.8	0.0	12.1

Intersection Summary	
HCM 2010 Ctrl Delay	14.8
HCM 2010 LOS	B

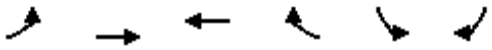
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1031	44	56	1105	79	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1541	1770	3539	1770	1514
Flt Permitted	1.00	1.00	0.18	1.00	0.95	1.00
Satd. Flow (perm)	3539	1541	334	3539	1770	1514
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	1063	45	58	1139	81	195
RTOR Reduction (vph)	0	10	0	0	0	177
Lane Group Flow (vph)	1063	35	58	1139	81	18
Confl. Peds. (#/hr)		2	2			10
Turn Type	NA	Perm	D.P+P	NA	Prot	Perm
Protected Phases	1		2 4	1 2 4	3	
Permitted Phases		1	1			3
Actuated Green, G (s)	63.0	63.0	90.6	100.4	10.4	10.4
Effective Green, g (s)	63.9	63.9	93.3	101.3	11.0	11.0
Actuated g/C Ratio	0.53	0.53	0.78	0.84	0.09	0.09
Clearance Time (s)	4.9	4.9			4.6	4.6
Vehicle Extension (s)	1.5	1.5			2.5	2.5
Lane Grp Cap (vph)	1884	820	611	2987	162	138
v/s Ratio Prot	c0.30		0.02	c0.32	c0.05	
v/s Ratio Perm		0.02	0.05			0.01
v/c Ratio	0.56	0.04	0.09	0.38	0.50	0.13
Uniform Delay, d1	18.7	13.4	5.2	2.1	51.9	50.1
Progression Factor	1.00	1.00	0.05	0.03	1.00	1.00
Incremental Delay, d2	1.2	0.1	0.0	0.0	1.8	0.3
Delay (s)	20.0	13.5	0.3	0.1	53.6	50.4
Level of Service	B	B	A	A	D	D
Approach Delay (s)	19.7			0.1	51.4	
Approach LOS	B			A	D	

Intersection Summary			
HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	47.9%	ICU Level of Service	A
Analysis Period (min)	15		

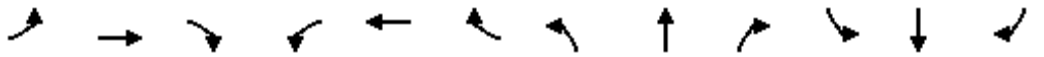
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	104	1118	1067	80	77	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.93	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1770	3539	3539	1541	1691	
Flt Permitted	0.17	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	319	3539	3539	1541	1691	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	106	1141	1089	82	79	87
RTOR Reduction (vph)	0	0	0	27	36	0
Lane Group Flow (vph)	106	1141	1089	55	130	0
Confl. Peds. (#/hr)	2			2	10	
Turn Type	D.P+P	NA	NA	Perm	Prot	
Protected Phases	2 3	1 2 3	1		4	
Permitted Phases	1			1		
Actuated Green, G (s)	87.1	92.0	63.0	63.0	18.5	
Effective Green, g (s)	85.2	89.2	63.9	63.9	19.1	
Actuated g/C Ratio	0.71	0.74	0.53	0.53	0.16	
Clearance Time (s)			4.9	4.9	4.6	
Vehicle Extension (s)			1.5	1.5	2.5	
Lane Grp Cap (vph)	484	2630	1884	820	269	
v/s Ratio Prot	0.04	c0.32	c0.31		c0.08	
v/s Ratio Perm	0.12			0.04		
v/c Ratio	0.22	0.43	0.58	0.07	0.48	
Uniform Delay, d1	8.0	5.8	18.9	13.6	46.0	
Progression Factor	1.02	0.17	0.38	0.54	1.00	
Incremental Delay, d2	0.1	0.1	1.1	0.1	1.0	
Delay (s)	8.3	1.1	8.2	7.5	46.9	
Level of Service	A	A	A	A	D	
Approach Delay (s)		1.7	8.2		46.9	
Approach LOS		A	A		D	

Intersection Summary			
HCM 2000 Control Delay	7.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	178	537	286	183	487	196	320	2575	23	175	2173	196
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	184	554	117	189	502	40	330	2655	23	180	2240	192
Adj No. of Lanes	1	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	648	290	212	587	262	456	3030	26	295	2432	208
Arrive On Green	0.13	0.18	0.18	0.12	0.17	0.17	0.18	0.61	0.61	0.03	0.13	0.13
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	6601	57	3442	6059	518
Grp Volume(v), veh/h	184	554	117	189	502	40	330	1932	746	180	1776	656
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	1602	1853	1721	1602	1771
Q Serve(g_s), s	14.1	21.2	6.7	14.7	19.3	2.4	12.7	47.1	47.2	7.2	51.1	51.3
Cycle Q Clear(g_c), s	14.1	21.2	6.7	14.7	19.3	2.4	12.7	47.1	47.2	7.2	51.1	51.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.29
Lane Grp Cap(c), veh/h	226	648	290	212	587	262	456	2206	850	295	1929	711
V/C Ratio(X)	0.81	0.85	0.40	0.89	0.86	0.15	0.72	0.88	0.88	0.61	0.92	0.92
Avail Cap(c_a), veh/h	228	751	336	215	726	325	456	2206	850	295	1929	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	0.33	0.33	0.33
Upstream Filter(I)	0.94	0.94	0.94	0.09	0.09	0.09	0.09	0.09	0.09	0.62	0.62	0.62
Uniform Delay (d), s/veh	59.5	55.4	27.0	60.8	56.8	32.5	55.2	23.9	23.9	65.7	58.5	58.6
Incr Delay (d2), s/veh	18.7	8.1	0.9	4.7	0.8	0.0	0.5	0.5	1.3	2.3	5.8	13.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.1	11.1	3.0	7.5	9.5	1.1	6.1	20.6	24.1	3.6	23.7	27.8
LnGrp Delay(d),s/veh	78.1	63.4	27.9	65.5	57.6	32.5	55.8	24.4	25.3	68.0	64.3	72.2
LnGrp LOS	E	E	C	E	E	C	E	C	C	E	E	E
Approach Vol, veh/h		855			731			3008			2612	
Approach Delay, s/veh		61.7			58.3			28.1			66.5	
Approach LOS		E			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	70.1	21.7	31.9	24.3	62.0	24.1	29.5
Change Period (Y+Rc), s	* 4.3	5.8	5.0	6.3	5.8	* 5.8	6.3	* 6.3
Max Green Setting (Gmax), s	* 12	59.9	17.0	29.7	15.7	* 56	18.0	* 29
Max Q Clear Time (g_c+I1), s	9.2	49.2	16.7	23.2	14.7	53.3	16.1	21.3
Green Ext Time (p_c), s	0.1	9.8	0.0	2.4	0.1	2.7	0.9	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	49.1
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

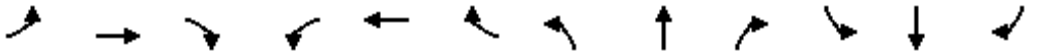
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	340	914	0	2602	2275	795
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	358	706	0	2739	2395	0
Adj No. of Lanes	2	2	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	361	293	0	5218	5218	1289
Arrive On Green	0.10	0.10	0.00	1.00	1.00	0.00
Sat Flow, veh/h	3442	2787	0	6929	6669	1583
Grp Volume(v), veh/h	358	706	0	2739	2395	0
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1602	1602	1583
Q Serve(g_s), s	14.5	14.7	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	14.5	14.7	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	361	293	0	5218	5218	1289
V/C Ratio(X)	0.99	2.41	0.00	0.52	0.46	0.00
Avail Cap(c_a), veh/h	361	293	0	5218	5218	1289
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	0.25	0.41	0.00
Uniform Delay (d), s/veh	62.6	62.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	44.7	646.1	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.2	37.0	0.0	0.0	0.0	0.0
LnGrp Delay(d),s/veh	107.3	708.8	0.0	0.1	0.1	0.0
LnGrp LOS	F	F		A	A	
Approach Vol, veh/h	1064			2739	2395	
Approach Delay, s/veh	506.4			0.1	0.1	
Approach LOS	F			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		120.0		20.0		120.0		
Change Period (Y+Rc), s		6.0		* 5.3		6.0		
Max Green Setting (Gmax), s		114.0		* 15		63.0		
Max Q Clear Time (g_c+I1), s		2.0		16.7		2.0		
Green Ext Time (p_c), s		66.3		0.0		37.0		

Intersection Summary	
HCM 2010 Ctrl Delay	87.0
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	358	753	273	154	543	183	392	1961	367	281	2243	677
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	369	776	209	159	560	34	404	2022	235	290	2312	646
Adj No. of Lanes	2	3	1	2	2	1	2	3	1	2	4	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	401	1087	595	319	665	297	558	2202	686	332	2343	1344
Arrive On Green	0.12	0.21	0.21	0.09	0.19	0.19	0.32	0.87	0.87	0.19	0.73	0.73
Sat Flow, veh/h	3442	5085	1583	3442	3539	1583	3442	5085	1583	3442	6408	2787
Grp Volume(v), veh/h	369	776	209	159	560	34	404	2022	235	290	2312	646
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1770	1583	1721	1695	1583	1721	1602	1393
Q Serve(g_s), s	14.9	19.8	2.8	6.2	21.4	2.0	14.5	36.4	4.0	11.5	48.7	0.0
Cycle Q Clear(g_c), s	14.9	19.8	2.8	6.2	21.4	2.0	14.5	36.4	4.0	11.5	48.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	401	1087	595	319	665	297	558	2202	686	332	2343	1344
V/C Ratio(X)	0.92	0.71	0.35	0.50	0.84	0.11	0.72	0.92	0.34	0.87	0.99	0.48
Avail Cap(c_a), veh/h	401	1362	681	347	910	407	558	2202	686	339	2343	1344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.53	0.53	0.53	0.45	0.45	0.45
Uniform Delay (d), s/veh	61.2	51.1	14.7	60.4	54.9	28.9	44.5	7.8	5.6	55.7	18.5	8.8
Incr Delay (d2), s/veh	26.3	1.3	0.4	1.2	5.3	0.2	2.5	4.4	0.7	11.0	9.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.5	9.4	3.8	3.0	11.0	0.9	7.0	16.2	1.8	5.9	22.1	3.1
LnGrp Delay(d),s/veh	87.5	52.4	15.1	61.6	60.2	29.1	47.0	12.1	6.3	66.7	28.2	9.4
LnGrp LOS	F	D	B	E	E	C	D	B	A	E	C	A
Approach Vol, veh/h		1354			753			2661			3248	
Approach Delay, s/veh		56.2			59.1			16.9			27.9	
Approach LOS		E			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	66.4	18.3	36.2	28.5	57.0	22.6	31.9
Change Period (Y+Rc), s	* 5.6	5.8	* 5.3	* 6.3	5.8	* 5.8	* 6.3	* 5.6
Max Green Setting (Gmax), s	* 14	51.6	* 14	* 38	14.2	* 51	* 16	* 36
Max Q Clear Time (g_c+I1), s	13.5	38.4	8.2	21.8	16.5	50.7	16.9	23.4
Green Ext Time (p_c), s	0.0	11.1	0.2	6.5	0.0	0.5	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	32.0
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

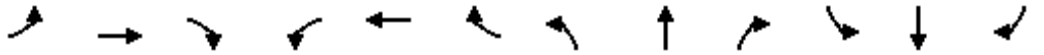
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	213	457	310	249	513	257	162	2405	379	196	1937	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	215	462	139	252	518	88	164	2429	345	198	1957	80
Adj No. of Lanes	1	2	1	1	2	1	1	4	1	1	4	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	231	591	264	248	651	291	187	2873	919	205	2919	119
Arrive On Green	0.13	0.17	0.17	0.14	0.18	0.18	0.21	0.90	0.88	0.12	0.46	0.45
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6408	1583	1774	6363	260
Grp Volume(v), veh/h	215	462	139	252	518	88	164	2429	345	198	1478	559
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1583	1774	1602	1817
Q Serve(g_s), s	16.8	17.5	8.8	19.6	19.6	6.7	12.5	22.7	1.7	15.6	33.7	33.7
Cycle Q Clear(g_c), s	16.8	17.5	8.8	19.6	19.6	6.7	12.5	22.7	1.7	15.6	33.7	33.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	231	591	264	248	651	291	187	2873	919	205	2205	834
V/C Ratio(X)	0.93	0.78	0.53	1.02	0.80	0.30	0.88	0.85	0.38	0.96	0.67	0.67
Avail Cap(c_a), veh/h	231	733	328	248	758	339	205	2873	919	205	2205	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	1.00	1.00	1.00	0.73	0.73	0.73	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.3	55.9	32.6	60.2	54.6	49.4	54.4	5.2	0.9	61.6	29.6	29.7
Incr Delay (d2), s/veh	35.1	4.1	1.9	61.4	5.7	0.8	22.7	2.4	0.9	52.2	1.6	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	10.5	8.9	4.0	13.8	10.1	3.0	7.3	9.2	0.8	10.6	15.3	17.9
LnGrp Delay(d),s/veh	95.4	60.0	34.4	121.7	60.3	50.2	77.1	7.6	1.8	113.8	31.2	34.0
LnGrp LOS	F	E	C	F	E	D	E	A	A	F	C	C
Approach Vol, veh/h		816			858			2938			2235	
Approach Delay, s/veh		65.0			77.3			10.8			39.2	
Approach LOS		E			E			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.6	66.8	25.0	27.7	19.1	68.2	22.3	30.3
Change Period (Y+Rc), s	* 4.6	5.3	* 5.6	* 5.3	* 4.6	5.3	* 4.3	* 5.6
Max Green Setting (Gmax), s	* 16	57.2	* 19	* 28	* 16	57.2	* 18	* 29
Max Q Clear Time (g_c+I1), s	17.6	24.7	21.6	19.5	14.5	35.7	18.8	21.6
Green Ext Time (p_c), s	0.0	32.4	0.0	2.9	0.0	21.5	0.0	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	34.9
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



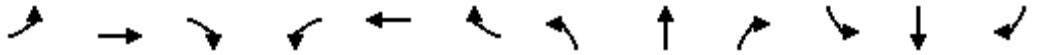
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	268	69	84	294	132	84	2801	103	137	2418	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	41	276	71	87	303	136	87	2888	106	141	2493	57
Adj No. of Lanes	1	2	1	1	2	1	1	4	0	1	4	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	411	184	135	453	203	159	3582	131	163	3618	894
Arrive On Green	0.07	0.12	0.12	0.08	0.13	0.13	0.18	1.00	1.00	0.18	1.00	1.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6394	234	1774	6408	1583
Grp Volume(v), veh/h	41	276	71	87	303	136	87	2167	827	141	2493	57
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1822	1774	1602	1583
Q Serve(g_s), s	3.1	10.5	5.8	6.7	11.4	11.5	6.2	0.0	0.0	10.8	0.0	0.0
Cycle Q Clear(g_c), s	3.1	10.5	5.8	6.7	11.4	11.5	6.2	0.0	0.0	10.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	121	411	184	135	453	203	159	2693	1021	163	3618	894
V/C Ratio(X)	0.34	0.67	0.39	0.65	0.67	0.67	0.55	0.80	0.81	0.86	0.69	0.06
Avail Cap(c_a), veh/h	152	715	320	153	733	328	165	2693	1021	215	3618	894
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.52	0.52	0.52	0.78	0.78	0.78	0.32	0.32	0.32	0.82	0.82	0.82
Uniform Delay (d), s/veh	62.2	59.3	57.2	62.9	58.2	58.2	54.9	0.0	0.0	56.3	0.0	0.0
Incr Delay (d2), s/veh	0.8	1.0	0.7	5.9	1.3	3.0	1.1	0.9	2.4	20.1	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	5.2	2.6	3.5	5.7	5.2	3.1	0.2	0.7	6.2	0.2	0.0
LnGrp Delay(d),s/veh	63.0	60.3	57.9	68.7	59.5	61.2	56.0	0.9	2.4	76.4	0.9	0.1
LnGrp LOS	E	E	E	E	E	E	E	A	A	E	A	A
Approach Vol, veh/h		388			526			3081			2691	
Approach Delay, s/veh		60.1			61.5			2.8			4.8	
Approach LOS		E			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	84.7	15.5	22.3	16.9	85.3	13.9	23.9
Change Period (Y+Rc), s	* 4.6	6.3	4.9	6.0	* 4.3	6.3	* 4.3	6.0
Max Green Setting (Gmax), s	* 17	60.8	12.1	28.3	* 13	65.1	* 12	29.0
Max Q Clear Time (g_c+I1), s	12.8	2.0	8.7	12.5	8.2	2.0	5.1	13.5
Green Ext Time (p_c), s	0.1	58.2	0.0	3.8	0.1	62.4	0.0	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	11.6
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	221	259	239	28	320	126	190	2264	32	187	2079	175
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	228	267	246	29	330	130	196	2334	33	193	2143	180
Adj No. of Lanes	1	2	0	1	1	1	1	4	0	1	4	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	446	397	94	359	305	177	2633	37	263	2746	230
Arrive On Green	0.11	0.25	0.25	0.05	0.19	0.19	0.10	0.40	0.40	0.30	0.90	0.90
Sat Flow, veh/h	1774	1774	1580	1774	1863	1583	1774	6560	93	1774	6070	509
Grp Volume(v), veh/h	228	266	247	29	330	130	196	1710	657	193	1696	627
Grp Sat Flow(s),veh/h/ln	1774	1770	1584	1774	1863	1583	1774	1602	1846	1774	1602	1773
Q Serve(g_s), s	16.0	18.6	19.3	2.2	24.3	10.1	14.0	46.3	46.3	13.7	16.0	16.1
Cycle Q Clear(g_c), s	16.0	18.6	19.3	2.2	24.3	10.1	14.0	46.3	46.3	13.7	16.0	16.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	1.00		0.29
Lane Grp Cap(c), veh/h	203	445	398	94	359	305	177	1929	741	263	2175	802
V/C Ratio(X)	1.12	0.60	0.62	0.31	0.92	0.43	1.10	0.89	0.89	0.73	0.78	0.78
Avail Cap(c_a), veh/h	203	445	398	139	386	328	177	1929	741	263	2175	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.76	0.76	0.76	1.00	1.00	1.00	0.75	0.75	0.75
Uniform Delay (d), s/veh	62.0	46.2	46.4	63.8	55.5	49.7	63.0	38.9	38.9	46.8	4.4	4.4
Incr Delay (d2), s/veh	100.7	2.2	2.9	1.4	21.3	0.7	98.4	6.5	14.7	7.8	2.2	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	13.5	9.4	8.7	1.1	14.7	4.5	11.7	21.6	26.6	7.2	6.7	8.2
LnGrp Delay(d),s/veh	162.7	48.4	49.4	65.2	76.8	50.4	161.4	45.4	53.7	54.5	6.6	10.1
LnGrp LOS	F	D	D	E	E	D	F	D	D	D	A	B
Approach Vol, veh/h		741			489			2563			2516	
Approach Delay, s/veh		83.9			69.1			56.4			11.1	
Approach LOS		F			E			E			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	61.5	12.3	40.1	18.9	68.6	20.9	31.6
Change Period (Y+Rc), s	5.3	* 5.3	4.9	* 4.9	4.9	5.3	4.9	* 4.6
Max Green Setting (Gmax), s	20.0	* 56	11.0	* 33	14.0	61.9	16.0	* 29
Max Q Clear Time (g_c+I1), s	15.7	48.3	4.2	21.3	16.0	18.1	18.0	26.3
Green Ext Time (p_c), s	3.6	6.9	0.0	2.9	0.0	27.6	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	42.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

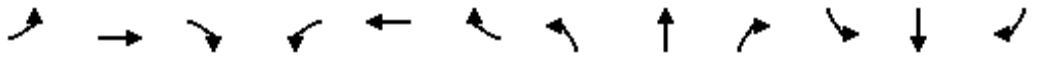
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	3	20	245	6	140	53	2412	88	263	2211	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	26	3	21	310	0	101	56	2566	94	280	2352	21
Adj No. of Lanes	1	1	0	2	0	1	1	4	0	2	4	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	15	104	329	0	147	124	2690	98	935	4142	37
Arrive On Green	0.07	0.07	0.07	0.09	0.00	0.09	0.14	0.84	0.84	0.54	1.00	1.00
Sat Flow, veh/h	1774	202	1412	3548	0	1583	1774	6394	234	3442	6599	59
Grp Volume(v), veh/h	26	0	24	310	0	101	56	1927	733	280	1713	660
Grp Sat Flow(s),veh/h/ln	1774	0	1614	1774	0	1583	1774	1602	1822	1721	1602	1852
Q Serve(g_s), s	1.9	0.0	2.0	12.2	0.0	8.7	4.1	45.0	45.7	6.2	0.0	0.0
Cycle Q Clear(g_c), s	1.9	0.0	2.0	12.2	0.0	8.7	4.1	45.0	45.7	6.2	0.0	0.0
Prop In Lane	1.00		0.88	1.00		1.00	1.00		0.13	1.00		0.03
Lane Grp Cap(c), veh/h	130	0	119	329	0	147	124	2022	766	935	3016	1163
V/C Ratio(X)	0.20	0.00	0.20	0.94	0.00	0.69	0.45	0.95	0.96	0.30	0.57	0.57
Avail Cap(c_a), veh/h	380	0	346	329	0	147	139	2022	766	935	3016	1163
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.31	0.31	0.31	0.63	0.63	0.63
Uniform Delay (d), s/veh	61.0	0.0	61.0	63.1	0.0	61.5	57.8	10.0	10.1	24.7	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.8	34.4	0.0	12.6	0.8	4.6	10.4	0.1	0.5	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.0	0.0	0.9	7.6	0.0	4.3	2.0	19.4	23.4	3.0	0.1	0.4
LnGrp Delay(d),s/veh	61.7	0.0	61.8	97.5	0.0	74.1	58.6	14.6	20.4	24.8	0.5	1.3
LnGrp LOS	E		E	F		E	E	B	C	C	A	A
Approach Vol, veh/h		50			411			2716			2653	
Approach Delay, s/veh		61.8			91.8			17.1			3.3	
Approach LOS		E			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	43.3	64.2		14.9	14.4	93.2		17.6
Change Period (Y+Rc), s	5.3	* 5.3		* 4.6	* 4.6	5.3		4.6
Max Green Setting (Gmax), s	19.0	* 59		* 30	* 11	66.9		13.0
Max Q Clear Time (g_c+I1), s	8.2	47.7		4.0	6.1	2.0		14.2
Green Ext Time (p_c), s	8.9	10.0		0.1	0.0	36.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	16.4
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



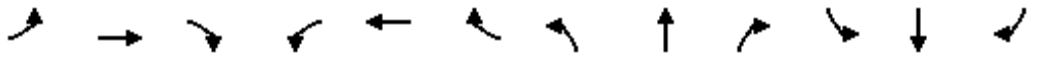
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	376	449	146	322	410	136	226	2471	338	190	2014	281
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	400	478	155	343	436	145	240	2629	360	202	2143	299
Adj No. of Lanes	2	2	0	2	2	0	2	4	0	2	4	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	456	536	173	391	491	162	289	2570	346	317	2635	366
Arrive On Green	0.13	0.20	0.20	0.11	0.19	0.19	0.03	0.15	0.15	0.09	0.46	0.46
Sat Flow, veh/h	3442	2634	849	3442	2617	863	3442	5757	775	3442	5732	796
Grp Volume(v), veh/h	400	320	313	343	293	288	240	2187	802	202	1795	647
Grp Sat Flow(s),veh/h/ln	1721	1770	1713	1721	1770	1711	1721	1602	1726	1721	1602	1722
Q Serve(g_s), s	16.0	24.6	24.9	13.7	22.6	23.0	9.7	62.5	62.5	7.9	45.1	45.5
Cycle Q Clear(g_c), s	16.0	24.6	24.9	13.7	22.6	23.0	9.7	62.5	62.5	7.9	45.1	45.5
Prop In Lane	1.00		0.50	1.00		0.50	1.00		0.45	1.00		0.46
Lane Grp Cap(c), veh/h	456	360	349	391	332	321	289	2145	771	317	2209	792
V/C Ratio(X)	0.88	0.89	0.90	0.88	0.88	0.90	0.83	1.02	1.04	0.64	0.81	0.82
Avail Cap(c_a), veh/h	460	379	367	418	367	354	295	2145	771	317	2209	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	0.75	0.75	0.75	0.79	0.79	0.79	0.35	0.35	0.35
Uniform Delay (d), s/veh	59.6	54.2	54.3	61.1	55.4	55.6	67.1	59.7	59.7	61.3	32.6	32.7
Incr Delay (d2), s/veh	10.8	13.7	15.2	14.1	16.3	18.4	14.5	22.3	40.1	1.5	1.2	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.3	13.5	13.3	7.3	12.6	12.5	5.2	32.2	38.5	3.8	20.2	22.3
LnGrp Delay(d),s/veh	70.4	67.9	69.5	75.2	71.7	74.0	81.5	82.0	99.8	62.8	33.8	36.1
LnGrp LOS	E	E	E	E	E	E	F	F	F	E	C	D
Approach Vol, veh/h		1033			924			3229			2644	
Approach Delay, s/veh		69.4			73.7			86.4			36.6	
Approach LOS		E			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	67.8	20.9	33.1	16.3	69.7	23.2	30.8
Change Period (Y+Rc), s	5.3	* 5.3	5.0	4.6	* 4.6	5.3	4.6	* 4.6
Max Green Setting (Gmax), s	11.0	* 63	17.0	30.0	* 12	61.5	18.7	* 29
Max Q Clear Time (g_c+I1), s	9.9	64.5	15.7	26.9	11.7	47.5	18.0	25.0
Green Ext Time (p_c), s	0.1	0.0	0.2	1.6	0.0	12.1	0.4	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	65.8
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.



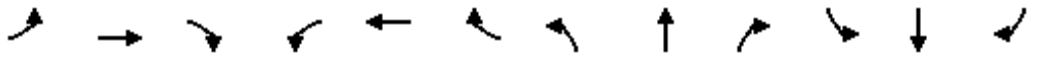
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	26	13	32	127	43	164	125	2465	81	268	2255	17
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	27	14	4	132	45	29	130	2568	81	279	2349	18
Adj No. of Lanes	1	1	0	1	1	1	1	4	0	2	4	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	108	31	158	206	175	127	3929	124	270	4071	31
Arrive On Green	0.06	0.08	0.08	0.09	0.11	0.11	0.14	1.00	1.00	0.16	1.00	1.00
Sat Flow, veh/h	1774	1394	398	1774	1863	1583	1774	6430	202	3442	6609	51
Grp Volume(v), veh/h	27	0	18	132	45	29	130	1918	731	279	1708	659
Grp Sat Flow(s),veh/h/ln	1774	0	1792	1774	1863	1583	1774	1602	1827	1721	1602	1854
Q Serve(g_s), s	2.0	0.0	1.3	10.3	3.1	2.3	10.0	0.0	0.0	11.0	0.0	0.0
Cycle Q Clear(g_c), s	2.0	0.0	1.3	10.3	3.1	2.3	10.0	0.0	0.0	11.0	0.0	0.0
Prop In Lane	1.00		0.22	1.00		1.00	1.00		0.11	1.00		0.03
Lane Grp Cap(c), veh/h	107	0	139	158	206	175	127	2937	1116	270	2961	1142
V/C Ratio(X)	0.25	0.00	0.13	0.84	0.22	0.17	1.03	0.65	0.65	1.03	0.58	0.58
Avail Cap(c_a), veh/h	165	0	397	219	464	395	127	2937	1116	270	2961	1142
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.54	0.54	0.54	0.42	0.42	0.42
Uniform Delay (d), s/veh	62.8	0.0	60.1	62.8	56.7	56.4	60.0	0.0	0.0	59.0	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.4	17.6	0.5	0.4	65.8	0.6	1.6	43.8	0.3	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.0	0.0	0.7	5.8	1.6	1.0	7.2	0.2	0.5	6.8	0.1	0.3
LnGrp Delay(d),s/veh	64.0	0.0	60.5	80.4	57.2	56.8	126.1	0.6	1.6	102.8	0.3	0.9
LnGrp LOS	E		E	F	E	E	F	A	A	F	A	A
Approach Vol, veh/h		45			206			2779			2646	
Approach Delay, s/veh		62.6			72.0			6.8			11.3	
Approach LOS		E			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	90.8	17.8	15.8	14.9	91.5	12.8	20.8
Change Period (Y+Rc), s	* 4.6	5.3	5.3	* 4.9	4.9	5.3	* 4.3	* 5.3
Max Green Setting (Gmax), s	* 11	61.6	17.3	* 31	10.0	62.3	* 13	* 35
Max Q Clear Time (g_c+I1), s	13.0	2.0	12.3	3.3	12.0	2.0	4.0	5.1
Green Ext Time (p_c), s	0.0	57.9	0.3	0.0	0.0	58.5	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	11.7
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	306	253	109	117	223	91	162	2404	123	124	2265	147
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	315	261	112	121	230	94	167	2478	127	128	2335	152
Adj No. of Lanes	2	2	0	1	2	0	1	4	0	1	4	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	345	144	144	290	115	443	3309	169	152	2213	144
Arrive On Green	0.18	0.24	0.24	0.08	0.12	0.12	0.25	0.53	0.53	0.03	0.12	0.12
Sat Flow, veh/h	3442	2436	1017	1774	2477	982	1774	6290	322	1774	6195	402
Grp Volume(v), veh/h	315	188	185	121	162	162	167	1892	713	128	1810	677
Grp Sat Flow(s),veh/h/ln	1721	1770	1683	1774	1770	1689	1774	1602	1806	1774	1602	1792
Q Serve(g_s), s	12.4	13.8	14.4	9.4	12.5	13.1	10.9	43.1	43.3	10.1	50.0	50.0
Cycle Q Clear(g_c), s	12.4	13.8	14.4	9.4	12.5	13.1	10.9	43.1	43.3	10.1	50.0	50.0
Prop In Lane	1.00		0.60	1.00		0.58	1.00		0.18	1.00		0.22
Lane Grp Cap(c), veh/h	365	251	239	144	207	198	443	2528	950	152	1716	640
V/C Ratio(X)	0.86	0.75	0.78	0.84	0.78	0.82	0.38	0.75	0.75	0.84	1.05	1.06
Avail Cap(c_a), veh/h	381	341	325	196	341	326	443	2528	950	167	1716	640
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.80	0.80	0.80	0.96	0.96	0.96	0.32	0.32	0.32	0.81	0.81	0.81
Uniform Delay (d), s/veh	56.6	51.1	51.4	63.4	60.1	60.3	43.5	25.9	26.0	67.1	61.8	61.8
Incr Delay (d2), s/veh	14.7	4.8	6.5	19.4	6.1	7.7	0.2	0.7	1.8	24.1	35.9	48.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.7	7.0	7.1	5.4	6.4	6.5	5.4	19.1	22.1	6.0	27.9	33.4
LnGrp Delay(d),s/veh	71.3	55.9	57.8	82.8	66.2	68.0	43.7	26.6	27.8	91.2	97.6	110.2
LnGrp LOS	E	E	E	F	E	E	D	C	C	F	F	F
Approach Vol, veh/h		688			445			2772			2615	
Approach Delay, s/veh		63.5			71.3			27.9			100.6	
Approach LOS		E			E			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	79.9	17.0	25.4	41.2	56.3	20.4	22.0
Change Period (Y+Rc), s	* 5.6	6.3	* 5.6	* 5.6	6.3	* 6.3	5.6	* 5.6
Max Green Setting (Gmax), s	* 13	61.2	* 16	* 27	25.0	* 50	15.5	* 27
Max Q Clear Time (g_c+I1), s	12.1	45.3	11.4	16.4	12.9	52.0	14.4	15.1
Green Ext Time (p_c), s	0.0	13.8	0.1	2.4	9.7	0.0	0.4	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	63.8
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	231	631	129	184	565	151	295	2385	96	200	2182	158
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	241	657	134	192	589	157	307	2484	100	208	2273	165
Adj No. of Lanes	2	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	731	327	190	817	365	361	2729	110	307	2571	186
Arrive On Green	0.09	0.21	0.21	0.11	0.23	0.23	0.03	0.14	0.14	0.18	0.84	0.84
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	6368	256	3442	6145	445
Grp Volume(v), veh/h	241	657	134	192	589	157	307	1874	710	208	1777	661
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1602	1818	1721	1602	1784
Q Serve(g_s), s	9.6	25.3	7.9	15.0	21.5	9.2	12.4	53.8	53.9	7.9	32.4	32.7
Cycle Q Clear(g_c), s	9.6	25.3	7.9	15.0	21.5	9.2	12.4	53.8	53.9	7.9	32.4	32.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.25
Lane Grp Cap(c), veh/h	320	731	327	190	817	365	361	2060	779	307	2011	747
V/C Ratio(X)	0.75	0.90	0.41	1.01	0.72	0.43	0.85	0.91	0.91	0.68	0.88	0.89
Avail Cap(c_a), veh/h	320	784	351	190	834	373	418	2060	779	320	2011	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.83	0.83	0.83	0.94	0.94	0.94	0.67	0.67	0.67	0.15	0.15	0.15
Uniform Delay (d), s/veh	61.9	54.1	28.4	62.5	49.7	27.6	66.5	57.4	57.5	55.6	9.3	9.3
Incr Delay (d2), s/veh	8.2	11.0	0.7	66.0	2.8	0.8	9.6	5.2	12.3	0.8	1.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.9	13.5	3.5	10.8	10.9	4.1	6.4	24.9	29.8	3.8	13.7	15.6
LnGrp Delay(d),s/veh	70.2	65.1	29.1	128.5	52.5	28.3	76.1	62.7	69.8	56.5	10.3	12.0
LnGrp LOS	E	E	C	F	D	C	E	E	E	E	B	B
Approach Vol, veh/h		1032			938			2891			2646	
Approach Delay, s/veh		61.6			64.0			65.8			14.3	
Approach LOS		E			E			E			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	65.8	21.0	34.9	19.7	64.4	17.6	38.3
Change Period (Y+Rc), s	5.8	* 5.8	6.0	* 6	* 5	5.8	* 4.6	6.0
Max Green Setting (Gmax), s	13.0	* 60	15.0	* 31	* 17	55.6	* 13	33.0
Max Q Clear Time (g_c+I1), s	9.9	55.9	17.0	27.3	14.4	34.7	11.6	23.5
Green Ext Time (p_c), s	0.2	3.8	0.0	1.6	0.3	16.8	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	46.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	9	15	16	164	25	69	22	2732	115	43	2292	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	9	15	16	169	26	71	23	2816	119	44	2363	11
Adj No. of Lanes	1	1	0	0	1	1	1	4	0	1	4	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	146	155	247	31	279	75	4159	175	104	4463	21
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.08	1.00	1.00	0.04	0.45	0.45
Sat Flow, veh/h	1293	826	881	1127	173	1583	1774	6354	267	1774	6632	31
Grp Volume(v), veh/h	9	0	31	195	0	71	23	2126	809	44	1712	662
Grp Sat Flow(s),veh/h/ln	1293	0	1707	1300	0	1583	1774	1602	1816	1774	1602	1857
Q Serve(g_s), s	1.0	0.0	2.1	18.7	0.0	5.4	1.7	0.0	0.0	3.4	36.0	36.0
Cycle Q Clear(g_c), s	21.7	0.0	2.1	20.8	0.0	5.4	1.7	0.0	0.0	3.4	36.0	36.0
Prop In Lane	1.00		0.52	0.87		1.00	1.00		0.15	1.00		0.02
Lane Grp Cap(c), veh/h	88	0	301	277	0	279	75	3145	1188	104	3234	1250
V/C Ratio(X)	0.10	0.00	0.10	0.70	0.00	0.25	0.31	0.68	0.68	0.42	0.53	0.53
Avail Cap(c_a), veh/h	162	0	399	359	0	370	129	3145	1188	141	3234	1250
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.33	0.33	0.33	0.27	0.27	0.27
Uniform Delay (d), s/veh	66.6	0.0	48.4	57.1	0.0	49.7	62.2	0.0	0.0	64.9	22.5	22.5
Incr Delay (d2), s/veh	0.5	0.0	0.1	4.2	0.0	0.5	0.8	0.4	1.1	0.7	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	0.0	1.0	7.7	0.0	2.4	0.8	0.1	0.4	1.7	16.0	18.6
LnGrp Delay(d),s/veh	67.1	0.0	48.5	61.3	0.0	50.2	62.9	0.4	1.1	65.7	22.6	22.9
LnGrp LOS	E		D	E		D	E	A	A	E	C	C
Approach Vol, veh/h		40			266			2958			2418	
Approach Delay, s/veh		52.7			58.4			1.1			23.5	
Approach LOS		D			E			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.1	96.9		30.0	10.5	99.5		30.0
Change Period (Y+Rc), s	4.9	5.3		* 5.3	* 4.6	5.3		* 5.3
Max Green Setting (Gmax), s	11.1	80.7		* 33	* 10	81.9		* 33
Max Q Clear Time (g_c+I1), s	5.4	2.0		23.7	3.7	38.0		22.8
Green Ext Time (p_c), s	0.0	76.8		1.0	0.0	43.3		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.6
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	1039	680	2266	0	0	2396
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863
Adj Flow Rate, veh/h	1049	687	2289	0	0	2420
Adj No. of Lanes	2	2	4	0	0	4
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	0	0	2
Cap, veh/h	971	786	4060	0	0	4060
Arrive On Green	0.28	0.28	1.00	0.00	0.00	1.00
Sat Flow, veh/h	3442	2787	6929	0	0	6929
Grp Volume(v), veh/h	1049	687	2289	0	0	2420
Grp Sat Flow(s),veh/h/ln	1721	1393	1602	0	0	1602
Q Serve(g_s), s	39.5	32.9	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	39.5	32.9	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	0.00	
Lane Grp Cap(c), veh/h	971	786	4060	0	0	4060
V/C Ratio(X)	1.08	0.87	0.56	0.00	0.00	0.60
Avail Cap(c_a), veh/h	971	786	4060	0	0	4060
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	2.00
Upstream Filter(I)	1.00	1.00	0.89	0.00	0.00	0.57
Uniform Delay (d), s/veh	50.3	47.9	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	53.1	10.7	0.5	0.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	25.9	13.9	0.1	0.0	0.0	0.1
LnGrp Delay(d),s/veh	103.4	58.6	0.5	0.0	0.0	0.4
LnGrp LOS	F	E	A			A
Approach Vol, veh/h	1736		2289			2420
Approach Delay, s/veh	85.6		0.5			0.4
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		95.0				95.0		45.0
Change Period (Y+Rc), s		6.3				6.3		5.5
Max Green Setting (Gmax), s		88.7				88.7		39.5
Max Q Clear Time (g_c+I1), s		2.0				2.0		41.5
Green Ext Time (p_c), s		85.9				85.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	23.4
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	326	222	0	1961	2632	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0
Adj Flow Rate, veh/h	340	231	0	2043	2742	0
Adj No. of Lanes	2	2	0	4	4	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	430	348	0	5067	5067	0
Arrive On Green	0.12	0.12	0.00	0.53	1.00	0.00
Sat Flow, veh/h	3442	2787	0	6929	6929	0
Grp Volume(v), veh/h	340	231	0	2043	2742	0
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1602	1602	0
Q Serve(g_s), s	13.4	11.1	0.0	26.7	0.0	0.0
Cycle Q Clear(g_c), s	13.4	11.1	0.0	26.7	0.0	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	430	348	0	5067	5067	0
V/C Ratio(X)	0.79	0.66	0.00	0.40	0.54	0.00
Avail Cap(c_a), veh/h	946	766	0	5067	5067	0
HCM Platoon Ratio	1.00	1.00	1.00	0.67	2.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.42	0.59	0.00
Uniform Delay (d), s/veh	59.5	58.4	0.0	13.2	0.0	0.0
Incr Delay (d2), s/veh	3.3	2.2	0.0	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.6	4.4	0.0	11.8	0.1	0.0
LnGrp Delay(d),s/veh	62.8	60.6	0.0	13.3	0.2	0.0
LnGrp LOS	E	E		B	A	
Approach Vol, veh/h	571			2043	2742	
Approach Delay, s/veh	61.9			13.3	0.2	
Approach LOS	E			B	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		117.0		23.0		117.0		
Change Period (Y+Rc), s		6.3		5.5		6.3		
Max Green Setting (Gmax), s		89.7		38.5		89.7		
Max Q Clear Time (g_c+I1), s		28.7		15.4		2.0		
Green Ext Time (p_c), s		59.5		2.1		84.6		

Intersection Summary	
HCM 2010 Ctrl Delay	11.8
HCM 2010 LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	155	1124	1203	626	522	1945
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	161	1171	1253	652	544	2026
Adj No. of Lanes	1	2	3	0	2	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	302	975	1722	804	619	2587
Arrive On Green	0.17	0.17	0.51	0.51	0.18	0.73
Sat Flow, veh/h	1774	2787	3558	1583	3442	3632
Grp Volume(v), veh/h	161	1171	1253	652	544	2026
Grp Sat Flow(s),veh/h/ln	1774	1393	1695	1583	1721	1770
Q Serve(g_s), s	8.3	17.0	28.8	34.4	15.4	36.0
Cycle Q Clear(g_c), s	8.3	17.0	28.8	34.4	15.4	36.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	302	975	1722	804	619	2587
V/C Ratio(X)	0.53	1.20	0.73	0.81	0.88	0.78
Avail Cap(c_a), veh/h	302	975	1722	804	723	2587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.81	0.81	1.00	1.00
Uniform Delay (d), s/veh	37.9	32.5	19.2	20.6	39.9	8.5
Incr Delay (d2), s/veh	0.5	96.2	2.2	7.2	10.3	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.1	26.4	13.9	16.4	8.2	18.0
LnGrp Delay(d),s/veh	38.4	128.7	21.4	27.7	50.2	10.9
LnGrp LOS	D	F	C	C	D	B
Approach Vol, veh/h	1332		1905			2570
Approach Delay, s/veh	117.7		23.6			19.2
Approach LOS	F		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	22.3	56.1				78.4		21.6
Change Period (Y+Rc), s	* 4.3	5.3				5.3		4.6
Max Green Setting (Gmax), s	* 21	47.8				73.1		17.0
Max Q Clear Time (g_c+I1), s	17.4	36.4				38.0		19.0
Green Ext Time (p_c), s	0.6	11.3				35.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.3
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	279	564	195	480	532	508	61	635	578	407	723	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	285	576	73	344	747	467	62	648	539	415	738	132
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	317	665	278	356	748	668	79	789	668	393	1199	214
Arrive On Green	0.37	0.37	0.37	0.21	0.21	0.21	0.05	0.23	0.23	0.23	0.41	0.41
Sat Flow, veh/h	1714	3600	1503	1714	3600	1528	1714	3420	1520	1714	2899	518
Grp Volume(v), veh/h	285	576	73	344	747	467	62	648	539	415	435	435
Grp Sat Flow(s),veh/h/ln	1714	1800	1503	1714	1800	1528	1714	1710	1520	1714	1710	1707
Q Serve(g_s), s	20.4	19.3	4.4	25.9	27.0	27.0	4.7	23.4	30.0	29.8	26.0	26.0
Cycle Q Clear(g_c), s	20.4	19.3	4.4	25.9	27.0	27.0	4.7	23.4	30.0	29.8	26.0	26.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.30
Lane Grp Cap(c), veh/h	317	665	278	356	748	668	79	789	668	393	707	706
V/C Ratio(X)	0.90	0.87	0.26	0.97	1.00	0.70	0.78	0.82	0.81	1.06	0.62	0.62
Avail Cap(c_a), veh/h	343	720	301	356	748	668	195	789	668	393	707	706
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.78	0.78	0.78	0.90	0.90	0.90	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	39.5	34.8	51.0	51.5	29.7	61.4	47.5	28.9	50.1	30.0	30.0
Incr Delay (d2), s/veh	22.5	9.4	0.4	33.4	28.8	2.5	14.1	8.6	9.1	60.9	4.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.5	10.3	1.9	15.5	16.4	14.0	2.5	12.0	21.0	20.7	13.1	13.1
LnGrp Delay(d),s/veh	62.4	48.8	35.2	84.5	80.3	32.2	75.4	56.0	38.1	111.0	34.0	34.0
LnGrp LOS	E	D	D	F	F	C	E	E	D	F	C	C
Approach Vol, veh/h		934			1558			1249			1285	
Approach Delay, s/veh		51.9			66.8			49.2			58.9	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	34.0	35.0		29.0	10.2	58.8		32.0
Change Period (Y+Rc), s	* 4.2	5.0		5.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s	* 30	28.0		26.0	* 15	43.0		27.0
Max Q Clear Time (g_c+I1), s	31.8	32.0		22.4	6.7	28.0		29.0
Green Ext Time (p_c), s	0.0	0.0		1.6	0.1	9.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		57.6
HCM 2010 LOS		E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	925	188	0	0	322	81	731	105	49	98	0	241
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	974	198	0	0	339	0	893	0	0	103	0	27
Adj No. of Lanes	2	1	0	0	2	1	2	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	2	2
Cap, veh/h	1025	893	0	0	448	200	1002	526	0	143	0	127
Arrive On Green	0.30	0.48	0.00	0.00	0.13	0.00	0.28	0.00	0.00	0.08	0.00	0.08
Sat Flow, veh/h	3442	1863	0	0	3632	1583	3548	1863	0	1774	0	1583
Grp Volume(v), veh/h	974	198	0	0	339	0	893	0	0	103	0	27
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1583	1774	1863	0	1774	0	1583
Q Serve(g_s), s	23.5	5.3	0.0	0.0	7.9	0.0	20.5	0.0	0.0	4.8	0.0	1.4
Cycle Q Clear(g_c), s	23.5	5.3	0.0	0.0	7.9	0.0	20.5	0.0	0.0	4.8	0.0	1.4
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	1025	893	0	0	448	200	1002	526	0	143	0	127
V/C Ratio(X)	0.95	0.22	0.00	0.00	0.76	0.00	0.89	0.00	0.00	0.72	0.00	0.21
Avail Cap(c_a), veh/h	1025	993	0	0	637	285	2101	1103	0	334	0	298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.2	12.9	0.0	0.0	35.8	0.0	29.2	0.0	0.0	38.1	0.0	36.5
Incr Delay (d2), s/veh	17.2	0.0	0.0	0.0	1.7	0.0	1.2	0.0	0.0	6.7	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	13.5	2.7	0.0	0.0	4.0	0.0	10.2	0.0	0.0	2.6	0.0	1.2
LnGrp Delay(d),s/veh	46.5	12.9	0.0	0.0	37.6	0.0	30.4	0.0	0.0	44.9	0.0	37.4
LnGrp LOS	D	B			D		C			D		D
Approach Vol, veh/h		1172			339			893			130	
Approach Delay, s/veh		40.8			37.6			30.4			43.3	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6	7	8
Phs Duration (G+Y+Rc), s		28.7		45.4		10.8	30.0	15.4
Change Period (Y+Rc), s		* 4.7		* 4.7		4.0	* 4.7	* 4.7
Max Green Setting (Gmax), s		* 50		* 45		16.0	* 25	* 15
Max Q Clear Time (g_c+I1), s		22.5		7.3		6.8	25.5	9.9
Green Ext Time (p_c), s		1.5		1.7		0.3	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	36.8
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

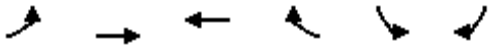
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	33	483	0	0	530	20	924	15	216	34	0	39
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	0	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	34	503	0	0	552	16	962	16	85	35	0	1
Adj No. of Lanes	1	3	0	0	3	0	2	1	1	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	2453	0	0	1996	58	924	500	425	49	0	44
Arrive On Green	0.03	0.50	0.00	0.00	0.41	0.41	0.28	0.28	0.28	0.03	0.00	0.03
Sat Flow, veh/h	1714	5076	0	0	5071	142	3326	1800	1530	1714	0	1530
Grp Volume(v), veh/h	34	503	0	0	368	200	962	16	85	35	0	1
Grp Sat Flow(s),veh/h/ln	1714	1638	0	0	1638	1775	1663	1800	1530	1714	0	1530
Q Serve(g_s), s	1.4	4.1	0.0	0.0	5.4	5.4	20.0	0.5	3.1	1.5	0.0	0.0
Cycle Q Clear(g_c), s	1.4	4.1	0.0	0.0	5.4	5.4	20.0	0.5	3.1	1.5	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	2453	0	0	1332	722	924	500	425	49	0	44
V/C Ratio(X)	0.58	0.21	0.00	0.00	0.28	0.28	1.04	0.03	0.20	0.72	0.00	0.02
Avail Cap(c_a), veh/h	186	2453	0	0	1332	722	924	500	425	381	0	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.24	0.24	0.00	0.00	0.96	0.96	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.3	10.1	0.0	0.0	14.3	14.3	26.0	18.9	19.9	34.7	0.0	34.0
Incr Delay (d2), s/veh	2.2	0.0	0.0	0.0	0.5	0.9	40.9	0.0	0.2	17.6	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	1.9	0.0	0.0	2.5	2.9	14.4	0.2	1.3	0.9	0.0	0.0
LnGrp Delay(d),s/veh	36.4	10.1	0.0	0.0	14.8	15.2	66.9	19.0	20.1	52.3	0.0	34.2
LnGrp LOS	D	B			B	B	F	B	C	D		C
Approach Vol, veh/h		537			568			1063			36	
Approach Delay, s/veh		11.8			14.9			62.5			51.8	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		40.9		6.1	6.7	34.3		25.0
Change Period (Y+Rc), s		5.0		4.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s		22.0		16.0	* 7.8	10.0		20.0
Max Q Clear Time (g_c+I1), s		6.1		3.5	3.4	7.4		22.0
Green Ext Time (p_c), s		5.8		0.1	0.0	1.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.7
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	678	724	0	390	23
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1800	1800
Adj Flow Rate, veh/h	0	706	754	0	428	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2326	2326	0	575	257
Arrive On Green	0.00	0.68	0.68	0.00	0.17	0.00
Sat Flow, veh/h	0	3600	3600	0	3429	1530
Grp Volume(v), veh/h	0	706	754	0	428	0
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1714	1530
Q Serve(g_s), s	0.0	5.4	5.9	0.0	7.7	0.0
Cycle Q Clear(g_c), s	0.0	5.4	5.9	0.0	7.7	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2326	2326	0	575	257
V/C Ratio(X)	0.00	0.30	0.32	0.00	0.74	0.00
Avail Cap(c_a), veh/h	0	2326	2326	0	1076	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.94	0.12	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.2	4.3	0.0	25.7	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	2.6	2.7	0.0	3.8	0.0
LnGrp Delay(d),s/veh	0.0	4.5	4.3	0.0	27.7	0.0
LnGrp LOS		A	A		C	
Approach Vol, veh/h		706	754		428	
Approach Delay, s/veh		4.5	4.3		27.7	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		49.5		15.5		49.5		
Change Period (Y+Rc), s		5.3		4.6		5.3		
Max Green Setting (Gmax), s		34.7		20.4		34.7		
Max Q Clear Time (g_c+I1), s		7.4		9.7		7.9		
Green Ext Time (p_c), s		10.8		1.2		10.7		

Intersection Summary	
HCM 2010 Ctrl Delay	9.7
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	197	555	0	2030	897	509
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	203	426	0	2093	925	0
Adj No. of Lanes	1	2	0	3	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	333	594	0	3157	2197	983
Arrive On Green	0.19	0.19	0.00	1.00	0.64	0.00
Sat Flow, veh/h	1714	3060	0	5238	3510	1530
Grp Volume(v), veh/h	203	426	0	2093	925	0
Grp Sat Flow(s),veh/h/ln	1714	1530	0	1638	1710	1530
Q Serve(g_s), s	6.5	7.8	0.0	0.0	8.0	0.0
Cycle Q Clear(g_c), s	6.5	7.8	0.0	0.0	8.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	333	594	0	3157	2197	983
V/C Ratio(X)	0.61	0.72	0.00	0.66	0.42	0.00
Avail Cap(c_a), veh/h	577	1030	0	3157	2197	983
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.00	0.34	0.91	0.00
Uniform Delay (d), s/veh	22.1	22.6	0.0	0.0	5.3	0.0
Incr Delay (d2), s/veh	1.7	1.5	0.0	0.4	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.2	3.4	0.0	0.1	3.9	0.0
LnGrp Delay(d),s/veh	23.8	24.1	0.0	0.4	5.8	0.0
LnGrp LOS	C	C		A	A	
Approach Vol, veh/h	629			2093	925	
Approach Delay, s/veh	24.0			0.4	5.8	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.5		16.5		43.5		
Change Period (Y+Rc), s		5.0		* 4.8		5.0		
Max Green Setting (Gmax), s		30.0		* 20		30.0		
Max Q Clear Time (g_c+I1), s		2.0		9.8		10.0		
Green Ext Time (p_c), s		23.4		1.8		17.5		

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

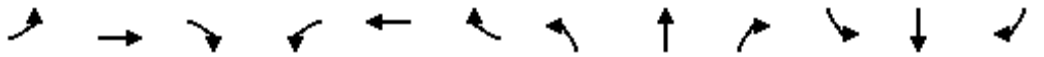
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	105	203	19	25	139	342	0	0	0	540	81	97
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800				1800	1800	1800
Adj Flow Rate, veh/h	112	216	6	27	148	117				635	0	36
Adj No. of Lanes	1	2	0	0	2	1				2	0	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	604	1123	31	263	984	503				1110	0	495
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33				0.32	0.00	0.32
Sat Flow, veh/h	1069	3399	94	233	2979	1523				3429	0	1529
Grp Volume(v), veh/h	112	108	114	96	79	117				635	0	36
Grp Sat Flow(s),veh/h/ln	1069	1710	1783	1656	1556	1523				1714	0	1529
Q Serve(g_s), s	2.1	1.1	1.1	0.0	0.9	1.4				3.8	0.0	0.4
Cycle Q Clear(g_c), s	2.9	1.1	1.1	0.9	0.9	1.4				3.8	0.0	0.4
Prop In Lane	1.00		0.05	0.28		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	604	565	589	733	514	503				1110	0	495
V/C Ratio(X)	0.19	0.19	0.19	0.13	0.15	0.23				0.57	0.00	0.07
Avail Cap(c_a), veh/h	1571	2110	2200	2118	1921	1880				2853	0	1272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	6.9	6.0	6.0	5.9	5.9	6.0				7.0	0.0	5.8
Incr Delay (d2), s/veh	0.1	0.2	0.2	0.1	0.1	0.2				0.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.6	0.5	0.6	0.5	0.4	0.6				1.8	0.0	0.2
LnGrp Delay(d),s/veh	7.1	6.1	6.1	6.0	6.0	6.3				7.4	0.0	5.9
LnGrp LOS	A	A	A	A	A	A				A		A
Approach Vol, veh/h		334			292						671	
Approach Delay, s/veh		6.4			6.1						7.4	
Approach LOS		A			A						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		12.5		12.4		12.5		
Change Period (Y+Rc), s		* 4.3		* 4.3		* 4.3		
Max Green Setting (Gmax), s		* 31		* 21		* 31		
Max Q Clear Time (g_c+I1), s		4.9		5.8		3.4		
Green Ext Time (p_c), s		3.3		2.3		3.3		

Intersection Summary	
HCM 2010 Ctrl Delay	6.8
HCM 2010 LOS	A

Notes

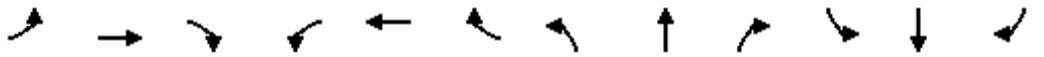
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	1300	230	110	1290	320	200	1030	130	210	940	160
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1937	1863	1863	1937	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	152	1313	164	111	1303	111	202	1040	124	212	949	152
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	1287	576	157	1183	550	251	1045	124	260	1020	163
Arrive On Green	0.10	0.35	0.35	0.18	0.67	0.67	0.14	0.32	0.32	0.15	0.32	0.32
Sat Flow, veh/h	1774	3681	1647	1774	3539	1647	1774	3313	395	1774	3179	509
Grp Volume(v), veh/h	152	1313	164	111	1303	111	202	577	587	212	549	552
Grp Sat Flow(s),veh/h/ln	1774	1840	1647	1774	1770	1647	1774	1840	1868	1774	1840	1847
Q Serve(g_s), s	10.9	45.4	9.4	7.7	43.4	3.4	14.3	40.7	40.8	15.1	37.6	37.6
Cycle Q Clear(g_c), s	10.9	45.4	9.4	7.7	43.4	3.4	14.3	40.7	40.8	15.1	37.6	37.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.28
Lane Grp Cap(c), veh/h	184	1287	576	157	1183	550	251	580	589	260	590	593
V/C Ratio(X)	0.83	1.02	0.28	0.71	1.10	0.20	0.81	0.99	1.00	0.81	0.93	0.93
Avail Cap(c_a), veh/h	184	1287	576	184	1183	550	266	580	589	266	590	593
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.57	0.57	0.57	0.96	0.96	0.96	0.62	0.62	0.62	0.85	0.85	0.85
Uniform Delay (d), s/veh	57.1	42.3	30.5	51.9	21.6	14.9	54.1	44.4	44.4	53.8	42.7	42.8
Incr Delay (d2), s/veh	15.1	24.4	0.7	6.8	58.3	0.8	9.4	28.1	28.3	13.9	19.4	19.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.1	27.4	4.4	4.1	30.3	1.6	7.7	25.2	25.6	8.4	22.3	22.4
LnGrp Delay(d),s/veh	72.2	66.7	31.3	58.7	79.8	15.7	63.4	72.5	72.7	67.7	62.2	62.2
LnGrp LOS	E	F	C	E	F	B	E	E	E	E	E	E
Approach Vol, veh/h		1629			1525			1366			1313	
Approach Delay, s/veh		63.6			73.6			71.3			63.1	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	49.4	20.9	45.7	16.0	47.4	21.6	45.0
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0
Max Green Setting (Gmax), s	11.5	41.0	17.5	39.0	11.5	41.0	17.5	39.0
Max Q Clear Time (g_c+I1), s	9.7	47.4	16.3	39.6	12.9	45.4	17.1	42.8
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	67.9
HCM 2010 LOS	E



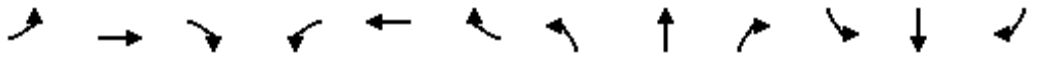
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	194	625	108	363	805	189	189	1389	328	121	983	103
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1863	1863	1863	1863	1863	1863	1788
Adj Flow Rate, veh/h	202	651	100	378	839	85	197	1447	178	126	1024	37
Adj No. of Lanes	2	2	0	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	730	112	437	1109	496	254	1695	528	353	1968	588
Arrive On Green	0.08	0.24	0.24	0.13	0.31	0.31	0.07	0.33	0.33	0.21	0.77	0.77
Sat Flow, veh/h	3442	3077	472	3442	3539	1583	3442	5085	1583	3442	5085	1520
Grp Volume(v), veh/h	202	374	377	378	839	85	197	1447	178	126	1024	37
Grp Sat Flow(s),veh/h/ln	1721	1770	1779	1721	1770	1583	1721	1695	1583	1721	1695	1520
Q Serve(g_s), s	6.9	24.5	24.6	12.9	25.6	3.3	6.7	31.8	10.1	3.8	9.1	0.7
Cycle Q Clear(g_c), s	6.9	24.5	24.6	12.9	25.6	3.3	6.7	31.8	10.1	3.8	9.1	0.7
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	261	420	422	437	1109	496	254	1695	528	353	1968	588
V/C Ratio(X)	0.77	0.89	0.89	0.87	0.76	0.17	0.77	0.85	0.34	0.36	0.52	0.06
Avail Cap(c_a), veh/h	459	516	519	488	1109	496	373	1695	528	353	1968	588
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Uniform Delay (d), s/veh	54.4	44.3	44.3	51.4	37.1	14.9	54.6	37.3	30.0	44.3	9.3	8.4
Incr Delay (d2), s/veh	1.6	11.9	12.1	12.8	2.7	0.1	3.1	5.7	1.7	0.2	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	13.3	13.5	6.9	12.9	1.5	3.3	15.8	4.7	1.8	4.3	0.3
LnGrp Delay(d),s/veh	56.0	56.2	56.4	64.2	39.8	14.9	57.7	43.0	31.8	44.5	10.3	8.6
LnGrp LOS	E	E	E	E	D	B	E	D	C	D	B	A
Approach Vol, veh/h		953			1302			1822			1187	
Approach Delay, s/veh		56.2			45.3			43.5			13.9	
Approach LOS		E			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	34.5	11.9	52.4	12.1	43.6	18.3	46.0
Change Period (Y+Rc), s	* 6	* 6	3.0	* 6	3.0	* 6	* 6	* 6
Max Green Setting (Gmax), s	* 17	* 35	13.0	* 37	16.0	* 36	* 10	* 40
Max Q Clear Time (g_c+I1), s	14.9	26.6	8.7	11.1	8.9	27.6	5.8	33.8
Green Ext Time (p_c), s	0.3	1.9	0.1	4.9	0.2	3.1	0.2	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	39.6
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	416	72	74	614	103	164	1452	86	144	1274	144
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	143	424	73	76	627	105	167	1482	88	147	1300	147
Adj No. of Lanes	1	2	0	1	2	0	1	3	1	1	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	912	156	336	825	138	193	1981	559	235	1922	597
Arrive On Green	0.09	0.30	0.30	0.06	0.27	0.27	0.11	0.35	0.35	0.13	0.38	0.38
Sat Flow, veh/h	1774	3021	516	1774	3032	507	1774	5588	1578	1774	5085	1580
Grp Volume(v), veh/h	143	247	250	76	366	366	167	1482	88	147	1300	147
Grp Sat Flow(s),veh/h/ln	1774	1770	1767	1774	1770	1769	1774	1863	1578	1774	1695	1580
Q Serve(g_s), s	6.6	13.6	13.8	3.6	22.7	22.8	11.1	28.0	4.6	9.4	25.6	7.7
Cycle Q Clear(g_c), s	6.6	13.6	13.8	3.6	22.7	22.8	11.1	28.0	4.6	9.4	25.6	7.7
Prop In Lane	1.00		0.29	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	534	533	336	482	482	193	1981	559	235	1922	597
V/C Ratio(X)	0.51	0.46	0.47	0.23	0.76	0.76	0.86	0.75	0.16	0.63	0.68	0.25
Avail Cap(c_a), veh/h	282	534	533	390	501	501	207	1981	559	266	1922	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.54	0.54	0.54	1.00	1.00	1.00	0.47	0.47	0.47	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	34.0	34.1	28.3	40.0	40.1	52.6	34.0	26.5	49.3	31.2	25.6
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.1	5.6	5.7	14.6	1.3	0.3	2.2	1.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.2	6.7	6.8	1.8	11.8	11.9	6.3	14.6	2.0	4.8	12.4	3.5
LnGrp Delay(d),s/veh	28.8	34.1	34.2	28.4	45.7	45.8	67.1	35.3	26.8	51.5	33.1	26.6
LnGrp LOS	C	C	C	C	D	D	E	D	C	D	C	C
Approach Vol, veh/h		640			808			1737			1594	
Approach Delay, s/veh		33.0			44.1			37.9			34.2	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	41.2	17.1	50.3	14.9	37.7	19.9	47.5
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	11.0	34.0	14.0	43.0	11.0	34.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	5.6	15.8	13.1	27.6	8.6	24.8	11.4	30.0
Green Ext Time (p_c), s	0.0	4.5	0.0	11.4	0.0	2.0	0.1	7.4

Intersection Summary	
HCM 2010 Ctrl Delay	37.1
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

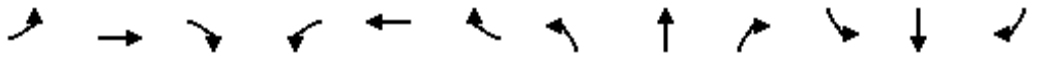
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	121	656	67	83	881	174	77	621	73	95	374	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	125	676	69	86	908	179	79	640	75	98	386	72
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	1554	159	107	1344	265	99	761	89	121	747	138
Arrive On Green	0.08	0.48	0.48	0.06	0.46	0.46	0.06	0.24	0.24	0.07	0.25	0.25
Sat Flow, veh/h	1774	3243	331	1774	2949	581	1774	3193	374	1774	2983	552
Grp Volume(v), veh/h	125	369	376	86	545	542	79	354	361	98	228	230
Grp Sat Flow(s),veh/h/ln	1774	1770	1804	1774	1770	1760	1774	1770	1797	1774	1770	1765
Q Serve(g_s), s	9.0	17.8	17.8	6.2	31.5	31.5	5.7	24.8	24.9	7.1	14.4	14.6
Cycle Q Clear(g_c), s	9.0	17.8	17.8	6.2	31.5	31.5	5.7	24.8	24.9	7.1	14.4	14.6
Prop In Lane	1.00		0.18	1.00		0.33	1.00		0.21	1.00		0.31
Lane Grp Cap(c), veh/h	149	848	865	107	807	802	99	422	428	121	443	442
V/C Ratio(X)	0.84	0.43	0.44	0.80	0.68	0.68	0.79	0.84	0.84	0.81	0.51	0.52
Avail Cap(c_a), veh/h	191	848	865	218	807	802	246	490	498	191	443	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.63	0.63	0.63	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	58.7	22.3	22.3	60.3	27.8	27.8	60.6	47.1	47.2	59.8	41.9	42.0
Incr Delay (d2), s/veh	12.8	1.1	1.1	3.3	2.8	2.9	5.3	11.0	11.0	5.7	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.0	9.0	9.1	3.2	15.9	15.9	3.0	13.4	13.6	3.7	7.1	7.2
LnGrp Delay(d),s/veh	71.5	23.3	23.3	63.5	30.7	30.7	65.9	58.1	58.2	65.5	42.9	43.0
LnGrp LOS	E	C	C	E	C	C	E	E	E	E	D	D
Approach Vol, veh/h		870			1173			794			556	
Approach Delay, s/veh		30.2			33.1			58.9			46.9	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	68.3	11.3	38.5	14.9	65.3	12.8	37.0
Change Period (Y+Rc), s	4.0	* 6	4.0	* 6	4.0	* 6	4.0	* 6
Max Green Setting (Gmax), s	16.0	* 44	18.0	* 32	14.0	* 46	14.0	* 36
Max Q Clear Time (g_c+I1), s	8.2	19.8	7.7	16.6	11.0	33.5	9.1	26.9
Green Ext Time (p_c), s	0.0	13.8	0.0	6.1	0.0	8.8	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	40.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



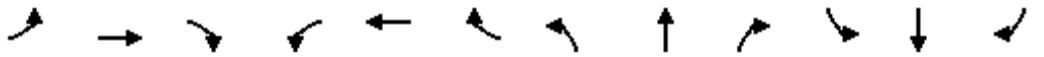
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	1110	190	280	1210	310	190	990	260	210	820	170
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	184	1133	194	286	1235	316	194	1010	265	214	837	173
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	205	794	135	233	780	196	215	910	238	233	987	204
Arrive On Green	0.12	0.26	0.26	0.13	0.28	0.28	0.12	0.33	0.33	0.13	0.34	0.34
Sat Flow, veh/h	1774	3025	516	1774	2802	706	1774	2778	726	1774	2922	604
Grp Volume(v), veh/h	184	661	666	286	773	778	194	642	633	214	507	503
Grp Sat Flow(s),veh/h/ln	1774	1770	1772	1774	1770	1738	1774	1770	1735	1774	1770	1756
Q Serve(g_s), s	15.6	39.9	39.9	20.0	42.3	42.3	16.4	49.8	49.8	18.1	40.4	40.4
Cycle Q Clear(g_c), s	15.6	39.9	39.9	20.0	42.3	42.3	16.4	49.8	49.8	18.1	40.4	40.4
Prop In Lane	1.00		0.29	1.00		0.41	1.00		0.42	1.00		0.34
Lane Grp Cap(c), veh/h	205	465	465	233	492	484	215	580	568	233	598	593
V/C Ratio(X)	0.90	1.42	1.43	1.23	1.57	1.61	0.90	1.11	1.11	0.92	0.85	0.85
Avail Cap(c_a), veh/h	233	465	465	233	492	484	233	580	568	233	598	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.3	56.0	56.1	66.0	54.9	54.9	65.9	51.1	51.1	65.2	46.7	46.7
Incr Delay (d2), s/veh	28.5	202.5	206.5	133.3	266.3	283.2	31.0	70.1	73.1	36.5	10.5	10.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.2	45.6	46.2	18.4	57.1	58.3	9.9	35.6	35.4	11.2	21.5	21.3
LnGrp Delay(d),s/veh	94.8	258.6	262.6	199.3	321.1	338.0	96.9	121.2	124.2	101.6	57.2	57.2
LnGrp LOS	F	F	F	F	F	F	F	F	F	F	E	E
Approach Vol, veh/h		1511			1837			1469			1224	
Approach Delay, s/veh		240.4			309.3			119.3			65.0	
Approach LOS		F			F			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	46.0	23.4	57.6	22.6	48.4	25.0	56.0
Change Period (Y+Rc), s	5.0	* 6.1	5.0	* 6.2	5.0	* 6.1	5.0	* 6.2
Max Green Setting (Gmax), s	20.0	* 40	20.0	* 50	20.0	* 40	20.0	* 50
Max Q Clear Time (g_c+I1), s	22.0	41.9	18.4	42.4	17.6	44.3	20.1	51.8
Green Ext Time (p_c), s	0.0	0.0	0.0	5.2	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	196.4
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



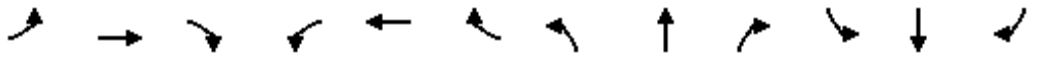
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	457	150	193	488	300	142	1286	97	197	1373	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	147	481	158	203	514	316	149	1354	102	207	1445	95
Adj No. of Lanes	1	3	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	189	879	278	279	483	296	175	1697	128	233	1873	123
Arrive On Green	0.08	0.24	0.24	0.08	0.24	0.24	0.10	0.36	0.36	0.27	0.80	0.80
Sat Flow, veh/h	1714	3676	1163	1714	2019	1238	1714	4657	351	1714	4707	309
Grp Volume(v), veh/h	147	427	212	203	435	395	149	952	504	207	1006	534
Grp Sat Flow(s),veh/h/ln	1714	1638	1563	1714	1710	1548	1714	1638	1732	1714	1638	1740
Q Serve(g_s), s	7.7	13.7	14.4	9.0	28.7	28.7	10.3	31.3	31.3	13.9	19.5	19.5
Cycle Q Clear(g_c), s	7.7	13.7	14.4	9.0	28.7	28.7	10.3	31.3	31.3	13.9	19.5	19.5
Prop In Lane	1.00		0.74	1.00		0.80	1.00		0.20	1.00		0.18
Lane Grp Cap(c), veh/h	189	784	374	279	409	370	175	1194	631	233	1303	692
V/C Ratio(X)	0.78	0.54	0.57	0.73	1.06	1.07	0.85	0.80	0.80	0.89	0.77	0.77
Avail Cap(c_a), veh/h	189	784	374	279	409	370	214	1194	631	371	1303	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	34.3	39.9	40.2	35.9	45.7	45.7	53.0	34.2	34.2	42.9	9.4	9.4
Incr Delay (d2), s/veh	18.6	0.8	2.0	6.9	56.3	59.2	22.9	5.6	10.1	13.7	4.1	7.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	6.2	6.4	5.6	19.9	18.3	6.0	15.1	16.7	7.4	9.1	10.3
LnGrp Delay(d),s/veh	52.9	40.7	42.2	42.8	101.9	104.8	75.8	39.8	44.3	56.5	13.5	16.8
LnGrp LOS	D	D	D	D	F	F	E	D	D	E	B	B
Approach Vol, veh/h		786			1033			1605			1747	
Approach Delay, s/veh		43.4			91.4			44.6			19.6	
Approach LOS		D			F			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.3	49.7	14.0	35.0	17.3	53.7	14.0	35.0
Change Period (Y+Rc), s	5.0	* 6	5.0	* 6.3	5.0	* 6	5.0	* 6.3
Max Green Setting (Gmax), s	26.0	* 34	9.0	* 29	15.0	* 45	9.0	* 29
Max Q Clear Time (g_c+I1), s	15.9	33.3	11.0	16.4	12.3	21.5	9.7	30.7
Green Ext Time (p_c), s	0.4	0.7	0.0	6.8	0.1	19.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.3
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	113	433	25	47	430	221	42	676	42	86	547	85
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	122	466	27	51	462	238	45	727	45	92	588	91
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1395	81	359	930	476	331	867	737	160	1431	221
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	743	3401	197	900	2267	1160	758	1863	1583	695	3074	475
Grp Volume(v), veh/h	122	242	251	51	360	340	45	727	45	92	338	341
Grp Sat Flow(s),veh/h/ln	743	1770	1828	900	1770	1658	758	1863	1583	695	1770	1779
Q Serve(g_s), s	14.1	9.0	9.1	4.0	14.6	14.7	4.0	33.1	1.5	11.9	12.2	12.3
Cycle Q Clear(g_c), s	28.8	9.0	9.1	13.0	14.6	14.7	16.3	33.1	1.5	45.0	12.2	12.3
Prop In Lane	1.00		0.11	1.00		0.70	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	266	726	750	359	726	680	331	867	737	160	824	828
V/C Ratio(X)	0.46	0.33	0.33	0.14	0.50	0.50	0.14	0.84	0.06	0.57	0.41	0.41
Avail Cap(c_a), veh/h	307	824	851	409	824	772	331	867	737	160	824	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	19.5	19.5	23.9	21.1	21.1	22.5	22.6	14.2	42.8	17.1	17.1
Incr Delay (d2), s/veh	1.7	0.4	0.4	0.3	0.7	0.8	0.3	7.6	0.0	6.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.0	4.4	4.6	1.0	7.2	6.9	0.9	18.8	0.7	2.7	6.0	6.1
LnGrp Delay(d),s/veh	33.6	19.8	19.9	24.2	21.8	22.0	22.7	30.2	14.3	48.8	17.5	17.5
LnGrp LOS	C	B	B	C	C	C	C	C	B	D	B	B
Approach Vol, veh/h		615			751			817			771	
Approach Delay, s/veh		22.6			22.1			28.9			21.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		51.0		45.7		51.0		45.7
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		47.0		16.7		35.1		30.8
Green Ext Time (p_c), s		0.0		13.6		7.6		8.9

Intersection Summary	
HCM 2010 Ctrl Delay	23.9
HCM 2010 LOS	C

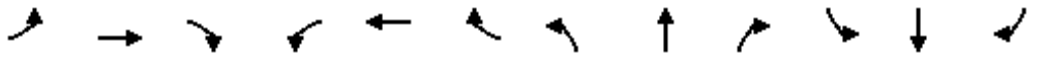
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	6	0	18	0	1453	23	24	1036	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1976	1863	1824	0	1863	1824	1863	1863	0
Adj Flow Rate, veh/h				6	0	19	0	1546	24	26	1102	0
Adj No. of Lanes				0	1	0	0	3	0	1	3	0
Peak Hour Factor				0.94	0.92	0.94	0.92	0.94	0.94	0.94	0.94	0.92
Percent Heavy Veh, %				0	2	0	0	2	2	2	2	0
Cap, veh/h				8	0	26	0	3984	62	367	3928	0
Arrive On Green				0.02	0.00	0.02	0.00	0.77	0.77	0.77	0.77	0.00
Sat Flow, veh/h				351	0	1112	0	5326	80	326	5253	0
Grp Volume(v), veh/h				25	0	0	0	1016	554	26	1102	0
Grp Sat Flow(s),veh/h/ln				1463	0	0	0	1695	1849	326	1695	0
Q Serve(g_s), s				0.8	0.0	0.0	0.0	4.8	4.8	1.4	3.1	0.0
Cycle Q Clear(g_c), s				0.8	0.0	0.0	0.0	4.8	4.8	6.2	3.1	0.0
Prop In Lane				0.24		0.76	0.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h				34	0	0	0	2618	1428	367	3928	0
V/C Ratio(X)				0.73	0.00	0.00	0.00	0.39	0.39	0.07	0.28	0.00
Avail Cap(c_a), veh/h				478	0	0	0	2618	1428	367	3928	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.81	0.81	0.77	0.77	0.00
Uniform Delay (d), s/veh				23.8	0.0	0.0	0.0	1.8	1.8	2.8	1.6	0.0
Incr Delay (d2), s/veh				24.9	0.0	0.0	0.0	0.4	0.6	0.3	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln				0.6	0.0	0.0	0.0	2.2	2.6	0.2	1.5	0.0
LnGrp Delay(d),s/veh				48.7	0.0	0.0	0.0	2.2	2.5	3.1	1.8	0.0
LnGrp LOS				D				A	A	A	A	
Approach Vol, veh/h					25			1570			1128	
Approach Delay, s/veh					48.6			2.3			1.8	
Approach LOS					D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		43.8				43.8		5.2
Change Period (Y+Rc), s		* 6				* 6		4.0
Max Green Setting (Gmax), s		* 23				* 23		16.0
Max Q Clear Time (g_c+I1), s		6.8				8.2		2.8
Green Ext Time (p_c), s		15.0				13.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	2.5
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	18	67	152	47	100	81	1351	230	60	937	27
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1863	1863	1863	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	24	18	68	155	48	102	83	1379	235	61	956	28
Adj No. of Lanes	0	1	0	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	58	149	253	305	258	125	2152	366	346	3235	95
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.07	0.49	0.49	0.19	0.64	0.64
Sat Flow, veh/h	208	355	911	1304	1863	1580	1774	4376	745	1774	5078	149
Grp Volume(v), veh/h	110	0	0	155	48	102	83	1068	546	61	638	346
Grp Sat Flow(s),veh/h/ln	1474	0	0	1304	1863	1580	1774	1695	1731	1774	1695	1836
Q Serve(g_s), s	1.1	0.0	0.0	7.9	2.7	6.9	5.5	28.1	28.1	3.4	10.1	10.1
Cycle Q Clear(g_c), s	7.7	0.0	0.0	15.6	2.7	6.9	5.5	28.1	28.1	3.4	10.1	10.1
Prop In Lane	0.22		0.62	1.00		1.00	1.00		0.43	1.00		0.08
Lane Grp Cap(c), veh/h	278	0	0	253	305	258	125	1667	851	346	2160	1170
V/C Ratio(X)	0.40	0.00	0.00	0.61	0.16	0.39	0.67	0.64	0.64	0.18	0.30	0.30
Avail Cap(c_a), veh/h	389	0	0	355	450	382	251	1667	851	346	2160	1170
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	45.2	0.0	0.0	49.0	43.1	44.9	54.4	22.6	22.6	40.3	9.7	9.7
Incr Delay (d2), s/veh	0.9	0.0	0.0	4.1	0.4	1.7	2.3	1.9	3.7	0.1	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	0.0	0.0	5.2	1.4	3.1	2.8	13.5	14.2	1.7	4.8	5.3
LnGrp Delay(d),s/veh	46.1	0.0	0.0	53.1	43.5	46.6	56.7	24.5	26.3	40.4	10.1	10.4
LnGrp LOS	D			D	D	D	E	C	C	D	B	B
Approach Vol, veh/h		110			305			1697			1045	
Approach Delay, s/veh		46.1			49.4			26.7			11.9	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.6	11.9	82.4		25.6	29.4	65.0
Change Period (Y+Rc), s		* 6	3.5	* 6		* 6	* 6	* 6
Max Green Setting (Gmax), s		* 29	17.0	* 59		* 29	* 14	* 59
Max Q Clear Time (g_c+I1), s		9.7	7.5	12.1		17.6	5.4	30.1
Green Ext Time (p_c), s		2.5	0.0	12.7		2.0	1.6	19.5

Intersection Summary	
HCM 2010 Ctrl Delay	24.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	7	525	266	214	652	33	440	19	372	23	17	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1900	1863	1900	1863	1900
Adj Flow Rate, veh/h	8	597	244	243	741	36	500	22	31	26	19	1
Adj No. of Lanes	1	2	0	1	2	0	2	0	1	0	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	8	838	342	289	1717	83	619	0	285	33	24	1
Arrive On Green	0.00	0.34	0.34	0.16	0.50	0.50	0.18	0.18	0.18	0.03	0.03	0.03
Sat Flow, veh/h	1774	2454	1002	1774	3436	167	3442	0	1583	1020	745	39
Grp Volume(v), veh/h	8	430	411	243	382	395	500	0	31	46	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1686	1774	1770	1833	1721	0	1583	1805	0	0
Q Serve(g_s), s	0.3	14.9	14.9	9.3	9.7	9.7	9.8	0.0	1.2	1.8	0.0	0.0
Cycle Q Clear(g_c), s	0.3	14.9	14.9	9.3	9.7	9.7	9.8	0.0	1.2	1.8	0.0	0.0
Prop In Lane	1.00		0.59	1.00		0.09	1.00		1.00	0.57		0.02
Lane Grp Cap(c), veh/h	8	604	576	289	884	916	619	0	285	59	0	0
V/C Ratio(X)	0.95	0.71	0.71	0.84	0.43	0.43	0.81	0.00	0.11	0.78	0.00	0.00
Avail Cap(c_a), veh/h	504	890	848	504	893	925	783	0	360	634	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.0	20.2	20.2	28.5	11.2	11.2	27.7	0.0	24.1	33.8	0.0	0.0
Incr Delay (d2), s/veh	73.7	0.6	0.6	2.5	0.1	0.1	5.0	0.0	0.2	8.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.3	7.3	7.1	4.8	4.7	4.9	5.1	0.0	0.5	1.0	0.0	0.0
LnGrp Delay(d),s/veh	108.7	20.8	20.8	31.1	11.3	11.3	32.7	0.0	24.3	41.8	0.0	0.0
LnGrp LOS	F	C	C	C	B	B	C		C	D		
Approach Vol, veh/h		849			1020			531			46	
Approach Delay, s/veh		21.6			16.0			32.2			41.8	
Approach LOS		C			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.7	16.5	29.6		7.6	5.3	40.8
Change Period (Y+Rc), s		4.0	5.0	* 5.6		5.3	5.0	* 5.6
Max Green Setting (Gmax), s		16.0	20.0	* 35		24.7	20.0	* 36
Max Q Clear Time (g_c+I1), s		11.8	11.3	16.9		3.8	2.3	11.7
Green Ext Time (p_c), s		0.8	0.2	7.1		0.1	0.0	7.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.0
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	167	52	206	13	51	48	338	494	14	33	358	103
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	180	56	35	14	55	14	363	531	14	35	385	83
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	380	394	335	385	303	77	430	1582	42	41	668	143
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.24	0.45	0.45	0.02	0.23	0.23
Sat Flow, veh/h	1326	1863	1583	1300	1433	365	1774	3523	93	1774	2903	620
Grp Volume(v), veh/h	180	56	35	14	0	69	363	266	279	35	233	235
Grp Sat Flow(s),veh/h/ln	1326	1863	1583	1300	0	1798	1774	1770	1846	1774	1770	1753
Q Serve(g_s), s	6.6	1.2	0.9	0.5	0.0	1.6	9.9	5.0	5.0	1.0	6.0	6.1
Cycle Q Clear(g_c), s	8.2	1.2	0.9	1.7	0.0	1.6	9.9	5.0	5.0	1.0	6.0	6.1
Prop In Lane	1.00		1.00	1.00		0.20	1.00		0.05	1.00		0.35
Lane Grp Cap(c), veh/h	380	394	335	385	0	381	430	795	829	41	407	404
V/C Ratio(X)	0.47	0.14	0.10	0.04	0.00	0.18	0.85	0.34	0.34	0.85	0.57	0.58
Avail Cap(c_a), veh/h	894	1116	948	893	0	1084	1045	1404	1465	697	1056	1047
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	16.3	16.2	17.0	0.0	16.5	18.4	9.1	9.1	24.8	17.4	17.4
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.0	0.0	0.1	1.8	0.1	0.1	16.2	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.4	0.6	0.4	0.2	0.0	0.8	5.1	2.4	2.5	0.7	3.0	3.0
LnGrp Delay(d),s/veh	20.1	16.4	16.2	17.0	0.0	16.5	20.2	9.2	9.2	41.0	17.9	17.9
LnGrp LOS	C	B	B	B		B	C	A	A	D	B	B
Approach Vol, veh/h		271			83			908			503	
Approach Delay, s/veh		18.9			16.6			13.6			19.5	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	28.5		16.3	17.3	17.3		16.3
Change Period (Y+Rc), s	5.0	* 5.6		5.5	5.0	* 5.6		* 5.5
Max Green Setting (Gmax), s	20.0	* 40		30.5	30.0	* 30		* 31
Max Q Clear Time (g_c+I1), s	3.0	7.0		10.2	11.9	8.1		3.7
Green Ext Time (p_c), s	0.0	3.8		0.7	0.5	3.7		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	16.2
HCM 2010 LOS	B

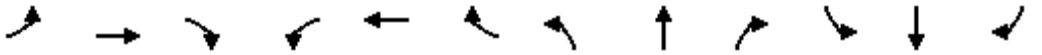
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	23	23	29	12	15	39	14	671	14	26	581	14
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	24	24	31	13	16	41	15	714	15	28	618	15
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	48	59	154	38	89	483	1023	21	420	1019	25
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	484	533	657	273	425	988	791	1818	38	723	1811	44
Grp Volume(v), veh/h	79	0	0	70	0	0	15	0	729	28	0	633
Grp Sat Flow(s),veh/h/ln	1673	0	0	1686	0	0	791	0	1856	723	0	1855
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	0.0	0.4	0.0	9.4	1.0	0.0	7.5
Cycle Q Clear(g_c), s	1.4	0.0	0.0	1.2	0.0	0.0	7.9	0.0	9.4	10.3	0.0	7.5
Prop In Lane	0.30		0.39	0.19		0.59	1.00		0.02	1.00		0.02
Lane Grp Cap(c), veh/h	293	0	0	281	0	0	483	0	1044	420	0	1043
V/C Ratio(X)	0.27	0.00	0.00	0.25	0.00	0.00	0.03	0.00	0.70	0.07	0.00	0.61
Avail Cap(c_a), veh/h	1833	0	0	1838	0	0	874	0	1962	777	0	1961
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	0.0	14.3	0.0	0.0	7.4	0.0	5.2	8.9	0.0	4.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.0	0.0	0.6	0.0	0.0	0.1	0.0	4.8	0.2	0.0	3.8
LnGrp Delay(d),s/veh	14.5	0.0	0.0	14.4	0.0	0.0	7.5	0.0	5.5	9.0	0.0	5.0
LnGrp LOS	B			B			A		A	A		A
Approach Vol, veh/h		79			70			744			661	
Approach Delay, s/veh		14.5			14.4			5.6			5.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		24.6		8.5		24.6		8.5
Change Period (Y+Rc), s		6.0		5.5		6.0		5.5
Max Green Setting (Gmax), s		35.0		35.5		35.0		35.5
Max Q Clear Time (g_c+I1), s		12.3		3.4		11.4		3.2
Green Ext Time (p_c), s		6.3		0.6		6.4		0.6

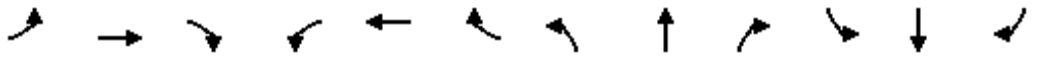
Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	128	317	91	203	281	117	92	719	118	46	504	106
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	135	334	96	214	296	123	97	757	124	48	531	112
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	281	752	213	384	1237	503	274	1167	191	194	1116	235
Arrive On Green	0.28	0.28	0.28	0.17	0.50	0.50	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	964	2725	772	1774	2457	999	784	3046	499	627	2913	612
Grp Volume(v), veh/h	135	215	215	214	211	208	97	440	441	48	322	321
Grp Sat Flow(s),veh/h/ln	964	1770	1727	1774	1770	1687	784	1770	1775	627	1770	1755
Q Serve(g_s), s	11.4	8.8	9.1	11.7	5.9	6.2	9.4	18.0	18.0	6.0	12.1	12.2
Cycle Q Clear(g_c), s	17.6	8.8	9.1	11.7	5.9	6.2	21.6	18.0	18.0	24.0	12.1	12.2
Prop In Lane	1.00		0.45	1.00		0.59	1.00		0.28	1.00		0.35
Lane Grp Cap(c), veh/h	281	489	477	0	891	849	274	678	680	194	678	673
V/C Ratio(X)	0.48	0.44	0.45	0.00	0.24	0.24	0.35	0.65	0.65	0.25	0.47	0.48
Avail Cap(c_a), veh/h	397	702	685	0	891	849	284	702	704	203	702	697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	26.3	26.4	0.0	12.4	12.4	28.7	22.3	22.3	32.2	20.5	20.5
Incr Delay (d2), s/veh	2.7	1.3	1.4	0.0	0.3	0.3	1.7	2.9	2.9	1.4	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.2	4.5	4.5	0.0	2.9	2.9	2.1	9.3	9.4	1.1	6.1	6.1
LnGrp Delay(d),s/veh	35.0	27.6	27.8	0.0	12.6	12.7	30.3	25.2	25.2	33.6	21.6	21.6
LnGrp LOS	D	C	C		B	B	C	C	C	C	C	C
Approach Vol, veh/h		565			633			978			691	
Approach Delay, s/veh		29.5			8.4			25.7			22.4	
Approach LOS		C			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		38.8	20.0	29.3		38.8		49.4
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s		35.0	35.0	35.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		23.6	13.7	19.6		26.0		8.2
Green Ext Time (p_c), s		9.7	1.4	4.8		7.8		11.6

Intersection Summary	
HCM 2010 Ctrl Delay	21.8
HCM 2010 LOS	C



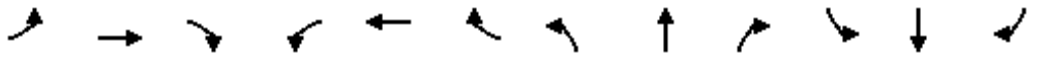
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	938	195	337	1085	0	354	0	492	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.98		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	957	185	344	1107	0	361	0	269	0	0	0
Adj No. of Lanes	1	2	0	1	3	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	1651	319	518	3513	0	406	0	400	0	483	0
Arrive On Green	0.00	1.00	1.00	0.11	0.69	0.00	0.26	0.00	0.26	0.00	0.00	0.00
Sat Flow, veh/h	1774	2951	570	1774	5253	0	1379	0	1547	0	1863	0
Grp Volume(v), veh/h	0	573	569	344	1107	0	361	0	269	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1752	1774	1695	0	1379	0	1547	0	1863	0
Q Serve(g_s), s	0.0	0.0	0.0	9.4	10.3	0.0	31.0	0.0	18.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	9.4	10.3	0.0	31.0	0.0	18.7	0.0	0.0	0.0
Prop In Lane	1.00		0.33	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	341	990	980	518	3513	0	416	0	400	0	483	0
V/C Ratio(X)	0.00	0.58	0.58	0.66	0.32	0.00	0.87	0.00	0.67	0.00	0.00	0.00
Avail Cap(c_a), veh/h	502	990	980	655	3513	0	416	0	400	0	483	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.88	0.88	1.00	1.00	0.00	0.85	0.00	0.85	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	8.0	7.3	0.0	45.0	0.0	40.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.2	2.2	0.9	0.2	0.0	14.6	0.0	3.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.6	0.6	4.6	4.9	0.0	13.5	0.0	8.3	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	2.2	2.2	8.8	7.6	0.0	59.6	0.0	43.0	0.0	0.0	0.0
LnGrp LOS		A	A	A	A		E		D			
Approach Vol, veh/h		1142			1451			630			0	
Approach Delay, s/veh		2.2			7.9			52.5			0.0	
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	85.9		34.1	15.8	70.1		34.1
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		* 5
Max Green Setting (Gmax), s	10.0	67.0		29.0	21.0	56.0		* 29
Max Q Clear Time (g_c+I1), s	0.0	12.3		0.0	11.4	2.0		33.0
Green Ext Time (p_c), s	0.0	14.9		0.0	0.4	14.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	14.6
HCM 2010 LOS	B

Notes

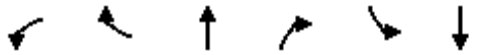
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	102	939	29	57	1243	142	33	4	39	156	5	68
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	110	1010	31	61	1337	153	35	4	42	168	5	73
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	382	2551	78	444	3317	380	133	28	128	285	0	260
Arrive On Green	0.04	0.73	0.72	0.06	1.00	1.00	0.17	0.17	0.16	0.17	0.16	0.17
Sat Flow, veh/h	1774	3504	108	1774	4620	529	544	170	769	1342	0	1566
Grp Volume(v), veh/h	110	510	531	61	981	509	81	0	0	168	0	73
Grp Sat Flow(s),veh/h/ln	1774	1770	1842	1774	1695	1759	1483	0	0	1342	0	1566
Q Serve(g_s), s	2.0	13.2	13.2	1.1	0.0	0.0	2.9	0.0	0.0	8.7	0.0	4.9
Cycle Q Clear(g_c), s	2.0	13.2	13.2	1.1	0.0	0.0	5.5	0.0	0.0	14.1	0.0	4.9
Prop In Lane	1.00		0.06	1.00		0.30	0.43		0.52	1.00		1.00
Lane Grp Cap(c), veh/h	382	1288	1341	444	2434	1263	289	0	0	285	0	260
V/C Ratio(X)	0.29	0.40	0.40	0.14	0.40	0.40	0.28	0.00	0.00	0.59	0.00	0.28
Avail Cap(c_a), veh/h	501	1288	1341	581	2434	1263	423	0	0	409	0	405
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.96	0.96	0.96	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.9	6.2	6.3	4.7	0.0	0.0	44.2	0.0	0.0	47.6	0.0	43.8
Incr Delay (d2), s/veh	0.2	0.9	0.9	0.0	0.5	0.9	0.2	0.0	0.0	0.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.9	6.7	7.0	0.5	0.2	0.3	2.4	0.0	0.0	5.4	0.0	2.1
LnGrp Delay(d),s/veh	4.1	7.2	7.1	4.8	0.5	0.9	44.3	0.0	0.0	48.3	0.0	44.0
LnGrp LOS	A	A	A	A	A	A	D			D		D
Approach Vol, veh/h		1151			1551			81			241	
Approach Delay, s/veh		6.8			0.8			44.3			47.0	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	89.2		22.9	6.7	90.4		22.9
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	12.0	65.0		29.0	12.0	65.0		29.0
Max Q Clear Time (g_c+I1), s	4.0	2.0		7.5	3.1	15.2		16.1
Green Ext Time (p_c), s	0.1	17.9		0.7	0.0	17.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	7.9
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	20	20	1630	10	10	2910
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	21	1716	11	11	3063
Adj No. of Lanes	1	1	3	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	89	80	4212	1308	38	4491
Arrive On Green	0.05	0.05	1.00	1.00	0.04	1.00
Sat Flow, veh/h	1774	1583	5253	1580	1774	5253
Grp Volume(v), veh/h	21	21	1716	11	11	3063
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1580	1774	1695
Q Serve(g_s), s	1.4	1.5	0.0	0.0	0.7	0.0
Cycle Q Clear(g_c), s	1.4	1.5	0.0	0.0	0.7	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	89	80	4212	1308	38	4491
V/C Ratio(X)	0.24	0.26	0.41	0.01	0.29	0.68
Avail Cap(c_a), veh/h	473	422	4212	1308	355	4491
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.89	0.89	0.72	0.72
Uniform Delay (d), s/veh	54.8	54.9	0.0	0.0	56.5	0.0
Incr Delay (d2), s/veh	0.5	0.6	0.3	0.0	1.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.7	0.1	0.0	0.4	0.3
LnGrp Delay(d),s/veh	55.3	55.5	0.3	0.0	57.7	0.6
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	42		1727			3074
Approach Delay, s/veh	55.4		0.3			0.8
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.6	103.4				110.0		10.0
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	50.7				78.7		32.0
Max Q Clear Time (g_c+I1), s	2.7	2.0				2.0		3.5
Green Ext Time (p_c), s	0.0	48.5				76.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.1
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	40	200	1550	70	70	2300
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	42	4	1632	61	74	2421
Adj No. of Lanes	1	1	2	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	70	62	2791	1247	128	4547
Arrive On Green	0.04	0.04	1.00	1.00	0.14	1.00
Sat Flow, veh/h	1774	1583	3632	1581	1774	5253
Grp Volume(v), veh/h	42	4	1632	61	74	2421
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1581	1774	1695
Q Serve(g_s), s	2.8	0.3	0.0	0.0	4.7	0.0
Cycle Q Clear(g_c), s	2.8	0.3	0.0	0.0	4.7	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	70	62	2791	1247	128	4547
V/C Ratio(X)	0.60	0.06	0.58	0.05	0.58	0.53
Avail Cap(c_a), veh/h	444	396	2791	1247	355	4547
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.70	0.70	0.83	0.83
Uniform Delay (d), s/veh	56.7	55.5	0.0	0.0	49.6	0.0
Incr Delay (d2), s/veh	3.1	0.2	0.6	0.1	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.1	0.2	0.0	2.3	0.2
LnGrp Delay(d),s/veh	59.8	55.7	0.6	0.1	50.9	0.4
LnGrp LOS	E	E	A	A	D	A
Approach Vol, veh/h	46		1693			2495
Approach Delay, s/veh	59.5		0.6			1.9
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.7	98.6				111.3		8.7
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	52.7				80.7		30.0
Max Q Clear Time (g_c+I1), s	6.7	2.0				2.0		4.8
Green Ext Time (p_c), s	0.0	50.3				77.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	2.0
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	20	10	10	1740	2360	20
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	11	11	1832	2484	21
Adj No. of Lanes	1	1	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	58	52	6	3187	4392	1368
Arrive On Green	0.03	0.03	0.01	1.00	0.86	0.86
Sat Flow, veh/h	1774	1583	1774	3632	5253	1583
Grp Volume(v), veh/h	21	11	11	1832	2484	21
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1695	1583
Q Serve(g_s), s	1.4	0.8	0.4	0.0	15.6	0.2
Cycle Q Clear(g_c), s	1.4	0.8	0.4	0.0	15.6	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	58	52	6	3187	4392	1368
V/C Ratio(X)	0.36	0.21	1.77	0.57	0.57	0.02
Avail Cap(c_a), veh/h	458	409	118	3187	4392	1368
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.76	0.76	0.65	0.65
Uniform Delay (d), s/veh	56.8	56.5	59.6	0.0	2.2	1.1
Incr Delay (d2), s/veh	1.4	0.7	382.1	0.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	116.5	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.7	0.9	0.3	7.3	0.1
LnGrp Delay(d),s/veh	58.2	57.3	558.1	0.6	2.5	1.1
LnGrp LOS	E	E	F	A	A	A
Approach Vol, veh/h	32			1843	2505	
Approach Delay, s/veh	57.9			3.9	2.5	
Approach LOS	E			A	A	

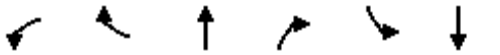
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		112.1		7.9	4.4	107.6		
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		
Max Green Setting (Gmax), s		79.7		31.0	8.5	67.7		
Max Q Clear Time (g_c+I1), s		2.0		3.4	2.4	17.6		
Green Ext Time (p_c), s		77.2		0.0	0.0	49.9		

Intersection Summary	
HCM 2010 Ctrl Delay	3.5
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	140	40	1580	130	190	2730
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	147	42	1663	137	200	2874
Adj No. of Lanes	1	1	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	175	156	3718	1158	242	4246
Arrive On Green	0.10	0.10	0.73	0.73	0.14	1.00
Sat Flow, veh/h	1774	1583	5253	1583	3442	5253
Grp Volume(v), veh/h	147	42	1663	137	200	2874
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1583	1721	1695
Q Serve(g_s), s	9.8	2.9	15.7	3.1	6.8	0.0
Cycle Q Clear(g_c), s	9.8	2.9	15.7	3.1	6.8	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	175	156	3718	1158	242	4246
V/C Ratio(X)	0.84	0.27	0.45	0.12	0.83	0.68
Avail Cap(c_a), veh/h	237	211	3718	1158	602	4246
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.71	0.71
Uniform Delay (d), s/veh	53.2	50.1	6.4	4.7	50.8	0.0
Incr Delay (d2), s/veh	13.9	0.3	0.4	0.2	2.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.5	1.3	7.4	1.4	3.3	0.2
LnGrp Delay(d),s/veh	67.1	50.4	6.8	5.0	52.8	0.6
LnGrp LOS	E	D	A	A	D	A
Approach Vol, veh/h	189		1800			3074
Approach Delay, s/veh	63.4		6.7			4.0
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.4	91.7				104.2		15.8
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	21.5	69.7				94.7		16.0
Max Q Clear Time (g_c+I1), s	8.8	17.7				2.0		11.8
Green Ext Time (p_c), s	0.2	51.8				92.1		0.1

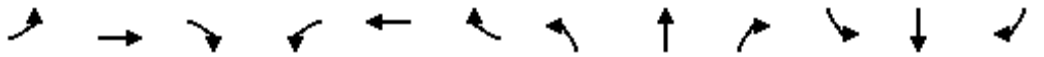
Intersection Summary	
HCM 2010 Ctrl Delay	7.2
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	20	80	1690	10	20	2810
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	21	84	1779	11	21	2958
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	120	107	4144	26	67	4403
Arrive On Green	0.07	0.07	1.00	1.00	0.08	1.00
Sat Flow, veh/h	1774	1583	5383	32	1774	5253
Grp Volume(v), veh/h	21	84	1156	634	21	2958
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1857	1774	1695
Q Serve(g_s), s	1.3	6.3	0.0	0.0	1.3	0.0
Cycle Q Clear(g_c), s	1.3	6.3	0.0	0.0	1.3	0.0
Prop In Lane	1.00	1.00		0.02	1.00	
Lane Grp Cap(c), veh/h	120	107	2694	1476	67	4403
V/C Ratio(X)	0.18	0.79	0.43	0.43	0.31	0.67
Avail Cap(c_a), veh/h	458	409	2694	1476	355	4403
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.09	0.09
Uniform Delay (d), s/veh	52.8	55.1	0.0	0.0	54.0	0.0
Incr Delay (d2), s/veh	0.3	4.7	0.5	0.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	2.9	0.2	0.4	0.7	0.0
LnGrp Delay(d),s/veh	53.0	59.8	0.5	0.9	54.1	0.1
LnGrp LOS	D	E	A	A	D	A
Approach Vol, veh/h	105		1790			2979
Approach Delay, s/veh	58.4		0.6			0.5
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.5	99.4				107.9		12.1
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	51.7				79.7		31.0
Max Q Clear Time (g_c+I1), s	3.3	2.0				2.0		8.3
Green Ext Time (p_c), s	0.0	49.5				77.3		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	1.8
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	390	610	110	540	80	400	1300	50	90	2120	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	189	411	459	116	568	20	421	1368	50	95	2232	60
Adj No. of Lanes	1	2	1	1	2	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	707	313	137	739	327	454	2700	99	132	2251	698
Arrive On Green	0.08	0.20	0.20	0.05	0.14	0.14	0.26	1.00	1.00	0.03	0.30	0.30
Sat Flow, veh/h	1774	3539	1564	1774	3539	1565	3442	5036	184	3442	5085	1577
Grp Volume(v), veh/h	189	411	459	116	568	20	421	921	497	95	2232	60
Grp Sat Flow(s),veh/h/ln	1774	1770	1564	1774	1770	1565	1721	1695	1830	1721	1695	1577
Q Serve(g_s), s	10.0	12.6	17.0	7.8	18.6	1.3	14.3	0.0	0.0	3.3	52.5	3.3
Cycle Q Clear(g_c), s	10.0	12.6	17.0	7.8	18.6	1.3	14.3	0.0	0.0	3.3	52.5	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	148	707	313	137	739	327	454	1818	981	132	2251	698
V/C Ratio(X)	1.28	0.58	1.47	0.84	0.77	0.06	0.93	0.51	0.51	0.72	0.99	0.09
Avail Cap(c_a), veh/h	148	973	430	148	973	430	459	1818	981	287	2251	698
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	0.91	0.91	0.91	0.82	0.82	0.82
Uniform Delay (d), s/veh	55.0	43.5	24.2	56.2	48.8	41.4	43.6	0.0	0.0	57.8	42.0	24.7
Incr Delay (d2), s/veh	167.2	0.3	227.6	26.7	1.6	0.0	23.1	0.9	1.7	2.3	15.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.8	6.2	27.1	4.8	9.3	0.6	8.2	0.2	0.5	1.6	27.7	1.5
LnGrp Delay(d),s/veh	222.2	43.8	251.8	82.8	50.4	41.4	66.7	0.9	1.7	60.1	57.3	24.9
LnGrp LOS	F	D	F	F	D	D	E	A	A	E	E	C
Approach Vol, veh/h		1059			704			1839			2387	
Approach Delay, s/veh		165.8			55.5			16.2			56.6	
Approach LOS		F			E			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	68.3	15.1	28.0	19.8	57.1	14.0	29.1
Change Period (Y+Rc), s	3.5	5.3	5.3	* 6	3.5	5.3	3.5	5.3
Max Green Setting (Gmax), s	10.5	49.7	10.5	* 31	16.5	43.7	10.5	31.7
Max Q Clear Time (g_c+I1), s	5.3	2.0	9.8	19.0	16.3	54.5	12.0	20.6
Green Ext Time (p_c), s	0.0	32.6	0.2	1.9	0.0	0.0	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	63.4
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	670	130	140	670	140	110	460	90	190	850	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1863	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	116	705	137	147	705	147	116	484	95	200	895	189
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	1777	342	195	1742	542	171	857	167	246	972	205
Arrive On Green	0.31	0.80	0.80	0.22	0.69	0.69	0.03	0.09	0.09	0.28	0.64	0.64
Sat Flow, veh/h	1774	4456	856	1774	5085	1583	1774	3072	600	1774	3026	639
Grp Volume(v), veh/h	116	556	286	147	705	147	116	289	290	200	544	540
Grp Sat Flow(s),veh/h/ln	1774	1763	1786	1774	1695	1583	1774	1840	1831	1774	1840	1825
Q Serve(g_s), s	6.2	5.6	5.7	9.3	7.3	2.9	7.8	18.0	18.2	12.6	31.1	31.1
Cycle Q Clear(g_c), s	6.2	5.6	5.7	9.3	7.3	2.9	7.8	18.0	18.2	12.6	31.1	31.1
Prop In Lane	1.00		0.48	1.00		1.00	1.00		0.33	1.00		0.35
Lane Grp Cap(c), veh/h	275	1406	712	195	1742	542	171	513	511	246	591	586
V/C Ratio(X)	0.42	0.40	0.40	0.75	0.40	0.27	0.68	0.56	0.57	0.81	0.92	0.92
Avail Cap(c_a), veh/h	275	1406	712	214	1742	542	214	569	566	273	630	625
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.97	0.97	0.97	0.98	0.98	0.98	0.98	0.98	0.98	0.90	0.90	0.90
Uniform Delay (d), s/veh	37.2	7.9	7.9	45.2	13.6	6.1	56.2	47.5	47.5	41.9	20.1	20.1
Incr Delay (d2), s/veh	0.4	0.8	1.6	10.6	0.7	1.2	3.3	0.4	0.5	12.6	16.4	16.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	2.8	3.0	5.1	3.4	1.4	4.0	9.3	9.3	7.0	18.1	18.0
LnGrp Delay(d),s/veh	37.5	8.7	9.5	55.8	14.3	7.3	59.5	47.9	48.0	54.5	36.5	36.7
LnGrp LOS	D	A	A	E	B	A	E	D	D	D	D	D
Approach Vol, veh/h		958			999			695			1284	
Approach Delay, s/veh		12.4			19.4			49.9			39.4	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.1	36.4	14.7	50.8	13.1	41.4	21.5	44.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	16.5	35.1	12.5	39.1	12.5	39.1	12.5	* 39
Max Q Clear Time (g_c+I1), s	14.6	20.2	11.3	7.7	9.8	33.1	8.2	9.3
Green Ext Time (p_c), s	0.0	6.1	0.0	8.0	0.0	3.4	1.9	7.8

Intersection Summary	
HCM 2010 Ctrl Delay	29.6
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

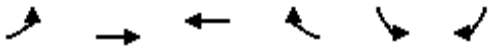
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	610	190	320	650	160	120	930	270	280	1700	150
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1788	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	126	642	200	337	684	168	126	979	284	295	1789	158
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	1117	342	432	1757	525	231	1526	442	399	2429	798
Arrive On Green	0.02	0.10	0.10	0.25	0.69	0.69	0.13	0.78	0.78	0.15	0.58	0.58
Sat Flow, veh/h	3442	3862	1182	3442	5085	1520	3442	3918	1135	3548	5588	1583
Grp Volume(v), veh/h	126	562	280	337	684	168	126	847	416	295	1789	158
Grp Sat Flow(s),veh/h/ln	1721	1695	1654	1721	1695	1520	1721	1695	1663	1774	1863	1583
Q Serve(g_s), s	4.3	19.0	19.5	10.9	6.8	5.3	4.1	13.3	13.3	9.5	28.2	5.1
Cycle Q Clear(g_c), s	4.3	19.0	19.5	10.9	6.8	5.3	4.1	13.3	13.3	9.5	28.2	5.1
Prop In Lane	1.00		0.71	1.00		1.00	1.00		0.68	1.00		1.00
Lane Grp Cap(c), veh/h	238	980	478	432	1757	525	231	1320	647	399	2429	798
V/C Ratio(X)	0.53	0.57	0.59	0.78	0.39	0.32	0.54	0.64	0.64	0.74	0.74	0.20
Avail Cap(c_a), veh/h	387	980	478	502	1757	525	387	1320	647	399	2429	798
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	0.98	0.98	0.98	0.98	0.98	0.98	0.91	0.91	0.91	0.57	0.57	0.57
Uniform Delay (d), s/veh	56.7	47.2	47.4	43.4	13.2	12.9	50.2	9.6	9.6	49.3	20.3	12.0
Incr Delay (d2), s/veh	0.7	2.4	5.1	5.4	0.6	1.6	0.7	2.2	4.4	3.7	1.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.1	9.3	9.6	5.5	3.3	2.3	2.0	6.3	6.6	4.8	14.6	2.3
LnGrp Delay(d),s/veh	57.4	49.6	52.4	48.8	13.8	14.5	50.9	11.7	14.0	53.0	21.4	12.3
LnGrp LOS	E	D	D	D	B	B	D	B	B	D	C	B
Approach Vol, veh/h		968			1189			1389			2242	
Approach Delay, s/veh		51.4			23.8			16.0			25.0	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	55.9	9.8	44.8	15.0	50.4	16.6	38.0
Change Period (Y+Rc), s	3.5	5.7	3.5	5.3	3.5	5.7	3.5	5.3
Max Green Setting (Gmax), s	11.5	42.3	11.5	36.7	11.5	42.3	15.5	32.7
Max Q Clear Time (g_c+I1), s	6.1	30.2	6.3	8.8	11.5	15.3	12.9	21.5
Green Ext Time (p_c), s	0.1	11.8	0.1	16.5	0.0	25.8	0.1	8.5

Intersection Summary	
HCM 2010 Ctrl Delay	27.0
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	80	950	850	100	80	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.2	5.2	5.2	5.5	5.5
Lane Util. Factor	1.00	0.91	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	3539	1583	1770	1559
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	3539	1583	1770	1559
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	1000	895	105	84	189
RTOR Reduction (vph)	0	0	0	0	0	173
Lane Group Flow (vph)	84	1000	895	105	84	16
Confl. Peds. (#/hr)					1	1
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	8.9	80.0	75.5	75.5	10.1	10.1
Effective Green, g (s)	8.4	81.3	76.8	76.8	10.3	10.3
Actuated g/C Ratio	0.07	0.68	0.64	0.64	0.09	0.09
Clearance Time (s)	3.5	6.5	6.5	6.5	5.7	5.7
Vehicle Extension (s)	2.0	4.3	4.3	4.3	2.0	2.0
Lane Grp Cap (vph)	123	3445	2264	1013	151	133
v/s Ratio Prot	c0.05	0.20	c0.25		c0.05	
v/s Ratio Perm				0.07		0.01
v/c Ratio	0.68	0.29	0.40	0.10	0.56	0.12
Uniform Delay, d1	54.5	7.8	10.4	8.3	52.7	50.7
Progression Factor	1.00	1.00	0.14	0.06	1.00	1.00
Incremental Delay, d2	11.8	0.2	0.5	0.2	2.5	0.2
Delay (s)	66.3	8.0	2.0	0.7	55.2	50.8
Level of Service	E	A	A	A	E	D
Approach Delay (s)		12.5	1.9		52.2	
Approach LOS		B	A		D	

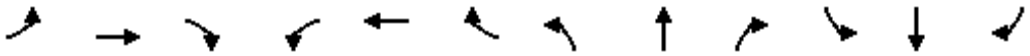
Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	960	80	30	930	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	6.5	4.0	5.2	5.5	5.5
Lane Util. Factor	0.95	1.00	1.00	0.91	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	5085	1770	1563
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	1770	5085	1770	1563
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1011	84	32	979	21	21
RTOR Reduction (vph)	0	25	0	0	0	20
Lane Group Flow (vph)	1011	59	32	979	21	1
Confl. Peds. (#/hr)					4	1
Turn Type	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	4		3	8	5	
Permitted Phases		4				5
Actuated Green, G (s)	80.0	80.0	4.4	75.5	4.1	4.1
Effective Green, g (s)	81.3	80.0	3.9	76.8	4.3	4.3
Actuated g/C Ratio	0.68	0.67	0.03	0.64	0.04	0.04
Clearance Time (s)	6.5	6.5	3.5	6.5	5.7	5.7
Vehicle Extension (s)	4.3	4.3	1.5	4.3	2.0	2.0
Lane Grp Cap (vph)	2397	1055	57	3254	63	56
v/s Ratio Prot	c0.29		c0.02	0.19	c0.01	
v/s Ratio Perm		0.04				0.00
v/c Ratio	0.42	0.06	0.56	0.30	0.33	0.01
Uniform Delay, d1	8.7	6.9	57.2	9.6	56.5	55.8
Progression Factor	0.44	0.08	1.05	1.23	1.00	1.00
Incremental Delay, d2	0.5	0.1	6.9	0.2	1.1	0.0
Delay (s)	4.4	0.7	66.7	12.0	57.6	55.8
Level of Service	A	A	E	B	E	E
Approach Delay (s)	4.1			13.8	56.7	
Approach LOS	A			B	E	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

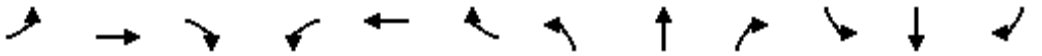
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	870	60	40	810	80	20	10	10	20	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	11	10	11	11	11	11	11	11
Total Lost time (s)	1.5	3.0		1.5	3.0	3.0		2.6			1.5	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00			1.00	
Frt	1.00	0.99		1.00	1.00	0.85		0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.98	
Satd. Flow (prot)	3204	5036		1652	4916	1478		1697			1697	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.87			0.88	
Satd. Flow (perm)	3204	5036		1652	4916	1478		1513			1522	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	916	63	42	853	84	21	11	11	21	11	11
RTOR Reduction (vph)	0	3	0	0	0	23	0	9	0	0	9	0
Lane Group Flow (vph)	84	976	0	42	853	61	0	34	0	0	34	0
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2 5			1 6	
Permitted Phases						8	2 5			1 6		
Actuated Green, G (s)	6.4	78.3		10.9	82.8	82.8		15.5			12.9	
Effective Green, g (s)	8.4	80.3		12.9	84.8	84.8		19.5			16.9	
Actuated g/C Ratio	0.07	0.67		0.11	0.71	0.71		0.16			0.14	
Clearance Time (s)	3.5	5.0		3.5	5.0	5.0						
Vehicle Extension (s)	1.5	3.9		1.5	3.9	3.9						
Lane Grp Cap (vph)	224	3369		177	3473	1044		245			214	
v/s Ratio Prot	c0.03	c0.19		0.03	c0.17							
v/s Ratio Perm						0.04		c0.02			c0.02	
v/c Ratio	0.38	0.29		0.24	0.25	0.06		0.14			0.16	
Uniform Delay, d1	53.3	8.1		49.0	6.2	5.4		43.0			45.3	
Progression Factor	1.00	1.00		0.68	0.35	0.06		1.00			1.00	
Incremental Delay, d2	0.4	0.2		0.2	0.2	0.1		0.1			0.1	
Delay (s)	53.7	8.4		33.5	2.4	0.4		43.1			45.4	
Level of Service	D	A		C	A	A		D			D	
Approach Delay (s)		11.9			3.5			43.1			45.4	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		

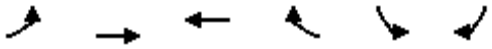
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	780	80	70	830	30	50	30	70	30	20	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	13	13	10	10	10	10	14	14
Total Lost time (s)	1.5	3.0		1.5	3.0		1.5	2.6		1.5	2.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.90		1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	4847		1652	5227		1652	1557		1652	1773	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1652	4847		1652	5227		1652	1557		1652	1773	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	42	821	84	74	874	32	53	32	74	32	21	53
RTOR Reduction (vph)	0	5	0	0	1	0	0	67	0	0	49	0
Lane Group Flow (vph)	42	900	0	74	905	0	53	39	0	32	25	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	6.4	78.3		10.9	82.8		6.9	8.6		5.6	7.3	
Effective Green, g (s)	8.4	80.3		12.9	84.8		8.9	10.6		7.6	9.3	
Actuated g/C Ratio	0.07	0.67		0.11	0.71		0.07	0.09		0.06	0.08	
Clearance Time (s)	3.5	5.0		3.5	5.0		3.5	4.6		3.5	4.6	
Vehicle Extension (s)	1.5	3.9		1.5	3.9		1.5	2.0		1.5	2.0	
Lane Grp Cap (vph)	115	3243		177	3693		122	137		104	137	
v/s Ratio Prot	c0.03	c0.19		c0.04	0.17		c0.03	c0.02		0.02	0.01	
v/s Ratio Perm												
v/c Ratio	0.37	0.28		0.42	0.24		0.43	0.28		0.31	0.18	
Uniform Delay, d1	53.3	8.1		50.0	6.2		53.1	51.1		53.7	51.8	
Progression Factor	1.27	0.21		0.68	0.26		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	0.2		0.5	0.1		0.9	0.4		0.6	0.2	
Delay (s)	68.4	1.9		34.5	1.8		54.0	51.5		54.3	52.0	
Level of Service	E	A		C	A		D	D		D	D	
Approach Delay (s)		4.9			4.2			52.4			52.7	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	10	840	1310	60	20	20
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	11	884	1379	63	21	21
Adj No. of Lanes	1	3	3	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	41	4584	4397	1455	96	88
Arrive On Green	0.05	1.00	1.00	1.00	0.05	0.05
Sat Flow, veh/h	1703	5253	5253	1583	1774	1615
Grp Volume(v), veh/h	11	884	1379	63	21	21
Grp Sat Flow(s),veh/h/ln	1703	1695	1695	1583	1774	1615
Q Serve(g_s), s	0.7	0.0	0.0	0.0	1.4	1.5
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.0	1.4	1.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	41	4584	4397	1455	96	88
V/C Ratio(X)	0.27	0.19	0.31	0.04	0.22	0.24
Avail Cap(c_a), veh/h	263	4584	4397	1455	532	484
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.76	0.76	1.00	1.00
Uniform Delay (d), s/veh	56.0	0.0	0.0	0.0	54.3	54.4
Incr Delay (d2), s/veh	1.2	0.1	0.1	0.0	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	0.0	0.1	0.0	0.7	1.4
LnGrp Delay(d),s/veh	57.3	0.1	0.1	0.0	54.7	54.9
LnGrp LOS	E	A	A	A	D	D
Approach Vol, veh/h		895	1442		42	
Approach Delay, s/veh		0.8	0.1		54.8	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				111.5		8.5	4.4	107.1
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				76.7		34.0	16.5	56.7
Max Q Clear Time (g_c+I1), s				2.0		3.5	2.7	2.0
Green Ext Time (p_c), s				51.2		0.0	0.0	41.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.3
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	370	70	140	930	240	110	540	190	260	860	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1937	1863	1937	1976
Adj Flow Rate, veh/h	53	389	50	147	979	64	116	568	99	274	905	79
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	947	119	202	1354	422	169	1482	689	326	1736	152
Arrive On Green	0.05	0.21	0.21	0.08	0.18	0.18	0.10	0.42	0.42	0.18	0.51	0.51
Sat Flow, veh/h	1774	4575	576	1774	5085	1583	1774	3539	1647	1774	3426	299
Grp Volume(v), veh/h	53	286	153	147	979	64	116	568	99	274	486	498
Grp Sat Flow(s),veh/h/ln	1774	1695	1761	1774	1695	1583	1774	1770	1647	1774	1840	1884
Q Serve(g_s), s	3.5	8.8	9.0	9.7	21.8	4.1	7.6	13.3	4.5	17.9	21.2	21.2
Cycle Q Clear(g_c), s	3.5	8.8	9.0	9.7	21.8	4.1	7.6	13.3	4.5	17.9	21.2	21.2
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	97	701	364	202	1354	422	169	1482	689	326	933	955
V/C Ratio(X)	0.55	0.41	0.42	0.73	0.72	0.15	0.69	0.38	0.14	0.84	0.52	0.52
Avail Cap(c_a), veh/h	200	754	392	303	1428	445	362	1482	689	436	933	955
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00	0.77	0.77	0.77
Uniform Delay (d), s/veh	55.3	41.2	41.3	53.6	45.1	37.8	52.5	24.2	21.6	47.3	19.8	19.8
Incr Delay (d2), s/veh	1.8	0.6	1.2	1.8	2.0	0.3	1.8	0.8	0.4	6.5	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	4.2	4.5	4.9	10.5	1.8	3.8	6.6	2.1	9.3	11.2	11.5
LnGrp Delay(d),s/veh	57.0	41.8	42.5	55.4	47.1	38.1	54.4	24.9	22.0	53.8	21.4	21.4
LnGrp LOS	E	D	D	E	D	D	D	C	C	D	C	C
Approach Vol, veh/h		492			1190			783			1258	
Approach Delay, s/veh		43.7			47.6			28.9			28.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.5	53.1	15.2	28.1	13.0	63.7	8.1	35.3
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	27.5	32.1	18.5	24.7	22.5	37.1	11.5	31.7
Max Q Clear Time (g_c+I1), s	19.9	15.3	11.7	11.0	9.6	23.2	5.5	23.8
Green Ext Time (p_c), s	0.2	12.3	0.1	9.7	0.1	10.5	0.0	6.2

Intersection Summary	
HCM 2010 Ctrl Delay	36.7
HCM 2010 LOS	D

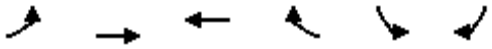
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	600	140	460	1100	430	70	1000	180	180	1380	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1788	1937	1937
Adj Flow Rate, veh/h	158	632	59	484	1158	250	74	1053	167	189	1453	98
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1123	430	599	1741	542	174	2013	627	290	2289	713
Arrive On Green	0.10	0.29	0.29	0.17	0.34	0.34	0.10	0.79	0.79	0.18	0.87	0.87
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	5085	1583	3304	5289	1647
Grp Volume(v), veh/h	158	632	59	484	1158	250	74	1053	167	189	1453	98
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1583	1652	1763	1647
Q Serve(g_s), s	5.3	12.6	1.9	16.2	23.3	14.8	2.4	8.8	1.8	6.4	9.8	1.1
Cycle Q Clear(g_c), s	5.3	12.6	1.9	16.2	23.3	14.8	2.4	8.8	1.8	6.4	9.8	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1123	430	599	1741	542	174	2013	627	290	2289	713
V/C Ratio(X)	0.59	0.56	0.14	0.81	0.67	0.46	0.42	0.52	0.27	0.65	0.63	0.14
Avail Cap(c_a), veh/h	387	1123	430	731	1741	542	387	2013	627	537	2289	713
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.95	0.95	0.95	0.92	0.92	0.92
Uniform Delay (d), s/veh	52.0	37.5	13.6	47.6	33.6	30.8	52.3	8.5	2.3	47.8	5.2	4.6
Incr Delay (d2), s/veh	0.8	2.0	0.7	4.6	2.0	2.8	0.6	0.9	1.0	0.9	1.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.5	6.1	0.9	8.1	11.2	6.9	1.2	4.1	0.9	2.9	4.6	0.5
LnGrp Delay(d),s/veh	52.8	39.5	14.2	52.2	35.6	33.6	52.9	9.4	3.3	48.6	6.5	5.0
LnGrp LOS	D	D	B	D	D	C	D	A	A	D	A	A
Approach Vol, veh/h		849			1892			1294			1740	
Approach Delay, s/veh		40.2			39.6			11.1			11.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	51.6	25.4	31.0	7.6	56.0	10.8	45.6
Change Period (Y+Rc), s	3.5	6.1	6.5	* 6.5	3.5	6.1	3.5	6.5
Max Green Setting (Gmax), s	17.5	34.9	23.5	* 25	11.5	40.9	11.5	36.5
Max Q Clear Time (g_c+I1), s	8.4	10.8	18.2	14.6	4.4	11.8	7.3	25.3
Green Ext Time (p_c), s	0.1	22.2	0.7	4.1	0.0	26.4	0.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.7
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	100	810	730	160	440	250
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1863	1788	1863	1937
Adj Flow Rate, veh/h	105	853	768	168	463	263
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	381	2062	1983	851	573	532
Arrive On Green	0.75	0.75	0.56	0.56	0.32	0.32
Sat Flow, veh/h	596	3778	3632	1520	1774	1647
Grp Volume(v), veh/h	105	853	768	168	463	263
Grp Sat Flow(s),veh/h/ln	596	1840	1770	1520	1774	1647
Q Serve(g_s), s	5.8	5.1	7.3	3.3	14.3	7.7
Cycle Q Clear(g_c), s	13.1	5.1	7.3	3.3	14.3	7.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	381	2062	1983	851	573	532
V/C Ratio(X)	0.28	0.41	0.39	0.20	0.81	0.49
Avail Cap(c_a), veh/h	381	2062	1983	851	967	897
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.64	0.64	0.96	0.96
Uniform Delay (d), s/veh	7.0	4.0	7.4	6.5	18.6	16.4
Incr Delay (d2), s/veh	1.6	0.6	0.4	0.3	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	2.7	3.6	1.4	7.1	3.5
LnGrp Delay(d),s/veh	8.7	4.6	7.8	6.9	19.6	16.6
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h		958	936		726	
Approach Delay, s/veh		5.0	7.6		18.5	
Approach LOS		A	A		B	

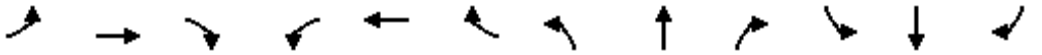
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				37.3		22.7		37.3
Change Period (Y+Rc), s				5.7		5.3		5.7
Max Green Setting (Gmax), s				18.3		30.7		18.3
Max Q Clear Time (g_c+I1), s				15.1		16.3		9.3
Green Ext Time (p_c), s				3.0		1.0		7.8

Intersection Summary	
HCM 2010 Ctrl Delay	9.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	1060	20	10	1000	10	20	10	10	30	10	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1900	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	32	1116	21	11	1053	11	21	11	11	32	11	116
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	4208	79	43	4009	42	129	113	113	220	18	193
Arrive On Green	0.04	0.79	0.79	0.01	0.25	0.25	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1774	5345	101	1774	5189	54	1258	890	890	1384	145	1524
Grp Volume(v), veh/h	32	736	401	11	688	376	21	0	22	32	0	127
Grp Sat Flow(s),veh/h/ln	1774	1763	1920	1774	1695	1853	1258	0	1780	1384	0	1668
Q Serve(g_s), s	2.1	6.7	6.7	0.7	19.4	19.5	1.9	0.0	1.3	2.5	0.0	8.6
Cycle Q Clear(g_c), s	2.1	6.7	6.7	0.7	19.4	19.5	10.6	0.0	1.3	3.8	0.0	8.6
Prop In Lane	1.00		0.05	1.00		0.03	1.00		0.50	1.00		0.91
Lane Grp Cap(c), veh/h	70	2776	1511	43	2619	1432	129	0	225	220	0	211
V/C Ratio(X)	0.46	0.27	0.27	0.25	0.26	0.26	0.16	0.00	0.10	0.15	0.00	0.60
Avail Cap(c_a), veh/h	214	2776	1511	214	2619	1432	341	0	525	453	0	492
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.74	0.74	0.74	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.4	3.4	3.4	58.4	17.4	17.4	54.5	0.0	46.3	48.0	0.0	49.5
Incr Delay (d2), s/veh	1.3	0.2	0.3	1.1	0.2	0.4	0.2	0.0	0.1	0.1	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	3.3	3.7	0.4	9.2	10.2	0.7	0.0	0.7	1.0	0.0	4.0
LnGrp Delay(d),s/veh	57.7	3.6	3.7	59.5	17.6	17.8	54.7	0.0	46.4	48.1	0.0	50.6
LnGrp LOS	E	A	A	E	B	B	D		D	D		D
Approach Vol, veh/h		1169			1075			43			159	
Approach Delay, s/veh		5.1			18.1			50.5			50.1	
Approach LOS		A			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		17.8	4.4	97.8		17.8	6.2	96.0
Change Period (Y+Rc), s		4.6	3.5	5.3		4.6	3.5	5.3
Max Green Setting (Gmax), s		33.4	12.5	60.7		33.4	12.5	60.7
Max Q Clear Time (g_c+I1), s		12.6	2.7	8.7		10.6	4.1	21.5
Green Ext Time (p_c), s		0.7	0.0	32.9		0.7	0.0	27.3

Intersection Summary	
HCM 2010 Ctrl Delay	14.6
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	700	280	190	500	150	140	840	80	300	1340	80
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	211	737	295	200	526	158	147	884	84	316	1411	84
Adj No. of Lanes	2	3	0	2	3	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	841	333	304	1177	870	564	1502	142	487	1434	85
Arrive On Green	0.09	0.23	0.23	0.09	0.23	0.23	0.10	0.10	0.10	0.55	0.55	0.55
Sat Flow, veh/h	3442	3584	1419	3442	5085	1583	1774	4726	448	1774	5222	311
Grp Volume(v), veh/h	211	697	335	200	526	158	147	633	335	316	1007	488
Grp Sat Flow(s),veh/h/ln	1721	1695	1612	1721	1695	1583	1774	1695	1784	1774	1863	1808
Q Serve(g_s), s	7.7	25.7	26.1	7.3	11.5	6.5	9.9	23.2	23.3	16.2	34.4	34.4
Cycle Q Clear(g_c), s	7.7	25.7	26.1	7.3	11.5	6.5	9.9	23.2	23.3	16.2	34.4	34.4
Prop In Lane	1.00		0.88	1.00		1.00	1.00		0.25	1.00		0.17
Lane Grp Cap(c), veh/h	315	796	378	304	1177	870	564	1077	567	487	1023	496
V/C Ratio(X)	0.67	0.88	0.89	0.66	0.45	0.18	0.26	0.59	0.59	0.65	0.98	0.98
Avail Cap(c_a), veh/h	463	796	378	463	1177	870	564	1077	567	487	1023	496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	0.90	0.90	0.90	0.28	0.28	0.28
Uniform Delay (d), s/veh	57.2	47.9	48.1	57.4	42.8	14.7	44.1	50.1	50.1	24.9	29.0	29.0
Incr Delay (d2), s/veh	0.9	12.9	24.9	0.9	1.2	0.4	1.0	2.1	4.0	1.0	11.5	17.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	13.4	14.3	3.5	5.5	4.9	5.0	11.2	12.1	7.9	19.0	19.3
LnGrp Delay(d),s/veh	58.1	60.9	73.0	58.2	44.0	15.1	45.1	52.2	54.1	25.9	40.5	46.7
LnGrp LOS	E	E	E	E	D	B	D	D	D	C	D	D
Approach Vol, veh/h		1243			884			1115			1811	
Approach Delay, s/veh		63.7			42.1			51.8			39.6	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.6	13.4	33.0		39.0	13.0	33.4
Change Period (Y+Rc), s		5.3	3.5	4.9		5.3	3.5	4.9
Max Green Setting (Gmax), s		33.7	15.5	28.1		33.7	15.5	28.1
Max Q Clear Time (g_c+I1), s		25.3	9.7	13.5		36.4	9.3	28.1
Green Ext Time (p_c), s		5.2	0.2	11.0		0.0	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	48.7
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	900	20	90	810	70	20	10	40	30	10	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	74	947	21	95	853	74	21	11	42	32	11	32
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	551	4028	89	147	2566	222	130	35	132	130	37	162
Arrive On Green	0.62	1.00	1.00	0.06	0.35	0.35	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1774	5324	118	1774	4959	429	1358	339	1295	762	367	1583
Grp Volume(v), veh/h	74	627	341	95	606	321	21	0	53	43	0	32
Grp Sat Flow(s),veh/h/ln	1774	1763	1916	1774	1763	1862	1358	0	1634	1129	0	1583
Q Serve(g_s), s	2.1	0.0	0.0	6.3	15.2	15.3	1.8	0.0	3.6	2.5	0.0	2.2
Cycle Q Clear(g_c), s	2.1	0.0	0.0	6.3	15.2	15.3	7.9	0.0	3.6	6.1	0.0	2.2
Prop In Lane	1.00		0.06	1.00		0.23	1.00		0.79	0.74		1.00
Lane Grp Cap(c), veh/h	551	2667	1450	147	1825	963	130	0	167	168	0	162
V/C Ratio(X)	0.13	0.24	0.24	0.64	0.33	0.33	0.16	0.00	0.32	0.26	0.00	0.20
Avail Cap(c_a), veh/h	551	2667	1450	229	1825	963	392	0	482	447	0	467
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.1	0.0	0.0	54.9	23.9	23.9	54.8	0.0	50.0	51.7	0.0	49.4
Incr Delay (d2), s/veh	0.0	0.2	0.3	1.6	0.5	0.9	0.2	0.0	0.4	0.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.0	0.1	0.1	3.2	7.5	8.1	0.7	0.0	1.7	1.4	0.0	1.0
LnGrp Delay(d),s/veh	16.1	0.2	0.3	56.6	24.3	24.8	55.0	0.0	50.4	52.0	0.0	49.6
LnGrp LOS	B	A	A	E	C	C	E		D	D		D
Approach Vol, veh/h		1042			1022			74			75	
Approach Delay, s/veh		1.4			27.5			51.7			51.0	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		14.8	11.5	93.7		14.8	40.2	65.0
Change Period (Y+Rc), s		4.6	3.5	4.9		4.6	4.9	* 4.9
Max Green Setting (Gmax), s		33.4	13.5	60.1		33.4	13.5	* 60
Max Q Clear Time (g_c+I1), s		9.9	8.3	2.0		8.1	4.1	17.3
Green Ext Time (p_c), s		0.4	0.0	10.6		0.4	3.4	9.9

Intersection Summary	
HCM 2010 Ctrl Delay	16.8
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	1050	60	10	640	80	50	20	20	120	30	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	32	1105	63	11	674	84	53	21	21	126	32	74
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	2747	157	41	2475	308	173	131	131	227	77	177
Arrive On Green	0.10	1.00	1.00	0.02	0.75	0.75	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1774	3540	202	1774	3295	410	1283	890	890	1359	521	1204
Grp Volume(v), veh/h	32	574	594	11	376	382	53	0	42	126	0	106
Grp Sat Flow(s),veh/h/ln	1774	1840	1902	1774	1840	1865	1283	0	1780	1359	0	1725
Q Serve(g_s), s	2.2	0.0	0.0	0.8	8.3	8.3	5.1	0.0	2.7	11.6	0.0	7.3
Cycle Q Clear(g_c), s	2.2	0.0	0.0	0.8	8.3	8.3	12.4	0.0	2.7	14.3	0.0	7.3
Prop In Lane	1.00		0.11	1.00		0.22	1.00		0.50	1.00		0.70
Lane Grp Cap(c), veh/h	85	1428	1476	41	1382	1401	173	0	262	227	0	254
V/C Ratio(X)	0.38	0.40	0.40	0.27	0.27	0.27	0.31	0.00	0.16	0.55	0.00	0.42
Avail Cap(c_a), veh/h	252	1428	1476	252	1382	1401	402	0	581	471	0	563
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.53	0.53	0.53	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	0.0	0.0	62.4	5.1	5.1	56.0	0.0	48.4	54.7	0.0	50.4
Incr Delay (d2), s/veh	0.5	0.5	0.4	1.3	0.5	0.5	0.4	0.0	0.1	0.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	0.2	0.2	0.4	4.4	4.4	1.8	0.0	1.3	4.4	0.0	3.5
LnGrp Delay(d),s/veh	57.5	0.5	0.4	63.7	5.5	5.5	56.4	0.0	48.5	55.4	0.0	50.8
LnGrp LOS	E	A	A	E	A	A	E		D	E		D
Approach Vol, veh/h		1200			769			95			232	
Approach Delay, s/veh		2.0			6.4			52.9			53.3	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	103.8		21.7	7.7	100.6		21.7
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	16.5	60.1		40.4	16.5	60.1		40.4
Max Q Clear Time (g_c+I1), s	2.8	2.0		16.3	4.2	10.3		14.4
Green Ext Time (p_c), s	0.0	33.6		0.9	0.0	30.7		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

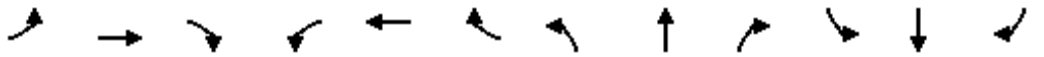
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	780	20	50	1290	30	20	10	70	20	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1900	1863	1863	1900	1976	1937	1976	1900	1863	1863
Adj Flow Rate, veh/h	11	821	21	53	1358	32	21	11	74	21	11	11
Adj No. of Lanes	1	3	0	1	4	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	537	4032	103	96	3336	79	60	25	114	131	59	156
Arrive On Green	0.63	1.00	1.00	0.11	1.00	1.00	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1703	5100	130	1774	6489	153	242	256	1152	825	597	1583
Grp Volume(v), veh/h	11	545	297	53	1005	385	106	0	0	32	0	11
Grp Sat Flow(s),veh/h/ln	1703	1695	1840	1774	1602	1836	1650	0	0	1422	0	1583
Q Serve(g_s), s	0.3	0.0	0.0	3.4	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s	0.3	0.0	0.0	3.4	0.0	0.0	7.4	0.0	0.0	2.2	0.0	0.8
Prop In Lane	1.00		0.07	1.00		0.08	0.20		0.70	0.66		1.00
Lane Grp Cap(c), veh/h	537	2680	1455	96	2471	944	199	0	0	190	0	156
V/C Ratio(X)	0.02	0.20	0.20	0.55	0.41	0.41	0.53	0.00	0.00	0.17	0.00	0.07
Avail Cap(c_a), veh/h	537	2680	1455	273	2471	944	526	0	0	483	0	475
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.96	0.96	0.96	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	0.0	52.1	0.0	0.0	52.0	0.0	0.0	49.7	0.0	49.1
Incr Delay (d2), s/veh	0.0	0.2	0.3	1.8	0.5	1.3	0.8	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	0.1	0.1	1.7	0.1	0.3	3.4	0.0	0.0	1.0	0.0	0.3
LnGrp Delay(d),s/veh	15.2	0.2	0.3	53.9	0.5	1.3	52.8	0.0	0.0	49.8	0.0	49.2
LnGrp LOS	B	A	A	D	A	A	D			D		D
Approach Vol, veh/h		853			1443			106			43	
Approach Delay, s/veh		0.4			2.6			52.8			49.7	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.8	8.0	98.2		13.8	41.2	65.0
Change Period (Y+Rc), s		4.0	3.5	5.3		4.0	5.3	* 5.3
Max Green Setting (Gmax), s		34.0	16.5	56.7		34.0	13.5	* 60
Max Q Clear Time (g_c+I1), s		9.4	5.4	2.0		4.2	2.3	2.0
Green Ext Time (p_c), s		0.5	0.0	10.3		0.6	2.7	21.7

Intersection Summary	
HCM 2010 Ctrl Delay	4.9
HCM 2010 LOS	A

Notes

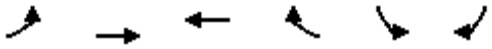
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	850	170	140	840	130	90	320	180	120	430	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	53	895	179	147	884	137	95	337	189	126	453	116
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	2304	459	201	2675	413	205	693	381	216	879	223
Arrive On Green	0.02	0.17	0.17	0.11	0.58	0.58	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1774	4426	881	1774	4624	713	839	2294	1261	873	2908	739
Grp Volume(v), veh/h	53	712	362	147	673	348	95	269	257	126	285	284
Grp Sat Flow(s),veh/h/ln	1774	1763	1782	1774	1763	1811	839	1840	1715	873	1840	1807
Q Serve(g_s), s	3.6	21.5	21.6	9.6	11.9	12.0	12.7	14.3	14.8	16.6	15.4	15.6
Cycle Q Clear(g_c), s	3.6	21.5	21.6	9.6	11.9	12.0	28.3	14.3	14.8	31.4	15.4	15.6
Prop In Lane	1.00		0.49	1.00		0.39	1.00		0.74	1.00		0.41
Lane Grp Cap(c), veh/h	98	1835	927	201	2040	1048	205	556	518	216	556	546
V/C Ratio(X)	0.54	0.39	0.39	0.73	0.33	0.33	0.46	0.48	0.50	0.58	0.51	0.52
Avail Cap(c_a), veh/h	214	1835	927	273	2040	1048	210	569	530	223	569	559
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	0.79	0.79	0.79	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	32.7	32.8	51.5	13.2	13.2	46.4	34.2	34.4	47.2	34.6	34.7
Incr Delay (d2), s/veh	1.7	0.6	1.2	3.6	0.4	0.9	0.5	0.2	0.2	2.3	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	10.7	11.0	4.9	5.9	6.2	3.0	7.3	7.0	4.2	7.9	7.8
LnGrp Delay(d),s/veh	59.1	33.3	34.0	55.0	13.6	14.0	46.8	34.4	34.6	49.6	34.9	35.0
LnGrp LOS	E	C	C	E	B	B	D	C	C	D	C	C
Approach Vol, veh/h		1127			1168			621			695	
Approach Delay, s/veh		34.8			18.9			36.4			37.6	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.1	65.8		39.2	8.1	72.7		39.2
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	16.5	54.7		35.1	12.5	58.7		35.1
Max Q Clear Time (g_c+I1), s	11.6	23.6		33.4	5.6	14.0		30.3
Green Ext Time (p_c), s	0.0	22.3		0.9	0.0	28.6		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.5
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	20	770	1290	30	30	10
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	21	811	1358	32	22	22
Adj No. of Lanes	1	3	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	55	4580	5564	131	98	89
Arrive On Green	0.06	1.00	1.00	1.00	0.06	0.06
Sat Flow, veh/h	1774	5253	6750	153	1774	1615
Grp Volume(v), veh/h	21	811	1005	385	22	22
Grp Sat Flow(s),veh/h/ln	1774	1695	1602	1836	1774	1615
Q Serve(g_s), s	1.4	0.0	0.0	0.0	1.4	1.6
Cycle Q Clear(g_c), s	1.4	0.0	0.0	0.0	1.4	1.6
Prop In Lane	1.00			0.08	1.00	1.00
Lane Grp Cap(c), veh/h	55	4580	4121	1574	98	89
V/C Ratio(X)	0.38	0.18	0.24	0.24	0.22	0.25
Avail Cap(c_a), veh/h	214	4580	4121	1574	517	471
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	55.2	0.0	0.0	0.0	54.2	54.3
Incr Delay (d2), s/veh	1.4	0.1	0.1	0.4	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.0	0.1	0.2	0.7	1.4
LnGrp Delay(d),s/veh	56.6	0.1	0.1	0.4	54.7	54.8
LnGrp LOS	E	A	A	A	D	D
Approach Vol, veh/h		832	1390		44	
Approach Delay, s/veh		1.5	0.2		54.8	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				111.4		8.6	5.2	106.2
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				77.7		33.0	12.5	61.7
Max Q Clear Time (g_c+I1), s				2.0		3.6	3.4	2.0
Green Ext Time (p_c), s				47.2		0.0	0.0	40.6

Intersection Summary	
HCM 2010 Ctrl Delay	1.7
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	260	10	200	30	10	20	100	1030	20	10	2030	230
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	274	11	52	32	11	4	105	1084	20	11	2137	233
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	359	60	283	227	74	23	129	3455	64	18	2841	306
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.07	0.67	0.67	0.02	1.00	1.00
Sat Flow, veh/h	1393	284	1342	838	350	111	1774	5141	95	1774	4663	502
Grp Volume(v), veh/h	274	0	63	47	0	0	105	715	389	11	1546	824
Grp Sat Flow(s),veh/h/ln	1393	0	1626	1299	0	0	1774	1695	1846	1774	1695	1774
Q Serve(g_s), s	16.7	0.0	3.8	2.1	0.0	0.0	7.0	10.5	10.5	0.7	0.0	0.0
Cycle Q Clear(g_c), s	22.6	0.0	3.8	5.9	0.0	0.0	7.0	10.5	10.5	0.7	0.0	0.0
Prop In Lane	1.00		0.83	0.68		0.09	1.00		0.05	1.00		0.28
Lane Grp Cap(c), veh/h	359	0	343	325	0	0	129	2278	1240	18	2065	1081
V/C Ratio(X)	0.76	0.00	0.18	0.14	0.00	0.00	0.81	0.31	0.31	0.61	0.75	0.76
Avail Cap(c_a), veh/h	506	0	515	478	0	0	185	2278	1240	185	2065	1081
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.76	0.76	0.76	0.20	0.20	0.20
Uniform Delay (d), s/veh	46.1	0.0	38.8	39.9	0.0	0.0	54.8	8.2	8.2	58.5	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.1	0.1	0.0	0.0	8.6	0.3	0.5	2.4	0.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.1	0.0	1.7	1.3	0.0	0.0	3.7	5.0	5.5	0.4	0.1	0.3
LnGrp Delay(d),s/veh	48.5	0.0	38.9	40.0	0.0	0.0	63.4	8.5	8.7	60.9	0.5	1.1
LnGrp LOS	D		D	D			E	A	A	E	A	A
Approach Vol, veh/h		337			47			1209			2381	
Approach Delay, s/veh		46.7			40.0			13.3			1.0	
Approach LOS		D			D			B			A	

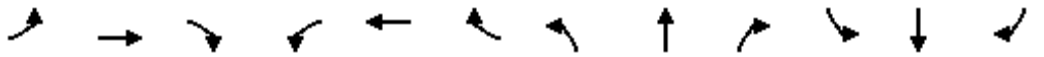
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	78.4		29.3	4.7	85.9		29.3
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	56.7		38.0	12.5	56.7		38.0
Max Q Clear Time (g_c+I1), s	9.0	2.0		24.6	2.7	12.5		7.9
Green Ext Time (p_c), s	0.0	52.2		0.7	0.0	42.5		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	9.1
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	20	40	50	20	60	20	980	40	30	1930	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	53	21	42	53	21	63	21	1032	42	32	2032	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	41	58	97	36	78	25	3814	155	40	3967	62
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.00	0.25	0.25	0.05	1.00	1.00
Sat Flow, veh/h	553	376	527	506	331	713	1774	5013	204	1774	5157	81
Grp Volume(v), veh/h	116	0	0	137	0	0	21	698	376	32	1335	729
Grp Sat Flow(s),veh/h/ln	1456	0	0	1550	0	0	1774	1695	1827	1774	1695	1848
Q Serve(g_s), s	0.0	0.0	0.0	1.0	0.0	0.0	1.4	19.8	19.9	2.1	0.0	0.0
Cycle Q Clear(g_c), s	9.2	0.0	0.0	10.3	0.0	0.0	1.4	19.8	19.9	2.1	0.0	0.0
Prop In Lane	0.46		0.36	0.39		0.46	1.00		0.11	1.00		0.04
Lane Grp Cap(c), veh/h	204	0	0	212	0	0	25	2579	1390	40	2608	1422
V/C Ratio(X)	0.57	0.00	0.00	0.65	0.00	0.00	0.82	0.27	0.27	0.80	0.51	0.51
Avail Cap(c_a), veh/h	473	0	0	486	0	0	185	2579	1390	185	2608	1422
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.92	0.92	0.92	0.09	0.09	0.09
Uniform Delay (d), s/veh	51.5	0.0	0.0	52.0	0.0	0.0	59.6	18.2	18.2	57.0	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.2	0.0	0.0	19.7	0.2	0.4	1.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	0.0	0.0	4.5	0.0	0.0	0.8	9.4	10.2	1.1	0.0	0.0
LnGrp Delay(d),s/veh	52.4	0.0	0.0	53.3	0.0	0.0	79.2	18.4	18.6	58.2	0.1	0.1
LnGrp LOS	D			D			E	B	B	E	A	A
Approach Vol, veh/h		116			137			1095			2096	
Approach Delay, s/veh		52.4			53.3			19.7			1.0	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	96.6		17.2	5.2	97.6		17.2
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	59.7		35.0	12.5	59.7		35.0
Max Q Clear Time (g_c+I1), s	4.1	21.9		11.2	3.4	2.0		12.3
Green Ext Time (p_c), s	0.0	35.5		1.1	0.0	52.5		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	600	210	120	720	140	130	800	110	210	1870	110
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.90	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	105	632	221	126	758	147	137	842	116	221	1968	116
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	667	233	152	801	155	161	1645	225	249	2114	629
Arrive On Green	0.02	0.09	0.09	0.06	0.19	0.19	0.18	0.73	0.73	0.09	0.28	0.28
Sat Flow, veh/h	1774	2526	882	1774	2896	561	1774	4492	615	1774	5085	1514
Grp Volume(v), veh/h	105	443	410	126	463	442	137	634	324	221	1968	116
Grp Sat Flow(s),veh/h/ln	1774	1770	1638	1774	1770	1688	1774	1695	1716	1774	1695	1514
Q Serve(g_s), s	7.1	29.9	29.9	8.4	31.0	31.0	9.0	9.6	9.7	14.8	45.2	7.0
Cycle Q Clear(g_c), s	7.1	29.9	29.9	8.4	31.0	31.0	9.0	9.6	9.7	14.8	45.2	7.0
Prop In Lane	1.00		0.54	1.00		0.33	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	130	467	433	152	489	467	161	1241	628	249	2114	629
V/C Ratio(X)	0.80	0.95	0.95	0.83	0.95	0.95	0.85	0.51	0.52	0.89	0.93	0.18
Avail Cap(c_a), veh/h	214	467	433	214	489	467	244	1241	628	318	2114	629
HCM Platoon Ratio	0.33	0.33	0.33	0.67	0.67	0.67	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	0.57	0.57	0.57	0.81	0.81	0.81	0.97	0.97	0.97	0.44	0.44	0.44
Uniform Delay (d), s/veh	57.7	53.9	54.0	55.7	48.0	48.0	48.3	11.5	11.5	53.4	41.6	27.8
Incr Delay (d2), s/veh	2.5	19.9	21.3	9.8	24.2	25.1	10.3	1.5	2.9	9.3	4.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	17.3	16.2	4.6	18.5	17.7	4.8	4.6	5.0	7.9	22.1	3.0
LnGrp Delay(d),s/veh	60.2	73.8	75.2	65.4	72.2	73.1	58.6	12.9	14.4	62.8	46.0	28.1
LnGrp LOS	E	E	E	E	E	E	E	B	B	E	D	C
Approach Vol, veh/h		958			1031			1095			2305	
Approach Delay, s/veh		72.9			71.7			19.1			46.7	
Approach LOS		E			E			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	54.8	12.3	38.5	20.3	48.8	13.8	37.0
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	16.5	40.1	14.5	31.7	21.5	35.1	14.5	31.7
Max Q Clear Time (g_c+I1), s	11.0	47.2	9.1	33.0	16.8	11.7	10.4	31.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	22.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	50.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	100	60	30	70	60	90	560	40	140	1030	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.88		0.82	0.89		0.82	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	105	63	32	74	63	95	589	42	147	1084	42
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	189	103	76	160	119	359	2427	173	522	2519	98
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.24	0.24	0.24	0.73	0.73	0.72
Sat Flow, veh/h	166	913	496	195	771	574	498	3344	238	792	3469	134
Grp Volume(v), veh/h	200	0	0	169	0	0	95	311	320	147	553	573
Grp Sat Flow(s),veh/h/ln	1576	0	0	1539	0	0	498	1770	1812	792	1770	1834
Q Serve(g_s), s	2.1	0.0	0.0	0.0	0.0	0.0	19.6	17.0	17.1	11.4	14.9	15.0
Cycle Q Clear(g_c), s	13.1	0.0	0.0	11.0	0.0	0.0	34.6	17.0	17.1	28.5	14.9	15.0
Prop In Lane	0.16		0.31	0.19		0.37	1.00		0.13	1.00		0.07
Lane Grp Cap(c), veh/h	362	0	0	355	0	0	359	1285	1315	522	1285	1331
V/C Ratio(X)	0.55	0.00	0.00	0.48	0.00	0.00	0.26	0.24	0.24	0.28	0.43	0.43
Avail Cap(c_a), veh/h	375	0	0	368	0	0	359	1285	1315	522	1285	1331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.94	0.94	0.94	0.35	0.35	0.35
Uniform Delay (d), s/veh	42.9	0.0	0.0	42.1	0.0	0.0	32.1	19.0	19.0	12.8	6.6	6.6
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.4	0.0	0.0	1.7	0.4	0.4	0.5	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.1	0.0	0.0	5.0	0.0	0.0	2.9	8.5	8.7	2.6	7.3	7.6
LnGrp Delay(d),s/veh	43.7	0.0	0.0	42.5	0.0	0.0	33.7	19.4	19.4	13.3	6.9	6.9
LnGrp LOS	D			D			C	B	B	B	A	A
Approach Vol, veh/h		200			169			726			1273	
Approach Delay, s/veh		43.7			42.5			21.3			7.7	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		91.1		28.9		91.1		28.9
Change Period (Y+Rc), s		4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s		85.1		26.0		85.1		26.0
Max Q Clear Time (g_c+I1), s		36.6		15.1		30.5		13.0
Green Ext Time (p_c), s		8.1		1.3		8.1		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	17.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	430	150	90	540	80	140	420	130	90	560	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	116	453	158	95	568	84	147	442	137	95	589	232
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	598	207	111	677	100	380	1615	496	528	1503	591
Arrive On Green	0.08	0.23	0.22	0.12	0.44	0.42	0.81	0.81	0.80	0.61	0.61	0.60
Sat Flow, veh/h	1774	2579	892	1774	3093	456	664	2667	820	831	2483	976
Grp Volume(v), veh/h	116	310	301	95	324	328	147	292	287	95	420	401
Grp Sat Flow(s),veh/h/ln	1774	1770	1701	1774	1770	1780	664	1770	1717	831	1770	1689
Q Serve(g_s), s	7.8	19.5	19.9	6.3	19.5	19.7	13.5	4.9	5.1	6.8	14.7	14.9
Cycle Q Clear(g_c), s	7.8	19.5	19.9	6.3	19.5	19.7	28.4	4.9	5.1	11.9	14.7	14.9
Prop In Lane	1.00		0.52	1.00		0.26	1.00		0.48	1.00		0.58
Lane Grp Cap(c), veh/h	134	411	395	111	387	390	380	1072	1040	528	1072	1023
V/C Ratio(X)	0.87	0.75	0.76	0.86	0.84	0.84	0.39	0.27	0.28	0.18	0.39	0.39
Avail Cap(c_a), veh/h	148	678	652	237	767	771	380	1072	1040	528	1072	1023
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	0.46	0.46	0.46	0.68	0.68	0.68	0.86	0.86	0.86	0.42	0.42	0.42
Uniform Delay (d), s/veh	54.9	42.9	43.2	52.0	31.8	32.1	11.2	5.1	5.2	12.9	12.2	12.4
Incr Delay (d2), s/veh	18.3	0.5	0.5	5.0	1.3	1.3	2.6	0.5	0.6	0.3	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	9.6	9.4	3.2	9.5	9.6	2.7	2.6	2.6	1.6	7.2	7.0
LnGrp Delay(d),s/veh	73.2	43.4	43.8	57.0	33.1	33.4	13.7	5.6	5.8	13.3	12.7	12.9
LnGrp LOS	E	D	D	E	C	C	B	A	A	B	B	B
Approach Vol, veh/h		727			747			726			916	
Approach Delay, s/veh		48.3			36.3			7.3			12.8	
Approach LOS		D			D			A			B	

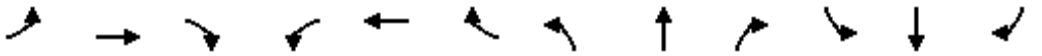
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		76.7	11.5	31.8		76.7	13.1	30.3
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	16.5	45.1		45.1	10.5	51.1
Max Q Clear Time (g_c+I1), s		30.4	8.3	21.9		16.9	9.8	21.7
Green Ext Time (p_c), s		4.8	0.0	3.6		5.7	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	650	160	120	600	200	70	410	90	120	800	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	684	168	126	632	211	74	432	95	126	842	116
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	839	206	143	823	275	221	1504	328	439	1627	224
Arrive On Green	0.06	0.30	0.29	0.16	0.63	0.62	0.52	0.52	0.51	0.17	0.17	0.17
Sat Flow, veh/h	1774	2814	691	1774	2604	868	584	2886	630	871	3123	430
Grp Volume(v), veh/h	95	430	422	126	429	414	74	263	264	126	477	481
Grp Sat Flow(s),veh/h/ln	1774	1770	1735	1774	1770	1703	584	1770	1746	871	1770	1783
Q Serve(g_s), s	6.4	27.0	27.1	8.3	20.8	21.0	12.6	10.1	10.3	15.6	29.4	29.4
Cycle Q Clear(g_c), s	6.4	27.0	27.1	8.3	20.8	21.0	42.0	10.1	10.3	25.9	29.4	29.4
Prop In Lane	1.00		0.40	1.00		0.51	1.00		0.36	1.00		0.24
Lane Grp Cap(c), veh/h	111	528	517	143	560	538	221	922	910	439	922	929
V/C Ratio(X)	0.85	0.82	0.82	0.88	0.77	0.77	0.33	0.29	0.29	0.29	0.52	0.52
Avail Cap(c_a), veh/h	133	782	766	177	826	795	221	922	910	439	922	929
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.37	0.37	0.37	0.49	0.49	0.49	0.78	0.78	0.78	0.92	0.92	0.92
Uniform Delay (d), s/veh	55.7	39.0	39.2	49.7	18.9	19.3	36.0	16.2	16.3	39.1	36.0	36.0
Incr Delay (d2), s/veh	13.8	1.0	1.0	16.0	0.6	0.6	3.2	0.6	0.6	1.5	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.5	13.4	13.2	4.7	9.9	9.8	2.2	5.1	5.1	4.0	14.9	15.0
LnGrp Delay(d),s/veh	69.5	40.0	40.2	65.7	19.5	20.0	39.2	16.8	16.9	40.6	37.9	37.9
LnGrp LOS	E	D	D	E	B	B	D	B	B	D	D	D
Approach Vol, veh/h		947			969			601			1084	
Approach Delay, s/veh		43.1			25.7			19.6			38.2	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		66.5	13.7	39.8		66.5	11.5	42.0
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		42.1	12.5	52.1		42.1	9.5	55.1
Max Q Clear Time (g_c+I1), s		44.0	10.3	29.1		31.4	8.4	23.0
Green Ext Time (p_c), s		0.0	0.0	5.8		4.2	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	33.0
HCM 2010 LOS	C



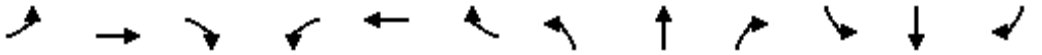
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	300	0	80	0	410	170	60	620	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor					1.00	1.00		0.95		1.00	0.95	
Frt					1.00	0.85		0.96		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1770	1583		3384		1770	3539	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1770	1583		3384		1770	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	316	0	84	0	432	179	63	653	0
RTOR Reduction (vph)	0	0	0	0	0	66	0	21	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	316	18	0	590	0	63	653	0
Turn Type				Split	NA	Perm		NA		Prot	NA	
Protected Phases				8	8			2		1	6	
Permitted Phases						8						
Actuated Green, G (s)					25.4	25.4		74.9		7.3	85.7	
Effective Green, g (s)					25.4	25.4		75.8		6.8	86.6	
Actuated g/C Ratio					0.21	0.21		0.63		0.06	0.72	
Clearance Time (s)					4.0	4.0		4.9		3.5	4.9	
Vehicle Extension (s)					1.5	1.5		1.5		1.5	1.5	
Lane Grp Cap (vph)					374	335		2137		100	2553	
v/s Ratio Prot					c0.18			c0.17		c0.04	0.18	
v/s Ratio Perm						0.01						
v/c Ratio					0.84	0.05		0.28		0.63	0.26	
Uniform Delay, d1					45.4	37.7		9.9		55.4	5.7	
Progression Factor					0.67	0.69		0.51		1.21	0.50	
Incremental Delay, d2					14.5	0.0		0.3		8.6	0.2	
Delay (s)					44.9	26.0		5.3		75.4	3.1	
Level of Service					D	C		A		E	A	
Approach Delay (s)		0.0			40.9			5.3			9.4	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	50	340	20	50	20	250	560	40	40	840	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	84	53	358	21	53	21	263	589	42	42	884	53
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	157	354	36	91	107	259	1934	863	46	1447	87
Arrive On Green	0.22	0.22	0.22	0.07	0.07	0.07	0.29	1.00	1.00	0.05	0.85	0.84
Sat Flow, veh/h	1108	699	1573	521	1315	1549	1774	3539	1579	1774	3392	203
Grp Volume(v), veh/h	137	0	358	74	0	21	263	589	42	42	461	476
Grp Sat Flow(s),veh/h/ln	1807	0	1573	1837	0	1549	1774	1770	1579	1774	1770	1826
Q Serve(g_s), s	7.6	0.0	27.0	4.7	0.0	1.5	17.5	0.0	0.0	2.8	9.6	9.7
Cycle Q Clear(g_c), s	7.6	0.0	27.0	4.7	0.0	1.5	17.5	0.0	0.0	2.8	9.6	9.7
Prop In Lane	0.61		1.00	0.28		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	407	0	354	127	0	107	259	1934	863	46	755	779
V/C Ratio(X)	0.34	0.00	1.01	0.58	0.00	0.20	1.02	0.30	0.05	0.91	0.61	0.61
Avail Cap(c_a), veh/h	407	0	354	413	0	349	259	1934	863	105	755	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.90	0.90	0.90	0.85	0.85	0.85
Uniform Delay (d), s/veh	39.0	0.0	46.5	54.2	0.0	52.7	42.5	0.0	0.0	56.7	5.7	5.8
Incr Delay (d2), s/veh	0.2	0.0	50.8	1.6	0.0	0.3	57.3	0.4	0.1	17.7	3.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	0.0	16.7	2.4	0.0	0.7	12.6	0.1	0.0	1.6	5.0	5.2
LnGrp Delay(d),s/veh	39.2	0.0	97.4	55.7	0.0	53.0	100.0	0.4	0.1	74.4	8.9	8.8
LnGrp LOS	D		F	E		D	F	A	A	E	A	A
Approach Vol, veh/h		495			95			894			979	
Approach Delay, s/veh		81.3			55.1			29.7			11.7	
Approach LOS		F			E			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	69.6		31.0	21.5	55.2		12.3
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	7.6	42.0		27.0	18.0	31.6		27.0
Max Q Clear Time (g_c+I1), s	4.8	2.0		29.0	19.5	11.7		6.7
Green Ext Time (p_c), s	0.0	5.2		0.0	0.0	4.8		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	33.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	60	60	10	90	30	40	530	10	30	870	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	211	63	63	11	95	32	42	558	11	32	916	274
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	163	163	49	333	301	46	2448	48	33	1831	546
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.05	1.00	1.00	0.02	0.68	0.67
Sat Flow, veh/h	1250	851	851	85	1736	1568	1774	3550	70	1774	2684	801
Grp Volume(v), veh/h	211	0	126	106	0	32	42	278	291	32	603	587
Grp Sat Flow(s),veh/h/ln	1250	0	1703	1821	0	1568	1774	1770	1850	1774	1770	1715
Q Serve(g_s), s	17.1	0.0	7.8	0.0	0.0	2.0	2.8	0.0	0.0	2.2	19.7	20.0
Cycle Q Clear(g_c), s	23.0	0.0	7.8	5.9	0.0	2.0	2.8	0.0	0.0	2.2	19.7	20.0
Prop In Lane	1.00		0.50	0.10		1.00	1.00		0.04	1.00		0.47
Lane Grp Cap(c), veh/h	239	0	326	382	0	301	46	1221	1276	33	1207	1170
V/C Ratio(X)	0.88	0.00	0.39	0.28	0.00	0.11	0.90	0.23	0.23	0.97	0.50	0.50
Avail Cap(c_a), veh/h	239	0	326	382	0	301	118	1221	1276	118	1207	1170
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.98	0.98	0.98	0.61	0.61	0.61
Uniform Delay (d), s/veh	52.7	0.0	42.3	41.6	0.0	40.0	56.7	0.0	0.0	58.8	9.2	9.3
Incr Delay (d2), s/veh	29.1	0.0	0.3	0.1	0.0	0.1	19.7	0.4	0.4	27.8	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.9	0.0	3.7	3.0	0.0	0.9	1.6	0.1	0.1	1.3	9.9	9.6
LnGrp Delay(d),s/veh	81.9	0.0	42.6	41.7	0.0	40.1	76.5	0.4	0.4	86.7	10.1	10.3
LnGrp LOS	F		D	D		D	E	A	A	F	B	B
Approach Vol, veh/h		337			138			611			1222	
Approach Delay, s/veh		67.2			41.3			5.6			12.2	
Approach LOS		E			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	86.8		27.0	7.1	85.9		27.0
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	8.5	76.1		23.0	8.5	76.1		23.0
Max Q Clear Time (g_c+I1), s	4.2	2.0		25.0	4.8	22.0		7.9
Green Ext Time (p_c), s	0.0	6.1		0.0	0.0	6.1		1.2

Intersection Summary		
HCM 2010 Ctrl Delay		20.2
HCM 2010 LOS		C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	360	140	360	300	80	320
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863
Adj Flow Rate, veh/h	379	147	379	316	84	337
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1239	474	396	1400	323	635
Arrive On Green	0.50	0.48	0.37	1.00	0.18	0.18
Sat Flow, veh/h	2595	957	1774	1863	1774	1583
Grp Volume(v), veh/h	267	259	379	316	84	337
Grp Sat Flow(s),veh/h/ln	1770	1689	1774	1863	1774	1583
Q Serve(g_s), s	10.7	11.1	25.0	0.0	4.9	19.4
Cycle Q Clear(g_c), s	10.7	11.1	25.0	0.0	4.9	19.4
Prop In Lane		0.57	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	876	836	396	1400	323	635
V/C Ratio(X)	0.30	0.31	0.96	0.23	0.26	0.53
Avail Cap(c_a), veh/h	876	836	621	1400	473	769
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.97	0.97
Uniform Delay (d), s/veh	18.0	18.3	37.1	0.0	42.2	27.4
Incr Delay (d2), s/veh	0.9	1.0	15.2	0.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.5	5.4	13.8	0.1	2.4	8.6
LnGrp Delay(d),s/veh	18.9	19.3	52.3	0.4	42.3	27.6
LnGrp LOS	B	B	D	A	D	C
Approach Vol, veh/h	526			695	421	
Approach Delay, s/veh	19.1			28.7	30.6	
Approach LOS	B			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	30.8	63.4				94.2		25.8
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	42.5	32.7				78.7		32.0
Max Q Clear Time (g_c+I1), s	27.0	13.1				2.0		21.4
Green Ext Time (p_c), s	0.3	7.1				9.6		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	660	360	250	520	50	170	10	170	20	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	695	379	263	547	53	187	0	179	21	11	11
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	1818	845	231	3106	298	523	0	418	83	39	39
Arrive On Green	0.01	0.54	0.53	0.13	0.66	0.65	0.15	0.00	0.14	0.05	0.05	0.04
Sat Flow, veh/h	1774	3390	1576	1774	4718	452	3548	0	1562	1774	840	840
Grp Volume(v), veh/h	21	695	379	263	391	209	187	0	179	21	0	22
Grp Sat Flow(s),veh/h/ln	1774	1695	1576	1774	1695	1780	1774	0	1562	1774	0	1679
Q Serve(g_s), s	1.0	13.8	17.2	15.0	5.1	5.3	5.5	0.0	10.9	1.3	0.0	1.5
Cycle Q Clear(g_c), s	1.0	13.8	17.2	15.0	5.1	5.3	5.5	0.0	10.9	1.3	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	15	1818	845	231	2232	1172	523	0	418	83	0	79
V/C Ratio(X)	1.41	0.38	0.45	1.14	0.18	0.18	0.36	0.00	0.43	0.25	0.00	0.28
Avail Cap(c_a), veh/h	123	1818	845	231	2232	1172	956	0	609	123	0	117
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	0.92	0.92	0.92	0.98	0.00	0.98	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	15.6	16.7	50.0	7.6	7.7	44.1	0.0	35.0	52.9	0.0	53.2
Incr Delay (d2), s/veh	207.1	0.5	1.3	98.7	0.2	0.3	0.6	0.0	0.9	0.6	0.0	0.7
Initial Q Delay(d3),s/veh	20.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	6.5	7.8	13.7	2.4	2.7	2.7	0.0	4.8	0.7	0.0	0.7
LnGrp Delay(d),s/veh	284.2	16.0	18.1	148.7	7.7	8.0	44.7	0.0	36.0	53.5	0.0	53.9
LnGrp LOS	F	B	B	F	A	A	D		D	D		D
Approach Vol, veh/h		1095			863			366			43	
Approach Delay, s/veh		21.9			50.8			40.4			53.7	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.0	65.7		9.4	5.0	79.7		20.9
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	15.5	43.7		7.1	8.5	50.7		30.1
Max Q Clear Time (g_c+I1), s	17.0	19.2		3.5	3.0	7.3		12.9
Green Ext Time (p_c), s	0.0	16.8		0.0	0.0	24.2		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	35.9
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	830	10	10	690	20	10	0	10	80	0	270
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	21	874	11	11	726	21	11	0	11	84	0	284
Adj No. of Lanes	1	3	0	1	3	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	501	2477	31	457	2430	70	305	51	187	606	0	427
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.27	0.00	0.27	0.27	0.00	0.27
Sat Flow, veh/h	703	5174	65	619	5074	146	502	188	690	1407	0	1578
Grp Volume(v), veh/h	21	572	313	11	484	263	22	0	0	84	0	284
Grp Sat Flow(s),veh/h/ln	703	1695	1848	619	1695	1831	1381	0	0	1407	0	1578
Q Serve(g_s), s	0.6	3.4	3.4	0.4	2.8	2.8	0.0	0.0	0.0	1.1	0.0	5.1
Cycle Q Clear(g_c), s	3.4	3.4	3.4	3.7	2.8	2.8	0.3	0.0	0.0	1.4	0.0	5.1
Prop In Lane	1.00		0.04	1.00		0.08	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	501	1623	885	457	1623	877	543	0	0	606	0	427
V/C Ratio(X)	0.04	0.35	0.35	0.02	0.30	0.30	0.04	0.00	0.00	0.14	0.00	0.67
Avail Cap(c_a), veh/h	649	2338	1275	587	2338	1263	1002	0	0	1103	0	989
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.1	5.2	5.2	6.4	5.1	5.1	8.6	0.0	0.0	9.0	0.0	10.4
Incr Delay (d2), s/veh	0.0	0.1	0.2	0.0	0.1	0.2	0.0	0.0	0.0	0.1	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	1.5	1.7	0.1	1.3	1.4	0.1	0.0	0.0	0.6	0.0	2.4
LnGrp Delay(d),s/veh	6.1	5.3	5.5	6.4	5.2	5.2	8.6	0.0	0.0	9.1	0.0	12.1
LnGrp LOS	A	A	A	A	A	A	A			A		B
Approach Vol, veh/h		906			758			22			368	
Approach Delay, s/veh		5.4			5.2			8.6			11.4	
Approach LOS		A			A			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		12.6		19.3		12.6		19.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		22.0		20.0		22.0
Max Q Clear Time (g_c+I1), s		2.3		5.4		7.1		5.7
Green Ext Time (p_c), s		1.5		9.4		1.3		9.3

Intersection Summary	
HCM 2010 Ctrl Delay	6.4
HCM 2010 LOS	A

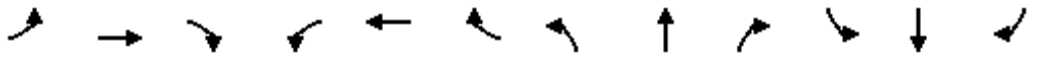
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	290	400	10	10	360	390	10	10	10	630	10	200
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	305	421	8	11	379	137	11	11	0	671	0	70
Adj No. of Lanes	1	3	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	3497	66	505	1605	713	31	31	0	601	0	268
Arrive On Green	0.19	0.68	0.67	0.45	0.45	0.45	0.03	0.03	0.00	0.17	0.00	0.17
Sat Flow, veh/h	1774	5138	97	951	3539	1571	909	909	0	3548	0	1581
Grp Volume(v), veh/h	305	277	152	11	379	137	22	0	0	671	0	70
Grp Sat Flow(s),veh/h/ln	1774	1695	1845	951	1770	1571	1817	0	0	1774	0	1581
Q Serve(g_s), s	16.6	2.8	2.8	0.6	6.4	5.1	1.2	0.0	0.0	16.6	0.0	3.8
Cycle Q Clear(g_c), s	16.6	2.8	2.8	0.6	6.4	5.1	1.2	0.0	0.0	16.6	0.0	3.8
Prop In Lane	1.00		0.05	1.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	2307	1256	505	1605	713	61	0	0	601	0	268
V/C Ratio(X)	0.92	0.12	0.12	0.02	0.24	0.19	0.36	0.00	0.00	1.12	0.00	0.26
Avail Cap(c_a), veh/h	489	2307	1256	505	1605	713	148	0	0	601	0	268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.99	0.99	0.99	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.2	5.4	5.5	14.8	16.4	16.0	46.3	0.0	0.0	40.7	0.0	35.4
Incr Delay (d2), s/veh	14.0	0.1	0.2	0.1	0.3	0.6	1.3	0.0	0.0	73.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.4	1.3	1.5	0.2	3.2	2.3	0.6	0.0	0.0	14.2	0.0	1.7
LnGrp Delay(d),s/veh	53.2	5.5	5.7	14.9	16.7	16.6	47.6	0.0	0.0	113.7	0.0	35.9
LnGrp LOS	D	A	A	B	B	B	D			F		D
Approach Vol, veh/h		734			527			22			741	
Approach Delay, s/veh		25.4			16.7			47.6			106.4	
Approach LOS		C			B			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		70.7		20.0	22.2	48.5		7.3
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		4.6
Max Green Setting (Gmax), s		60.7		16.0	27.5	29.7		7.4
Max Q Clear Time (g_c+I1), s		4.8		18.6	18.6	8.4		3.2
Green Ext Time (p_c), s		11.1		0.0	0.2	8.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



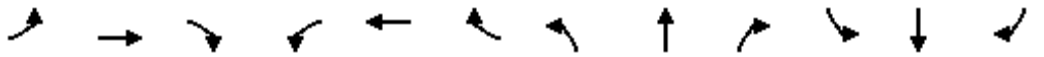
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	70	130	70	70	110	40	1010	40	20	1570	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	42	74	137	74	74	116	42	1063	42	21	1653	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	79	132	208	117	115	152	455	3014	119	25	1782	34
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.53	1.00	1.00	0.00	0.12	0.12
Sat Flow, veh/h	172	509	804	304	445	587	1714	4848	191	1714	4960	96
Grp Volume(v), veh/h	253	0	0	264	0	0	42	718	387	21	1092	593
Grp Sat Flow(s),veh/h/ln	1485	0	0	1336	0	0	1714	1638	1763	1714	1638	1780
Q Serve(g_s), s	0.0	0.0	0.0	4.5	0.0	0.0	1.4	0.0	0.0	1.5	39.6	39.6
Cycle Q Clear(g_c), s	17.9	0.0	0.0	22.5	0.0	0.0	1.4	0.0	0.0	1.5	39.6	39.6
Prop In Lane	0.17		0.54	0.28		0.44	1.00		0.11	1.00		0.05
Lane Grp Cap(c), veh/h	419	0	0	384	0	0	455	2037	1096	25	1177	639
V/C Ratio(X)	0.60	0.00	0.00	0.69	0.00	0.00	0.09	0.35	0.35	0.84	0.93	0.93
Avail Cap(c_a), veh/h	710	0	0	662	0	0	455	2037	1096	250	1177	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.97	0.97	0.97	0.74	0.74	0.74
Uniform Delay (d), s/veh	39.4	0.0	0.0	41.0	0.0	0.0	21.0	0.0	0.0	59.6	51.3	51.4
Incr Delay (d2), s/veh	1.4	0.0	0.0	2.2	0.0	0.0	0.1	0.5	0.9	38.6	10.8	17.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.6	0.0	0.0	8.4	0.0	0.0	0.7	0.1	0.3	1.0	19.8	22.6
LnGrp Delay(d),s/veh	40.8	0.0	0.0	43.2	0.0	0.0	21.1	0.5	0.9	98.2	62.2	68.7
LnGrp LOS	D			D			C	A	A	F	E	E
Approach Vol, veh/h		253			264			1147			1706	
Approach Delay, s/veh		40.8			43.2			1.4			64.9	
Approach LOS		D			D			A			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	79.5		35.2	36.8	48.0		35.2
Change Period (Y+Rc), s	3.5	4.9		* 4.2	4.9	* 4.9		* 4.2
Max Green Setting (Gmax), s	17.5	35.1		* 55	9.5	* 43		* 55
Max Q Clear Time (g_c+I1), s	3.5	2.0		19.9	3.4	41.6		24.5
Green Ext Time (p_c), s	0.0	8.4		4.1	0.1	1.2		4.0

Intersection Summary	
HCM 2010 Ctrl Delay	39.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	10	30	20	10	60	10	1150	10	30	1940	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	53	11	32	21	11	63	11	1211	11	32	2042	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	115	27	48	60	30	104	13	3858	35	40	3906	61
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.02	1.00	1.00	0.05	1.00	1.00
Sat Flow, veh/h	704	282	493	239	304	1070	1714	5022	46	1714	4984	78
Grp Volume(v), veh/h	96	0	0	95	0	0	11	790	432	32	1342	732
Grp Sat Flow(s),veh/h/ln	1479	0	0	1614	0	0	1714	1638	1792	1714	1638	1786
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	2.2	0.0	0.0
Cycle Q Clear(g_c), s	7.3	0.0	0.0	6.5	0.0	0.0	0.8	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.55		0.33	0.22		0.66	1.00		0.03	1.00		0.04
Lane Grp Cap(c), veh/h	190	0	0	193	0	0	13	2517	1377	40	2567	1400
V/C Ratio(X)	0.51	0.00	0.00	0.49	0.00	0.00	0.84	0.31	0.31	0.81	0.52	0.52
Avail Cap(c_a), veh/h	408	0	0	427	0	0	121	2517	1377	121	2567	1400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.58	0.58	0.58	0.70	0.70	0.70
Uniform Delay (d), s/veh	52.1	0.0	0.0	51.9	0.0	0.0	59.0	0.0	0.0	57.0	0.0	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.0	1.9	0.0	0.0	51.4	0.2	0.3	22.8	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.2	0.0	0.0	3.1	0.0	0.0	0.5	0.1	0.1	1.3	0.2	0.4
LnGrp Delay(d),s/veh	54.2	0.0	0.0	53.9	0.0	0.0	110.4	0.2	0.3	79.7	0.5	1.0
LnGrp LOS	D			D			F	A	A	E	A	A
Approach Vol, veh/h		96			95			1233			2106	
Approach Delay, s/veh		54.2			53.9			1.2			1.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.3	97.5		16.2	4.4	99.3		16.2
Change Period (Y+Rc), s	3.5	5.3		4.6	3.5	5.3		4.6
Max Green Setting (Gmax), s	8.5	67.7		30.4	8.5	67.7		30.4
Max Q Clear Time (g_c+I1), s	4.2	2.0		9.3	2.8	2.0		8.5
Green Ext Time (p_c), s	0.0	48.2		1.1	0.0	48.2		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	4.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	110	50	190	160	70	70	820	140	140	1400	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.92		0.80	0.89		0.80	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	137	116	53	200	168	74	74	863	147	147	1474	168
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	122	201	92	175	204	90	94	2111	357	261	2739	312
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.06	0.50	0.50	0.15	0.61	0.61
Sat Flow, veh/h	1002	1078	493	1036	1094	482	1714	4212	713	1714	4455	507
Grp Volume(v), veh/h	137	0	169	200	0	242	74	670	340	147	1084	558
Grp Sat Flow(s),veh/h/ln	1002	0	1571	1036	0	1576	1714	1638	1649	1714	1638	1686
Q Serve(g_s), s	3.3	0.0	8.4	7.6	0.0	12.7	3.7	11.0	11.1	6.8	16.4	16.4
Cycle Q Clear(g_c), s	16.0	0.0	8.4	16.0	0.0	12.7	3.7	11.0	11.1	6.8	16.4	16.4
Prop In Lane	1.00		0.31	1.00		0.31	1.00		0.43	1.00		0.30
Lane Grp Cap(c), veh/h	122	0	292	175	0	293	94	1642	827	261	2014	1037
V/C Ratio(X)	1.12	0.00	0.58	1.14	0.00	0.83	0.78	0.41	0.41	0.56	0.54	0.54
Avail Cap(c_a), veh/h	122	0	292	175	0	293	189	1642	827	289	2014	1037
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.45	0.00	0.45	0.90	0.90	0.90	0.74	0.74	0.74
Uniform Delay (d), s/veh	42.5	0.0	31.9	41.0	0.0	33.7	40.1	13.5	13.5	33.8	9.5	9.5
Incr Delay (d2), s/veh	117.6	0.0	2.8	91.0	0.0	8.6	12.1	0.7	1.4	1.5	0.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.9	0.0	3.9	8.5	0.0	6.2	2.0	5.1	5.3	3.3	7.6	8.0
LnGrp Delay(d),s/veh	160.1	0.0	34.7	132.0	0.0	42.2	52.2	14.1	14.8	35.3	10.3	11.0
LnGrp LOS	F		C	F		D	D	B	B	D	B	B
Approach Vol, veh/h		306			442			1084			1789	
Approach Delay, s/veh		90.9			82.8			17.0			12.6	
Approach LOS		F			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.0	48.0		20.0	8.2	57.8		20.0
Change Period (Y+Rc), s	4.9	* 4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	14.5	* 43		16.0	9.5	48.1		16.0
Max Q Clear Time (g_c+I1), s	8.8	13.1		18.0	5.7	18.4		18.0
Green Ext Time (p_c), s	0.3	7.3		0.0	0.0	14.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	20	10	50	30	130	100	920	40	60	1600	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.88		0.68	0.70		0.70	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	42	21	11	53	32	137	105	968	42	63	1684	168
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	216	236	124	89	56	174	107	2889	125	79	2641	263
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.06	0.60	0.60	0.09	1.00	1.00
Sat Flow, veh/h	1031	944	494	206	225	696	1714	4825	209	1714	4534	451
Grp Volume(v), veh/h	42	0	32	222	0	0	105	657	353	63	1216	636
Grp Sat Flow(s),veh/h/ln	1031	0	1438	1127	0	0	1714	1638	1758	1714	1638	1709
Q Serve(g_s), s	0.0	0.0	2.0	15.5	0.0	0.0	7.3	12.1	12.1	4.3	0.0	0.0
Cycle Q Clear(g_c), s	8.9	0.0	2.0	21.8	0.0	0.0	7.3	12.1	12.1	4.3	0.0	0.0
Prop In Lane	1.00		0.34	0.24		0.62	1.00		0.12	1.00		0.26
Lane Grp Cap(c), veh/h	216	0	360	319	0	0	107	1961	1053	79	1908	996
V/C Ratio(X)	0.19	0.00	0.09	0.70	0.00	0.00	0.98	0.33	0.34	0.79	0.64	0.64
Avail Cap(c_a), veh/h	223	0	369	326	0	0	107	1961	1053	107	1908	996
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.84	0.84	0.84	0.68	0.68	0.68
Uniform Delay (d), s/veh	37.1	0.0	34.5	41.6	0.0	0.0	56.2	12.1	12.1	53.9	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.1	6.2	0.0	0.0	73.1	0.4	0.7	17.7	1.1	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	0.0	0.8	7.4	0.0	0.0	5.6	5.6	6.1	2.4	0.3	0.6
LnGrp Delay(d),s/veh	37.5	0.0	34.6	47.8	0.0	0.0	129.3	12.5	12.8	71.6	1.1	2.2
LnGrp LOS	D		C	D			F	B	B	E	A	A
Approach Vol, veh/h		74			222			1115			1915	
Approach Delay, s/veh		36.3			47.8			23.6			3.8	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	76.7		34.2	11.0	74.8		34.2
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	69.1		* 31	7.5	69.1		* 31
Max Q Clear Time (g_c+I1), s	6.3	14.1		10.9	9.3	2.0		23.8
Green Ext Time (p_c), s	0.0	37.1		2.2	0.0	42.0		1.2

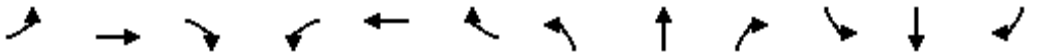
Intersection Summary	
HCM 2010 Ctrl Delay	14.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	100	100	1060	60	80	1330
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2		4.9		3.5	4.9
Lane Util. Factor	1.00		0.91		1.00	0.91
Frpb, ped/bikes	0.98		1.00		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.93		0.99		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1600		4875		1710	4914
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1600		4875		1710	4914
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	105	105	1116	63	84	1400
RTOR Reduction (vph)	33	0	4	0	0	0
Lane Group Flow (vph)	177	0	1175	0	84	1400
Confl. Peds. (#/hr)		27				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Prot		NA		Prot	NA
Protected Phases	4		2 9		1	6
Permitted Phases						
Actuated Green, G (s)	18.4		63.1		11.6	55.5
Effective Green, g (s)	18.4		63.1		11.6	55.5
Actuated g/C Ratio	0.15		0.53		0.10	0.46
Clearance Time (s)	4.2				3.5	4.9
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	245		2563		165	2272
v/s Ratio Prot	c0.11		c0.24		c0.05	c0.28
v/s Ratio Perm						
v/c Ratio	0.72		0.46		0.51	0.62
Uniform Delay, d1	48.4		17.8		51.5	24.2
Progression Factor	1.00		0.16		0.91	0.69
Incremental Delay, d2	10.0		0.5		1.4	0.7
Delay (s)	58.4		3.3		48.1	17.4
Level of Service	E		A		D	B
Approach Delay (s)	58.4		3.3			19.1
Approach LOS	E		A			B

Intersection Summary			
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	0	130	20	10	10	70	1040	10	10	1310	110
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.93		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1710	1530		1710	1665		1710	4903		1710	4833	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1710	1530		1710	1665		1710	4903		1710	4833	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	74	0	137	21	11	11	74	1095	11	11	1379	116
RTOR Reduction (vph)	0	125	0	0	9	0	0	1	0	0	6	0
Lane Group Flow (vph)	74	12	0	21	13	0	74	1105	0	11	1489	0
Confl. Peds. (#/hr)							12		17	17		12
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6 10	
Permitted Phases												
Actuated Green, G (s)	10.5	10.5		18.4	18.4		9.3	52.6		11.6	65.4	
Effective Green, g (s)	10.5	10.5		18.4	18.4		9.3	52.6		11.6	65.4	
Actuated g/C Ratio	0.09	0.09		0.15	0.15		0.08	0.44		0.10	0.55	
Clearance Time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	149	133		262	255		132	2149		165	2633	
v/s Ratio Prot	c0.04	0.01		c0.01	0.01		c0.04	0.23		0.01	c0.31	
v/s Ratio Perm												
v/c Ratio	0.50	0.09		0.08	0.05		0.56	0.51		0.07	0.57	
Uniform Delay, d1	52.2	50.4		43.5	43.3		53.4	24.4		49.3	18.0	
Progression Factor	1.00	1.00		1.00	1.00		1.40	0.31		1.70	0.10	
Incremental Delay, d2	2.6	0.3		0.1	0.1		4.8	0.8		0.1	0.7	
Delay (s)	54.8	50.7		43.7	43.4		79.6	8.4		83.7	2.4	
Level of Service	D	D		D	D		E	A		F	A	
Approach Delay (s)		52.1			43.5			12.9			3.0	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	210	90	130	230	90	80	910	170	90	1410	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	126	221	95	137	242	95	84	958	179	95	1484	53
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	156	484	200	162	484	184	106	1527	284	311	2431	87
Arrive On Green	0.09	0.21	0.21	0.09	0.20	0.20	0.02	0.12	0.12	0.36	1.00	1.00
Sat Flow, veh/h	1714	2337	966	1714	2402	912	1714	4154	774	1714	4869	174
Grp Volume(v), veh/h	126	159	157	137	170	167	84	755	382	95	998	539
Grp Sat Flow(s),veh/h/ln	1714	1710	1594	1714	1710	1604	1714	1638	1651	1714	1638	1767
Q Serve(g_s), s	8.7	9.8	10.4	9.4	10.6	11.1	5.9	26.3	26.4	4.8	0.2	0.2
Cycle Q Clear(g_c), s	8.7	9.8	10.4	9.4	10.6	11.1	5.9	26.3	26.4	4.8	0.2	0.2
Prop In Lane	1.00		0.61	1.00		0.57	1.00		0.47	1.00		0.10
Lane Grp Cap(c), veh/h	156	354	330	162	345	324	106	1204	607	311	1635	882
V/C Ratio(X)	0.81	0.45	0.47	0.84	0.49	0.52	0.80	0.63	0.63	0.31	0.61	0.61
Avail Cap(c_a), veh/h	179	504	470	179	504	473	121	1204	607	311	1635	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.81	0.81	0.81	0.85	0.85	0.85	0.95	0.95	0.95	0.81	0.81	0.81
Uniform Delay (d), s/veh	53.5	41.6	41.8	53.5	42.5	42.7	58.0	44.9	45.0	32.8	0.0	0.0
Incr Delay (d2), s/veh	17.6	0.7	0.9	24.3	0.9	1.1	25.6	2.4	4.7	0.4	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.9	4.7	4.6	5.6	5.1	5.0	3.5	12.4	12.9	2.3	0.3	0.7
LnGrp Delay(d),s/veh	71.1	42.3	42.7	77.7	43.4	43.8	83.6	47.3	49.6	33.2	1.4	2.6
LnGrp LOS	E	D	D	E	D	D	F	D	D	C	A	A
Approach Vol, veh/h		442			474			1221			1632	
Approach Delay, s/veh		50.7			53.4			50.5			3.7	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.7	49.0	14.9	29.5	10.9	64.8	15.5	28.8
Change Period (Y+Rc), s	4.9	* 4.9	3.5	4.6	3.5	4.9	4.6	* 4.6
Max Green Setting (Gmax), s	11.5	* 44	12.5	35.4	8.5	47.1	12.5	* 35
Max Q Clear Time (g_c+I1), s	6.8	28.4	11.4	12.4	7.9	2.2	10.7	13.1
Green Ext Time (p_c), s	2.7	6.5	0.0	2.1	0.0	14.8	0.4	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	30.6
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	10	30	20	20	50	20	990	20	30	1670	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.98		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	42	11	32	21	21	53	21	1042	21	32	1758	105
Adj No. of Lanes	0	1	1	0	1	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	171	38	178	62	56	102	25	3750	76	40	3761	1138
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.03	1.00	1.00	0.05	1.00	1.00
Sat Flow, veh/h	980	323	1495	211	470	860	1714	4955	100	1714	4914	1487
Grp Volume(v), veh/h	53	0	32	95	0	0	21	689	374	32	1758	105
Grp Sat Flow(s),veh/h/ln	1303	0	1495	1541	0	0	1714	1638	1779	1714	1638	1487
Q Serve(g_s), s	0.0	0.0	2.3	1.5	0.0	0.0	1.5	0.0	0.0	2.2	0.0	0.0
Cycle Q Clear(g_c), s	4.6	0.0	2.3	6.7	0.0	0.0	1.5	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.79		1.00	0.22		0.56	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	209	0	178	220	0	0	25	2480	1346	40	3761	1138
V/C Ratio(X)	0.25	0.00	0.18	0.43	0.00	0.00	0.84	0.28	0.28	0.81	0.47	0.09
Avail Cap(c_a), veh/h	507	0	511	554	0	0	121	2480	1346	121	3761	1138
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.89	0.89	0.89	0.82	0.82	0.82
Uniform Delay (d), s/veh	48.5	0.0	47.6	49.5	0.0	0.0	58.1	0.0	0.0	57.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.5	1.3	0.0	0.0	45.2	0.2	0.5	25.8	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	0.0	1.0	3.0	0.0	0.0	1.0	0.1	0.2	1.3	0.1	0.0
LnGrp Delay(d),s/veh	49.1	0.0	48.0	50.8	0.0	0.0	103.3	0.2	0.5	82.8	0.3	0.1
LnGrp LOS	D		D	D			F	A	A	F	A	A
Approach Vol, veh/h		85			95			1084			1895	
Approach Delay, s/veh		48.7			50.8			2.3			1.7	
Approach LOS		D			D			A			A	

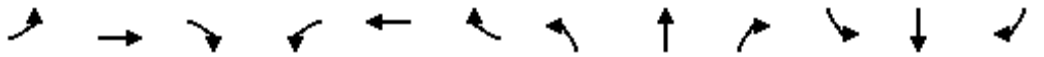
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.3	95.4		18.3	5.2	96.5		18.3
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	8.5	58.4		41.0	8.5	58.4		41.0
Max Q Clear Time (g_c+I1), s	4.2	2.0		6.6	3.5	2.0		8.7
Green Ext Time (p_c), s	0.0	38.8		1.1	0.0	38.8		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	4.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	330	90	70	460	200	30	180	30	120	560	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	347	0	74	484	211	32	189	32	126	589	74
Adj No. of Lanes	0	2	1	0	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	915	539	108	625	298	33	1451	241	145	1713	215
Arrive On Green	0.34	0.34	0.00	0.34	0.34	0.33	0.02	0.48	0.47	0.08	0.54	0.53
Sat Flow, veh/h	79	2688	1583	212	1837	875	1774	3036	505	1774	3165	397
Grp Volume(v), veh/h	158	210	0	400	0	369	32	109	112	126	329	334
Grp Sat Flow(s),veh/h/ln	1157	1610	1583	1394	0	1530	1774	1770	1772	1774	1770	1792
Q Serve(g_s), s	1.5	11.9	0.0	21.6	0.0	25.2	2.2	4.1	4.3	8.4	12.6	12.7
Cycle Q Clear(g_c), s	26.7	11.9	0.0	33.5	0.0	25.2	2.2	4.1	4.3	8.4	12.6	12.7
Prop In Lane	0.13		1.00	0.18		0.57	1.00		0.29	1.00		0.22
Lane Grp Cap(c), veh/h	428	548	539	510	0	521	33	846	847	145	958	970
V/C Ratio(X)	0.37	0.38	0.00	0.78	0.00	0.71	0.97	0.13	0.13	0.87	0.34	0.34
Avail Cap(c_a), veh/h	611	738	726	701	0	701	133	846	847	325	958	970
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.00	0.85	0.00	0.85	0.97	0.97	0.97	0.72	0.72	0.72
Uniform Delay (d), s/veh	29.3	30.0	0.0	38.6	0.0	34.7	58.8	17.4	17.5	54.4	15.5	15.6
Incr Delay (d2), s/veh	0.2	0.1	0.0	2.2	0.0	0.9	36.6	0.3	0.3	4.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	5.3	0.0	12.8	0.0	10.8	1.4	2.1	2.1	4.3	6.3	6.4
LnGrp Delay(d),s/veh	29.5	30.2	0.0	40.8	0.0	35.6	95.4	17.7	17.9	58.8	16.2	16.3
LnGrp LOS	C	C		D		D	F	B	B	E	B	B
Approach Vol, veh/h		368			769			253			789	
Approach Delay, s/veh		29.9			38.3			27.6			23.0	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	61.3		44.8	6.2	68.9		44.8
Change Period (Y+Rc), s	3.5	4.9		4.9	3.5	4.9		4.9
Max Green Setting (Gmax), s	22.5	30.1		54.1	9.5	43.1		54.1
Max Q Clear Time (g_c+I1), s	10.4	6.3		28.7	4.2	14.7		35.5
Green Ext Time (p_c), s	0.1	2.3		4.7	0.0	2.4		4.4

Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	70	100	70	30	120	40	1010	90	60	1760	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1824	1863	1863	1863	1863	1863	1863	1863	1824
Adj Flow Rate, veh/h	53	74	105	74	32	126	42	1063	95	63	1853	32
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	101	117	167	64	404	89	2087	930	103	3077	53
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.05	0.59	0.59	0.06	0.60	0.59
Sat Flow, veh/h	155	390	451	463	248	1556	1774	3539	1577	1774	5148	89
Grp Volume(v), veh/h	232	0	0	106	0	126	42	1063	95	63	1220	665
Grp Sat Flow(s),veh/h/ln	995	0	0	711	0	1556	1774	1770	1577	1774	1695	1846
Q Serve(g_s), s	13.1	0.0	0.0	0.0	0.0	8.5	3.0	22.9	3.4	4.5	29.4	29.5
Cycle Q Clear(g_c), s	30.9	0.0	0.0	17.8	0.0	8.5	3.0	22.9	3.4	4.5	29.4	29.5
Prop In Lane	0.23		0.45	0.70		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	293	0	0	232	0	404	89	2087	930	103	2027	1104
V/C Ratio(X)	0.79	0.00	0.00	0.46	0.00	0.31	0.47	0.51	0.10	0.61	0.60	0.60
Avail Cap(c_a), veh/h	339	0	0	275	0	455	150	2087	930	218	2027	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	48.3	0.0	0.0	41.6	0.0	38.8	60.1	15.6	11.6	59.8	16.4	16.5
Incr Delay (d2), s/veh	9.0	0.0	0.0	0.5	0.0	0.2	1.4	0.9	0.2	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.8	0.0	0.0	3.4	0.0	3.7	1.5	11.3	1.5	2.2	13.8	15.0
LnGrp Delay(d),s/veh	57.3	0.0	0.0	42.1	0.0	38.9	61.5	16.5	11.9	60.0	16.5	16.7
LnGrp LOS	E			D		D	E	B	B	E	B	B
Approach Vol, veh/h		232			232			1200			1948	
Approach Delay, s/veh		57.3			40.4			17.7			18.0	
Approach LOS		E			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.6	80.7		37.8	10.5	81.7		37.8
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	16.5	62.7		38.0	11.5	67.7		38.0
Max Q Clear Time (g_c+I1), s	6.5	24.9		32.9	5.0	31.5		19.8
Green Ext Time (p_c), s	0.0	35.1		0.9	0.0	33.7		1.6

Intersection Summary		
HCM 2010 Ctrl Delay		21.9
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	620	190	140	470	170	130	740	100	400	1820	100
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1788	1863	1863	1788	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	105	653	200	147	495	179	137	779	105	421	1916	105
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	866	371	139	902	384	256	1430	191	423	1951	107
Arrive On Green	0.07	0.24	0.24	0.16	0.51	0.51	0.14	0.32	0.31	0.32	0.53	0.51
Sat Flow, veh/h	1774	3539	1514	1774	3539	1507	1774	4536	607	1774	4934	270
Grp Volume(v), veh/h	105	653	200	147	495	179	137	581	303	421	1315	706
Grp Sat Flow(s),veh/h/ln	1774	1770	1514	1774	1770	1507	1774	1695	1753	1774	1695	1813
Q Serve(g_s), s	7.6	22.2	14.9	10.2	12.4	6.7	9.3	18.4	18.7	30.8	49.4	49.8
Cycle Q Clear(g_c), s	7.6	22.2	14.9	10.2	12.4	6.7	9.3	18.4	18.7	30.8	49.4	49.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		0.15
Lane Grp Cap(c), veh/h	121	866	371	139	902	384	256	1069	553	423	1340	717
V/C Ratio(X)	0.86	0.75	0.54	1.06	0.55	0.47	0.53	0.54	0.55	1.00	0.98	0.98
Avail Cap(c_a), veh/h	123	909	389	139	942	401	259	1069	553	423	1340	717
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	0.09	0.09	0.09	0.61	0.61	0.61	0.97	0.97	0.97	0.09	0.09	0.09
Uniform Delay (d), s/veh	60.0	45.5	42.7	54.8	26.8	12.0	51.6	36.8	37.1	44.3	30.3	30.6
Incr Delay (d2), s/veh	5.7	0.4	0.2	75.3	0.6	0.9	1.0	1.9	3.8	12.0	4.2	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.9	10.9	6.3	7.9	6.0	2.8	4.6	8.9	9.6	16.5	23.8	26.1
LnGrp Delay(d),s/veh	65.7	45.8	42.9	130.2	27.4	12.9	52.6	38.7	40.8	56.3	34.5	37.7
LnGrp LOS	E	D	D	F	C	B	D	D	D	E	C	D
Approach Vol, veh/h		958			821			1021			2442	
Approach Delay, s/veh		47.4			42.6			41.2			39.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	35.0	45.0	12.9	37.1	24.6	55.4	14.2	35.8
Change Period (Y+Rc), s	3.5	5.3	3.5	5.3	5.3	* 5.3	3.5	5.3
Max Green Setting (Gmax), s	31.5	38.1	9.5	33.3	19.5	* 50	10.7	32.1
Max Q Clear Time (g_c+I1), s	32.8	20.7	9.6	14.4	11.3	51.8	12.2	24.2
Green Ext Time (p_c), s	0.0	7.3	0.0	11.9	4.4	0.0	0.0	6.0

Intersection Summary	
HCM 2010 Ctrl Delay	41.6
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	500	150	80	390	140	100	920	90	190	1490	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1824	1863	1863	1824	1863	1863	1824	1863	1863	1863
Adj Flow Rate, veh/h	126	526	158	84	411	147	105	968	95	200	1568	116
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	693	207	110	587	208	183	2084	204	219	1590	706
Arrive On Green	0.08	0.25	0.24	0.06	0.23	0.22	0.03	0.15	0.14	0.12	0.45	0.45
Sat Flow, veh/h	1774	2786	833	1774	2555	903	1774	4707	461	1774	3539	1572
Grp Volume(v), veh/h	126	347	337	84	283	275	105	697	366	200	1568	116
Grp Sat Flow(s),veh/h/ln	1774	1840	1778	1774	1770	1689	1774	1695	1778	1774	1770	1572
Q Serve(g_s), s	9.1	22.7	22.9	6.1	19.1	19.5	7.6	24.5	24.6	14.5	57.0	4.0
Cycle Q Clear(g_c), s	9.1	22.7	22.9	6.1	19.1	19.5	7.6	24.5	24.6	14.5	57.0	4.0
Prop In Lane	1.00		0.47	1.00		0.53	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	144	458	442	110	407	388	183	1501	787	219	1590	706
V/C Ratio(X)	0.88	0.76	0.76	0.76	0.70	0.71	0.57	0.46	0.47	0.91	0.99	0.16
Avail Cap(c_a), veh/h	153	501	484	139	468	447	183	1501	787	322	1590	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	0.62	0.62	0.62	0.73	0.73	0.73	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.1	45.2	45.5	60.0	45.9	46.3	60.0	41.4	41.5	56.3	35.4	10.6
Incr Delay (d2), s/veh	33.2	5.3	5.7	8.1	2.3	2.7	2.1	0.8	1.4	17.8	19.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.8	12.2	12.0	3.2	9.6	9.4	3.8	11.7	12.5	8.2	32.0	1.8
LnGrp Delay(d),s/veh	92.3	50.5	51.2	68.2	48.2	49.0	62.0	42.1	42.9	74.1	54.9	11.1
LnGrp LOS	F	D	D	E	D	D	E	D	D	E	D	B
Approach Vol, veh/h		810			642			1168			1884	
Approach Delay, s/veh		57.3			51.2			44.2			54.3	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.1	61.5	12.1	36.3	19.2	62.4	14.5	33.9
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	5.3	* 5.3	3.5	4.9
Max Green Setting (Gmax), s	24.1	43.5	10.7	34.5	10.5	* 57	11.7	33.5
Max Q Clear Time (g_c+I1), s	16.5	26.6	8.1	24.9	9.6	59.0	11.1	21.5
Green Ext Time (p_c), s	0.1	8.6	0.0	4.9	0.1	0.0	0.0	5.7

Intersection Summary	
HCM 2010 Ctrl Delay	51.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

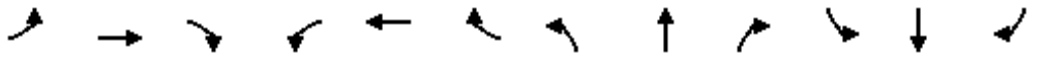
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	550	360	120	530	140	140	870	60	130	1750	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1824	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	95	579	379	126	558	147	147	916	63	137	1842	95
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	243	660	432	144	708	186	123	1892	130	150	2004	103
Arrive On Green	0.14	0.32	0.32	0.08	0.26	0.26	0.02	0.13	0.13	0.08	0.40	0.39
Sat Flow, veh/h	1774	2051	1343	1774	2772	728	1774	4859	333	1774	4952	255
Grp Volume(v), veh/h	95	499	459	126	356	349	147	638	341	137	1260	677
Grp Sat Flow(s),veh/h/ln	1774	1770	1624	1774	1770	1730	1774	1695	1802	1774	1695	1817
Q Serve(g_s), s	6.3	34.7	34.6	9.1	24.3	24.5	9.0	22.7	22.8	10.0	45.8	46.0
Cycle Q Clear(g_c), s	6.3	34.7	34.6	9.1	24.3	24.5	9.0	22.7	22.8	10.0	45.8	46.0
Prop In Lane	1.00		0.83	1.00		0.42	1.00		0.18	1.00		0.14
Lane Grp Cap(c), veh/h	243	570	523	144	452	442	123	1320	702	150	1372	735
V/C Ratio(X)	0.39	0.88	0.88	0.88	0.79	0.79	1.20	0.48	0.49	0.91	0.92	0.92
Avail Cap(c_a), veh/h	243	626	575	177	667	652	123	1320	702	150	1372	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	0.61	0.61	0.61	0.78	0.78	0.78	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	41.6	41.5	59.1	45.1	45.1	63.5	44.5	44.6	59.0	36.7	36.8
Incr Delay (d2), s/veh	0.3	10.8	11.6	19.0	3.0	3.2	134.3	1.0	1.9	47.6	11.3	18.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	18.6	17.2	5.2	12.3	12.1	9.0	10.9	11.8	6.9	23.5	26.8
LnGrp Delay(d),s/veh	51.5	52.4	53.1	78.0	48.1	48.3	197.8	45.5	46.4	106.6	47.9	55.5
LnGrp LOS	D	D	D	E	D	D	F	D	D	F	D	E
Approach Vol, veh/h		1053			831			1126			2074	
Approach Delay, s/veh		52.6			52.7			65.7			54.3	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	54.6	14.5	45.8	13.0	56.6	23.2	37.2
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	11.5	42.7	13.5	45.1	9.5	44.7	10.5	* 48
Max Q Clear Time (g_c+I1), s	12.0	24.8	11.1	36.7	11.0	48.0	8.3	26.5
Green Ext Time (p_c), s	0.0	17.0	0.0	4.3	0.0	0.0	1.4	5.7

Intersection Summary	
HCM 2010 Ctrl Delay	56.2
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	490	180	160	460	80	160	370	90	110	530	170
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.85	1.00		0.85	0.97		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	137	516	189	168	484	84	168	389	95	116	558	179
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	768	279	188	966	166	247	898	646	364	898	656
Arrive On Green	0.09	0.31	0.30	0.11	0.33	0.32	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1774	2465	896	1774	2933	503	718	1863	1340	879	1863	1360
Grp Volume(v), veh/h	137	369	336	168	290	278	168	389	95	116	558	179
Grp Sat Flow(s),veh/h/ln	1774	1770	1591	1774	1770	1666	718	1863	1340	879	1863	1360
Q Serve(g_s), s	9.2	21.8	22.1	11.2	15.8	16.2	27.1	16.4	4.7	11.9	26.6	9.4
Cycle Q Clear(g_c), s	9.2	21.8	22.1	11.2	15.8	16.2	53.7	16.4	4.7	28.3	26.6	9.4
Prop In Lane	1.00		0.56	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	552	496	188	583	549	247	898	646	364	898	656
V/C Ratio(X)	0.88	0.67	0.68	0.89	0.50	0.51	0.68	0.43	0.15	0.32	0.62	0.27
Avail Cap(c_a), veh/h	242	552	496	237	583	549	254	916	659	372	916	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.39	0.39	0.39	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.76	0.76
Uniform Delay (d), s/veh	54.1	35.9	36.3	53.0	32.3	32.5	42.8	20.3	17.3	29.6	23.0	18.5
Incr Delay (d2), s/veh	5.7	2.5	2.9	24.7	3.0	3.3	5.6	0.1	0.0	0.1	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.7	11.1	10.1	6.8	8.2	7.9	5.8	8.5	1.8	2.9	13.8	3.5
LnGrp Delay(d),s/veh	59.7	38.4	39.2	77.7	35.3	35.8	48.4	20.4	17.3	29.7	23.7	18.6
LnGrp LOS	E	D	D	E	D	D	D	C	B	C	C	B
Approach Vol, veh/h		842			736			652			853	
Approach Delay, s/veh		42.2			45.2			27.2			23.4	
Approach LOS		D			D			C			C	

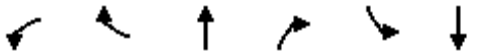
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		61.9	14.6	43.5		61.9	16.7	41.4
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		58.1	16.9	31.7		58.1	16.5	32.1
Max Q Clear Time (g_c+I1), s		55.7	11.2	18.2		30.3	13.2	24.1
Green Ext Time (p_c), s		1.3	0.0	3.6		4.8	0.0	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	34.5
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	90	160	70	530	990	70
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	95	15	74	558	1042	69
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	193	172	91	2314	1676	111
Arrive On Green	0.11	0.11	0.05	0.65	0.50	0.50
Sat Flow, veh/h	1774	1583	1774	3632	3463	223
Grp Volume(v), veh/h	95	15	74	558	547	564
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1823
Q Serve(g_s), s	1.9	0.3	1.6	2.5	8.5	8.5
Cycle Q Clear(g_c), s	1.9	0.3	1.6	2.5	8.5	8.5
Prop In Lane	1.00	1.00	1.00			0.12
Lane Grp Cap(c), veh/h	193	172	91	2314	880	907
V/C Ratio(X)	0.49	0.09	0.82	0.24	0.62	0.62
Avail Cap(c_a), veh/h	1311	1170	234	3082	1121	1155
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	15.2	17.8	2.7	6.9	6.9
Incr Delay (d2), s/veh	1.9	0.2	15.9	0.1	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.0	0.3	1.1	1.2	4.3	4.4
LnGrp Delay(d),s/veh	17.9	15.4	33.7	2.7	7.7	7.6
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	110			632	1111	
Approach Delay, s/veh	17.5			6.4	7.6	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		29.8		8.1	5.9	23.8		
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0		
Max Green Setting (Gmax), s		33.0		28.0	5.0	24.0		
Max Q Clear Time (g_c+I1), s		4.5		3.9	3.6	10.5		
Green Ext Time (p_c), s		12.9		0.3	0.0	8.3		

Intersection Summary	
HCM 2010 Ctrl Delay	7.8
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	100	70	620	90	60	1030
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	105	74	653	95	63	1084
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	131	92	1956	284	65	2597
Arrive On Green	0.13	0.13	0.63	0.62	0.04	0.73
Sat Flow, veh/h	986	695	3195	451	1774	3632
Grp Volume(v), veh/h	180	0	372	376	63	1084
Grp Sat Flow(s),veh/h/ln	1691	0	1770	1783	1774	1770
Q Serve(g_s), s	6.2	0.0	5.9	6.0	2.1	7.1
Cycle Q Clear(g_c), s	6.2	0.0	5.9	6.0	2.1	7.1
Prop In Lane	0.58	0.41		0.25	1.00	
Lane Grp Cap(c), veh/h	225	0	1116	1124	65	2597
V/C Ratio(X)	0.80	0.00	0.33	0.33	0.97	0.42
Avail Cap(c_a), veh/h	535	0	1116	1124	237	2597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.86	0.86	0.85	0.85
Uniform Delay (d), s/veh	25.2	0.0	5.2	5.3	28.9	3.1
Incr Delay (d2), s/veh	2.5	0.0	0.7	0.7	23.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	0.0	3.0	3.1	1.5	3.5
LnGrp Delay(d),s/veh	27.8	0.0	5.9	5.9	52.1	3.5
LnGrp LOS	C		A	A	D	A
Approach Vol, veh/h	180		748			1147
Approach Delay, s/veh	27.8		5.9			6.2
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.2	41.8				48.0		12.0
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	20.1				32.1		19.0
Max Q Clear Time (g_c+I1), s	4.1	8.0				9.1		8.2
Green Ext Time (p_c), s	0.0	5.2				6.6		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	7.9
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	470	110	60	660	60	110	300	60	120	540	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	53	495	116	63	695	63	116	316	63	126	568	126
Adj No. of Lanes	1	2	0	1	2	0	0	2	0	0	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	994	232	136	1059	96	155	445	92	136	642	150
Arrive On Green	0.09	0.35	0.34	0.08	0.32	0.32	0.06	0.06	0.06	0.52	0.52	0.50
Sat Flow, veh/h	1774	2845	663	1774	3279	297	808	2312	480	528	2487	580
Grp Volume(v), veh/h	53	307	304	63	375	383	262	0	233	438	0	382
Grp Sat Flow(s),veh/h/ln	1774	1770	1738	1774	1770	1807	1822	0	1777	1836	0	1760
Q Serve(g_s), s	3.6	17.7	18.0	4.4	23.6	23.7	18.3	0.0	16.7	28.6	0.0	24.2
Cycle Q Clear(g_c), s	3.6	17.7	18.0	4.4	23.6	23.7	18.3	0.0	16.7	28.6	0.0	24.2
Prop In Lane	1.00		0.38	1.00		0.16	0.44		0.27	0.29		0.33
Lane Grp Cap(c), veh/h	164	618	607	136	572	584	350	0	342	474	0	454
V/C Ratio(X)	0.32	0.50	0.50	0.46	0.66	0.66	0.75	0.00	0.68	0.92	0.00	0.84
Avail Cap(c_a), veh/h	164	618	607	136	572	584	350	0	342	551	0	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.41	0.41	0.41	0.51	0.51	0.51	0.93	0.00	0.93	0.26	0.00	0.26
Uniform Delay (d), s/veh	55.2	33.3	33.5	57.4	37.8	37.9	57.8	0.0	57.0	30.2	0.0	29.4
Incr Delay (d2), s/veh	0.2	1.2	1.2	5.6	3.0	2.9	12.7	0.0	9.9	6.3	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	8.9	8.8	2.4	12.0	12.3	10.5	0.0	9.2	15.2	0.0	11.8
LnGrp Delay(d),s/veh	55.4	34.5	34.7	63.0	40.8	40.8	70.5	0.0	67.0	36.5	0.0	32.0
LnGrp LOS	E	C	C	E	D	D	E		E	D		C
Approach Vol, veh/h		664			821			495			820	
Approach Delay, s/veh		36.3			42.5			68.8			34.4	
Approach LOS		D			D			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	14.0	49.4		37.6	17.4	46.0
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	4.9	* 4.9
Max Green Setting (Gmax), s		24.1	10.5	39.1		38.1	8.5	* 41
Max Q Clear Time (g_c+I1), s		20.3	6.4	20.0		30.6	5.6	25.7
Green Ext Time (p_c), s		0.7	0.0	1.6		2.0	0.6	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	43.3
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	90	250	710	120	20	1160
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.84		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	95	263	747	126	21	1221
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	93	257	1948	328	29	2450
Arrive On Green	0.25	0.25	0.64	0.64	0.02	0.69
Sat Flow, veh/h	377	1043	3113	509	1774	3632
Grp Volume(v), veh/h	359	0	438	435	21	1221
Grp Sat Flow(s),veh/h/ln	1424	0	1770	1759	1774	1770
Q Serve(g_s), s	32.0	0.0	15.2	15.2	1.5	21.1
Cycle Q Clear(g_c), s	32.0	0.0	15.2	15.2	1.5	21.1
Prop In Lane	0.26	0.73		0.29	1.00	
Lane Grp Cap(c), veh/h	351	0	1141	1135	29	2450
V/C Ratio(X)	1.02	0.00	0.38	0.38	0.71	0.50
Avail Cap(c_a), veh/h	351	0	1141	1135	109	2450
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.54	0.54	0.43	0.43
Uniform Delay (d), s/veh	49.0	0.0	10.9	11.0	63.6	9.4
Incr Delay (d2), s/veh	54.3	0.0	0.5	0.5	5.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	17.9	0.0	7.6	7.6	0.8	10.3
LnGrp Delay(d),s/veh	103.3	0.0	11.4	11.5	68.6	9.7
LnGrp LOS	F		B	B	E	A
Approach Vol, veh/h	359		873			1242
Approach Delay, s/veh	103.3		11.5			10.7
Approach LOS	F		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.2	87.8				94.0		36.0
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	77.1				89.1		32.0
Max Q Clear Time (g_c+I1), s	3.5	17.2				23.1		34.0
Green Ext Time (p_c), s	0.0	9.2				9.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.4
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	60	50	50	60	50	50	570	20	30	870	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	63	53	53	63	53	53	600	21	32	916	116
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	131	86	182	157	105	64	1585	55	39	1393	176
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.04	0.45	0.45	0.02	0.44	0.44
Sat Flow, veh/h	542	654	431	365	787	526	1774	3489	122	1774	3161	400
Grp Volume(v), veh/h	200	0	0	169	0	0	53	304	317	32	513	519
Grp Sat Flow(s),veh/h/ln	1627	0	0	1678	0	0	1774	1770	1841	1774	1770	1792
Q Serve(g_s), s	0.9	0.0	0.0	0.0	0.0	0.0	1.3	4.9	4.9	0.8	9.9	9.9
Cycle Q Clear(g_c), s	4.5	0.0	0.0	3.6	0.0	0.0	1.3	4.9	4.9	0.8	9.9	9.9
Prop In Lane	0.42		0.26	0.31		0.31	1.00		0.07	1.00		0.22
Lane Grp Cap(c), veh/h	443	0	0	444	0	0	64	804	837	39	780	790
V/C Ratio(X)	0.45	0.00	0.00	0.38	0.00	0.00	0.83	0.38	0.38	0.81	0.66	0.66
Avail Cap(c_a), veh/h	1115	0	0	1139	0	0	205	942	980	205	942	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.6	0.0	0.0	15.3	0.0	0.0	20.7	7.8	7.8	21.0	9.5	9.5
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.5	0.0	0.0	23.2	0.3	0.3	31.6	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	0.0	0.0	1.9	0.0	0.0	1.0	2.4	2.5	0.7	5.0	5.0
LnGrp Delay(d),s/veh	16.3	0.0	0.0	15.8	0.0	0.0	43.9	8.1	8.1	52.6	10.8	10.8
LnGrp LOS	B			B			D	A	A	D	B	B
Approach Vol, veh/h		200			169			674			1064	
Approach Delay, s/veh		16.3			15.8			10.9			12.0	
Approach LOS		B			B			B			B	

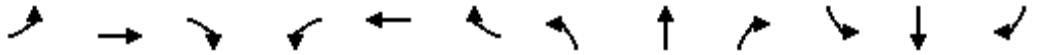
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	24.6		13.6	5.6	24.0		13.6
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	23.0		28.0	5.0	23.0		28.0
Max Q Clear Time (g_c+I1), s	2.8	6.9		6.5	3.3	11.9		5.6
Green Ext Time (p_c), s	0.0	9.3		2.3	0.0	7.2		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	12.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	30	100	150	30	30	60	570	130	30	920	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	32	105	158	32	32	63	600	137	32	968	11
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	94	233	345	62	47	78	1351	308	39	1611	18
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.04	0.47	0.47	0.02	0.45	0.45
Sat Flow, veh/h	113	442	1098	1014	293	220	1774	2865	653	1774	3584	41
Grp Volume(v), veh/h	158	0	0	222	0	0	63	370	367	32	478	501
Grp Sat Flow(s),veh/h/ln	1652	0	0	1527	0	0	1774	1770	1748	1774	1770	1856
Q Serve(g_s), s	0.0	0.0	0.0	1.9	0.0	0.0	1.7	6.6	6.7	0.9	9.7	9.7
Cycle Q Clear(g_c), s	3.9	0.0	0.0	5.8	0.0	0.0	1.7	6.6	6.7	0.9	9.7	9.7
Prop In Lane	0.13		0.66	0.71		0.14	1.00		0.37	1.00		0.02
Lane Grp Cap(c), veh/h	436	0	0	454	0	0	78	834	824	39	795	834
V/C Ratio(X)	0.36	0.00	0.00	0.49	0.00	0.00	0.81	0.44	0.45	0.83	0.60	0.60
Avail Cap(c_a), veh/h	1037	0	0	964	0	0	187	1043	1030	187	1043	1094
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	0.0	16.9	0.0	0.0	22.5	8.4	8.4	23.1	9.9	9.9
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.8	0.0	0.0	17.8	0.4	0.4	33.9	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.9	0.0	0.0	2.8	0.0	0.0	1.2	3.3	3.2	0.8	4.8	5.0
LnGrp Delay(d),s/veh	16.8	0.0	0.0	17.7	0.0	0.0	40.3	8.8	8.8	57.1	10.6	10.6
LnGrp LOS	B			B			D	A	A	E	B	B
Approach Vol, veh/h		158			222			800			1011	
Approach Delay, s/veh		16.8			17.7			11.2			12.0	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	27.4		15.1	6.1	26.3		15.1
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	28.0		28.0	5.0	28.0		28.0
Max Q Clear Time (g_c+I1), s	2.9	8.7		5.9	3.7	11.7		7.8
Green Ext Time (p_c), s	0.0	10.8		2.4	0.0	9.7		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	450	10	10	440	30	20	10	60	60	10	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	63	474	11	11	463	32	21	11	63	63	11	63
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	647	1641	38	648	1643	729	402	155	310	495	64	310
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	895	3535	82	904	3539	1571	760	779	1562	1077	325	1562
Grp Volume(v), veh/h	63	237	248	11	463	32	32	0	63	74	0	63
Grp Sat Flow(s),veh/h/ln	895	1770	1848	904	1770	1571	1539	0	1562	1402	0	1562
Q Serve(g_s), s	1.1	2.0	2.0	0.2	1.9	0.3	0.0	0.0	0.8	0.6	0.0	0.8
Cycle Q Clear(g_c), s	3.0	2.0	2.0	2.2	1.9	0.3	0.3	0.0	0.8	1.0	0.0	0.8
Prop In Lane	1.00		0.04	1.00		1.00	0.66		1.00	0.85		1.00
Lane Grp Cap(c), veh/h	647	821	857	648	1643	729	557	0	310	559	0	310
V/C Ratio(X)	0.10	0.29	0.29	0.02	0.28	0.04	0.06	0.00	0.20	0.13	0.00	0.20
Avail Cap(c_a), veh/h	1062	1642	1715	1067	3284	1458	1496	0	1318	1440	0	1318
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.8	3.9	3.9	4.6	3.9	3.5	7.7	0.0	7.9	8.0	0.0	7.9
Incr Delay (d2), s/veh	0.1	0.2	0.2	0.0	0.1	0.0	0.0	0.0	0.3	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.3	1.0	1.0	0.0	0.9	0.1	0.2	0.0	0.4	0.4	0.0	0.4
LnGrp Delay(d),s/veh	4.9	4.1	4.1	4.6	4.0	3.5	7.8	0.0	8.3	8.1	0.0	8.3
LnGrp LOS	A	A	A	A	A	A	A		A	A		A
Approach Vol, veh/h		548			506			95			137	
Approach Delay, s/veh		4.2			4.0			8.1			8.2	
Approach LOS		A			A			A			A	

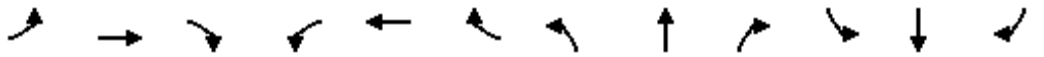
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		8.7		15.0		8.7		15.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		22.0		20.0		22.0
Max Q Clear Time (g_c+I1), s		2.8		5.0		3.0		4.2
Green Ext Time (p_c), s		0.9		5.8		0.9		5.9

Intersection Summary	
HCM 2010 Ctrl Delay	4.8
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	340	90	150	350	60	80	250	80	60	590	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	358	95	158	368	63	84	263	84	63	621	105
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	857	224	251	935	159	99	1456	455	74	1619	273
Arrive On Green	0.31	0.31	0.30	0.31	0.31	0.30	0.06	0.55	0.54	0.04	0.53	0.53
Sat Flow, veh/h	948	2766	724	930	3019	512	1774	2655	829	1774	3030	511
Grp Volume(v), veh/h	74	227	226	158	214	217	84	173	174	63	362	364
Grp Sat Flow(s),veh/h/ln	948	1770	1720	930	1770	1762	1774	1770	1715	1774	1770	1771
Q Serve(g_s), s	8.0	12.2	12.5	19.5	11.4	11.6	5.6	5.9	6.2	4.2	14.4	14.5
Cycle Q Clear(g_c), s	19.6	12.2	12.5	32.1	11.4	11.6	5.6	5.9	6.2	4.2	14.4	14.5
Prop In Lane	1.00		0.42	1.00		0.29	1.00		0.48	1.00		0.29
Lane Grp Cap(c), veh/h	262	548	533	251	548	546	99	971	941	74	946	947
V/C Ratio(X)	0.28	0.41	0.42	0.63	0.39	0.40	0.85	0.18	0.18	0.85	0.38	0.38
Avail Cap(c_a), veh/h	292	605	588	280	605	602	163	971	941	310	946	947
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.96	0.96	0.96	0.92	0.92	0.92	0.76	0.76	0.76
Uniform Delay (d), s/veh	40.3	32.8	33.0	45.7	32.5	32.7	56.2	13.6	13.7	57.1	16.3	16.5
Incr Delay (d2), s/veh	0.2	0.1	0.2	2.3	0.2	0.2	9.2	0.4	0.4	7.5	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.1	6.0	6.0	5.2	5.6	5.7	3.0	2.9	3.0	2.2	7.3	7.3
LnGrp Delay(d),s/veh	40.5	32.9	33.2	47.9	32.7	32.8	65.4	13.9	14.1	64.6	17.2	17.3
LnGrp LOS	D	C	C	D	C	C	E	B	B	E	B	B
Approach Vol, veh/h		527			589			431			789	
Approach Delay, s/veh		34.1			36.8			24.0			21.1	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	69.8		41.2	10.7	68.1		41.2
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	21.5	45.1		40.4	11.5	55.1		40.4
Max Q Clear Time (g_c+I1), s	6.2	8.2		21.6	7.6	16.5		34.1
Green Ext Time (p_c), s	0.0	4.3		4.2	0.0	4.3		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	28.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	960	10	20	890	50	10	10	20	30	10	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	84	1011	11	21	937	53	11	11	21	32	11	84
Adj No. of Lanes	1	2	0	1	3	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	2299	25	15	3020	902	90	76	384	126	36	384
Arrive On Green	0.02	0.21	0.21	0.01	0.59	0.59	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3585	39	1774	5085	1519	179	303	1538	294	144	1538
Grp Volume(v), veh/h	84	499	523	21	937	53	22	0	21	43	0	84
Grp Sat Flow(s),veh/h/ln	1774	1770	1854	1774	1695	1519	482	0	1538	438	0	1538
Q Serve(g_s), s	5.7	29.4	29.4	1.0	11.0	1.8	0.3	0.0	1.2	2.5	0.0	5.2
Cycle Q Clear(g_c), s	5.7	29.4	29.4	1.0	11.0	1.8	23.2	0.0	1.2	24.3	0.0	5.2
Prop In Lane	1.00		0.02	1.00		1.00	0.50		1.00	0.74		1.00
Lane Grp Cap(c), veh/h	99	1135	1189	15	3020	902	165	0	384	162	0	384
V/C Ratio(X)	0.84	0.44	0.44	1.39	0.31	0.06	0.13	0.00	0.05	0.27	0.00	0.22
Avail Cap(c_a), veh/h	237	1135	1189	148	3020	902	165	0	384	162	0	384
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.67	0.67	0.67	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.4	28.6	28.6	59.5	12.1	10.3	36.0	0.0	34.2	47.6	0.0	35.7
Incr Delay (d2), s/veh	6.6	1.1	1.1	194.7	0.2	0.1	0.1	0.0	0.0	4.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.0	14.8	15.5	1.3	5.2	0.8	0.6	0.0	0.5	1.5	0.0	2.4
LnGrp Delay(d),s/veh	65.0	29.7	29.6	275.6	12.3	10.3	36.1	0.0	34.2	51.6	0.0	37.0
LnGrp LOS	E	C	C	F	B	B	D		C	D		D
Approach Vol, veh/h		1106			1011			43			127	
Approach Delay, s/veh		32.4			17.7			35.2			41.9	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	5.0	81.0		34.0	10.7	75.3
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	16.5	61.4
Max Q Clear Time (g_c+I1), s		25.2	3.0	31.4		26.3	7.7	13.0
Green Ext Time (p_c), s		0.2	0.0	22.6		0.1	0.0	26.8

Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	690	350	180	740	90	230	350	170	180	500	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	105	726	368	189	779	95	242	368	179	189	526	147
Adj No. of Lanes	1	2	0	1	3	0	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	842	426	207	1928	233	285	590	281	210	796	221
Arrive On Green	0.02	0.12	0.12	0.23	0.84	0.83	0.08	0.26	0.25	0.04	0.10	0.09
Sat Flow, veh/h	1774	2255	1141	1774	4585	555	3442	2285	1089	1774	2708	752
Grp Volume(v), veh/h	105	570	524	189	575	299	242	283	264	189	343	330
Grp Sat Flow(s),veh/h/ln	1774	1770	1626	1774	1695	1750	1721	1770	1605	1774	1770	1690
Q Serve(g_s), s	7.1	37.9	38.0	12.5	4.9	5.1	8.3	17.0	17.6	12.7	22.4	22.6
Cycle Q Clear(g_c), s	7.1	37.9	38.0	12.5	4.9	5.1	8.3	17.0	17.6	12.7	22.4	22.6
Prop In Lane	1.00		0.70	1.00		0.32	1.00		0.68	1.00		0.45
Lane Grp Cap(c), veh/h	123	661	607	207	1426	736	285	457	415	210	521	497
V/C Ratio(X)	0.85	0.86	0.86	0.92	0.40	0.41	0.85	0.62	0.64	0.90	0.66	0.66
Avail Cap(c_a), veh/h	163	661	607	237	1426	736	373	457	415	222	521	497
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.88	0.88	0.88	0.94	0.94	0.94	0.91	0.91	0.91	0.98	0.98	0.98
Uniform Delay (d), s/veh	58.0	49.6	49.7	45.5	5.9	6.1	54.3	39.3	39.8	56.9	48.4	48.5
Incr Delay (d2), s/veh	20.1	12.5	13.5	30.9	0.8	1.6	10.1	5.7	6.7	31.9	6.3	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	20.9	19.4	7.9	2.2	2.7	4.4	9.0	8.6	8.1	11.9	11.6
LnGrp Delay(d),s/veh	78.1	62.0	63.3	76.3	6.7	7.7	64.4	44.9	46.4	88.8	54.6	55.2
LnGrp LOS	E	E	E	E	A	A	E	D	D	F	D	E
Approach Vol, veh/h		1199			1063			789			862	
Approach Delay, s/veh		64.0			19.4			51.4			62.3	
Approach LOS		E			B			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.2	35.0	18.0	48.8	13.9	39.3	12.3	54.5
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	3.5	4.9
Max Green Setting (Gmax), s	15.5	30.1	16.5	41.1	13.5	32.1	11.5	46.1
Max Q Clear Time (g_c+I1), s	14.7	19.6	14.5	40.0	10.3	24.6	9.1	7.1
Green Ext Time (p_c), s	0.0	3.0	0.0	1.0	0.1	2.5	0.0	24.3

Intersection Summary	
HCM 2010 Ctrl Delay	49.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	630	220	250	560	80	210	780	160	160	1320	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.93	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	189	663	55	263	589	18	221	821	143	168	1389	195
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	233	841	357	321	964	413	261	1796	310	397	2091	293
Arrive On Green	0.02	0.08	0.08	0.03	0.09	0.09	0.15	0.82	0.80	0.23	0.92	0.90
Sat Flow, veh/h	3510	3610	1534	3510	3610	1544	3510	4398	759	3510	4556	639
Grp Volume(v), veh/h	189	663	55	263	589	18	221	644	320	168	1054	530
Grp Sat Flow(s),veh/h/ln	1755	1805	1534	1755	1805	1544	1755	1729	1699	1755	1729	1737
Q Serve(g_s), s	6.4	21.7	3.2	8.9	18.9	0.9	7.4	6.5	6.9	4.9	7.7	8.2
Cycle Q Clear(g_c), s	6.4	21.7	3.2	8.9	18.9	0.9	7.4	6.5	6.9	4.9	7.7	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.37
Lane Grp Cap(c), veh/h	233	841	357	321	964	413	261	1412	694	397	1587	797
V/C Ratio(X)	0.81	0.79	0.15	0.82	0.61	0.04	0.85	0.46	0.46	0.42	0.66	0.66
Avail Cap(c_a), veh/h	351	993	422	351	993	425	351	1412	694	397	1587	797
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.90	0.90	0.90	0.94	0.94	0.94	0.96	0.96	0.96	0.90	0.90	0.90
Uniform Delay (d), s/veh	57.9	52.5	28.6	57.2	48.7	21.4	50.4	7.1	7.4	43.1	3.0	3.2
Incr Delay (d2), s/veh	4.3	2.7	0.1	11.2	0.7	0.0	10.2	1.0	2.1	0.2	2.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	11.2	1.4	4.9	9.5	0.4	3.9	3.1	3.5	2.4	3.6	4.2
LnGrp Delay(d),s/veh	62.2	55.2	28.7	68.4	49.4	21.4	60.7	8.1	9.5	43.3	5.0	7.1
LnGrp LOS	E	E	C	E	D	C	E	A	A	D	A	A
Approach Vol, veh/h		907			870			1185			1752	
Approach Delay, s/veh		55.1			54.6			18.3			9.3	
Approach LOS		E			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	53.0	16.1	31.9	12.9	59.1	12.0	36.1
Change Period (Y+Rc), s	4.9	* 4.9	4.6	* 4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	10.5	* 48	12.5	* 32	12.5	46.1	12.5	32.4
Max Q Clear Time (g_c+I1), s	6.9	8.9	10.9	23.7	9.4	10.2	8.4	20.9
Green Ext Time (p_c), s	0.2	4.4	0.5	2.1	0.1	8.6	0.1	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	28.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	800	60	80	700	110	90	250	50	120	580	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	116	842	63	84	737	116	95	263	53	126	611	137
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	1279	96	117	1174	185	112	962	191	143	956	214
Arrive On Green	0.15	0.77	0.76	0.07	0.38	0.38	0.02	0.11	0.11	0.16	0.67	0.65
Sat Flow, veh/h	1774	3336	250	1774	3060	481	1774	2939	583	1774	2869	642
Grp Volume(v), veh/h	116	447	458	84	426	427	95	157	159	126	376	372
Grp Sat Flow(s),veh/h/ln	1774	1770	1816	1774	1770	1772	1774	1770	1752	1774	1770	1741
Q Serve(g_s), s	7.7	14.3	14.3	5.6	23.5	23.5	6.4	9.8	10.0	8.3	14.8	15.1
Cycle Q Clear(g_c), s	7.7	14.3	14.3	5.6	23.5	23.5	6.4	9.8	10.0	8.3	14.8	15.1
Prop In Lane	1.00		0.14	1.00		0.27	1.00		0.33	1.00		0.37
Lane Grp Cap(c), veh/h	133	678	696	117	679	680	112	579	573	143	590	580
V/C Ratio(X)	0.87	0.66	0.66	0.72	0.63	0.63	0.85	0.27	0.28	0.88	0.64	0.64
Avail Cap(c_a), veh/h	237	678	696	148	679	680	118	579	573	148	590	580
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.92	0.92	0.92	0.66	0.66	0.66	1.00	1.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	50.4	10.3	10.4	54.9	30.0	30.1	58.2	40.4	40.5	49.8	15.8	16.1
Incr Delay (d2), s/veh	6.1	4.6	4.4	5.0	2.9	2.9	37.4	1.1	1.2	35.6	4.6	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.0	7.6	7.8	2.9	12.0	12.1	4.3	5.0	5.1	5.5	7.9	7.8
LnGrp Delay(d),s/veh	56.5	14.9	14.8	59.9	32.9	33.0	95.6	41.5	41.7	85.4	20.4	20.8
LnGrp LOS	E	B	B	E	C	C	F	D	D	F	C	C
Approach Vol, veh/h		1021			937			411			874	
Approach Delay, s/veh		19.6			35.4			54.1			29.9	
Approach LOS		B			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	43.3	13.0	50.0	13.0	44.0	13.0	50.0
Change Period (Y+Rc), s	3.5	4.9	4.6	* 4.6	4.9	* 4.9	3.5	4.6
Max Green Setting (Gmax), s	10.5	37.1	10.5	* 45	8.5	* 39	16.5	39.4
Max Q Clear Time (g_c+I1), s	10.3	12.0	7.6	16.3	8.4	17.1	9.7	25.5
Green Ext Time (p_c), s	0.0	2.3	0.1	8.0	0.0	6.2	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	31.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	740	80	130	480	270	80	900	130	330	1280	100
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	158	779	84	137	505	284	84	947	137	347	1347	105
Adj No. of Lanes	1	3	0	1	3	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	1076	115	176	816	371	99	1614	233	314	2291	179
Arrive On Green	0.10	0.23	0.22	0.10	0.24	0.23	0.06	0.36	0.35	0.18	0.48	0.47
Sat Flow, veh/h	1774	4664	500	1774	3390	1541	1774	4490	648	1774	4798	374
Grp Volume(v), veh/h	158	565	298	137	505	284	84	714	370	347	952	500
Grp Sat Flow(s),veh/h/ln	1774	1695	1774	1774	1695	1541	1774	1695	1747	1774	1695	1782
Q Serve(g_s), s	11.4	20.0	20.2	9.8	17.3	22.4	6.1	22.2	22.4	23.0	26.5	26.6
Cycle Q Clear(g_c), s	11.4	20.0	20.2	9.8	17.3	22.4	6.1	22.2	22.4	23.0	26.5	26.6
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.37	1.00		0.21
Lane Grp Cap(c), veh/h	177	782	409	176	816	371	99	1219	628	314	1619	851
V/C Ratio(X)	0.89	0.72	0.73	0.78	0.62	0.77	0.85	0.59	0.59	1.11	0.59	0.59
Avail Cap(c_a), veh/h	232	782	409	246	816	371	273	1219	628	314	1619	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.8	46.2	46.4	57.2	44.0	46.4	60.8	33.8	34.0	53.5	24.7	24.8
Incr Delay (d2), s/veh	23.5	5.7	10.8	6.4	3.5	14.0	7.3	2.1	4.0	82.2	1.6	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.8	10.0	11.2	5.1	8.5	10.9	3.2	10.8	11.5	18.4	12.8	13.8
LnGrp Delay(d),s/veh	81.4	51.9	57.2	63.6	47.5	60.4	68.1	35.9	38.0	135.7	26.2	27.7
LnGrp LOS	F	D	E	E	D	E	E	D	D	F	C	C
Approach Vol, veh/h		1021			926			1168			1799	
Approach Delay, s/veh		58.0			53.9			38.9			47.8	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	50.7	17.0	35.3	11.3	66.5	18.3	34.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	* 5.3	4.9	* 4.9
Max Green Setting (Gmax), s	23.5	41.7	17.5	30.1	20.5	* 45	18.5	* 29
Max Q Clear Time (g_c+I1), s	25.0	24.4	13.4	24.4	8.1	28.6	11.8	22.2
Green Ext Time (p_c), s	0.0	15.9	0.1	3.0	0.1	15.2	1.7	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	48.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	650	10	10	750	70	20	10	20	180	10	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	32	684	11	11	789	74	21	11	21	189	11	53
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	1485	24	391	1362	128	331	183	282	574	43	136
Arrive On Green	0.83	0.83	0.79	0.42	0.42	0.40	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	638	3564	57	745	3269	307	550	407	628	1042	96	302
Grp Volume(v), veh/h	32	339	356	11	427	436	53	0	0	253	0	0
Grp Sat Flow(s),veh/h/ln	638	1770	1852	745	1770	1806	1584	0	0	1440	0	0
Q Serve(g_s), s	1.8	3.1	3.1	0.6	11.1	11.2	0.0	0.0	0.0	5.8	0.0	0.0
Cycle Q Clear(g_c), s	13.0	3.1	3.1	3.7	11.1	11.2	1.0	0.0	0.0	6.8	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.17	0.40		0.40	0.75		0.21
Lane Grp Cap(c), veh/h	267	737	772	391	737	753	797	0	0	753	0	0
V/C Ratio(X)	0.12	0.46	0.46	0.03	0.58	0.58	0.07	0.00	0.00	0.34	0.00	0.00
Avail Cap(c_a), veh/h	267	737	772	391	737	753	797	0	0	753	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.89	0.89	0.89	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.3	3.2	3.2	12.3	13.5	13.6	9.4	0.0	0.0	10.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	2.0	1.9	0.1	3.0	2.9	0.0	0.0	0.0	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	1.7	1.8	0.1	5.9	6.1	0.5	0.0	0.0	3.0	0.0	0.0
LnGrp Delay(d),s/veh	8.2	5.2	5.1	12.4	16.4	16.5	9.4	0.0	0.0	12.1	0.0	0.0
LnGrp LOS	A	A	A	B	B	B	A			B		
Approach Vol, veh/h		727			874			53			253	
Approach Delay, s/veh		5.3			16.4			9.4			12.1	
Approach LOS		A			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.0		29.0		31.0		29.0
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		27.0		23.7		27.0		23.7
Max Q Clear Time (g_c+I1), s		8.8		13.2		3.0		15.0
Green Ext Time (p_c), s		1.2		8.1		1.3		6.9

Intersection Summary	
HCM 2010 Ctrl Delay	11.4
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	710	120	130	700	50	50	30	60	130	100	60
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.97		0.95	0.96		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	747	126	137	737	53	53	32	63	137	105	63
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	1794	302	155	2222	160	216	118	233	270	233	140
Arrive On Green	0.02	0.59	0.59	0.17	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3022	510	1774	3345	240	1170	540	1063	1240	1066	640
Grp Volume(v), veh/h	21	437	436	137	390	400	53	0	95	137	0	168
Grp Sat Flow(s),veh/h/ln	1774	1770	1762	1774	1770	1816	1170	0	1603	1240	0	1706
Q Serve(g_s), s	1.4	16.0	16.1	9.0	0.0	0.0	4.9	0.0	5.9	12.4	0.0	10.2
Cycle Q Clear(g_c), s	1.4	16.0	16.1	9.0	0.0	0.0	15.2	0.0	5.9	18.3	0.0	10.2
Prop In Lane	1.00		0.29	1.00		0.13	1.00		0.66	1.00		0.38
Lane Grp Cap(c), veh/h	30	1050	1046	155	1175	1206	216	0	351	270	0	374
V/C Ratio(X)	0.70	0.42	0.42	0.88	0.33	0.33	0.24	0.00	0.27	0.51	0.00	0.45
Avail Cap(c_a), veh/h	89	1050	1046	296	1175	1206	233	0	374	288	0	398
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.47	0.47	0.47	0.86	0.86	0.86	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.7	13.2	13.2	48.9	0.0	0.0	47.2	0.0	38.9	46.5	0.0	40.6
Incr Delay (d2), s/veh	5.2	0.6	0.6	5.5	0.7	0.6	0.2	0.0	0.2	0.5	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	7.9	7.9	4.6	0.2	0.2	1.6	0.0	2.6	4.3	0.0	4.8
LnGrp Delay(d),s/veh	63.9	13.7	13.8	54.4	0.7	0.6	47.4	0.0	39.1	47.0	0.0	40.9
LnGrp LOS	E	B	B	D	A	A	D		D	D		D
Approach Vol, veh/h		894			927			148			305	
Approach Delay, s/veh		14.9			8.6			42.0			43.7	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.5	75.2		30.3	6.0	83.7		30.3
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	20.5	59.4		28.0	6.5	73.4		28.0
Max Q Clear Time (g_c+I1), s	11.0	18.1		20.3	3.4	2.0		17.2
Green Ext Time (p_c), s	0.1	20.7		1.0	0.0	25.4		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	18.0
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	720	120	150	650	70	130	380	120	220	710	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.92	1.00		0.86	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	758	126	158	684	74	137	400	126	232	747	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	1354	542	178	1514	613	156	617	190	252	948	94
Arrive On Green	0.11	0.77	0.75	0.10	0.43	0.42	0.09	0.24	0.23	0.14	0.30	0.29
Sat Flow, veh/h	1774	3539	1444	1774	3539	1459	1774	2553	786	1774	3209	318
Grp Volume(v), veh/h	84	758	126	158	684	74	137	274	252	232	412	409
Grp Sat Flow(s),veh/h/ln	1774	1770	1444	1774	1770	1459	1774	1770	1569	1774	1770	1757
Q Serve(g_s), s	5.6	10.6	3.2	10.6	16.5	3.7	9.2	16.7	17.4	15.5	25.6	25.7
Cycle Q Clear(g_c), s	5.6	10.6	3.2	10.6	16.5	3.7	9.2	16.7	17.4	15.5	25.6	25.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		0.18
Lane Grp Cap(c), veh/h	98	1354	542	178	1514	613	156	428	379	252	523	519
V/C Ratio(X)	0.86	0.56	0.23	0.89	0.45	0.12	0.88	0.64	0.66	0.92	0.79	0.79
Avail Cap(c_a), veh/h	157	1354	542	296	1514	613	207	442	392	281	523	519
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	0.98	0.98	0.98	0.78	0.78	0.78
Uniform Delay (d), s/veh	52.9	9.9	9.8	53.3	24.4	21.2	54.1	40.8	41.3	50.8	38.8	38.9
Incr Delay (d2), s/veh	12.0	1.5	0.9	9.5	1.0	0.4	21.8	2.2	3.1	25.6	5.7	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.0	5.1	1.3	5.6	8.2	1.6	5.4	8.4	7.9	9.4	13.3	13.3
LnGrp Delay(d),s/veh	64.9	11.4	10.7	62.8	25.3	21.6	75.9	43.0	44.4	76.5	44.5	44.7
LnGrp LOS	E	B	B	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		968			916			663			1053	
Approach Delay, s/veh		16.0			31.5			50.3			51.6	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	33.0	16.1	49.9	14.6	39.5	10.6	55.3
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	3.5	4.9
Max Green Setting (Gmax), s	19.5	29.1	20.5	34.1	14.5	34.1	11.1	43.5
Max Q Clear Time (g_c+I1), s	17.5	19.4	12.6	12.6	11.2	27.7	7.6	18.5
Green Ext Time (p_c), s	0.0	2.3	0.1	13.9	0.0	2.4	0.0	15.3

Intersection Summary	
HCM 2010 Ctrl Delay	36.7
HCM 2010 LOS	D

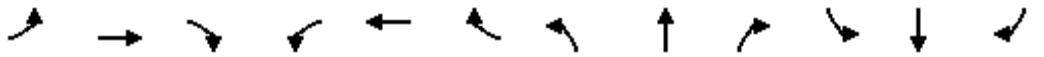
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	820	80	80	810	20	50	50	100	50	140	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.98		0.95	0.97		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	32	863	84	84	853	21	53	53	105	53	147	74
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	1818	177	159	2238	55	146	132	366	82	196	90
Arrive On Green	0.02	0.56	0.55	0.18	1.00	1.00	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1774	3256	317	1774	3529	87	416	544	1509	189	809	369
Grp Volume(v), veh/h	32	469	478	84	428	446	106	0	105	274	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1804	1774	1770	1847	959	0	1509	1366	0	0
Q Serve(g_s), s	2.2	19.1	19.1	5.1	0.0	0.0	0.0	0.0	6.8	12.6	0.0	0.0
Cycle Q Clear(g_c), s	2.2	19.1	19.1	5.1	0.0	0.0	11.2	0.0	6.8	23.9	0.0	0.0
Prop In Lane	1.00		0.18	1.00		0.05	0.50		1.00	0.19		0.27
Lane Grp Cap(c), veh/h	41	988	1007	159	1122	1171	278	0	366	367	0	0
V/C Ratio(X)	0.78	0.47	0.47	0.53	0.38	0.38	0.38	0.00	0.29	0.75	0.00	0.00
Avail Cap(c_a), veh/h	148	988	1007	159	1122	1171	300	0	390	392	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.58	0.58	0.58	0.69	0.69	0.69	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.3	15.9	16.0	46.9	0.0	0.0	37.9	0.0	37.0	43.9	0.0	0.0
Incr Delay (d2), s/veh	6.7	1.0	0.9	1.1	0.7	0.6	0.3	0.0	0.2	6.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	9.5	9.7	2.6	0.2	0.2	3.0	0.0	2.8	9.3	0.0	0.0
LnGrp Delay(d),s/veh	65.0	16.9	16.9	48.0	0.7	0.6	38.2	0.0	37.1	49.9	0.0	0.0
LnGrp LOS	E	B	B	D	A	A	D		D	D		
Approach Vol, veh/h		979			958			211			274	
Approach Delay, s/veh		18.5			4.8			37.7			49.9	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		33.1	15.9	71.0		33.1	6.8	80.1
Change Period (Y+Rc), s		4.0	4.6	* 4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		31.0	10.5	* 66		31.0	10.5	66.4
Max Q Clear Time (g_c+I1), s		13.2	7.1	21.1		25.9	4.2	2.0
Green Ext Time (p_c), s		1.8	0.2	9.4		0.9	0.0	8.3

Intersection Summary	
HCM 2010 Ctrl Delay	18.3
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	790	60	160	780	50	40	10	120	160	20	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	832	63	168	821	53	42	11	126	168	21	11
Adj No. of Lanes	1	2	1	2	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	0	0	0	0	0
Cap, veh/h	24	1662	740	258	1792	116	498	123	667	447	54	25
Arrive On Green	0.01	0.47	0.47	0.07	0.53	0.52	0.36	0.36	0.34	0.36	0.36	0.35
Sat Flow, veh/h	1774	3539	1577	3442	3376	218	1198	345	1605	1051	153	70
Grp Volume(v), veh/h	11	832	63	168	430	444	53	0	126	200	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1577	1721	1770	1824	1543	0	1605	1274	0	0
Q Serve(g_s), s	0.6	14.7	2.0	4.3	13.6	13.6	0.0	0.0	4.5	10.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	14.7	2.0	4.3	13.6	13.6	1.8	0.0	4.5	11.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.12	0.79		1.00	0.84		0.05
Lane Grp Cap(c), veh/h	24	1662	740	258	939	968	620	0	667	527	0	0
V/C Ratio(X)	0.46	0.50	0.09	0.65	0.46	0.46	0.09	0.00	0.19	0.38	0.00	0.00
Avail Cap(c_a), veh/h	158	1662	740	421	939	968	620	0	667	527	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.84	0.84	0.84	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.1	16.6	13.2	40.5	13.1	13.1	19.3	0.0	16.7	23.0	0.0	0.0
Incr Delay (d2), s/veh	4.3	1.0	0.2	0.9	1.3	1.3	0.3	0.0	0.6	2.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.3	7.4	0.9	2.1	6.9	7.1	0.9	0.0	2.1	4.1	0.0	0.0
LnGrp Delay(d),s/veh	48.4	17.5	13.4	41.3	14.4	14.5	19.5	0.0	17.3	25.0	0.0	0.0
LnGrp LOS	D	B	B	D	B	B	B		B	C		
Approach Vol, veh/h		906			1042			179			200	
Approach Delay, s/veh		17.6			18.8			18.0			25.0	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	9.7	45.3		35.0	4.2	50.8
Change Period (Y+Rc), s		4.9	3.5	5.3		4.9	3.5	5.3
Max Green Setting (Gmax), s		30.1	10.5	35.7		30.1	7.5	38.7
Max Q Clear Time (g_c+I1), s		6.5	6.3	16.7		13.8	2.6	15.6
Green Ext Time (p_c), s		1.1	0.1	13.6		1.0	0.0	15.7

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	780	240	310	680	240	160	350	550	270	1100	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	137	821	206	326	716	77	168	447	210	284	1158	92
Adj No. of Lanes	2	3	0	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	1320	329	370	1209	536	355	1259	531	328	1180	523
Arrive On Green	0.08	0.33	0.32	0.11	0.34	0.34	0.10	0.34	0.34	0.10	0.33	0.33
Sat Flow, veh/h	3442	4054	1010	3442	3539	1569	3548	3725	1569	3442	3539	1569
Grp Volume(v), veh/h	137	686	341	326	716	77	168	447	210	284	1158	92
Grp Sat Flow(s),veh/h/ln	1721	1695	1673	1721	1770	1569	1774	1863	1569	1721	1770	1569
Q Serve(g_s), s	4.6	20.5	20.8	11.2	20.0	3.0	5.4	10.8	12.3	9.8	38.9	3.6
Cycle Q Clear(g_c), s	4.6	20.5	20.8	11.2	20.0	3.0	5.4	10.8	12.3	9.8	38.9	3.6
Prop In Lane	1.00		0.60	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	1104	545	370	1209	536	355	1259	531	328	1180	523
V/C Ratio(X)	0.50	0.62	0.63	0.88	0.59	0.14	0.47	0.35	0.40	0.87	0.98	0.18
Avail Cap(c_a), veh/h	315	1104	545	516	1209	536	355	1259	531	459	1180	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	0.71	0.71	0.71
Uniform Delay (d), s/veh	52.9	34.2	34.5	52.8	32.6	14.6	51.0	29.9	30.4	53.5	39.6	15.1
Incr Delay (d2), s/veh	0.5	2.3	4.7	9.7	2.1	0.6	4.5	0.8	2.2	6.8	17.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	10.0	10.3	5.8	10.1	1.4	2.9	5.7	5.7	5.0	21.9	1.6
LnGrp Delay(d),s/veh	53.3	36.5	39.2	62.5	34.7	15.2	55.5	30.7	32.6	60.3	57.4	15.2
LnGrp LOS	D	D	D	E	C	B	E	C	C	E	E	B
Approach Vol, veh/h		1164			1119			825			1534	
Approach Delay, s/veh		39.3			41.5			36.2			55.4	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	44.6	16.9	43.1	16.0	44.0	15.0	45.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	16.5	34.7	18.5	33.1	12.5	38.7	11.5	* 40
Max Q Clear Time (g_c+I1), s	11.8	14.3	13.2	22.8	7.4	40.9	6.6	22.0
Green Ext Time (p_c), s	0.2	14.9	0.2	5.6	0.1	0.0	0.4	6.2

Intersection Summary	
HCM 2010 Ctrl Delay	44.6
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	460	10	30	610	180	30	20	60	170	20	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	32	484	11	32	642	189	32	21	63	179	21	53
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	380	1592	36	445	1212	356	96	41	659	114	7	659
Arrive On Green	0.45	0.45	0.43	0.90	0.90	0.86	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	656	3537	80	896	2694	792	0	98	1582	0	17	1582
Grp Volume(v), veh/h	32	242	253	32	421	410	53	0	63	200	0	53
Grp Sat Flow(s),veh/h/ln	656	1770	1848	896	1770	1716	98	0	1582	17	0	1582
Q Serve(g_s), s	1.9	5.2	5.2	0.6	2.7	3.2	0.0	0.0	1.5	0.0	0.0	1.2
Cycle Q Clear(g_c), s	5.1	5.2	5.2	5.9	2.7	3.2	25.0	0.0	1.5	25.0	0.0	1.2
Prop In Lane	1.00		0.04	1.00		0.46	0.60		1.00	0.89		1.00
Lane Grp Cap(c), veh/h	380	796	832	445	796	772	137	0	659	121	0	659
V/C Ratio(X)	0.08	0.30	0.30	0.07	0.53	0.53	0.39	0.00	0.10	1.65	0.00	0.08
Avail Cap(c_a), veh/h	380	796	832	445	796	772	137	0	659	121	0	659
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.78	0.78	0.78	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.5	10.5	10.5	2.7	1.8	2.2	15.2	0.0	10.6	28.5	0.0	10.6
Incr Delay (d2), s/veh	0.4	0.9	0.8	0.2	2.0	2.0	8.1	0.0	0.3	327.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	2.7	2.9	0.2	1.4	1.7	0.8	0.0	0.7	13.0	0.0	0.6
LnGrp Delay(d),s/veh	11.9	11.4	11.4	3.0	3.7	4.2	23.2	0.0	10.9	356.2	0.0	10.8
LnGrp LOS	B	B	B	A	A	A	C		B	F		B
Approach Vol, veh/h		527			863			116			253	
Approach Delay, s/veh		11.4			3.9			16.5			283.8	
Approach LOS		B			A			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		31.0		29.0		31.0
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		25.0		25.7		25.0		25.7
Max Q Clear Time (g_c+I1), s		27.0		7.2		27.0		7.9
Green Ext Time (p_c), s		0.0		11.2		0.0		11.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.3
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	920	10	10	900	70	10	0	10	50	0	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	968	11	11	947	74	11	0	11	53	0	84
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	2376	27	6	2761	215	177	14	146	381	0	360
Arrive On Green	0.17	1.00	1.00	0.00	0.19	0.19	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1774	3583	41	1774	4802	374	568	60	628	1366	0	1543
Grp Volume(v), veh/h	126	478	501	11	668	353	22	0	0	53	0	84
Grp Sat Flow(s),veh/h/ln	1774	1770	1855	1774	1695	1786	1256	0	0	1366	0	1543
Q Serve(g_s), s	8.3	0.0	0.0	0.4	20.5	20.6	0.1	0.0	0.0	0.0	0.0	5.3
Cycle Q Clear(g_c), s	8.3	0.0	0.0	0.4	20.5	20.6	5.4	0.0	0.0	3.6	0.0	5.3
Prop In Lane	1.00		0.02	1.00		0.21	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	146	1174	1230	6	1949	1027	338	0	0	381	0	360
V/C Ratio(X)	0.86	0.41	0.41	1.77	0.34	0.34	0.07	0.00	0.00	0.14	0.00	0.23
Avail Cap(c_a), veh/h	163	1174	1230	163	1949	1027	338	0	0	381	0	360
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.37	0.37	0.37	0.96	0.96	0.96	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.4	0.0	0.0	59.9	29.0	29.0	35.8	0.0	0.0	36.6	0.0	37.3
Incr Delay (d2), s/veh	13.6	0.4	0.4	390.9	0.5	0.9	0.0	0.0	0.0	0.8	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	116.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	0.1	0.1	0.9	9.8	10.4	0.6	0.0	0.0	1.5	0.0	2.4
LnGrp Delay(d),s/veh	63.0	0.4	0.4	567.3	29.4	29.9	35.8	0.0	0.0	37.4	0.0	38.8
LnGrp LOS	E	A	A	F	C	C	D			D		D
Approach Vol, veh/h		1105			1032			22			137	
Approach Delay, s/veh		7.5			35.3			35.8			38.3	
Approach LOS		A			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.0	4.4	83.6		32.0	15.0	73.0
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	4.6	* 4.6
Max Green Setting (Gmax), s		28.0	11.5	68.4		28.0	11.5	* 68
Max Q Clear Time (g_c+I1), s		7.4	2.4	2.0		7.3	10.3	22.6
Green Ext Time (p_c), s		0.5	0.0	9.9		0.5	0.1	10.6

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

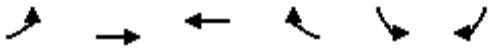
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1010	20	30	1100	60	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1541	1770	3539	1770	1508
Flt Permitted	1.00	1.00	0.17	1.00	0.95	1.00
Satd. Flow (perm)	3539	1541	318	3539	1770	1508
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1063	21	32	1158	63	32
RTOR Reduction (vph)	0	5	0	0	0	29
Lane Group Flow (vph)	1063	16	32	1158	63	3
Confl. Peds. (#/hr)		2	2			10
Turn Type	NA	Perm	D.P+P	NA	Prot	Perm
Protected Phases	1		2 4	1 2 4	3	
Permitted Phases		1	1			3
Actuated Green, G (s)	60.4	60.4	91.6	101.4	9.4	9.4
Effective Green, g (s)	61.3	61.3	94.3	102.3	10.0	10.0
Actuated g/C Ratio	0.51	0.51	0.79	0.85	0.08	0.08
Clearance Time (s)	4.9	4.9			4.6	4.6
Vehicle Extension (s)	1.5	1.5			2.5	2.5
Lane Grp Cap (vph)	1807	787	649	3016	147	125
v/s Ratio Prot	c0.30		0.01	c0.33	c0.04	
v/s Ratio Perm		0.01	0.03			0.00
v/c Ratio	0.59	0.02	0.05	0.38	0.43	0.02
Uniform Delay, d1	20.5	14.5	5.1	1.9	52.3	50.5
Progression Factor	1.00	1.00	0.05	0.03	1.00	1.00
Incremental Delay, d2	1.4	0.0	0.0	0.0	1.5	0.1
Delay (s)	21.9	14.6	0.3	0.1	53.7	50.6
Level of Service	C	B	A	A	D	D
Approach Delay (s)	21.8			0.1	52.7	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		

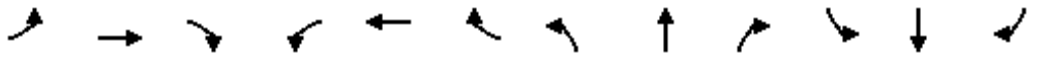
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	60	980	1010	70	130	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.93	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1770	3539	3539	1541	1695	
Flt Permitted	0.17	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	318	3539	3539	1541	1695	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	1032	1063	74	137	137
RTOR Reduction (vph)	0	0	0	27	31	0
Lane Group Flow (vph)	63	1032	1063	47	243	0
Confl. Peds. (#/hr)	2			2	10	
Turn Type	D.P+P	NA	NA	Perm	Prot	
Protected Phases	2 3	1 2 3	1		4	
Permitted Phases	1			1		
Actuated Green, G (s)	81.5	86.4	60.4	60.4	24.1	
Effective Green, g (s)	79.6	83.6	61.3	61.3	24.7	
Actuated g/C Ratio	0.66	0.70	0.51	0.51	0.21	
Clearance Time (s)			4.9	4.9	4.6	
Vehicle Extension (s)			1.5	1.5	2.5	
Lane Grp Cap (vph)	432	2465	1807	787	348	
v/s Ratio Prot	0.02	c0.29	c0.30		c0.14	
v/s Ratio Perm	0.07			0.03		
v/c Ratio	0.15	0.42	0.59	0.06	0.70	
Uniform Delay, d1	9.5	7.8	20.5	14.8	44.2	
Progression Factor	0.14	0.10	0.67	0.83	1.00	
Incremental Delay, d2	0.1	0.1	1.2	0.1	5.5	
Delay (s)	1.4	0.9	15.1	12.4	49.7	
Level of Service	A	A	B	B	D	
Approach Delay (s)		0.9	14.9		49.7	
Approach LOS		A	B		D	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	590	430	180	480	120	280	2050	20	170	2650	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	621	282	189	505	22	295	2158	20	179	2789	162
Adj No. of Lanes	1	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	739	331	152	671	300	451	3019	28	295	2507	145
Arrive On Green	0.11	0.21	0.21	0.09	0.19	0.19	0.26	0.92	0.92	0.11	0.53	0.53
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	6597	61	3442	6245	360
Grp Volume(v), veh/h	179	621	282	189	505	22	295	1572	606	179	2142	809
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	1602	1852	1721	1602	1799
Q Serve(g_s), s	13.9	23.6	24.0	12.0	18.9	1.6	10.7	11.2	11.2	6.9	56.2	56.2
Cycle Q Clear(g_c), s	13.9	23.6	24.0	12.0	18.9	1.6	10.7	11.2	11.2	6.9	56.2	56.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.20
Lane Grp Cap(c), veh/h	203	739	331	152	671	300	451	2199	847	295	1929	722
V/C Ratio(X)	0.88	0.84	0.85	1.24	0.75	0.07	0.65	0.71	0.71	0.61	1.11	1.12
Avail Cap(c_a), veh/h	228	877	392	152	726	325	451	2199	847	295	1929	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	0.84	0.84	0.84	0.38	0.38	0.38	0.61	0.61	0.61	0.42	0.42	0.42
Uniform Delay (d), s/veh	61.1	53.1	53.3	64.0	53.6	46.6	48.8	3.7	3.7	59.8	32.6	32.6
Incr Delay (d2), s/veh	25.2	5.4	12.4	128.8	1.6	0.0	2.1	1.2	3.2	1.5	53.2	62.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.2	12.1	11.6	11.3	9.4	0.7	5.2	4.6	5.8	3.3	34.0	40.1
LnGrp Delay(d),s/veh	86.3	58.5	65.7	192.8	55.2	46.6	50.9	4.9	6.9	61.3	85.9	95.2
LnGrp LOS	F	E	E	F	E	D	D	A	A	E	F	F
Approach Vol, veh/h		1082			716			2473			3130	
Approach Delay, s/veh		65.0			91.3			10.9			86.9	
Approach LOS		E			F			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	69.9	18.3	35.6	24.1	62.0	21.0	32.9
Change Period (Y+Rc), s	* 4.3	5.8	6.3	* 6.3	5.8	* 5.8	5.0	6.3
Max Green Setting (Gmax), s	* 12	59.9	12.0	* 35	15.7	* 56	18.0	28.7
Max Q Clear Time (g_c+I1), s	8.9	13.2	14.0	26.0	12.7	58.2	15.9	20.9
Green Ext Time (p_c), s	0.1	26.2	0.0	3.3	1.6	0.0	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	58.7
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	160	470	0	2210	2870	940
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	168	244	0	2326	3021	0
Adj No. of Lanes	2	3	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	320	335	0	5296	5296	1309
Arrive On Green	0.09	0.09	0.00	1.00	1.00	0.00
Sat Flow, veh/h	3442	3610	0	6929	6669	1583
Grp Volume(v), veh/h	168	244	0	2326	3021	0
Grp Sat Flow(s),veh/h/ln	1721	1203	0	1602	1602	1583
Q Serve(g_s), s	6.5	9.2	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.5	9.2	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	320	335	0	5296	5296	1309
V/C Ratio(X)	0.53	0.73	0.00	0.44	0.57	0.00
Avail Cap(c_a), veh/h	361	379	0	5296	5296	1309
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	0.59	0.09	0.00
Uniform Delay (d), s/veh	60.6	61.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.3	6.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.2	6.2	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	61.9	67.8	0.0	0.2	0.0	0.0
LnGrp LOS	E	E		A	A	
Approach Vol, veh/h	412			2326	3021	
Approach Delay, s/veh	65.4			0.2	0.0	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		121.7		18.3		121.7		
Change Period (Y+Rc), s		6.0		* 5.3		6.0		
Max Green Setting (Gmax), s		114.0		* 15		73.0		
Max Q Clear Time (g_c+I1), s		2.0		11.2		2.0		
Green Ext Time (p_c), s		43.1		0.6		56.5		

Intersection Summary	
HCM 2010 Ctrl Delay	4.8
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

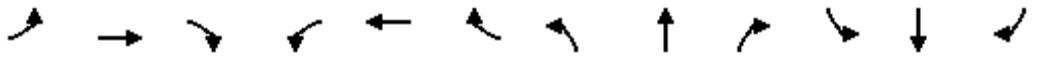
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	890	130	140	430	280	140	1720	230	440	2450	430
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	232	937	60	147	453	110	147	1811	136	463	2579	356
Adj No. of Lanes	2	4	0	2	2	1	2	4	1	2	4	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	1292	82	319	761	341	294	2483	614	507	2880	1491
Arrive On Green	0.09	0.21	0.21	0.09	0.22	0.22	0.17	0.78	0.78	0.20	0.60	0.60
Sat Flow, veh/h	3442	6204	395	3442	3539	1583	3442	6408	1583	3442	6408	2787
Grp Volume(v), veh/h	232	724	273	147	453	110	147	1811	136	463	2579	356
Grp Sat Flow(s),veh/h/ln	1721	1602	1793	1721	1770	1583	1721	1602	1583	1721	1602	1393
Q Serve(g_s), s	9.3	19.7	19.9	5.7	16.1	8.2	5.4	20.5	3.3	18.4	48.8	7.3
Cycle Q Clear(g_c), s	9.3	19.7	19.9	5.7	16.1	8.2	5.4	20.5	3.3	18.4	48.8	7.3
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	295	1001	373	319	761	341	294	2483	614	507	2880	1491
V/C Ratio(X)	0.79	0.72	0.73	0.46	0.60	0.32	0.50	0.73	0.22	0.91	0.90	0.24
Avail Cap(c_a), veh/h	295	1177	439	320	910	407	295	2483	614	526	2880	1491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83	0.47	0.47	0.47
Uniform Delay (d), s/veh	62.7	51.7	51.8	60.2	49.5	46.3	55.3	11.9	10.0	55.4	25.3	12.3
Incr Delay (d2), s/veh	13.2	1.8	5.1	1.0	0.7	0.5	1.1	1.6	0.7	11.0	2.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.0	8.9	10.4	2.7	7.9	3.7	2.6	8.8	1.5	9.5	21.7	2.8
LnGrp Delay(d),s/veh	75.9	53.5	56.8	61.3	50.2	46.9	56.4	13.5	10.7	66.4	27.7	12.5
LnGrp LOS	E	D	E	E	D	D	E	B	B	E	C	B
Approach Vol, veh/h		1229			710			2094			3398	
Approach Delay, s/veh		58.5			52.0			16.4			31.4	
Approach LOS		E			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.2	60.1	18.3	35.4	17.6	68.7	17.3	36.4
Change Period (Y+Rc), s	* 5.6	5.8	* 5.3	* 6.3	* 5.6	5.8	* 5.3	* 6.3
Max Green Setting (Gmax), s	* 21	48.3	* 13	* 34	* 12	57.7	* 12	* 36
Max Q Clear Time (g_c+I1), s	20.4	22.5	7.7	21.9	7.4	50.8	11.3	18.1
Green Ext Time (p_c), s	0.2	25.4	0.2	7.3	0.2	6.9	0.1	9.1

Intersection Summary	
HCM 2010 Ctrl Delay	33.6
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	470	330	300	530	170	180	1950	270	160	2390	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	179	495	198	316	558	33	189	2053	237	168	2516	71
Adj No. of Lanes	1	2	1	1	2	1	1	4	1	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	204	623	279	247	734	328	167	2632	858	248	2976	84
Arrive On Green	0.12	0.18	0.18	0.14	0.21	0.21	0.13	0.55	0.54	0.14	0.46	0.45
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6408	1583	1774	6455	182
Grp Volume(v), veh/h	179	495	198	316	558	33	189	2053	237	168	1872	715
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1583	1774	1602	1831
Q Serve(g_s), s	13.9	18.8	13.1	19.5	20.8	1.7	13.2	35.5	0.0	12.6	48.2	48.3
Cycle Q Clear(g_c), s	13.9	18.8	13.1	19.5	20.8	1.7	13.2	35.5	0.0	12.6	48.2	48.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	204	623	279	247	734	328	167	2632	858	248	2216	844
V/C Ratio(X)	0.88	0.79	0.71	1.28	0.76	0.10	1.13	0.78	0.28	0.68	0.84	0.85
Avail Cap(c_a), veh/h	231	733	328	247	758	339	167	2632	858	248	2216	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	55.3	34.1	60.2	52.2	23.2	61.2	26.8	12.9	57.2	33.3	33.4
Incr Delay (d2), s/veh	23.6	5.3	6.2	152.9	4.7	0.2	102.7	2.0	0.7	6.0	4.2	10.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.1	9.7	6.2	20.0	10.6	0.8	11.2	16.0	3.8	6.6	22.2	26.8
LnGrp Delay(d),s/veh	84.5	60.6	40.4	213.1	56.9	23.4	163.9	28.7	13.6	63.2	37.5	43.7
LnGrp LOS	F	E	D	F	E	C	F	C	B	E	D	D
Approach Vol, veh/h		872			907			2479			2755	
Approach Delay, s/veh		60.9			110.1			37.6			40.7	
Approach LOS		E			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.7	61.5	24.9	28.9	17.6	68.6	20.2	33.6
Change Period (Y+Rc), s	5.3	* 5.3	* 5.6	* 5.3	* 4.6	5.3	* 4.3	* 5.6
Max Green Setting (Gmax), s	17.0	* 56	* 19	* 28	* 13	60.2	* 18	* 29
Max Q Clear Time (g_c+I1), s	14.6	37.5	21.5	20.8	15.2	50.3	15.9	22.8
Green Ext Time (p_c), s	1.8	16.4	0.0	2.9	0.0	9.7	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	51.1
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	400	140	100	370	120	100	2380	90	140	2680	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	74	421	147	105	389	126	105	2505	95	147	2821	84
Adj No. of Lanes	1	2	1	1	2	1	1	4	0	1	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	554	248	137	556	249	162	2859	108	267	3341	826
Arrive On Green	0.08	0.16	0.16	0.08	0.16	0.16	0.03	0.15	0.15	0.30	1.00	1.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6384	242	1774	6408	1583
Grp Volume(v), veh/h	74	421	147	105	389	126	105	1884	716	147	2821	84
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1820	1774	1602	1583
Q Serve(g_s), s	5.6	15.9	12.1	8.1	14.6	7.3	8.2	53.7	53.9	9.7	0.0	0.0
Cycle Q Clear(g_c), s	5.6	15.9	12.1	8.1	14.6	7.3	8.2	53.7	53.9	9.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	144	554	248	137	556	249	162	2152	815	267	3341	826
V/C Ratio(X)	0.52	0.76	0.59	0.77	0.70	0.51	0.65	0.88	0.88	0.55	0.84	0.10
Avail Cap(c_a), veh/h	152	683	305	170	733	328	165	2152	815	267	3341	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.87	0.87	0.87	0.88	0.88	0.88	0.54	0.54	0.54	0.79	0.79	0.79
Uniform Delay (d), s/veh	61.7	56.5	54.9	63.4	55.9	27.8	65.7	55.8	55.9	45.0	0.0	0.0
Incr Delay (d2), s/veh	2.5	3.5	2.0	13.5	1.7	1.4	4.7	3.0	7.6	1.9	2.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.9	8.0	5.4	4.5	7.3	3.3	4.2	24.5	29.0	4.9	0.5	0.0
LnGrp Delay(d),s/veh	64.2	60.0	56.9	76.8	57.6	29.2	70.3	58.9	63.5	46.9	2.2	0.2
LnGrp LOS	E	E	E	E	E	C	E	E	E	D	A	A
Approach Vol, veh/h		642			620			2705			3052	
Approach Delay, s/veh		59.8			55.1			60.5			4.3	
Approach LOS		E			E			E			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.4	69.0	15.7	27.9	17.1	79.3	15.6	28.0
Change Period (Y+Rc), s	6.3	* 6.3	4.9	6.0	* 4.3	6.3	* 4.3	6.0
Max Green Setting (Gmax), s	15.1	* 63	13.4	27.0	* 13	65.1	* 12	29.0
Max Q Clear Time (g_c+I1), s	11.7	55.9	10.1	17.9	10.2	2.0	7.6	16.6
Green Ext Time (p_c), s	1.6	6.2	0.1	4.0	0.1	48.8	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	35.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	410	310	70	200	140	120	1670	60	110	2350	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	232	432	326	74	211	147	126	1758	63	116	2474	168
Adj No. of Lanes	1	2	0	1	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	387	290	132	249	211	168	3241	116	138	2996	203
Arrive On Green	0.14	0.20	0.20	0.07	0.13	0.13	0.09	0.51	0.51	0.08	0.49	0.49
Sat Flow, veh/h	1774	1930	1447	1774	1863	1583	1774	6399	229	1774	6177	418
Grp Volume(v), veh/h	232	396	362	74	211	147	126	1320	501	116	1923	719
Grp Sat Flow(s),veh/h/ln	1774	1770	1607	1774	1863	1583	1774	1602	1822	1774	1602	1789
Q Serve(g_s), s	18.0	28.1	28.1	5.6	15.5	10.4	9.7	26.2	26.2	9.0	48.1	48.5
Cycle Q Clear(g_c), s	18.0	28.1	28.1	5.6	15.5	10.4	9.7	26.2	26.2	9.0	48.1	48.5
Prop In Lane	1.00		0.90	1.00		1.00	1.00		0.13	1.00		0.23
Lane Grp Cap(c), veh/h	254	355	323	132	249	211	168	2434	923	138	2331	868
V/C Ratio(X)	0.91	1.11	1.12	0.56	0.85	0.70	0.75	0.54	0.54	0.84	0.82	0.83
Avail Cap(c_a), veh/h	254	355	323	139	386	328	168	2434	923	139	2331	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	0.70	0.70	0.70
Uniform Delay (d), s/veh	59.1	56.0	56.0	62.6	59.3	40.3	61.8	23.5	23.5	63.7	30.9	31.1
Incr Delay (d2), s/veh	33.9	82.5	87.3	3.9	8.8	3.5	17.3	0.9	2.3	25.9	2.5	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.2	21.9	20.3	2.9	8.6	4.7	5.6	11.7	13.7	5.4	21.7	25.4
LnGrp Delay(d),s/veh	93.0	138.4	143.2	66.5	68.1	43.8	79.1	24.4	25.8	89.6	33.4	37.6
LnGrp LOS	F	F	F	E	E	D	E	C	C	F	C	D
Approach Vol, veh/h		990			432			1947			2758	
Approach Delay, s/veh		129.5			59.6			28.3			36.9	
Approach LOS		F			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	76.2	15.3	33.0	18.5	73.2	25.0	23.3
Change Period (Y+Rc), s	* 4.6	5.3	4.9	* 4.9	5.3	* 5.3	4.9	* 4.6
Max Green Setting (Gmax), s	* 11	70.2	11.0	* 28	13.0	* 68	11.0	* 29
Max Q Clear Time (g_c+I1), s	11.0	28.2	7.6	30.1	11.7	50.5	20.0	17.5
Green Ext Time (p_c), s	0.0	18.0	0.0	0.0	0.9	14.7	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	50.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

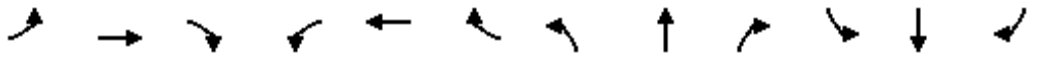
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	10	50	80	0	40	40	1860	40	130	2500	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	11	53	97	0	28	42	1958	42	137	2632	11
Adj No. of Lanes	1	1	0	2	0	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	24	117	222	0	138	103	3289	71	1075	5072	21
Arrive On Green	0.09	0.09	0.09	0.09	0.00	0.09	0.06	0.51	0.51	0.31	0.76	0.76
Sat Flow, veh/h	1377	279	1346	2665	0	1583	1774	6504	140	3442	6636	28
Grp Volume(v), veh/h	32	0	64	97	0	28	42	1447	553	137	1906	737
Grp Sat Flow(s),veh/h/ln	1377	0	1625	1332	0	1583	1774	1602	1838	1721	1602	1858
Q Serve(g_s), s	3.5	0.0	6.0	5.7	0.0	2.6	3.7	34.1	34.1	4.6	24.8	24.8
Cycle Q Clear(g_c), s	3.5	0.0	6.0	11.7	0.0	2.6	3.7	34.1	34.1	4.6	24.8	24.8
Prop In Lane	1.00		0.83	1.00		1.00	1.00		0.08	1.00		0.01
Lane Grp Cap(c), veh/h	165	0	141	222	0	138	103	2430	929	1075	3673	1420
V/C Ratio(X)	0.19	0.00	0.45	0.44	0.00	0.20	0.41	0.60	0.60	0.13	0.52	0.52
Avail Cap(c_a), veh/h	303	0	305	257	0	158	122	2430	929	1075	3673	1420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.77	0.77	0.77	0.71	0.71	0.71
Uniform Delay (d), s/veh	68.3	0.0	69.4	75.0	0.0	67.9	72.7	28.0	28.0	39.4	7.4	7.4
Incr Delay (d2), s/veh	0.6	0.0	2.3	1.4	0.0	0.7	2.0	0.8	2.2	0.0	0.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.0	2.8	2.2	0.0	1.2	1.9	15.2	17.8	2.2	10.9	12.9
LnGrp Delay(d),s/veh	68.8	0.0	71.7	76.3	0.0	68.6	74.7	28.8	30.1	39.4	7.7	8.3
LnGrp LOS	E		E	E		E	E	C	C	D	A	A
Approach Vol, veh/h		96			125			2042			2780	
Approach Delay, s/veh		70.7			74.6			30.1			9.5	
Approach LOS		E			E			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	55.3	86.2		18.5	13.9	127.6		18.5
Change Period (Y+Rc), s	5.3	* 5.3		* 4.6	* 4.6	5.3		* 4.6
Max Green Setting (Gmax), s	15.0	* 81		* 30	* 11	84.9		* 16
Max Q Clear Time (g_c+I1), s	6.6	36.1		8.0	5.7	26.8		13.7
Green Ext Time (p_c), s	6.1	20.4		0.8	0.0	37.4		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	250	420	150	410	420	150	210	1970	150	210	2480	410
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	263	442	158	432	442	158	221	2074	158	221	2611	432
Adj No. of Lanes	2	2	0	2	2	0	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	503	178	369	492	174	270	2820	215	315	2682	433
Arrive On Green	0.11	0.20	0.20	0.11	0.19	0.19	0.03	0.15	0.15	0.12	0.64	0.64
Sat Flow, veh/h	3442	2564	908	3442	2564	908	3442	6120	466	3442	5603	905
Grp Volume(v), veh/h	263	304	296	432	304	296	221	1628	604	221	2230	813
Grp Sat Flow(s),veh/h/ln	1721	1770	1702	1721	1770	1702	1721	1602	1781	1721	1602	1703
Q Serve(g_s), s	10.3	23.3	23.7	15.0	23.5	23.8	8.9	45.3	45.3	8.6	61.7	66.4
Cycle Q Clear(g_c), s	10.3	23.3	23.7	15.0	23.5	23.8	8.9	45.3	45.3	8.6	61.7	66.4
Prop In Lane	1.00		0.53	1.00		0.53	1.00		0.26	1.00		0.53
Lane Grp Cap(c), veh/h	393	347	334	369	340	327	270	2214	820	315	2300	815
V/C Ratio(X)	0.67	0.87	0.89	1.17	0.89	0.91	0.82	0.74	0.74	0.70	0.97	1.00
Avail Cap(c_a), veh/h	411	379	365	369	367	353	270	2214	820	315	2300	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.46	0.46	0.46	0.73	0.73	0.73	0.90	0.90	0.90	0.09	0.09	0.09
Uniform Delay (d), s/veh	59.5	54.6	54.7	62.5	55.2	55.3	67.2	51.2	51.2	59.6	24.5	25.3
Incr Delay (d2), s/veh	1.8	9.7	11.1	96.7	17.5	19.7	16.0	2.0	5.2	0.6	2.0	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.0	12.3	12.2	12.1	13.1	13.0	4.9	20.5	23.6	4.1	27.4	32.7
LnGrp Delay(d),s/veh	61.3	64.3	65.8	159.2	72.7	75.1	83.1	53.2	56.5	60.3	26.4	34.1
LnGrp LOS	E	E	E	F	E	E	F	D	E	E	C	C
Approach Vol, veh/h		863			1032			2453			3264	
Approach Delay, s/veh		63.9			109.6			56.7			30.6	
Approach LOS		E			F			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.1	69.8	20.0	32.1	15.6	72.3	20.6	31.5
Change Period (Y+Rc), s	5.3	* 5.3	5.0	4.6	* 4.6	5.3	4.6	* 4.6
Max Green Setting (Gmax), s	11.0	* 65	15.0	30.0	* 11	64.5	16.7	* 29
Max Q Clear Time (g_c+I1), s	10.6	47.3	17.0	25.7	10.9	68.4	12.3	25.8
Green Ext Time (p_c), s	0.0	12.9	0.0	1.8	0.0	0.0	1.8	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	53.5
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

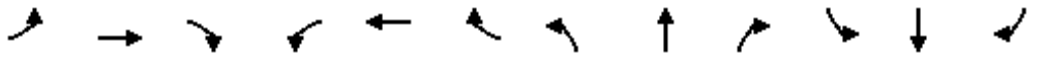
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	30	30	60	20	100	60	1900	60	130	2430	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	32	32	63	21	105	63	2000	63	137	2558	21
Adj No. of Lanes	1	1	0	1	1	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	67	67	139	169	144	116	3036	96	780	4204	34
Arrive On Green	0.07	0.08	0.08	0.08	0.09	0.09	0.07	0.47	0.47	0.45	1.00	1.00
Sat Flow, veh/h	1774	856	856	1774	1863	1583	1774	6430	203	3442	6605	54
Grp Volume(v), veh/h	32	0	64	63	21	105	63	1495	568	137	1861	718
Grp Sat Flow(s),veh/h/ln	1774	0	1712	1774	1863	1583	1774	1602	1827	1721	1602	1853
Q Serve(g_s), s	2.4	0.0	5.0	4.8	1.5	6.0	4.8	33.4	33.4	3.3	0.0	0.0
Cycle Q Clear(g_c), s	2.4	0.0	5.0	4.8	1.5	6.0	4.8	33.4	33.4	3.3	0.0	0.0
Prop In Lane	1.00		0.50	1.00		1.00	1.00		0.11	1.00		0.03
Lane Grp Cap(c), veh/h	117	0	134	139	169	144	116	2269	863	780	3059	1179
V/C Ratio(X)	0.27	0.00	0.48	0.45	0.12	0.73	0.54	0.66	0.66	0.18	0.61	0.61
Avail Cap(c_a), veh/h	165	0	384	152	399	339	128	2269	863	780	3059	1179
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83	0.31	0.31	0.31
Uniform Delay (d), s/veh	62.2	0.0	61.7	61.7	58.5	27.6	63.4	28.3	28.3	30.5	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	2.6	2.3	0.3	6.9	3.3	1.3	3.3	0.0	0.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	0.0	2.5	2.4	0.8	2.9	2.5	14.9	17.5	1.6	0.1	0.2
LnGrp Delay(d),s/veh	63.4	0.0	64.3	64.0	58.9	34.5	66.7	29.6	31.6	30.5	0.3	0.7
LnGrp LOS	E		E	E	E	C	E	C	C	C	A	A
Approach Vol, veh/h		96			189			2126			2716	
Approach Delay, s/veh		64.0			47.1			31.2			1.9	
Approach LOS		E			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.0	71.4	15.3	16.3	14.0	94.4	13.6	18.0
Change Period (Y+Rc), s	5.3	* 5.3	* 4.3	* 5.3	4.9	5.3	* 4.3	* 5.3
Max Green Setting (Gmax), s	11.4	* 66	* 12	* 31	10.1	67.1	* 13	* 30
Max Q Clear Time (g_c+I1), s	5.3	35.4	6.8	7.0	6.8	2.0	4.4	8.0
Green Ext Time (p_c), s	4.4	17.7	0.0	0.8	0.0	38.5	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.9
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



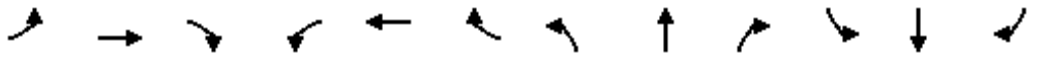
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	250	240	120	140	260	130	100	2050	100	100	2930	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	263	253	126	147	274	137	105	2158	105	105	3084	116
Adj No. of Lanes	2	2	0	1	2	0	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	296	316	153	171	340	165	149	3310	161	137	3334	125
Arrive On Green	0.09	0.14	0.14	0.10	0.15	0.15	0.08	0.52	0.52	0.15	1.00	1.00
Sat Flow, veh/h	3442	2316	1119	1774	2310	1124	1774	6308	307	1774	6388	239
Grp Volume(v), veh/h	263	191	188	147	208	203	105	1644	619	105	2315	885
Grp Sat Flow(s),veh/h/ln	1721	1770	1665	1774	1770	1664	1774	1602	1809	1774	1602	1821
Q Serve(g_s), s	10.6	14.7	15.3	11.4	15.9	16.6	8.1	34.6	34.6	7.9	0.0	0.0
Cycle Q Clear(g_c), s	10.6	14.7	15.3	11.4	15.9	16.6	8.1	34.6	34.6	7.9	0.0	0.0
Prop In Lane	1.00		0.67	1.00		0.68	1.00		0.17	1.00		0.13
Lane Grp Cap(c), veh/h	296	241	227	171	260	245	149	2522	949	137	2509	950
V/C Ratio(X)	0.89	0.79	0.83	0.86	0.80	0.83	0.70	0.65	0.65	0.77	0.92	0.93
Avail Cap(c_a), veh/h	296	341	321	233	430	404	152	2522	949	144	2509	950
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.95	0.95	0.95	0.94	0.94	0.94	0.46	0.46	0.46	0.67	0.67	0.67
Uniform Delay (d), s/veh	63.3	58.5	58.8	62.3	57.7	58.0	62.4	24.0	24.0	58.0	0.0	0.0
Incr Delay (d2), s/veh	25.2	7.8	10.9	19.3	5.3	6.8	6.4	0.6	1.6	14.6	5.0	12.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.1	7.7	7.8	6.5	8.2	8.1	4.2	15.4	17.6	4.5	1.2	3.3
LnGrp Delay(d),s/veh	88.5	66.3	69.7	81.6	63.0	64.8	68.8	24.6	25.7	72.5	5.0	12.4
LnGrp LOS	F	E	E	F	E	E	E	C	C	E	A	B
Approach Vol, veh/h		642			558			2368			3305	
Approach Delay, s/veh		76.4			68.6			26.9			9.2	
Approach LOS		E			E			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	79.8	19.1	24.7	16.8	79.4	17.6	26.2
Change Period (Y+Rc), s	* 5.6	6.3	* 5.6	* 5.6	5.0	6.3	5.6	* 5.6
Max Green Setting (Gmax), s	* 11	60.1	* 18	* 27	12.0	60.1	11.4	* 34
Max Q Clear Time (g_c+I1), s	9.9	36.6	13.4	17.3	10.1	2.0	12.6	18.6
Green Ext Time (p_c), s	0.0	23.3	0.1	1.8	0.0	57.2	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.4
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	620	140	230	530	130	210	2140	90	200	2400	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	232	653	147	242	558	137	221	2253	95	211	2526	126
Adj No. of Lanes	2	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	729	326	190	815	364	295	2804	118	295	2727	136
Arrive On Green	0.09	0.21	0.21	0.11	0.23	0.23	0.09	0.44	0.44	0.03	0.14	0.14
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	6354	268	3442	6300	313
Grp Volume(v), veh/h	232	653	147	242	558	137	221	1704	644	211	1925	727
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1602	1816	1721	1602	1807
Q Serve(g_s), s	9.2	25.2	11.4	15.0	20.2	10.2	8.8	43.0	43.0	8.5	55.4	55.6
Cycle Q Clear(g_c), s	9.2	25.2	11.4	15.0	20.2	10.2	8.8	43.0	43.0	8.5	55.4	55.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.17
Lane Grp Cap(c), veh/h	320	729	326	190	815	364	295	2121	801	295	2080	782
V/C Ratio(X)	0.73	0.90	0.45	1.27	0.69	0.38	0.75	0.80	0.80	0.72	0.93	0.93
Avail Cap(c_a), veh/h	320	784	351	190	834	373	295	2121	801	344	2080	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.70	0.70	0.70	0.96	0.96	0.96	0.80	0.80	0.80	0.09	0.09	0.09
Uniform Delay (d), s/veh	61.8	54.1	48.7	62.5	49.3	45.4	62.5	33.8	33.9	66.3	57.8	57.9
Incr Delay (d2), s/veh	5.7	9.2	0.7	156.3	2.2	0.6	8.3	2.7	6.9	0.5	0.9	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	13.3	5.1	15.6	10.1	4.5	4.5	19.5	23.0	4.1	24.8	28.4
LnGrp Delay(d),s/veh	67.5	63.3	49.3	218.8	51.4	46.0	70.9	36.5	40.7	66.9	58.7	60.4
LnGrp LOS	E	E	D	F	D	D	E	D	D	E	E	E
Approach Vol, veh/h		1032			937			2569			2863	
Approach Delay, s/veh		62.3			93.9			40.6			59.7	
Approach LOS		E			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	67.6	21.0	34.8	17.8	66.4	17.6	38.2
Change Period (Y+Rc), s	* 4.6	5.8	6.0	* 6	5.8	* 5.8	* 4.6	6.0
Max Green Setting (Gmax), s	* 14	59.0	15.0	* 31	12.0	* 61	* 13	33.0
Max Q Clear Time (g_c+I1), s	10.5	45.0	17.0	27.2	10.8	57.6	11.2	22.2
Green Ext Time (p_c), s	0.2	11.6	0.0	1.7	0.1	2.8	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	57.8
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	30	40	60	10	30	10	2150	210	100	2730	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	32	42	63	11	32	11	2263	221	105	2874	11
Adj No. of Lanes	1	1	0	0	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	89	117	143	21	192	44	4164	405	128	4947	19
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.05	1.00	1.00	0.14	1.00	1.00
Sat Flow, veh/h	1358	732	961	787	176	1583	1774	5984	582	1774	6639	25
Grp Volume(v), veh/h	21	0	74	74	0	32	11	1816	668	105	2080	805
Grp Sat Flow(s),veh/h/ln	1358	0	1693	963	0	1583	1774	1602	1760	1774	1602	1858
Q Serve(g_s), s	2.1	0.0	5.6	6.8	0.0	2.5	0.8	0.0	0.0	8.0	0.0	0.0
Cycle Q Clear(g_c), s	14.5	0.0	5.6	12.4	0.0	2.5	0.8	0.0	0.0	8.0	0.0	0.0
Prop In Lane	1.00		0.57	0.85		1.00	1.00		0.33	1.00		0.01
Lane Grp Cap(c), veh/h	96	0	205	164	0	192	44	3344	1225	128	3581	1385
V/C Ratio(X)	0.22	0.00	0.36	0.45	0.00	0.17	0.25	0.54	0.55	0.82	0.58	0.58
Avail Cap(c_a), veh/h	163	0	289	233	0	270	128	3344	1225	374	3581	1385
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.49	0.49	0.49	0.21	0.21	0.21
Uniform Delay (d), s/veh	66.5	0.0	56.5	61.6	0.0	55.2	65.3	0.0	0.0	59.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	1.1	1.9	0.0	0.4	1.4	0.3	0.9	2.9	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	0.0	2.7	2.9	0.0	1.1	0.4	0.1	0.3	4.0	0.0	0.1
LnGrp Delay(d),s/veh	67.6	0.0	57.6	63.6	0.0	55.6	66.7	0.3	0.9	61.9	0.1	0.4
LnGrp LOS	E		E	E		E	E	A	A	E	A	A
Approach Vol, veh/h		95			106			2495			2990	
Approach Delay, s/veh		59.8			61.1			0.8			2.4	
Approach LOS		E			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.0	102.7		22.3	8.1	109.6		22.3
Change Period (Y+Rc), s	4.9	5.3		* 5.3	* 4.6	5.3		* 5.3
Max Green Setting (Gmax), s	29.5	71.1		* 24	* 10	90.8		* 24
Max Q Clear Time (g_c+I1), s	10.0	2.0		16.5	2.8	2.0		14.4
Green Ext Time (p_c), s	0.2	67.6		0.5	0.0	86.3		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	3.7
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	920	670	1530	0	0	2830
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863
Adj Flow Rate, veh/h	968	705	1611	0	0	2979
Adj No. of Lanes	2	2	4	0	0	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	0	2
Cap, veh/h	971	786	4060	0	0	4060
Arrive On Green	0.28	0.28	0.21	0.00	0.00	1.00
Sat Flow, veh/h	3442	2787	6929	0	0	6929
Grp Volume(v), veh/h	968	705	1611	0	0	2979
Grp Sat Flow(s),veh/h/ln	1721	1393	1602	0	0	1602
Q Serve(g_s), s	39.3	34.0	30.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	39.3	34.0	30.4	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	0.00	
Lane Grp Cap(c), veh/h	971	786	4060	0	0	4060
V/C Ratio(X)	1.00	0.90	0.40	0.00	0.00	0.73
Avail Cap(c_a), veh/h	971	786	4060	0	0	4060
HCM Platoon Ratio	1.00	1.00	0.33	1.00	1.00	2.00
Upstream Filter(I)	1.00	1.00	0.94	0.00	0.00	0.25
Uniform Delay (d), s/veh	50.2	48.3	32.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	28.1	13.0	0.3	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	22.5	14.5	13.6	0.0	0.0	0.1
LnGrp Delay(d),s/veh	78.3	61.3	32.6	0.0	0.0	0.3
LnGrp LOS	E	E	C			A
Approach Vol, veh/h	1673		1611			2979
Approach Delay, s/veh	71.1		32.6			0.3
Approach LOS	E		C			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		95.0				95.0		45.0
Change Period (Y+Rc), s		6.3				6.3		5.5
Max Green Setting (Gmax), s		88.7				88.7		39.5
Max Q Clear Time (g_c+I1), s		32.4				2.0		41.3
Green Ext Time (p_c), s		56.0				85.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.5
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	220	350	0	1680	3050	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0
Adj Flow Rate, veh/h	232	368	0	1768	3211	0
Adj No. of Lanes	2	2	0	4	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	535	433	0	4872	4872	0
Arrive On Green	0.16	0.16	0.00	1.00	1.00	0.00
Sat Flow, veh/h	3442	2787	0	6929	6929	0
Grp Volume(v), veh/h	232	368	0	1768	3211	0
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1602	1602	0
Q Serve(g_s), s	8.5	18.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.5	18.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	535	433	0	4872	4872	0
V/C Ratio(X)	0.43	0.85	0.00	0.36	0.66	0.00
Avail Cap(c_a), veh/h	750	607	0	4872	4872	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.33	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.59	0.50	0.00
Uniform Delay (d), s/veh	53.6	57.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	8.1	0.0	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.1	7.4	0.0	0.0	0.1	0.0
LnGrp Delay(d),s/veh	54.1	65.6	0.0	0.1	0.4	0.0
LnGrp LOS	D	E		A	A	
Approach Vol, veh/h	600			1768	3211	
Approach Delay, s/veh	61.2			0.1	0.4	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		112.8		27.2		112.8		
Change Period (Y+Rc), s		6.3		5.5		6.3		
Max Green Setting (Gmax), s		97.7		30.5		97.7		
Max Q Clear Time (g_c+I1), s		2.0		20.0		2.0		
Green Ext Time (p_c), s		93.5		1.8		93.5		

Intersection Summary	
HCM 2010 Ctrl Delay	6.8
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	150	1090	1180	540	590	1950
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	158	1147	1242	248	621	2053
Adj No. of Lanes	2	2	3	1	2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	737	1180	2209	688	721	2431
Arrive On Green	0.21	0.21	0.43	0.43	0.21	0.69
Sat Flow, veh/h	3442	2787	5253	1583	3442	3632
Grp Volume(v), veh/h	158	1147	1242	248	621	2053
Grp Sat Flow(s),veh/h/ln	1721	1393	1695	1583	1721	1770
Q Serve(g_s), s	3.8	21.4	18.3	10.5	17.4	43.2
Cycle Q Clear(g_c), s	3.8	21.4	18.3	10.5	17.4	43.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	737	1180	2209	688	721	2431
V/C Ratio(X)	0.21	0.97	0.56	0.36	0.86	0.84
Avail Cap(c_a), veh/h	737	1180	2209	688	1263	2431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.63	0.63	0.81	0.81	1.00	1.00
Uniform Delay (d), s/veh	32.4	28.2	21.2	19.0	38.1	11.7
Incr Delay (d2), s/veh	0.0	14.5	0.8	1.2	2.4	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	17.8	8.7	4.8	8.5	22.1
LnGrp Delay(d),s/veh	32.4	42.8	22.0	20.2	40.5	15.5
LnGrp LOS	C	D	C	C	D	B
Approach Vol, veh/h	1305		1490			2674
Approach Delay, s/veh	41.5		21.7			21.3
Approach LOS	D		C			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	25.3	48.7				74.0		26.0
Change Period (Y+Rc), s	* 4.3	5.3				5.3		4.6
Max Green Setting (Gmax), s	* 37	27.7				68.7		21.4
Max Q Clear Time (g_c+I1), s	19.4	20.3				45.2		23.4
Green Ext Time (p_c), s	1.6	7.4				23.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	26.2
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

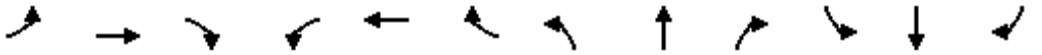
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	340	650	170	480	520	670	60	540	600	410	770	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	347	699	62	351	763	665	63	568	579	432	811	114
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	357	750	316	357	750	673	80	684	623	397	1159	163
Arrive On Green	0.42	0.42	0.42	0.07	0.07	0.07	0.02	0.07	0.07	0.23	0.38	0.38
Sat Flow, veh/h	1714	3600	1517	1714	3600	1528	1714	3420	1523	1714	3011	423
Grp Volume(v), veh/h	347	699	62	351	763	665	63	568	579	432	461	464
Grp Sat Flow(s),veh/h/ln	1714	1800	1517	1714	1800	1528	1714	1710	1523	1714	1710	1725
Q Serve(g_s), s	23.8	22.2	3.1	24.5	25.0	25.0	4.4	19.7	24.0	27.8	27.2	27.2
Cycle Q Clear(g_c), s	23.8	22.2	3.1	24.5	25.0	25.0	4.4	19.7	24.0	27.8	27.2	27.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	357	750	316	357	750	673	80	684	623	397	658	664
V/C Ratio(X)	0.97	0.93	0.20	0.98	1.02	0.99	0.78	0.83	0.93	1.09	0.70	0.70
Avail Cap(c_a), veh/h	357	750	316	357	750	673	111	684	623	397	658	664
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.33	0.33	0.33	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	34.2	28.6	55.7	55.9	36.8	58.5	54.0	32.8	46.1	31.1	31.1
Incr Delay (d2), s/veh	37.2	16.8	0.3	23.3	23.4	17.3	19.2	10.1	20.4	70.8	6.1	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	14.9	12.6	1.3	14.0	14.9	24.8	2.5	10.3	22.8	20.9	13.9	14.0
LnGrp Delay(d),s/veh	71.8	50.9	28.9	78.9	79.3	54.1	77.7	64.1	53.2	116.9	37.2	37.1
LnGrp LOS	E	D	C	E	F	D	E	E	D	F	D	D
Approach Vol, veh/h		1108			1779			1210			1357	
Approach Delay, s/veh		56.3			69.8			59.6			62.5	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	32.0	29.0		29.0	9.8	51.2		30.0
Change Period (Y+Rc), s	* 4.2	5.0		4.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s	* 28	24.0		25.0	* 7.8	44.0		25.0
Max Q Clear Time (g_c+I1), s	29.8	26.0		25.8	6.4	29.2		27.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	9.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	63.0
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	940	200	0	0	220	90	790	100	40	210	0	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	989	211	0	0	232	0	832	105	40	221	0	29
Adj No. of Lanes	2	1	0	0	2	1	2	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	1123	1000	0	0	445	199	1013	378	144	0	0	0
Arrive On Green	0.33	0.54	0.00	0.00	0.13	0.00	0.29	0.29	0.29	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	3632	1583	3442	1286	490		0	
Grp Volume(v), veh/h	989	211	0	0	232	0	832	0	145		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1583	1721	0	1776			
Q Serve(g_s), s	15.1	3.3	0.0	0.0	3.4	0.0	12.5	0.0	3.5			
Cycle Q Clear(g_c), s	15.1	3.3	0.0	0.0	3.4	0.0	12.5	0.0	3.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.28			
Lane Grp Cap(c), veh/h	1123	1000	0	0	445	199	1013	0	523			
V/C Ratio(X)	0.88	0.21	0.00	0.00	0.52	0.00	0.82	0.00	0.28			
Avail Cap(c_a), veh/h	1566	1518	0	0	974	436	3114	0	1607			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	17.7	6.7	0.0	0.0	22.7	0.0	18.3	0.0	15.1			
Incr Delay (d2), s/veh	3.6	0.0	0.0	0.0	0.4	0.0	0.7	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(0%),veh/ln	7.7	1.7	0.0	0.0	1.7	0.0	6.0	0.0	1.7			
LnGrp Delay(d),s/veh	21.3	6.8	0.0	0.0	23.1	0.0	18.9	0.0	15.2			
LnGrp LOS	C	A			C		B		B			
Approach Vol, veh/h		1200			232			977				
Approach Delay, s/veh		18.7			23.1			18.4				
Approach LOS		B			C			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		21.1		34.5			22.8	11.7
Change Period (Y+Rc), s		* 4.7		* 4.7			* 4.7	* 4.7
Max Green Setting (Gmax), s		* 50		* 45			* 25	* 15
Max Q Clear Time (g_c+I1), s		14.5		5.3			17.1	5.4
Green Ext Time (p_c), s		1.8		1.3			1.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

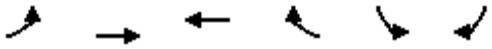
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	540	0	0	550	20	1040	50	210	10	0	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	0	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	32	568	0	0	579	16	1095	53	50	11	0	0
Adj No. of Lanes	1	3	0	0	3	0	2	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	2339	0	0	1827	50	887	480	408	24	0	21
Arrive On Green	0.01	0.16	0.00	0.00	0.37	0.37	0.27	0.27	0.27	0.01	0.00	0.00
Sat Flow, veh/h	1714	5076	0	0	5079	135	3326	1800	1530	1714	0	1530
Grp Volume(v), veh/h	32	568	0	0	385	210	1095	53	50	11	0	0
Grp Sat Flow(s),veh/h/ln	1714	1638	0	0	1638	1776	1663	1800	1530	1714	0	1530
Q Serve(g_s), s	1.1	6.1	0.0	0.0	5.0	5.1	16.0	1.3	1.5	0.4	0.0	0.0
Cycle Q Clear(g_c), s	1.1	6.1	0.0	0.0	5.0	5.1	16.0	1.3	1.5	0.4	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	2339	0	0	1217	660	887	480	408	24	0	21
V/C Ratio(X)	0.54	0.24	0.00	0.00	0.32	0.32	1.23	0.11	0.12	0.46	0.00	0.00
Avail Cap(c_a), veh/h	223	2339	0	0	1217	660	887	480	408	211	0	189
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.95	0.95	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.2	15.8	0.0	0.0	13.4	13.4	22.0	16.6	16.7	29.4	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.0	0.6	1.2	115.4	0.1	0.1	13.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.5	2.8	0.0	0.0	2.4	2.7	21.5	0.7	0.6	0.3	0.0	0.0
LnGrp Delay(d),s/veh	29.9	15.8	0.0	0.0	14.1	14.6	137.4	16.7	16.8	42.5	0.0	0.0
LnGrp LOS	C	B			B	B	F	B	B	D		
Approach Vol, veh/h		600			595			1198			11	
Approach Delay, s/veh		16.6			14.3			127.0			42.5	
Approach LOS		B			B			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		33.6		5.4	6.3	27.3		21.0
Change Period (Y+Rc), s		5.0		4.6	* 4.2	5.0		5.0
Max Green Setting (Gmax), s		22.0		7.4	* 7.8	10.0		16.0
Max Q Clear Time (g_c+I1), s		8.1		2.4	3.1	7.1		18.0
Green Ext Time (p_c), s		5.9		0.0	0.0	1.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	71.2
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	690	700	0	440	30
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1800	1800
Adj Flow Rate, veh/h	0	726	737	0	493	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2199	2199	0	658	294
Arrive On Green	0.00	1.00	0.64	0.00	0.19	0.00
Sat Flow, veh/h	0	3600	3600	0	3429	1530
Grp Volume(v), veh/h	0	726	737	0	493	0
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1714	1530
Q Serve(g_s), s	0.0	0.0	5.9	0.0	8.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	5.9	0.0	8.1	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2199	2199	0	658	294
V/C Ratio(X)	0.00	0.33	0.34	0.00	0.75	0.00
Avail Cap(c_a), veh/h	0	2199	2199	0	1166	520
HCM Platoon Ratio	1.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.94	0.09	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	4.9	0.0	22.9	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.1	2.8	0.0	4.0	0.0
LnGrp Delay(d),s/veh	0.0	0.4	4.9	0.0	24.6	0.0
LnGrp LOS		A	A		C	
Approach Vol, veh/h		726	737		493	
Approach Delay, s/veh		0.4	4.9		24.6	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.9		16.1		43.9		
Change Period (Y+Rc), s		5.3		4.6		5.3		
Max Green Setting (Gmax), s		29.7		20.4		29.7		
Max Q Clear Time (g_c+I1), s		2.0		10.1		7.9		
Green Ext Time (p_c), s		10.9		1.4		9.8		

Intersection Summary	
HCM 2010 Ctrl Delay	8.2
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	100	450	0	1500	1250	350
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	105	423	0	1579	1316	0
Adj No. of Lanes	1	2	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	325	579	0	4008	4008	990
Arrive On Green	0.19	0.19	0.00	1.00	0.65	0.00
Sat Flow, veh/h	1714	3060	0	6696	6444	1530
Grp Volume(v), veh/h	105	423	0	1579	1316	0
Grp Sat Flow(s),veh/h/ln	1714	1530	0	1548	1548	1530
Q Serve(g_s), s	3.2	7.8	0.0	0.0	5.7	0.0
Cycle Q Clear(g_c), s	3.2	7.8	0.0	0.0	5.7	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	325	579	0	4008	4008	990
V/C Ratio(X)	0.32	0.73	0.00	0.39	0.33	0.00
Avail Cap(c_a), veh/h	577	1030	0	4008	4008	990
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.00	0.79	0.73	0.00
Uniform Delay (d), s/veh	21.0	22.9	0.0	0.0	4.7	0.0
Incr Delay (d2), s/veh	0.5	1.7	0.0	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	3.4	0.0	0.1	2.4	0.0
LnGrp Delay(d),s/veh	21.5	24.6	0.0	0.2	4.9	0.0
LnGrp LOS	C	C		A	A	
Approach Vol, veh/h	528			1579	1316	
Approach Delay, s/veh	24.0			0.2	4.9	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.8		16.2		43.8		
Change Period (Y+Rc), s		5.0		* 4.8		5.0		
Max Green Setting (Gmax), s		30.0		* 20		30.0		
Max Q Clear Time (g_c+I1), s		2.0		9.8		7.7		
Green Ext Time (p_c), s		23.1		1.6		19.0		

Intersection Summary	
HCM 2010 Ctrl Delay	5.7
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

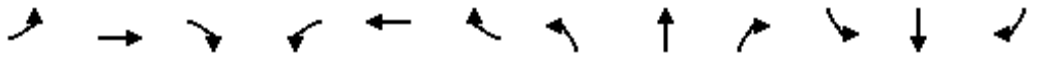
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	90	10	20	140	220	0	0	0	450	30	30
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800				1800	1800	1800
Adj Flow Rate, veh/h	32	95	4	21	147	81				497	0	10
Adj No. of Lanes	1	2	0	0	2	1				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	619	866	36	282	791	396				1015	0	453
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26				0.30	0.00	0.30
Sat Flow, veh/h	1109	3345	140	209	3055	1530				3429	0	1530
Grp Volume(v), veh/h	32	48	51	94	74	81				497	0	10
Grp Sat Flow(s),veh/h/ln	1109	1710	1775	1707	1556	1530				1714	0	1530
Q Serve(g_s), s	0.4	0.4	0.4	0.0	0.7	0.8				2.3	0.0	0.1
Cycle Q Clear(g_c), s	1.2	0.4	0.4	0.8	0.7	0.8				2.3	0.0	0.1
Prop In Lane	1.00		0.08	0.22		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	619	443	460	670	403	396				1015	0	453
V/C Ratio(X)	0.05	0.11	0.11	0.14	0.18	0.20				0.49	0.00	0.02
Avail Cap(c_a), veh/h	2094	2718	2821	2848	2473	2432				4562	0	2036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	6.0	5.5	5.5	5.6	5.6	5.6				5.6	0.0	4.8
Incr Delay (d2), s/veh	0.0	0.1	0.1	0.1	0.2	0.3				0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	0.2	0.2	0.4	0.3	0.4				1.1	0.0	0.0
LnGrp Delay(d),s/veh	6.1	5.6	5.6	5.7	5.8	5.9				6.0	0.0	4.8
LnGrp LOS	A	A	A	A	A	A				A		A
Approach Vol, veh/h		131			249						507	
Approach Delay, s/veh		5.7			5.8						5.9	
Approach LOS		A			A						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		9.3		10.0		9.3		
Change Period (Y+Rc), s		* 4.3		* 4.3		* 4.3		
Max Green Setting (Gmax), s		* 31		* 26		* 31		
Max Q Clear Time (g_c+I1), s		3.2		4.3		2.8		
Green Ext Time (p_c), s		1.9		1.8		1.9		

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A

Notes

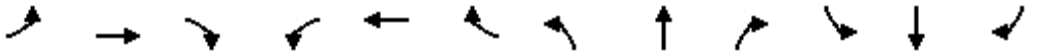
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	940	280	110	960	140	190	540	160	150	1000	130
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1937	1863	1863	1937	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	158	989	295	116	1011	147	200	568	168	158	1053	137
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	1356	607	162	1213	564	248	905	267	208	983	128
Arrive On Green	0.12	0.37	0.37	0.18	0.69	0.69	0.14	0.32	0.32	0.12	0.30	0.30
Sat Flow, veh/h	1774	3681	1647	1774	3539	1647	1774	2805	827	1774	3277	426
Grp Volume(v), veh/h	158	989	295	116	1011	147	200	372	364	158	591	599
Grp Sat Flow(s),veh/h/ln	1774	1840	1647	1774	1770	1647	1774	1840	1791	1774	1840	1862
Q Serve(g_s), s	11.2	30.2	17.9	8.0	27.2	4.4	14.2	22.3	22.4	11.2	39.0	39.0
Cycle Q Clear(g_c), s	11.2	30.2	17.9	8.0	27.2	4.4	14.2	22.3	22.4	11.2	39.0	39.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.46	1.00		0.23
Lane Grp Cap(c), veh/h	208	1356	607	162	1213	564	248	594	578	208	552	559
V/C Ratio(X)	0.76	0.73	0.49	0.71	0.83	0.26	0.81	0.63	0.63	0.76	1.07	1.07
Avail Cap(c_a), veh/h	252	1356	607	252	1213	564	252	594	578	252	552	559
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.60	0.60	0.98	0.98	0.98	0.72	0.72	0.72	0.64	0.64	0.64
Uniform Delay (d), s/veh	55.6	35.5	31.6	51.5	17.7	14.1	54.2	37.4	37.4	55.6	45.5	45.5
Incr Delay (d2), s/veh	4.9	2.1	1.7	2.1	6.6	1.1	11.8	1.8	1.8	5.2	51.2	51.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.8	15.8	8.4	4.0	14.0	2.2	7.8	11.7	11.4	5.8	27.6	28.0
LnGrp Delay(d),s/veh	60.5	37.5	33.2	53.6	24.4	15.2	66.0	39.1	39.2	60.8	96.7	97.2
LnGrp LOS	E	D	C	D	C	B	E	D	D	E	F	F
Approach Vol, veh/h		1442			1274			936			1348	
Approach Delay, s/veh		39.2			26.0			44.9			92.7	
Approach LOS		D			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	51.9	20.7	43.0	17.7	48.6	17.7	46.0
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0
Max Green Setting (Gmax), s	16.5	39.0	16.5	37.0	16.5	39.0	16.5	37.0
Max Q Clear Time (g_c+I1), s	10.0	32.2	16.2	41.0	13.2	29.2	13.2	24.4
Green Ext Time (p_c), s	0.1	6.6	0.0	0.0	0.1	9.4	0.1	10.3

Intersection Summary	
HCM 2010 Ctrl Delay	51.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	890	240	330	750	140	60	720	210	200	1860	120
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1863	1863	1863	1863	1863	1863	1788
Adj Flow Rate, veh/h	105	937	253	347	789	147	63	758	221	211	1958	126
Adj No. of Lanes	2	2	0	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	873	235	258	1313	587	2726	5829	1815	273	2076	621
Arrive On Green	0.05	0.32	0.32	0.08	0.37	0.37	0.79	1.00	1.00	0.03	0.13	0.13
Sat Flow, veh/h	3442	2758	743	3442	3539	1583	3442	5085	1583	3442	5085	1520
Grp Volume(v), veh/h	105	600	590	347	789	147	63	758	221	211	1958	126
Grp Sat Flow(s),veh/h/ln	1721	1770	1732	1721	1770	1583	1721	1695	1583	1721	1695	1520
Q Serve(g_s), s	3.6	38.0	38.0	9.0	21.7	7.7	0.5	0.0	0.0	7.3	45.8	18.9
Cycle Q Clear(g_c), s	3.6	38.0	38.0	9.0	21.7	7.7	0.5	0.0	0.0	7.3	45.8	18.9
Prop In Lane	1.00		0.43	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	560	548	258	1313	587	2726	5829	1815	273	2076	621
V/C Ratio(X)	0.67	1.07	1.08	1.34	0.60	0.25	0.02	0.13	0.12	0.77	0.94	0.20
Avail Cap(c_a), veh/h	258	560	548	258	1313	587	2726	5829	1815	488	2076	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.40	0.40	0.40	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84
Uniform Delay (d), s/veh	56.4	41.0	41.0	55.5	30.5	26.2	2.6	0.0	0.0	57.4	50.5	157.5
Incr Delay (d2), s/veh	0.7	45.8	47.4	178.6	0.5	0.1	0.0	0.0	0.1	1.5	8.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	25.6	25.3	10.7	10.6	3.4	0.2	0.0	0.1	3.5	23.2	8.1
LnGrp Delay(d),s/veh	57.1	86.8	88.4	234.1	31.1	26.2	2.6	0.0	0.1	58.8	59.5	158.1
LnGrp LOS	E	F	F	F	C	C	A	A	A	E	E	F
Approach Vol, veh/h		1295			1283			1042			2295	
Approach Delay, s/veh		85.1			85.4			0.2			64.8	
Approach LOS		F			F			A			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	44.0	103.1	55.0	8.5	50.5	12.5	145.6
Change Period (Y+Rc), s	* 6	* 6	* 6	* 6	3.0	* 6	3.0	* 6
Max Green Setting (Gmax), s	* 9	* 38	* 6	* 49	9.0	* 38	17.0	* 38
Max Q Clear Time (g_c+I1), s	11.0	40.0	2.5	47.8	5.6	23.7	9.3	2.0
Green Ext Time (p_c), s	0.0	0.0	0.1	1.0	0.0	3.7	0.2	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	62.3
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	430	150	130	410	170	100	910	70	150	1600	120
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	211	453	158	137	432	179	105	958	74	158	1684	126
Adj No. of Lanes	1	2	0	1	2	0	1	3	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	552	191	224	521	214	316	2462	696	185	1822	567
Arrive On Green	0.03	0.07	0.07	0.08	0.21	0.21	0.06	0.15	0.15	0.10	0.36	0.36
Sat Flow, veh/h	1774	2575	890	1774	2442	1002	1774	5588	1580	1774	5085	1582
Grp Volume(v), veh/h	211	310	301	137	312	299	105	958	74	158	1684	126
Grp Sat Flow(s),veh/h/ln	1774	1770	1695	1774	1770	1674	1774	1863	1580	1774	1695	1582
Q Serve(g_s), s	11.0	20.7	21.0	3.5	20.2	20.5	6.8	18.6	3.4	10.5	38.1	4.9
Cycle Q Clear(g_c), s	11.0	20.7	21.0	3.5	20.2	20.5	6.8	18.6	3.4	10.5	38.1	4.9
Prop In Lane	1.00		0.53	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	379	363	224	378	357	316	2462	696	185	1822	567
V/C Ratio(X)	0.95	0.82	0.83	0.61	0.83	0.84	0.33	0.39	0.11	0.85	0.92	0.22
Avail Cap(c_a), veh/h	223	501	480	241	501	474	316	2462	696	266	1822	567
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	1.00	1.00	1.00	0.75	0.75	0.75	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	53.4	53.6	51.0	45.1	45.2	49.6	36.6	15.2	52.8	36.9	14.7
Incr Delay (d2), s/veh	36.1	4.2	4.8	2.6	6.4	7.6	0.2	0.3	0.2	12.0	9.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.4	10.6	10.4	4.5	10.5	10.2	3.4	9.7	1.5	5.8	19.4	2.3
LnGrp Delay(d),s/veh	84.9	57.6	58.4	53.5	51.4	52.8	49.8	37.0	15.5	64.9	46.4	15.6
LnGrp LOS	F	E	E	D	D	D	D	D	B	E	D	B
Approach Vol, veh/h		822			748			1137			1968	
Approach Delay, s/veh		64.9			52.4			36.8			45.9	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	30.7	26.4	48.0	15.0	30.6	16.5	57.9
Change Period (Y+Rc), s	5.0	* 5	5.0	* 5	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	11.0	* 34	14.0	* 43	11.0	34.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	5.5	23.0	8.8	40.1	13.0	22.5	12.5	20.6
Green Ext Time (p_c), s	1.3	1.8	0.2	2.1	0.0	2.0	0.1	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	48.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	940	120	150	620	70	70	350	170	180	850	80
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	989	126	158	653	74	74	368	179	189	895	84
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	460	1304	166	183	773	88	94	488	234	213	908	85
Arrive On Green	0.26	0.41	0.41	0.10	0.24	0.24	0.05	0.21	0.21	0.12	0.28	0.28
Sat Flow, veh/h	1774	3159	402	1774	3206	363	1774	2323	1113	1774	3271	307
Grp Volume(v), veh/h	95	554	561	158	360	367	74	279	268	189	484	495
Grp Sat Flow(s),veh/h/ln	1774	1770	1792	1774	1770	1799	1774	1770	1666	1774	1770	1809
Q Serve(g_s), s	5.4	34.8	34.8	11.4	25.2	25.3	5.4	19.2	19.7	13.6	35.4	35.4
Cycle Q Clear(g_c), s	5.4	34.8	34.8	11.4	25.2	25.3	5.4	19.2	19.7	13.6	35.4	35.4
Prop In Lane	1.00		0.22	1.00		0.20	1.00		0.67	1.00		0.17
Lane Grp Cap(c), veh/h	460	731	740	183	427	434	94	372	350	213	491	502
V/C Ratio(X)	0.21	0.76	0.76	0.87	0.84	0.85	0.79	0.75	0.77	0.89	0.99	0.99
Avail Cap(c_a), veh/h	460	731	740	246	667	678	177	422	397	246	491	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.39	0.39	0.39	0.77	0.77	0.77	1.00	1.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	37.7	32.6	32.6	57.4	47.0	47.0	60.9	48.2	48.3	56.3	46.7	46.7
Incr Delay (d2), s/veh	0.0	2.9	2.9	13.7	14.5	14.5	5.5	6.5	7.7	21.3	32.6	32.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.7	17.5	17.7	6.3	14.0	14.3	2.8	10.0	9.8	7.9	21.8	22.2
LnGrp Delay(d),s/veh	37.7	35.5	35.5	71.1	61.5	61.5	66.3	54.6	56.0	77.6	79.3	78.9
LnGrp LOS	D	D	D	E	E	E	E	D	E	E	E	E
Approach Vol, veh/h		1210			885			621			1168	
Approach Delay, s/veh		35.7			63.2			56.6			78.9	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	59.7	10.9	42.1	39.7	37.4	19.6	33.3
Change Period (Y+Rc), s	4.0	* 6	4.0	* 6	* 6	* 6	4.0	* 6
Max Green Setting (Gmax), s	18.0	* 43	13.0	* 36	* 12	* 49	18.0	* 31
Max Q Clear Time (g_c+I1), s	13.4	36.8	7.4	37.4	7.4	27.3	15.6	21.7
Green Ext Time (p_c), s	0.0	3.3	0.0	0.0	2.6	4.1	0.0	5.6

Intersection Summary	
HCM 2010 Ctrl Delay	58.3
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

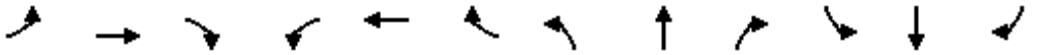
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	910	100	240	900	180	220	580	250	380	930	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	958	105	253	947	189	232	611	263	400	979	116
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1	848	93	234	1262	252	234	783	337	234	1035	123
Arrive On Green	0.00	0.26	0.26	0.13	0.43	0.43	0.13	0.32	0.32	0.13	0.32	0.32
Sat Flow, veh/h	1774	3218	353	1774	2942	587	1774	2412	1037	1774	3188	378
Grp Volume(v), veh/h	0	527	536	253	569	567	232	448	426	400	543	552
Grp Sat Flow(s),veh/h/ln	1774	1770	1801	1774	1770	1759	1774	1770	1680	1774	1770	1796
Q Serve(g_s), s	0.0	39.9	39.9	20.0	41.0	41.1	19.8	34.7	34.7	20.0	45.3	45.3
Cycle Q Clear(g_c), s	0.0	39.9	39.9	20.0	41.0	41.1	19.8	34.7	34.7	20.0	45.3	45.3
Prop In Lane	1.00		0.20	1.00		0.33	1.00		0.62	1.00		0.21
Lane Grp Cap(c), veh/h	1	466	475	234	759	754	234	575	546	234	575	583
V/C Ratio(X)	0.00	1.13	1.13	1.08	0.75	0.75	0.99	0.78	0.78	1.71	0.95	0.95
Avail Cap(c_a), veh/h	234	466	475	234	759	754	234	582	553	234	582	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	55.7	55.7	65.7	36.4	36.4	65.6	46.2	46.2	65.7	49.8	49.8
Incr Delay (d2), s/veh	0.0	82.1	81.9	81.5	3.7	3.8	55.7	6.0	6.4	335.5	24.0	23.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	30.1	30.6	15.1	20.9	20.8	13.3	17.9	17.1	31.6	26.0	26.4
LnGrp Delay(d),s/veh	0.0	137.8	137.6	147.1	40.1	40.2	121.2	52.2	52.6	401.1	73.8	73.7
LnGrp LOS		F	F	F	D	D	F	D	D	F	E	E
Approach Vol, veh/h		1063			1389			1106			1495	
Approach Delay, s/veh		137.7			59.7			66.8			161.3	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	46.0	25.0	55.4	0.0	71.0	25.0	55.4
Change Period (Y+Rc), s	5.0	* 6.1	5.0	* 6.2	5.0	* 6.1	5.0	* 6.2
Max Green Setting (Gmax), s	20.0	* 40	20.0	* 50	20.0	* 40	20.0	* 50
Max Q Clear Time (g_c+I1), s	22.0	41.9	21.8	47.3	0.0	43.1	22.0	36.7
Green Ext Time (p_c), s	0.0	0.0	0.0	1.8	0.0	0.0	0.0	6.8

Intersection Summary	
HCM 2010 Ctrl Delay	107.7
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	560	190	160	420	150	90	930	90	310	1510	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	179	589	200	168	442	158	95	979	95	326	1589	105
Adj No. of Lanes	1	3	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	261	812	269	262	539	191	118	1344	130	350	2028	134
Arrive On Green	0.10	0.22	0.22	0.09	0.22	0.22	0.07	0.30	0.30	0.27	0.57	0.57
Sat Flow, veh/h	1714	3642	1207	1714	2471	875	1714	4552	441	1714	4708	311
Grp Volume(v), veh/h	179	528	261	168	305	295	95	704	370	326	1105	589
Grp Sat Flow(s),veh/h/ln	1714	1638	1573	1714	1710	1636	1714	1638	1717	1714	1638	1743
Q Serve(g_s), s	9.6	17.9	18.5	9.0	20.3	20.7	6.6	23.1	23.2	22.2	31.4	31.4
Cycle Q Clear(g_c), s	9.6	17.9	18.5	9.0	20.3	20.7	6.6	23.1	23.2	22.2	31.4	31.4
Prop In Lane	1.00		0.77	1.00		0.53	1.00		0.26	1.00		0.18
Lane Grp Cap(c), veh/h	261	731	351	262	373	357	118	967	507	350	1411	751
V/C Ratio(X)	0.68	0.72	0.74	0.64	0.82	0.83	0.81	0.73	0.73	0.93	0.78	0.78
Avail Cap(c_a), veh/h	267	756	363	277	395	378	171	967	507	386	1411	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	0.83	0.83	0.83
Uniform Delay (d), s/veh	33.8	43.2	43.4	33.5	44.6	44.8	55.1	38.0	38.0	42.9	21.3	21.3
Incr Delay (d2), s/veh	6.9	3.3	7.7	4.3	11.5	13.0	16.2	4.8	9.0	24.4	3.7	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.0	8.5	8.8	4.5	10.8	10.6	3.6	11.1	12.3	12.9	14.9	16.5
LnGrp Delay(d),s/veh	40.6	46.5	51.2	37.8	56.1	57.7	71.2	42.8	47.0	67.3	25.0	28.1
LnGrp LOS	D	D	D	D	E	E	E	D	D	E	C	C
Approach Vol, veh/h		968			768			1169			2020	
Approach Delay, s/veh		46.7			52.7			46.4			32.7	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.5	41.4	16.0	33.1	13.2	57.7	16.6	32.5
Change Period (Y+Rc), s	5.0	* 6	5.0	* 6.3	5.0	* 6	5.0	* 6.3
Max Green Setting (Gmax), s	27.0	* 31	12.0	* 28	12.0	* 46	12.0	* 28
Max Q Clear Time (g_c+I1), s	24.2	25.2	11.0	20.5	8.6	33.4	11.6	22.7
Green Ext Time (p_c), s	0.3	5.3	0.0	4.4	0.1	10.9	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	41.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	480	40	60	390	130	40	410	40	200	750	200
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	126	505	42	63	411	137	42	432	42	211	789	211
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	1275	106	316	1008	333	233	893	759	376	1325	354
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	856	3309	275	856	2617	863	561	1863	1583	916	2763	739
Grp Volume(v), veh/h	126	269	278	63	277	271	42	432	42	211	505	495
Grp Sat Flow(s),veh/h/ln	856	1770	1814	856	1770	1710	561	1863	1583	916	1770	1732
Q Serve(g_s), s	11.2	9.8	9.9	5.1	10.1	10.3	5.2	14.0	1.3	18.0	18.5	18.5
Cycle Q Clear(g_c), s	21.5	9.8	9.9	15.0	10.1	10.3	23.7	14.0	1.3	32.0	18.5	18.5
Prop In Lane	1.00		0.15	1.00		0.50	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	312	682	699	316	682	659	233	893	759	376	849	831
V/C Ratio(X)	0.40	0.40	0.40	0.20	0.41	0.41	0.18	0.48	0.06	0.56	0.60	0.60
Avail Cap(c_a), veh/h	415	896	919	420	896	866	249	944	802	401	896	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	19.8	19.8	25.2	19.9	19.9	25.5	15.7	12.4	26.5	16.8	16.8
Incr Delay (d2), s/veh	1.2	0.5	0.5	0.4	0.6	0.6	0.5	0.6	0.0	2.1	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.8	4.9	5.0	1.2	5.0	4.9	0.8	7.2	0.6	4.7	9.3	9.1
LnGrp Delay(d),s/veh	29.0	20.3	20.3	25.7	20.4	20.5	26.0	16.2	12.4	28.6	18.1	18.1
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		673			611			516			1211	
Approach Delay, s/veh		22.0			21.0			16.7			19.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		48.6		40.2		48.6		40.2
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		34.0		17.0		25.7		23.5
Green Ext Time (p_c), s		8.6		12.3		13.5		10.7

Intersection Summary	
HCM 2010 Ctrl Delay	20.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	130	0	30	0	810	130	40	2100	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1976	1863	1824	0	1863	1824	1863	1863	0
Adj Flow Rate, veh/h				137	0	32	0	853	137	42	2211	0
Adj No. of Lanes				0	1	0	0	3	0	1	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	2	0	0	2	2	2	2	0
Cap, veh/h				229	0	53	0	2879	460	489	3312	0
Arrive On Green				0.18	0.00	0.18	0.00	1.00	1.00	0.65	0.65	0.00
Sat Flow, veh/h				1255	0	293	0	4588	706	566	5253	0
Grp Volume(v), veh/h				169	0	0	0	653	337	42	2211	0
Grp Sat Flow(s),veh/h/ln				1548	0	0	0	1695	1736	566	1695	0
Q Serve(g_s), s				6.0	0.0	0.0	0.0	0.0	0.0	1.7	16.1	0.0
Cycle Q Clear(g_c), s				6.0	0.0	0.0	0.0	0.0	0.0	1.7	16.1	0.0
Prop In Lane				0.81		0.19	0.00		0.41	1.00		0.00
Lane Grp Cap(c), veh/h				282	0	0	0	2208	1131	489	3312	0
V/C Ratio(X)				0.60	0.00	0.00	0.00	0.30	0.30	0.09	0.67	0.00
Avail Cap(c_a), veh/h				697	0	0	0	2208	1131	489	3312	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.92	0.92	0.19	0.19	0.00
Uniform Delay (d), s/veh				22.5	0.0	0.0	0.0	0.0	0.0	3.9	6.5	0.0
Incr Delay (d2), s/veh				0.8	0.0	0.0	0.0	0.3	0.6	0.1	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln				2.6	0.0	0.0	0.0	0.1	0.2	0.3	7.4	0.0
LnGrp Delay(d),s/veh				23.3	0.0	0.0	0.0	0.3	0.6	4.0	6.7	0.0
LnGrp LOS				C				A	A	A	A	
Approach Vol, veh/h					169			990			2253	
Approach Delay, s/veh					23.3			0.4			6.6	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		45.1				45.1		14.9
Change Period (Y+Rc), s		* 6				* 6		4.0
Max Green Setting (Gmax), s		* 23				* 23		27.0
Max Q Clear Time (g_c+I1), s		2.0				18.1		8.0
Green Ext Time (p_c), s		20.2				4.8		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	5.6
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

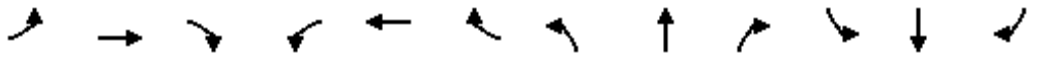
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	30	120	270	20	70	40	830	70	100	2100	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1863	1863	1863	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	32	32	126	284	21	74	42	874	74	105	2211	42
Adj No. of Lanes	0	1	0	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	92	279	351	528	447	100	2150	181	207	2728	52
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.06	0.45	0.45	0.23	1.00	1.00
Sat Flow, veh/h	178	323	986	1222	1863	1578	1774	4779	403	1774	5138	97
Grp Volume(v), veh/h	190	0	0	284	21	74	42	619	329	105	1457	796
Grp Sat Flow(s),veh/h/ln	1487	0	0	1222	1863	1578	1774	1695	1792	1774	1695	1845
Q Serve(g_s), s	2.7	0.0	0.0	21.0	1.0	4.2	2.7	14.7	14.8	6.2	0.0	0.0
Cycle Q Clear(g_c), s	12.1	0.0	0.0	33.1	1.0	4.2	2.7	14.7	14.8	6.2	0.0	0.0
Prop In Lane	0.17		0.66	1.00		1.00	1.00		0.23	1.00		0.05
Lane Grp Cap(c), veh/h	456	0	0	351	528	447	100	1526	806	207	1800	980
V/C Ratio(X)	0.42	0.00	0.00	0.81	0.04	0.17	0.42	0.41	0.41	0.51	0.81	0.81
Avail Cap(c_a), veh/h	456	0	0	351	528	447	251	1526	806	207	1800	980
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75
Uniform Delay (d), s/veh	35.1	0.0	0.0	44.7	31.2	32.3	54.7	22.2	22.2	43.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	14.2	0.1	0.3	1.0	0.8	1.5	0.6	3.1	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.2	0.0	0.0	10.7	0.5	1.9	1.4	7.1	7.6	3.1	0.8	1.5
LnGrp Delay(d),s/veh	35.7	0.0	0.0	58.9	31.2	32.6	55.7	23.0	23.8	43.6	3.1	5.6
LnGrp LOS	D			E	C	C	E	C	C	D	A	A
Approach Vol, veh/h		190			379			990			2358	
Approach Delay, s/veh		35.7			52.2			24.6			5.7	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		40.0	10.3	69.7		40.0	20.0	60.0
Change Period (Y+Rc), s		* 6	3.5	* 6		* 6	* 6	* 6
Max Green Setting (Gmax), s		* 34	17.0	* 54		* 34	* 14	* 54
Max Q Clear Time (g_c+I1), s		14.1	4.7	2.0		35.1	8.2	16.8
Green Ext Time (p_c), s		3.6	0.0	41.2		0.0	0.2	11.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	630	340	330	610	20	140	10	190	50	40	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1900	1863	1900	1863	1900
Adj Flow Rate, veh/h	11	663	303	347	642	20	147	11	32	53	42	7
Adj No. of Lanes	1	2	0	1	2	0	2	0	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	749	342	379	1835	57	557	0	256	70	55	9
Arrive On Green	0.01	0.32	0.32	0.21	0.52	0.52	0.16	0.16	0.16	0.07	0.07	0.07
Sat Flow, veh/h	1774	2362	1080	1774	3504	109	3442	0	1583	932	739	123
Grp Volume(v), veh/h	11	497	469	347	324	338	147	0	32	102	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1672	1774	1770	1843	1721	0	1583	1794	0	0
Q Serve(g_s), s	0.6	24.5	24.5	17.6	9.8	9.8	3.4	0.0	1.6	5.1	0.0	0.0
Cycle Q Clear(g_c), s	0.6	24.5	24.5	17.6	9.8	9.8	3.4	0.0	1.6	5.1	0.0	0.0
Prop In Lane	1.00		0.65	1.00		0.06	1.00		1.00	0.52		0.07
Lane Grp Cap(c), veh/h	12	561	530	379	927	965	557	0	256	134	0	0
V/C Ratio(X)	0.90	0.88	0.88	0.92	0.35	0.35	0.26	0.00	0.12	0.76	0.00	0.00
Avail Cap(c_a), veh/h	386	682	644	386	927	965	955	0	439	482	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	45.6	29.8	29.8	35.3	12.8	12.8	33.7	0.0	32.9	41.7	0.0	0.0
Incr Delay (d2), s/veh	51.3	10.3	10.8	25.4	0.1	0.1	0.1	0.0	0.1	3.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	13.5	12.8	11.2	4.8	5.0	1.6	0.0	0.7	2.7	0.0	0.0
LnGrp Delay(d),s/veh	96.9	40.1	40.6	60.7	12.8	12.8	33.8	0.0	33.0	45.1	0.0	0.0
LnGrp LOS	F	D	D	E	B	B	C		C	D		
Approach Vol, veh/h		977			1009			179			102	
Approach Delay, s/veh		40.9			29.3			33.7			45.1	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		20.4	24.6	34.7		12.2	5.6	53.7
Change Period (Y+Rc), s		5.5	5.0	* 5.6		5.3	5.0	* 5.6
Max Green Setting (Gmax), s		25.5	20.0	* 35		24.7	20.0	* 36
Max Q Clear Time (g_c+I1), s		5.4	19.6	26.5		7.1	2.6	11.8
Green Ext Time (p_c), s		0.3	0.0	2.7		0.3	0.0	7.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.4
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	60	330	20	60	50	240	360	10	30	450	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	158	63	59	21	63	20	253	379	9	32	474	87
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	383	393	334	389	286	91	319	1470	35	39	772	141
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.18	0.42	0.42	0.02	0.26	0.26
Sat Flow, veh/h	1310	1863	1583	1264	1356	431	1774	3534	84	1774	2990	546
Grp Volume(v), veh/h	158	63	59	21	0	83	253	190	198	32	279	282
Grp Sat Flow(s),veh/h/ln	1310	1863	1583	1264	0	1787	1774	1770	1848	1774	1770	1766
Q Serve(g_s), s	5.2	1.3	1.4	0.6	0.0	1.8	6.3	3.2	3.2	0.8	6.4	6.5
Cycle Q Clear(g_c), s	7.0	1.3	1.4	1.9	0.0	1.8	6.3	3.2	3.2	0.8	6.4	6.5
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.05	1.00		0.31
Lane Grp Cap(c), veh/h	383	393	334	389	0	377	319	736	768	39	457	456
V/C Ratio(X)	0.41	0.16	0.18	0.05	0.00	0.22	0.79	0.26	0.26	0.82	0.61	0.62
Avail Cap(c_a), veh/h	978	1239	1053	968	0	1196	1160	1173	1225	774	1173	1171
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	14.8	14.8	15.5	0.0	15.0	18.0	8.8	8.8	22.3	15.0	15.0
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.0	0.0	0.1	1.7	0.1	0.1	14.7	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.9	0.7	0.6	0.2	0.0	0.9	3.2	1.5	1.6	0.5	3.2	3.2
LnGrp Delay(d),s/veh	18.1	14.8	14.9	15.6	0.0	15.1	19.7	8.8	8.8	37.0	15.5	15.5
LnGrp LOS	B	B	B	B		B	B	A	A	D	B	B
Approach Vol, veh/h		280			104			641			593	
Approach Delay, s/veh		16.7			15.2			13.1			16.7	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	24.7		15.2	13.2	17.4		15.2
Change Period (Y+Rc), s	5.0	* 5.6		5.5	5.0	* 5.6		* 5.5
Max Green Setting (Gmax), s	20.0	* 30		30.5	30.0	* 30		* 31
Max Q Clear Time (g_c+I1), s	2.8	5.2		9.0	8.3	8.5		3.9
Green Ext Time (p_c), s	0.0	3.5		0.8	0.3	3.4		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	80	30	20	80	110	10	390	20	80	770	20
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	84	32	21	84	116	11	411	21	84	811	21
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	224	74	104	140	173	277	960	49	549	988	26
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	222	1134	374	83	710	876	657	1757	90	952	1808	47
Grp Volume(v), veh/h	148	0	0	221	0	0	11	0	432	84	0	832
Grp Sat Flow(s),veh/h/ln	1730	0	0	1669	0	0	657	0	1847	952	0	1854
Q Serve(g_s), s	0.0	0.0	0.0	1.3	0.0	0.0	0.6	0.0	6.2	2.6	0.0	16.6
Cycle Q Clear(g_c), s	3.2	0.0	0.0	5.4	0.0	0.0	17.2	0.0	6.2	8.8	0.0	16.6
Prop In Lane	0.22		0.22	0.10		0.52	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	439	0	0	418	0	0	277	0	1009	549	0	1013
V/C Ratio(X)	0.34	0.00	0.00	0.53	0.00	0.00	0.04	0.00	0.43	0.15	0.00	0.82
Avail Cap(c_a), veh/h	1387	0	0	1388	0	0	429	0	1438	770	0	1444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	0.0	16.6	0.0	0.0	15.5	0.0	6.0	8.6	0.0	8.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	0.0	0.0	2.6	0.0	0.0	0.1	0.0	3.2	0.7	0.0	8.8
LnGrp Delay(d),s/veh	15.9	0.0	0.0	17.0	0.0	0.0	15.5	0.0	6.1	8.7	0.0	10.1
LnGrp LOS	B			B			B		A	A		B
Approach Vol, veh/h		148			221			443			916	
Approach Delay, s/veh		15.9			17.0			6.4			10.0	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.6		14.4		30.6		14.4
Change Period (Y+Rc), s		6.0		5.5		6.0		5.5
Max Green Setting (Gmax), s		35.0		35.5		35.0		35.5
Max Q Clear Time (g_c+I1), s		18.6		5.2		19.2		7.4
Green Ext Time (p_c), s		5.4		1.6		5.3		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	10.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	290	110	130	330	60	60	340	80	140	740	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	305	116	137	347	63	63	358	84	147	779	200
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	394	959	357	386	1139	205	260	1357	315	481	1326	341
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	972	2525	941	962	2998	539	572	2854	662	944	2790	716
Grp Volume(v), veh/h	95	212	209	137	203	207	63	220	222	147	494	485
Grp Sat Flow(s),veh/h/ln	972	1770	1697	962	1770	1768	572	1770	1746	944	1770	1736
Q Serve(g_s), s	5.3	5.8	6.0	8.1	5.6	5.7	6.2	5.2	5.3	7.7	14.0	14.0
Cycle Q Clear(g_c), s	10.9	5.8	6.0	14.1	5.6	5.7	20.3	5.2	5.3	12.9	14.0	14.0
Prop In Lane	1.00		0.55	1.00		0.30	1.00		0.38	1.00		0.41
Lane Grp Cap(c), veh/h	394	672	644	386	672	671	260	841	830	481	841	825
V/C Ratio(X)	0.24	0.32	0.32	0.36	0.30	0.31	0.24	0.26	0.27	0.31	0.59	0.59
Avail Cap(c_a), veh/h	517	896	859	508	896	895	278	896	884	510	896	880
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.9	15.1	15.2	20.2	15.0	15.0	20.6	10.9	10.9	14.8	13.2	13.2
Incr Delay (d2), s/veh	0.7	0.6	0.6	1.2	0.5	0.6	1.0	0.4	0.4	0.8	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	2.9	2.9	2.3	2.8	2.9	1.1	2.6	2.6	2.1	7.1	7.0
LnGrp Delay(d),s/veh	19.6	15.7	15.8	21.3	15.5	15.6	21.6	11.2	11.3	15.5	14.8	14.8
LnGrp LOS	B	B	B	C	B	B	C	B	B	B	B	B
Approach Vol, veh/h		516			547			505			1126	
Approach Delay, s/veh		16.4			17.0			12.5			14.9	
Approach LOS		B			B			B			B	

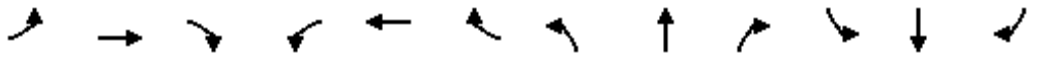
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		37.8		31.2		37.8		31.2
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		35.0		35.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		22.3		12.9		16.0		16.1
Green Ext Time (p_c), s		10.6		11.1		14.9		10.1

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	900	210	350	900	0	240	0	350	0	0	0
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.97		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	947	205	368	947	0	253	0	114	0	0	0
Adj No. of Lanes	1	2	0	1	3	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	407	1719	372	530	3684	0	360	0	348	0	422	0
Arrive On Green	0.00	1.00	1.00	0.10	0.72	0.00	0.23	0.00	0.23	0.00	0.00	0.00
Sat Flow, veh/h	1774	2891	625	1774	5253	0	1374	0	1541	0	1863	0
Grp Volume(v), veh/h	0	579	573	368	947	0	253	0	114	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1746	1774	1695	0	1374	0	1541	0	1863	0
Q Serve(g_s), s	0.0	0.0	0.0	9.2	7.6	0.0	21.0	0.0	7.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	9.2	7.6	0.0	21.0	0.0	7.4	0.0	0.0	0.0
Prop In Lane	1.00		0.36	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	407	1052	1038	530	3684	0	370	0	348	0	422	0
V/C Ratio(X)	0.00	0.55	0.55	0.69	0.26	0.00	0.68	0.00	0.33	0.00	0.00	0.00
Avail Cap(c_a), veh/h	568	1052	1038	670	3684	0	426	0	411	0	498	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.90	0.90	1.00	1.00	0.00	0.93	0.00	0.93	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	6.5	5.6	0.0	44.4	0.0	38.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.9	1.9	1.3	0.2	0.0	2.4	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.5	0.5	4.6	3.6	0.0	8.1	0.0	3.2	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	1.9	1.9	7.8	5.8	0.0	46.9	0.0	39.0	0.0	0.0	0.0
LnGrp LOS		A	A	A	A		D		D			
Approach Vol, veh/h		1152			1315			367			0	
Approach Delay, s/veh		1.9			6.3			44.4			0.0	
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	89.9		30.1	15.6	74.3		30.1
Change Period (Y+Rc), s	4.0	5.0		4.9	4.0	5.0		4.9
Max Green Setting (Gmax), s	10.0	66.0		30.1	21.0	55.0		30.1
Max Q Clear Time (g_c+I1), s	0.0	9.6		23.0	11.2	2.0		0.0
Green Ext Time (p_c), s	0.0	13.2		0.7	0.4	13.1		0.0

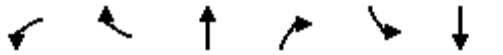
Intersection Summary	
HCM 2010 Ctrl Delay	9.5
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	930	20	30	820	290	10	10	40	150	10	50
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	147	979	21	32	863	305	11	11	42	158	11	53
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	476	2652	57	461	2683	943	59	61	161	275	0	241
Arrive On Green	0.05	0.75	0.74	0.03	0.97	0.95	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1774	3542	76	1774	3697	1300	152	397	1049	1333	0	1565
Grp Volume(v), veh/h	147	489	511	32	791	377	64	0	0	158	0	53
Grp Sat Flow(s),veh/h/ln	1774	1770	1848	1774	1695	1607	1599	0	0	1333	0	1565
Q Serve(g_s), s	2.4	11.5	11.5	0.6	1.4	1.8	0.0	0.0	0.0	8.5	0.0	3.6
Cycle Q Clear(g_c), s	2.4	11.5	11.5	0.6	1.4	1.8	4.1	0.0	0.0	12.6	0.0	3.6
Prop In Lane	1.00		0.04	1.00		0.81	0.17		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	476	1325	1384	461	2460	1166	281	0	0	275	0	241
V/C Ratio(X)	0.31	0.37	0.37	0.07	0.32	0.32	0.23	0.00	0.00	0.57	0.00	0.22
Avail Cap(c_a), veh/h	587	1325	1384	613	2460	1166	457	0	0	426	0	417
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.3	5.2	5.2	4.4	0.6	0.8	45.0	0.0	0.0	48.0	0.0	44.5
Incr Delay (d2), s/veh	0.1	0.8	0.8	0.0	0.3	0.7	0.2	0.0	0.0	0.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	5.9	6.1	0.3	0.6	0.9	1.9	0.0	0.0	5.1	0.0	1.6
LnGrp Delay(d),s/veh	3.4	6.0	6.0	4.5	0.9	1.5	45.1	0.0	0.0	48.7	0.0	44.6
LnGrp LOS	A	A	A	A	A	A	D			D		D
Approach Vol, veh/h		1147			1200			64			211	
Approach Delay, s/veh		5.7			1.2			45.1			47.7	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	90.1		21.4	5.7	92.9		21.4
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	12.0	64.0		30.0	12.0	64.0		30.0
Max Q Clear Time (g_c+I1), s	4.4	3.8		6.1	2.6	13.5		14.6
Green Ext Time (p_c), s	0.1	13.3		0.6	0.0	13.0		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	8.0
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	20	20	2300	30	20	1800
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	21	2421	32	21	1895
Adj No. of Lanes	1	1	3	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	83	74	4208	1305	65	4545
Arrive On Green	0.05	0.05	1.00	1.00	0.07	1.00
Sat Flow, veh/h	1774	1583	5253	1577	1774	5253
Grp Volume(v), veh/h	21	21	2421	32	21	1895
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1577	1774	1695
Q Serve(g_s), s	1.5	1.7	0.0	0.0	1.5	0.0
Cycle Q Clear(g_c), s	1.5	1.7	0.0	0.0	1.5	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	83	74	4208	1305	65	4545
V/C Ratio(X)	0.25	0.28	0.58	0.02	0.32	0.42
Avail Cap(c_a), veh/h	434	387	4208	1305	315	4545
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.80	0.80	0.91	0.91
Uniform Delay (d), s/veh	62.0	62.1	0.0	0.0	61.0	0.0
Incr Delay (d2), s/veh	0.6	0.8	0.5	0.0	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	0.8	0.2	0.0	0.8	0.1
LnGrp Delay(d),s/veh	62.6	62.9	0.5	0.0	61.9	0.3
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	42		2453			1916
Approach Delay, s/veh	62.8		0.5			0.9
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.0	115.7				124.7		10.3
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	64.7				92.7		33.0
Max Q Clear Time (g_c+I1), s	3.5	2.0				2.0		3.7
Green Ext Time (p_c), s	0.0	62.3				89.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.3
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	80	100	1760	160	180	1850
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	84	105	1853	168	189	1947
Adj No. of Lanes	1	1	2	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	144	129	2527	1131	205	4371
Arrive On Green	0.08	0.08	1.00	1.00	0.23	1.00
Sat Flow, veh/h	1774	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	84	105	1853	168	189	1947
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1695
Q Serve(g_s), s	6.2	8.8	0.0	0.0	14.0	0.0
Cycle Q Clear(g_c), s	6.2	8.8	0.0	0.0	14.0	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	144	129	2527	1131	205	4371
V/C Ratio(X)	0.58	0.82	0.73	0.15	0.92	0.45
Avail Cap(c_a), veh/h	394	352	2527	1131	315	4371
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.62	0.62	0.88	0.88
Uniform Delay (d), s/veh	59.8	61.0	0.0	0.0	51.3	0.0
Incr Delay (d2), s/veh	1.4	4.7	1.2	0.2	16.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	4.0	0.4	0.1	7.8	0.1
LnGrp Delay(d),s/veh	61.2	65.7	1.2	0.2	67.5	0.3
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	189		2021			2136
Approach Delay, s/veh	63.7		1.1			6.2
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	19.6	100.4				120.0		15.0
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	67.7				95.7		30.0
Max Q Clear Time (g_c+I1), s	16.0	2.0				2.0		10.8
Green Ext Time (p_c), s	0.1	64.8				92.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	6.4
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	20	20	20	1840	2010	20
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	21	21	1937	2116	21
Adj No. of Lanes	1	1	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	63	56	17	3205	4405	1372
Arrive On Green	0.04	0.04	0.02	1.00	0.87	0.87
Sat Flow, veh/h	1774	1583	1774	3632	5253	1583
Grp Volume(v), veh/h	21	21	21	1937	2116	21
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1695	1583
Q Serve(g_s), s	1.6	1.8	1.3	0.0	12.9	0.2
Cycle Q Clear(g_c), s	1.6	1.8	1.3	0.0	12.9	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	63	56	17	3205	4405	1372
V/C Ratio(X)	0.34	0.38	1.23	0.60	0.48	0.02
Avail Cap(c_a), veh/h	407	364	105	3205	4405	1372
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.61	0.61	0.60	0.60
Uniform Delay (d), s/veh	63.6	63.7	66.2	0.0	2.1	1.2
Incr Delay (d2), s/veh	1.2	1.5	125.9	0.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	19.7	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	1.6	1.2	0.2	6.0	0.1
LnGrp Delay(d),s/veh	64.7	65.2	211.8	0.5	2.3	1.2
LnGrp LOS	E	E	F	A	A	A
Approach Vol, veh/h	42			1958	2137	
Approach Delay, s/veh	65.0			2.8	2.3	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		126.2		8.8	5.3	120.9		
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		
Max Green Setting (Gmax), s		94.7		31.0	8.5	82.7		
Max Q Clear Time (g_c+I1), s		2.0		3.8	3.3	14.9		
Green Ext Time (p_c), s		91.5		0.0	0.0	67.2		

Intersection Summary	
HCM 2010 Ctrl Delay	3.2
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	120	160	2170	200	30	1790
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	168	2284	211	32	1884
Adj No. of Lanes	1	1	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	206	184	3976	1238	45	4193
Arrive On Green	0.12	0.12	0.78	0.78	0.03	1.00
Sat Flow, veh/h	1774	1583	5253	1583	3442	5253
Grp Volume(v), veh/h	126	168	2284	211	32	1884
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1583	1721	1695
Q Serve(g_s), s	9.1	14.2	24.0	4.5	1.2	0.0
Cycle Q Clear(g_c), s	9.1	14.2	24.0	4.5	1.2	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	206	184	3976	1238	45	4193
V/C Ratio(X)	0.61	0.91	0.57	0.17	0.71	0.45
Avail Cap(c_a), veh/h	210	188	3976	1238	204	4193
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.92	0.92
Uniform Delay (d), s/veh	56.8	59.0	5.8	3.7	65.5	0.0
Incr Delay (d2), s/veh	3.5	40.8	0.6	0.3	6.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.7	8.3	11.2	2.0	0.6	0.1
LnGrp Delay(d),s/veh	60.3	99.8	6.4	4.0	72.3	0.3
LnGrp LOS	E	F	A	A	E	A
Approach Vol, veh/h	294		2495			1916
Approach Delay, s/veh	82.9		6.2			1.5
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.8	109.6				115.3		19.7
Change Period (Y+Rc), s	3.5	5.3				5.3		3.5
Max Green Setting (Gmax), s	8.5	97.7				109.7		16.5
Max Q Clear Time (g_c+I1), s	3.2	26.0				2.0		16.2
Green Ext Time (p_c), s	0.0	71.1				106.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.1
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	10	30	2140	20	40	1920
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	11	32	2253	21	42	2021
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	63	56	4263	40	98	4603
Arrive On Green	0.04	0.04	1.00	1.00	0.11	1.00
Sat Flow, veh/h	1774	1583	5363	48	1774	5253
Grp Volume(v), veh/h	11	32	1469	805	42	2021
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1854	1774	1695
Q Serve(g_s), s	0.8	2.7	0.0	0.0	3.0	0.0
Cycle Q Clear(g_c), s	0.8	2.7	0.0	0.0	3.0	0.0
Prop In Lane	1.00	1.00		0.03	1.00	
Lane Grp Cap(c), veh/h	63	56	2782	1521	98	4603
V/C Ratio(X)	0.17	0.57	0.53	0.53	0.43	0.44
Avail Cap(c_a), veh/h	407	364	2782	1521	315	4603
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.82	0.82	0.49	0.49
Uniform Delay (d), s/veh	63.2	64.1	0.0	0.0	58.1	0.0
Incr Delay (d2), s/veh	0.5	3.3	0.6	1.1	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	1.2	0.2	0.5	1.5	0.1
LnGrp Delay(d),s/veh	63.7	67.4	0.6	1.1	58.6	0.1
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	43		2274			2063
Approach Delay, s/veh	66.4		0.8			1.3
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.4	114.8				126.2		8.8
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	66.7				94.7		31.0
Max Q Clear Time (g_c+I1), s	5.0	2.0				2.0		4.7
Green Ext Time (p_c), s	0.0	64.2				91.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	680	500	70	390	60	600	1520	70	150	1440	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	232	716	273	74	411	11	632	1600	71	158	1516	190
Adj No. of Lanes	1	2	1	1	2	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	878	389	87	667	294	661	2631	117	197	1995	618
Arrive On Green	0.10	0.25	0.25	0.05	0.19	0.19	0.38	1.00	1.00	0.02	0.13	0.13
Sat Flow, veh/h	1774	3539	1568	1774	3539	1563	3442	4992	221	3442	5085	1576
Grp Volume(v), veh/h	232	716	273	74	411	11	632	1087	584	158	1516	190
Grp Sat Flow(s),veh/h/ln	1774	1770	1568	1774	1770	1563	1721	1695	1823	1721	1695	1576
Q Serve(g_s), s	14.0	25.7	21.4	5.6	14.4	0.8	24.1	0.0	0.0	6.2	38.9	14.8
Cycle Q Clear(g_c), s	14.0	25.7	21.4	5.6	14.4	0.8	24.1	0.0	0.0	6.2	38.9	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	184	878	389	87	667	294	661	1787	961	197	1995	618
V/C Ratio(X)	1.26	0.82	0.70	0.85	0.62	0.04	0.96	0.61	0.61	0.80	0.76	0.31
Avail Cap(c_a), veh/h	184	1049	465	145	970	428	765	1787	961	408	1995	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	0.84	0.84	0.84	0.89	0.89	0.89
Uniform Delay (d), s/veh	60.5	47.8	46.2	63.7	50.3	44.8	41.0	0.0	0.0	65.5	52.6	42.1
Incr Delay (d2), s/veh	153.6	3.6	2.6	10.2	0.3	0.0	17.9	1.3	2.4	2.6	2.5	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	14.7	13.0	9.6	3.0	7.1	0.3	13.0	0.3	0.6	3.0	18.7	6.6
LnGrp Delay(d),s/veh	214.1	51.4	48.8	73.9	50.7	44.8	59.0	1.3	2.4	68.1	55.1	43.3
LnGrp LOS	F	D	D	E	D	D	E	A	A	E	E	D
Approach Vol, veh/h		1221			496			2303			1864	
Approach Delay, s/veh		81.8			54.0			17.4			55.0	
Approach LOS		F			D			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	75.2	10.6	37.5	29.9	57.0	18.0	30.1
Change Period (Y+Rc), s	3.5	5.3	3.5	6.0	3.5	5.3	3.5	* 6
Max Green Setting (Gmax), s	16.5	50.7	11.5	38.0	30.5	36.7	14.5	* 36
Max Q Clear Time (g_c+I1), s	8.2	2.0	7.6	27.7	26.1	40.9	16.0	16.4
Green Ext Time (p_c), s	0.1	26.9	0.0	3.8	0.3	0.0	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	45.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	850	100	180	890	270	150	790	130	170	490	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1863	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	232	895	93	189	937	81	158	832	126	179	516	126
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	364	1891	196	242	1569	488	203	888	135	232	862	209
Arrive On Green	0.41	0.78	0.78	0.04	0.10	0.10	0.23	0.55	0.55	0.04	0.10	0.10
Sat Flow, veh/h	1774	4870	504	1774	5085	1583	1774	3206	486	1774	2938	714
Grp Volume(v), veh/h	232	647	341	189	937	81	158	478	480	179	322	320
Grp Sat Flow(s),veh/h/ln	1774	1763	1848	1774	1695	1583	1774	1840	1852	1774	1840	1811
Q Serve(g_s), s	13.6	8.4	8.5	13.7	22.9	4.4	10.9	31.3	31.3	13.0	21.8	22.0
Cycle Q Clear(g_c), s	13.6	8.4	8.5	13.7	22.9	4.4	10.9	31.3	31.3	13.0	21.8	22.0
Prop In Lane	1.00		0.27	1.00		1.00	1.00		0.26	1.00		0.39
Lane Grp Cap(c), veh/h	364	1369	718	242	1569	488	203	510	513	232	540	531
V/C Ratio(X)	0.64	0.47	0.48	0.78	0.60	0.17	0.78	0.94	0.94	0.77	0.60	0.60
Avail Cap(c_a), veh/h	364	1369	718	266	1569	488	266	525	528	266	540	531
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.92	0.92	0.92
Uniform Delay (d), s/veh	34.4	9.8	9.8	60.2	50.7	22.2	48.6	27.9	27.9	60.3	51.3	51.4
Incr Delay (d2), s/veh	2.7	1.1	2.1	10.6	1.6	0.7	6.9	22.7	22.6	8.8	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.8	4.2	4.6	7.5	11.0	2.0	5.7	18.9	19.0	7.0	11.3	11.2
LnGrp Delay(d),s/veh	37.1	10.9	12.0	70.8	52.3	22.9	55.5	50.6	50.6	69.1	52.5	52.7
LnGrp LOS	D	B	B	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1220			1207			1116			821	
Approach Delay, s/veh		16.2			53.2			51.3			56.2	
Approach LOS		B			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	38.9	19.2	53.4	16.4	41.0	29.6	43.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	17.5	35.1	17.5	43.1	17.5	35.1	22.5	* 38
Max Q Clear Time (g_c+I1), s	15.0	33.3	15.7	10.5	12.9	24.0	15.6	24.9
Green Ext Time (p_c), s	0.0	0.7	0.0	9.8	0.1	4.9	3.8	6.6

Intersection Summary	
HCM 2010 Ctrl Delay	42.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

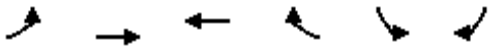
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	320	730	210	260	820	240	260	1340	200	160	1060	250
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1788	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	337	768	181	274	863	104	274	1411	195	168	1116	235
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	443	1195	279	374	1372	410	376	1575	218	565	2321	861
Arrive On Green	0.09	0.19	0.19	0.14	0.36	0.36	0.11	0.35	0.35	0.16	0.42	0.42
Sat Flow, veh/h	3442	4121	962	3442	5085	1520	3442	4519	624	3548	5588	1583
Grp Volume(v), veh/h	337	631	318	274	863	104	274	1058	548	168	1116	235
Grp Sat Flow(s),veh/h/ln	1721	1695	1693	1721	1695	1520	1721	1695	1753	1774	1863	1583
Q Serve(g_s), s	12.4	22.3	22.5	9.9	18.3	4.2	10.0	38.4	38.5	5.4	19.0	10.3
Cycle Q Clear(g_c), s	12.4	22.3	22.5	9.9	18.3	4.2	10.0	38.4	38.5	5.4	19.0	10.3
Prop In Lane	1.00		0.57	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	443	983	491	374	1372	410	376	1181	611	565	2321	861
V/C Ratio(X)	0.76	0.64	0.65	0.73	0.63	0.25	0.73	0.90	0.90	0.30	0.48	0.27
Avail Cap(c_a), veh/h	649	983	491	569	1372	410	516	1181	611	565	2321	861
HCM Platoon Ratio	0.67	0.67	0.67	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.97	0.97	0.97	0.87	0.87	0.87	0.64	0.64	0.64
Uniform Delay (d), s/veh	57.4	46.1	46.3	53.8	36.3	14.4	56.1	40.1	40.1	48.2	27.8	15.9
Incr Delay (d2), s/veh	1.4	3.0	6.1	1.0	2.1	1.4	1.5	9.5	16.4	0.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.0	10.9	11.4	4.7	8.7	1.9	4.8	19.5	21.3	2.7	9.8	4.6
LnGrp Delay(d),s/veh	58.8	49.2	52.4	54.8	38.4	15.8	57.6	49.6	56.5	48.3	28.2	16.4
LnGrp LOS	E	D	D	D	D	B	E	D	E	D	C	B
Approach Vol, veh/h		1286			1241			1880			1519	
Approach Delay, s/veh		52.5			40.1			52.8			28.6	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	57.7	18.2	38.4	24.4	49.0	15.6	41.0
Change Period (Y+Rc), s	3.5	5.7	3.5	5.3	5.7	* 5.7	3.5	5.3
Max Green Setting (Gmax), s	17.5	39.3	22.5	32.7	13.5	* 43	19.5	35.7
Max Q Clear Time (g_c+I1), s	12.0	21.0	14.4	20.3	7.4	40.5	11.9	24.5
Green Ext Time (p_c), s	0.2	11.1	0.3	10.0	0.5	2.5	0.2	9.1

Intersection Summary	
HCM 2010 Ctrl Delay	43.9
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



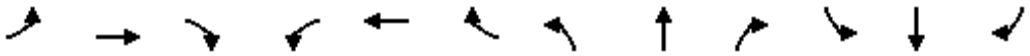
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	40	860	890	60	60	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.2	5.2	5.2	5.5	5.5
Lane Util. Factor	1.00	0.91	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	3539	1583	1770	1558
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	3539	1583	1770	1558
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	42	905	937	63	63	158
RTOR Reduction (vph)	0	0	0	0	0	146
Lane Group Flow (vph)	42	905	937	63	63	12
Confl. Peds. (#/hr)						1
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	6.0	68.9	71.4	71.4	8.9	8.9
Effective Green, g (s)	5.5	70.2	72.7	72.7	9.1	9.1
Actuated g/C Ratio	0.05	0.59	0.61	0.61	0.08	0.08
Clearance Time (s)	3.5	6.5	6.5	6.5	5.7	5.7
Vehicle Extension (s)	1.5	4.3	4.3	4.3	2.0	2.0
Lane Grp Cap (vph)	81	2974	2144	959	134	118
v/s Ratio Prot	c0.02	0.18	c0.26		c0.04	
v/s Ratio Perm				0.04		0.01
v/c Ratio	0.52	0.30	0.44	0.07	0.47	0.10
Uniform Delay, d1	56.0	12.6	12.7	9.7	53.1	51.6
Progression Factor	1.00	1.00	0.53	0.38	1.00	1.00
Incremental Delay, d2	2.3	0.3	0.6	0.1	0.9	0.1
Delay (s)	58.3	12.8	7.3	3.8	54.1	51.8
Level of Service	E	B	A	A	D	D
Approach Delay (s)		14.9	7.1		52.4	
Approach LOS		B	A		D	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	810	110	80	840	110	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	6.5	4.0	5.2	5.5	5.5
Lane Util. Factor	0.95	1.00	1.00	0.91	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	5085	1770	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	1770	5085	1770	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	853	116	84	884	116	95
RTOR Reduction (vph)	0	49	0	0	0	85
Lane Group Flow (vph)	853	67	84	884	116	10
Turn Type	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	4		3	8	5	
Permitted Phases		4				5
Actuated Green, G (s)	68.9	68.9	8.5	71.4	12.3	12.3
Effective Green, g (s)	70.2	68.9	8.0	72.7	12.5	12.5
Actuated g/C Ratio	0.59	0.57	0.07	0.61	0.10	0.10
Clearance Time (s)	6.5	6.5	3.5	6.5	5.7	5.7
Vehicle Extension (s)	4.3	4.3	1.5	4.3	2.0	2.0
Lane Grp Cap (vph)	2070	908	118	3080	184	164
v/s Ratio Prot	c0.24		c0.05	0.17	c0.07	
v/s Ratio Perm		0.04				0.01
v/c Ratio	0.41	0.07	0.71	0.29	0.63	0.06
Uniform Delay, d1	13.6	11.4	54.9	11.3	51.5	48.5
Progression Factor	0.31	0.04	1.06	1.13	1.00	1.00
Incremental Delay, d2	0.6	0.2	15.2	0.2	5.1	0.1
Delay (s)	4.8	0.6	73.6	13.0	56.6	48.5
Level of Service	A	A	E	B	E	D
Approach Delay (s)	4.3			18.3	53.0	
Approach LOS	A			B	D	

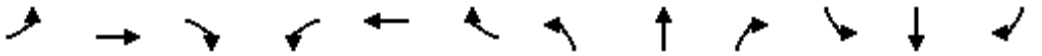
Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	45.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	170	890	90	70	1050	110	40	10	40	90	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	11	10	11	11	11	11	11	11
Total Lost time (s)	1.5	3.0		1.5	3.0	3.0		2.6			1.5	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00			1.00	
Frt	1.00	0.99		1.00	1.00	0.85		0.94			0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.96	
Satd. Flow (prot)	3204	5015		1652	4916	1478		1657			1708	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.86			0.71	
Satd. Flow (perm)	3204	5015		1652	4916	1478		1461			1260	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	179	937	95	74	1105	116	42	11	42	95	11	11
RTOR Reduction (vph)	0	5	0	0	0	26	0	31	0	0	4	0
Lane Group Flow (vph)	179	1027	0	74	1105	90	0	64	0	0	113	0
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2 5			1 6	
Permitted Phases						8	2 5			1 6		
Actuated Green, G (s)	11.2	81.0		10.5	80.3	80.3		19.5			24.3	
Effective Green, g (s)	13.2	83.0		12.5	82.3	82.3		23.5			27.4	
Actuated g/C Ratio	0.10	0.64		0.10	0.63	0.63		0.18			0.21	
Clearance Time (s)	3.5	5.0		3.5	5.0	5.0						
Vehicle Extension (s)	1.5	3.9		1.5	3.9	3.9						
Lane Grp Cap (vph)	325	3201		158	3112	935		264			265	
v/s Ratio Prot	c0.06	0.20		0.04	c0.22							
v/s Ratio Perm						0.06		0.04			c0.09	
v/c Ratio	0.55	0.32		0.47	0.36	0.10		0.24			0.43	
Uniform Delay, d1	55.6	10.7		55.6	11.3	9.3		45.6			44.5	
Progression Factor	1.00	1.00		1.22	0.36	0.08		1.00			1.00	
Incremental Delay, d2	1.1	0.3		0.8	0.3	0.2		0.2			0.4	
Delay (s)	56.7	10.9		68.7	4.4	0.9		45.8			44.9	
Level of Service	E	B		E	A	A		D			D	
Approach Delay (s)		17.7			7.7			45.8			44.9	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		

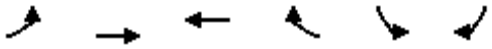
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	910	60	80	1070	30	80	30	110	110	30	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	13	13	10	10	10	10	14	14
Total Lost time (s)	1.5	3.0		1.5	3.0		1.5	2.6		1.5	2.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.88		1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	4870		1652	5233		1652	1534		1652	1771	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1652	4870		1652	5233		1652	1534		1652	1771	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	958	63	84	1126	32	84	32	116	116	32	84
RTOR Reduction (vph)	0	3	0	0	1	0	0	106	0	0	75	0
Lane Group Flow (vph)	53	1018	0	84	1157	0	84	42	0	116	41	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	11.2	81.0		10.5	80.3		10.5	9.0		12.9	11.4	
Effective Green, g (s)	13.2	83.0		12.5	82.3		12.5	11.0		14.9	13.4	
Actuated g/C Ratio	0.10	0.64		0.10	0.63		0.10	0.08		0.11	0.10	
Clearance Time (s)	3.5	5.0		3.5	5.0		3.5	4.6		3.5	4.6	
Vehicle Extension (s)	1.5	3.9		1.5	3.9		1.5	2.0		1.5	2.0	
Lane Grp Cap (vph)	167	3109		158	3312		158	129		189	182	
v/s Ratio Prot	0.03	0.21		c0.05	c0.22		0.05	c0.03		c0.07	0.02	
v/s Ratio Perm												
v/c Ratio	0.32	0.33		0.53	0.35		0.53	0.32		0.61	0.22	
Uniform Delay, d1	54.2	10.7		56.0	11.2		56.0	56.0		54.8	53.5	
Progression Factor	1.46	0.47		1.12	0.19		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.3		1.4	0.2		1.7	0.5		4.1	0.2	
Delay (s)	79.8	5.3		64.1	2.3		57.7	56.5		58.9	53.8	
Level of Service	E	A		E	A		E	E		E	D	
Approach Delay (s)		9.0			6.5			57.0			56.3	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	20	1300	800	250	80	20
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	1368	842	263	52	55
Adj No. of Lanes	1	3	3	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	53	4525	4303	1444	117	107
Arrive On Green	0.06	1.00	1.00	1.00	0.07	0.07
Sat Flow, veh/h	1703	5253	5253	1583	1774	1615
Grp Volume(v), veh/h	21	1368	842	263	52	55
Grp Sat Flow(s),veh/h/ln	1703	1695	1695	1583	1774	1615
Q Serve(g_s), s	1.4	0.0	0.0	0.0	3.4	4.0
Cycle Q Clear(g_c), s	1.4	0.0	0.0	0.0	3.4	4.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	53	4525	4303	1444	117	107
V/C Ratio(X)	0.40	0.30	0.20	0.18	0.44	0.52
Avail Cap(c_a), veh/h	206	4525	4303	1444	503	458
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.90	0.90	1.00	1.00
Uniform Delay (d), s/veh	55.2	0.0	0.0	0.0	53.9	54.2
Incr Delay (d2), s/veh	1.7	0.2	0.1	0.2	1.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.1	0.0	0.1	1.7	3.6
LnGrp Delay(d),s/veh	56.9	0.2	0.1	0.2	54.9	55.6
LnGrp LOS	E	A	A	A	D	E
Approach Vol, veh/h		1389	1105		107	
Approach Delay, s/veh		1.0	0.1		55.3	
Approach LOS		A	A		E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				110.1		9.9	5.2	104.8
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				78.7		32.0	12.5	62.7
Max Q Clear Time (g_c+I1), s				2.0		6.0	3.4	2.0
Green Ext Time (p_c), s				54.3		0.1	0.0	45.8

Intersection Summary	
HCM 2010 Ctrl Delay	2.9
HCM 2010 LOS	A

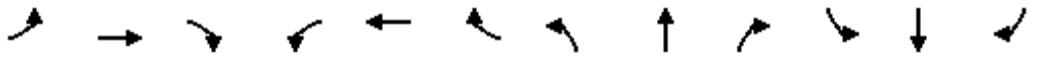
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	900	60	160	400	170	70	650	130	110	570	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1937	1863	1937	1976
Adj Flow Rate, veh/h	137	947	63	168	421	179	74	684	137	116	600	63
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	191	1409	94	226	1570	489	123	1454	677	170	1472	154
Arrive On Green	0.11	0.29	0.29	0.04	0.10	0.10	0.07	0.41	0.41	0.06	0.29	0.29
Sat Flow, veh/h	1774	4872	323	1774	5085	1583	1774	3539	1647	1774	3363	352
Grp Volume(v), veh/h	137	658	352	168	421	179	74	684	137	116	328	335
Grp Sat Flow(s),veh/h/ln	1774	1695	1806	1774	1695	1583	1774	1770	1647	1774	1840	1875
Q Serve(g_s), s	9.0	20.6	20.6	11.2	9.2	12.7	4.9	16.9	6.4	7.7	17.2	17.2
Cycle Q Clear(g_c), s	9.0	20.6	20.6	11.2	9.2	12.7	4.9	16.9	6.4	7.7	17.2	17.2
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	191	980	522	226	1570	489	123	1454	677	170	806	821
V/C Ratio(X)	0.72	0.67	0.67	0.74	0.27	0.37	0.60	0.47	0.20	0.68	0.41	0.41
Avail Cap(c_a), veh/h	333	980	522	333	1570	489	214	1454	677	288	806	821
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	0.97	0.97	0.97
Uniform Delay (d), s/veh	51.8	37.6	37.6	55.6	41.4	42.9	54.3	25.8	22.7	54.3	29.9	29.9
Incr Delay (d2), s/veh	1.9	3.7	6.8	2.0	0.4	2.1	1.8	1.1	0.7	1.7	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	10.1	11.2	5.7	4.4	5.8	2.4	8.5	3.0	3.9	9.1	9.3
LnGrp Delay(d),s/veh	53.7	41.3	44.4	57.6	41.8	45.0	56.0	26.9	23.4	56.1	31.4	31.4
LnGrp LOS	D	D	D	E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		1147			768			895			779	
Approach Delay, s/veh		43.7			46.0			28.8			35.1	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	52.2	16.8	38.0	9.8	55.4	14.4	40.4
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	17.5	32.1	20.5	32.7	12.5	37.1	20.5	32.7
Max Q Clear Time (g_c+I1), s	9.7	18.9	13.2	22.6	6.9	19.2	11.0	14.7
Green Ext Time (p_c), s	0.0	9.3	0.1	7.8	0.0	11.7	0.1	12.4

Intersection Summary	
HCM 2010 Ctrl Delay	38.6
HCM 2010 LOS	D



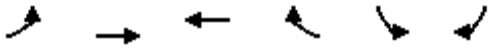
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	1060	160	400	690	490	190	1350	270	130	1270	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1788	1937	1937
Adj Flow Rate, veh/h	211	1116	76	421	726	351	200	1421	258	137	1337	79
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	1420	587	523	1855	577	316	1733	540	280	1880	585
Arrive On Green	0.18	0.56	0.56	0.15	0.36	0.36	0.03	0.11	0.11	0.17	0.71	0.71
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	5085	1583	3304	5289	1647
Grp Volume(v), veh/h	211	1116	76	421	726	351	200	1421	258	137	1337	79
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1583	1652	1763	1647
Q Serve(g_s), s	6.9	20.7	1.5	14.2	12.7	15.2	6.9	32.8	18.3	4.5	17.7	1.8
Cycle Q Clear(g_c), s	6.9	20.7	1.5	14.2	12.7	15.2	6.9	32.8	18.3	4.5	17.7	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	1420	587	523	1855	577	316	1733	540	280	1880	585
V/C Ratio(X)	0.67	0.79	0.13	0.81	0.39	0.61	0.63	0.82	0.48	0.49	0.71	0.13
Avail Cap(c_a), veh/h	473	1420	587	531	1855	577	531	1733	540	427	1880	585
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	0.86	0.86	0.86	0.82	0.82	0.82
Uniform Delay (d), s/veh	47.4	23.7	6.4	49.2	28.2	15.3	56.2	49.6	43.2	47.5	13.7	11.4
Incr Delay (d2), s/veh	0.9	4.3	0.4	8.1	0.6	4.7	0.7	3.9	2.6	0.4	1.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	10.1	0.7	7.3	6.0	7.3	3.3	16.0	8.4	2.1	8.7	0.9
LnGrp Delay(d),s/veh	48.2	28.0	6.8	57.2	28.9	20.0	56.9	53.5	45.8	47.9	15.7	11.8
LnGrp LOS	D	C	A	E	C	C	E	D	D	D	B	B
Approach Vol, veh/h		1403			1498			1879			1553	
Approach Delay, s/veh		29.9			34.8			52.8			18.3	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	45.0	22.7	38.0	12.5	46.8	12.5	48.3
Change Period (Y+Rc), s	6.1	* 6.1	6.5	* 6.5	3.5	6.1	3.5	6.5
Max Green Setting (Gmax), s	13.5	* 39	16.5	* 32	16.5	35.9	14.5	33.5
Max Q Clear Time (g_c+I1), s	6.5	34.8	16.2	22.7	8.9	19.7	8.9	17.2
Green Ext Time (p_c), s	0.5	3.6	0.0	6.0	0.1	11.2	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.0
HCM 2010 LOS	D

Notes

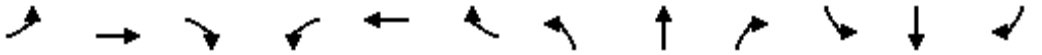
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	170	760	650	240	230	180
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1863	1788	1863	1937
Adj Flow Rate, veh/h	179	800	684	253	242	189
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	480	2505	2409	1034	360	334
Arrive On Green	0.91	0.91	0.68	0.68	0.20	0.20
Sat Flow, veh/h	595	3778	3632	1520	1774	1647
Grp Volume(v), veh/h	179	800	684	253	242	189
Grp Sat Flow(s),veh/h/ln	595	1840	1770	1520	1774	1647
Q Serve(g_s), s	5.9	1.7	4.6	3.8	7.6	6.2
Cycle Q Clear(g_c), s	10.5	1.7	4.6	3.8	7.6	6.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	480	2505	2409	1034	360	334
V/C Ratio(X)	0.37	0.32	0.28	0.24	0.67	0.57
Avail Cap(c_a), veh/h	480	2505	2409	1034	967	897
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.45	0.45	0.99	0.99
Uniform Delay (d), s/veh	2.2	1.0	3.8	3.7	22.1	21.5
Incr Delay (d2), s/veh	2.0	0.3	0.1	0.3	0.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	0.9	2.2	1.6	3.8	2.8
LnGrp Delay(d),s/veh	4.2	1.3	3.9	3.9	22.9	22.1
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		979	937		431	
Approach Delay, s/veh		1.8	3.9		22.5	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				44.5		15.5		44.5
Change Period (Y+Rc), s				5.7		5.3		5.7
Max Green Setting (Gmax), s				18.3		30.7		18.3
Max Q Clear Time (g_c+I1), s				12.5		9.6		6.6
Green Ext Time (p_c), s				5.2		0.6		9.9

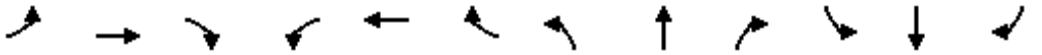
Intersection Summary	
HCM 2010 Ctrl Delay	6.5
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	940	30	20	1170	20	20	10	20	10	10	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1900	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	42	989	32	21	1232	21	21	11	21	11	11	42
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	4400	142	53	4224	72	120	46	88	138	27	104
Arrive On Green	0.05	0.84	0.84	0.06	1.00	1.00	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	1774	5263	170	1774	5150	88	1346	597	1139	1372	353	1347
Grp Volume(v), veh/h	42	662	359	21	811	442	21	0	32	11	0	53
Grp Sat Flow(s),veh/h/ln	1774	1763	1907	1774	1695	1847	1346	0	1736	1372	0	1700
Q Serve(g_s), s	3.0	4.9	4.9	1.5	0.0	0.0	2.0	0.0	2.3	1.0	0.0	3.9
Cycle Q Clear(g_c), s	3.0	4.9	4.9	1.5	0.0	0.0	5.8	0.0	2.3	3.2	0.0	3.9
Prop In Lane	1.00		0.09	1.00		0.05	1.00		0.66	1.00		0.79
Lane Grp Cap(c), veh/h	81	2948	1595	53	2781	1515	120	0	134	138	0	132
V/C Ratio(X)	0.52	0.22	0.22	0.40	0.29	0.29	0.18	0.00	0.24	0.08	0.00	0.40
Avail Cap(c_a), veh/h	198	2948	1595	198	2781	1515	392	0	486	416	0	476
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.91	0.91	0.91	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.7	2.2	2.2	60.0	0.0	0.0	59.9	0.0	56.4	57.9	0.0	57.1
Incr Delay (d2), s/veh	1.5	0.1	0.3	1.6	0.2	0.4	0.3	0.0	0.3	0.1	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	2.4	2.7	0.7	0.1	0.2	0.7	0.0	1.1	0.4	0.0	1.8
LnGrp Delay(d),s/veh	62.2	2.3	2.4	61.7	0.2	0.4	60.1	0.0	56.7	58.0	0.0	57.9
LnGrp LOS	E	A	A	E	A	A	E		E	E		E
Approach Vol, veh/h		1063			1274			53			64	
Approach Delay, s/veh		4.7			1.3			58.1			57.9	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		12.7	5.4	112.0		12.7	7.4	109.9
Change Period (Y+Rc), s		4.6	3.5	5.3		4.6	3.5	5.3
Max Green Setting (Gmax), s		34.4	12.5	69.7		34.4	12.5	69.7
Max Q Clear Time (g_c+I1), s		7.8	3.5	6.9		5.9	5.0	2.0
Green Ext Time (p_c), s		0.4	0.0	38.6		0.4	0.0	40.3

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	260	670	110	300	730	310	220	1150	110	260	930	120
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	274	705	116	316	768	326	232	1211	116	274	979	126
Adj No. of Lanes	2	3	0	2	3	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	378	1029	168	425	1311	849	477	1270	122	493	1351	173
Arrive On Green	0.11	0.23	0.23	0.12	0.26	0.26	0.27	0.27	0.27	0.28	0.28	0.28
Sat Flow, veh/h	3442	4408	718	3442	5085	1583	1774	4721	452	1774	4855	623
Grp Volume(v), veh/h	274	541	280	316	768	326	232	870	457	274	751	354
Grp Sat Flow(s),veh/h/ln	1721	1695	1736	1721	1695	1583	1774	1695	1783	1774	1863	1753
Q Serve(g_s), s	9.9	18.8	19.1	11.4	17.0	15.5	14.2	32.5	32.5	17.0	23.5	23.6
Cycle Q Clear(g_c), s	9.9	18.8	19.1	11.4	17.0	15.5	14.2	32.5	32.5	17.0	23.5	23.6
Prop In Lane	1.00		0.41	1.00		1.00	1.00		0.25	1.00		0.36
Lane Grp Cap(c), veh/h	378	791	405	425	1311	849	477	912	480	493	1036	488
V/C Ratio(X)	0.73	0.68	0.69	0.74	0.59	0.38	0.49	0.95	0.95	0.56	0.72	0.73
Avail Cap(c_a), veh/h	494	791	405	494	1311	849	477	912	480	493	1036	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	0.70	0.70	0.70	0.43	0.43	0.43
Uniform Delay (d), s/veh	55.5	45.1	45.2	54.6	41.8	17.5	39.7	46.4	46.4	39.7	42.1	42.1
Incr Delay (d2), s/veh	2.2	4.8	9.4	3.8	1.8	1.2	2.5	16.0	24.7	1.9	1.9	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.8	9.3	10.2	5.7	8.2	11.2	7.3	17.2	19.3	8.6	12.4	12.0
LnGrp Delay(d),s/veh	57.8	49.9	54.6	58.4	43.7	18.7	42.1	62.3	71.0	41.7	44.0	46.2
LnGrp LOS	E	D	D	E	D	B	D	E	E	D	D	D
Approach Vol, veh/h		1095			1410			1559			1379	
Approach Delay, s/veh		53.1			41.2			61.9			44.1	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		39.2	15.7	36.2		38.0	18.8	33.0
Change Period (Y+Rc), s		5.3	3.5	4.9		5.3	4.9	* 4.9
Max Green Setting (Gmax), s		32.7	16.5	28.1		32.7	16.5	* 28
Max Q Clear Time (g_c+I1), s		25.6	11.9	19.0		34.5	13.4	21.1
Green Ext Time (p_c), s		5.2	0.2	5.4		0.0	0.5	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	50.2
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	1020	40	160	1100	90	60	10	100	90	20	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	116	1074	42	168	1158	95	63	11	105	95	21	84
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	2334	91	479	3153	259	163	33	318	225	45	346
Arrive On Green	0.03	0.15	0.15	0.54	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	5223	204	1774	4982	409	1284	152	1454	797	205	1583
Grp Volume(v), veh/h	116	725	391	168	819	434	63	0	116	116	0	84
Grp Sat Flow(s),veh/h/ln	1774	1763	1901	1774	1763	1865	1284	0	1606	1002	0	1583
Q Serve(g_s), s	8.4	24.4	24.5	7.0	0.0	0.0	6.1	0.0	7.9	9.6	0.0	5.7
Cycle Q Clear(g_c), s	8.4	24.4	24.5	7.0	0.0	0.0	23.6	0.0	7.9	17.5	0.0	5.7
Prop In Lane	1.00		0.11	1.00		0.22	1.00		0.91	0.82		1.00
Lane Grp Cap(c), veh/h	168	1576	850	479	2231	1180	163	0	351	269	0	346
V/C Ratio(X)	0.69	0.46	0.46	0.35	0.37	0.37	0.39	0.00	0.33	0.43	0.00	0.24
Avail Cap(c_a), veh/h	389	1576	850	479	2231	1180	242	0	450	352	0	443
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	0.81	0.81	0.81	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.1	41.1	41.1	23.4	0.0	0.0	57.3	0.0	42.8	49.5	0.0	41.9
Incr Delay (d2), s/veh	1.5	0.8	1.5	0.1	0.4	0.7	0.6	0.0	0.2	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	12.1	13.3	3.4	0.1	0.2	2.2	0.0	3.5	3.8	0.0	2.5
LnGrp Delay(d),s/veh	62.6	41.9	42.5	23.6	0.4	0.7	57.9	0.0	43.0	49.9	0.0	42.1
LnGrp LOS	E	D	D	C	A	A	E		D	D		D
Approach Vol, veh/h		1232			1421			179			200	
Approach Delay, s/veh		44.0			3.2			48.2			46.6	
Approach LOS		D			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		31.0	38.0	61.0		31.0	13.8	85.1
Change Period (Y+Rc), s		4.6	4.9	* 4.9		4.6	3.5	4.9
Max Green Setting (Gmax), s		34.4	26.5	* 56		34.4	26.5	56.1
Max Q Clear Time (g_c+I1), s		25.6	9.0	26.5		19.5	10.4	2.0
Green Ext Time (p_c), s		0.9	1.1	11.2		1.1	0.1	15.7

Intersection Summary	
HCM 2010 Ctrl Delay	25.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	830	130	10	960	100	50	20	10	60	20	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	32	874	137	11	1011	105	53	21	11	63	21	32
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	2625	411	41	2687	279	152	120	63	171	69	106
Arrive On Green	0.10	1.00	1.00	0.02	0.80	0.80	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1774	3189	500	1774	3366	350	1346	1199	628	1372	694	1057
Grp Volume(v), veh/h	32	504	507	11	553	563	53	0	32	63	0	53
Grp Sat Flow(s),veh/h/ln	1774	1840	1849	1774	1840	1876	1346	0	1826	1372	0	1751
Q Serve(g_s), s	2.2	0.0	0.0	0.8	11.3	11.3	4.9	0.0	2.1	5.7	0.0	3.7
Cycle Q Clear(g_c), s	2.2	0.0	0.0	0.8	11.3	11.3	8.6	0.0	2.1	7.8	0.0	3.7
Prop In Lane	1.00		0.27	1.00		0.19	1.00		0.34	1.00		0.60
Lane Grp Cap(c), veh/h	85	1515	1522	41	1469	1497	152	0	183	171	0	175
V/C Ratio(X)	0.38	0.33	0.33	0.27	0.38	0.38	0.35	0.00	0.17	0.37	0.00	0.30
Avail Cap(c_a), veh/h	198	1515	1522	198	1469	1497	332	0	427	354	0	409
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	0.0	0.0	62.4	3.8	3.8	58.3	0.0	53.6	57.2	0.0	54.3
Incr Delay (d2), s/veh	0.1	0.1	0.1	1.3	0.7	0.7	0.5	0.0	0.2	0.5	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	0.0	0.0	0.4	6.0	6.1	1.9	0.0	1.1	2.2	0.0	1.8
LnGrp Delay(d),s/veh	57.1	0.1	0.1	63.7	4.5	4.5	58.8	0.0	53.7	57.6	0.0	54.6
LnGrp LOS	E	A	A	E	A	A	E		D	E		D
Approach Vol, veh/h		1043			1127			85			116	
Approach Delay, s/veh		1.8			5.1			56.9			56.3	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	109.9		15.6	7.7	106.7		15.6
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	12.5	76.1		28.4	12.5	76.1		28.4
Max Q Clear Time (g_c+I1), s	2.8	2.0		9.8	4.2	13.3		10.6
Green Ext Time (p_c), s	0.0	44.4		0.4	0.0	40.3		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	8.0
HCM 2010 LOS	A

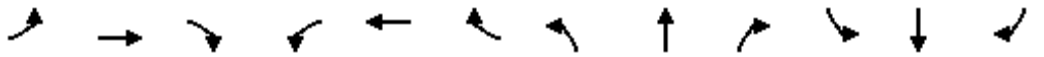
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	1130	20	60	690	90	10	10	50	130	20	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1900	1863	1863	1900	1976	1937	1976	1900	1863	1863
Adj Flow Rate, veh/h	32	1189	21	63	726	95	11	11	53	137	21	32
Adj No. of Lanes	1	3	0	1	4	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	2994	53	109	3027	388	34	46	111	156	20	475
Arrive On Green	0.21	1.00	1.00	0.08	0.69	0.69	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1703	5146	91	1774	5794	743	0	154	371	332	67	1583
Grp Volume(v), veh/h	32	783	427	63	600	221	75	0	0	158	0	32
Grp Sat Flow(s),veh/h/ln	1703	1695	1847	1774	1602	1732	525	0	0	399	0	1583
Q Serve(g_s), s	1.8	0.0	0.0	4.1	5.5	5.6	0.0	0.0	0.0	0.0	0.0	1.7
Cycle Q Clear(g_c), s	1.8	0.0	0.0	4.1	5.5	5.6	36.0	0.0	0.0	36.0	0.0	1.7
Prop In Lane	1.00		0.05	1.00		0.43	0.15		0.71	0.87		1.00
Lane Grp Cap(c), veh/h	180	1973	1075	109	2511	905	192	0	0	176	0	475
V/C Ratio(X)	0.18	0.40	0.40	0.58	0.24	0.24	0.39	0.00	0.00	0.90	0.00	0.07
Avail Cap(c_a), veh/h	206	1973	1075	214	2511	905	192	0	0	176	0	475
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.99	0.99	0.99	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.0	0.0	0.0	53.6	9.6	9.6	33.3	0.0	0.0	45.9	0.0	30.0
Incr Delay (d2), s/veh	0.2	0.6	1.1	1.8	0.2	0.6	0.5	0.0	0.0	39.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.9	0.2	0.3	2.1	2.4	2.8	1.8	0.0	0.0	7.2	0.0	0.8
LnGrp Delay(d),s/veh	43.2	0.6	1.1	55.4	9.8	10.2	33.8	0.0	0.0	85.6	0.0	30.0
LnGrp LOS	D	A	A	E	A	B	C			F		C
Approach Vol, veh/h		1242			884			75			190	
Approach Delay, s/veh		1.8			13.2			33.8			76.2	
Approach LOS		A			B			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.0	8.9	73.1		38.0	16.0	66.0
Change Period (Y+Rc), s		4.0	3.5	5.3		4.0	5.3	* 5.3
Max Green Setting (Gmax), s		34.0	12.5	60.7		34.0	12.5	* 61
Max Q Clear Time (g_c+I1), s		38.0	6.1	2.0		38.0	3.8	7.6
Green Ext Time (p_c), s		0.0	0.0	17.7		0.0	3.2	10.1

Intersection Summary	
HCM 2010 Ctrl Delay	12.9
HCM 2010 LOS	B

Notes

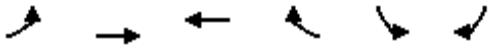
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	820	100	110	980	160	100	540	130	70	340	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	105	863	105	116	1032	168	105	568	137	74	358	95
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	2687	325	166	2616	425	226	840	202	140	824	216
Arrive On Green	0.17	1.00	1.00	0.09	0.57	0.57	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	4782	579	1774	4586	745	934	2945	708	740	2887	757
Grp Volume(v), veh/h	105	635	333	116	793	407	105	354	351	74	227	226
Grp Sat Flow(s),veh/h/ln	1774	1763	1835	1774	1763	1806	934	1840	1812	740	1840	1804
Q Serve(g_s), s	7.2	0.0	0.0	8.2	16.2	16.3	13.5	22.2	22.3	12.8	13.0	13.3
Cycle Q Clear(g_c), s	7.2	0.0	0.0	8.2	16.2	16.3	26.8	22.2	22.3	35.1	13.0	13.3
Prop In Lane	1.00		0.32	1.00		0.41	1.00		0.39	1.00		0.42
Lane Grp Cap(c), veh/h	151	1981	1031	166	2011	1030	226	525	517	140	525	515
V/C Ratio(X)	0.70	0.32	0.32	0.70	0.39	0.40	0.46	0.67	0.68	0.53	0.43	0.44
Avail Cap(c_a), veh/h	198	1981	1031	307	2011	1030	226	525	517	140	525	515
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	0.52	0.52	0.52	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	0.0	0.0	57.2	15.5	15.5	48.9	41.1	41.2	56.7	37.9	38.0
Incr Delay (d2), s/veh	3.6	0.4	0.8	2.0	0.6	1.1	0.3	1.5	1.5	1.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	0.1	0.2	4.2	8.0	8.4	3.5	11.4	11.3	2.7	6.6	6.7
LnGrp Delay(d),s/veh	55.9	0.4	0.8	59.2	16.1	16.6	49.2	42.6	42.7	58.6	38.1	38.2
LnGrp LOS	E	A	A	E	B	B	D	D	D	E	D	D
Approach Vol, veh/h		1073			1316			810			527	
Approach Delay, s/veh		6.0			20.0			43.5			41.0	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.6	76.4		40.0	12.6	77.4		40.0
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	20.5	60.7		35.1	12.5	68.7		35.1
Max Q Clear Time (g_c+I1), s	10.2	2.0		37.1	9.2	18.3		28.8
Green Ext Time (p_c), s	0.1	35.1		0.0	0.0	32.1		2.5

Intersection Summary	
HCM 2010 Ctrl Delay	24.1
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	80	1110	660	50	100	80
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	84	1168	695	53	94	95
Adj No. of Lanes	1	3	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	132	4391	4759	358	164	149
Arrive On Green	0.15	1.00	1.00	1.00	0.09	0.09
Sat Flow, veh/h	1774	5253	6387	461	1774	1615
Grp Volume(v), veh/h	84	1168	543	205	94	95
Grp Sat Flow(s),veh/h/ln	1774	1695	1602	1781	1774	1615
Q Serve(g_s), s	5.3	0.0	0.0	0.0	6.1	6.8
Cycle Q Clear(g_c), s	5.3	0.0	0.0	0.0	6.1	6.8
Prop In Lane	1.00			0.26	1.00	1.00
Lane Grp Cap(c), veh/h	132	4391	3733	1384	164	149
V/C Ratio(X)	0.64	0.27	0.15	0.15	0.57	0.64
Avail Cap(c_a), veh/h	214	4391	3733	1384	517	471
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.99	0.99	1.00	1.00
Uniform Delay (d), s/veh	49.6	0.0	0.0	0.0	52.2	52.5
Incr Delay (d2), s/veh	1.5	0.1	0.1	0.2	1.2	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.7	0.0	0.0	0.1	3.1	6.1
LnGrp Delay(d),s/veh	51.1	0.1	0.1	0.2	53.4	54.2
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		1252	748		189	
Approach Delay, s/veh		3.5	0.1		53.8	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				106.9		13.1	10.4	96.5
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				77.7		33.0	12.5	61.7
Max Q Clear Time (g_c+I1), s				2.0		8.8	7.3	2.0
Green Ext Time (p_c), s				39.1		0.3	0.0	34.6

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	10	100	10	10	10	70	1780	20	20	1320	160
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	105	11	105	11	11	11	74	1874	21	21	1389	168
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	18	168	64	61	42	93	3945	44	30	3334	403
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.11	1.00	1.00	0.02	0.73	0.73
Sat Flow, veh/h	1384	152	1454	207	525	366	1774	5185	58	1774	4599	556
Grp Volume(v), veh/h	105	0	116	33	0	0	74	1225	670	21	1024	533
Grp Sat Flow(s),veh/h/ln	1384	0	1606	1098	0	0	1774	1695	1852	1774	1695	1765
Q Serve(g_s), s	2.7	0.0	8.3	0.1	0.0	0.0	4.9	0.0	0.0	1.4	14.3	14.3
Cycle Q Clear(g_c), s	11.1	0.0	8.3	8.4	0.0	0.0	4.9	0.0	0.0	1.4	14.3	14.3
Prop In Lane	1.00		0.91	0.33		0.33	1.00		0.03	1.00		0.32
Lane Grp Cap(c), veh/h	195	0	186	167	0	0	93	2580	1410	30	2458	1279
V/C Ratio(X)	0.54	0.00	0.62	0.20	0.00	0.00	0.79	0.47	0.48	0.71	0.42	0.42
Avail Cap(c_a), veh/h	519	0	562	527	0	0	200	2580	1410	200	2458	1279
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.31	0.31	0.31	0.64	0.64	0.64
Uniform Delay (d), s/veh	52.2	0.0	50.6	47.9	0.0	0.0	53.0	0.0	0.0	58.7	6.5	6.5
Incr Delay (d2), s/veh	0.9	0.0	1.3	0.2	0.0	0.0	1.8	0.2	0.4	7.0	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.5	0.0	3.7	1.0	0.0	0.0	2.4	0.1	0.1	0.8	6.7	7.0
LnGrp Delay(d),s/veh	53.0	0.0	51.9	48.1	0.0	0.0	54.8	0.2	0.4	65.7	6.8	7.1
LnGrp LOS	D		D	D			D	A	A	E	A	A
Approach Vol, veh/h		221			33			1969			1578	
Approach Delay, s/veh		52.4			48.1			2.3			7.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	92.3		17.9	5.5	96.6		17.9
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	13.5	51.7		42.0	13.5	51.7		42.0
Max Q Clear Time (g_c+I1), s	6.9	16.3		13.1	3.4	2.0		10.4
Green Ext Time (p_c), s	0.0	34.1		0.8	0.0	47.2		0.8

Intersection Summary		
HCM 2010 Ctrl Delay		7.9
HCM 2010 LOS		A

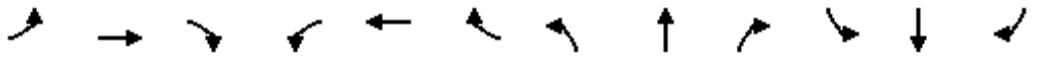
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	10	30	30	10	20	50	1750	30	60	1220	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	11	32	32	11	21	53	1842	32	63	1284	53
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	17	40	104	39	48	68	2690	47	470	3829	158
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.08	1.00	1.00	0.53	1.00	1.00
Sat Flow, veh/h	967	190	435	647	435	528	1774	5148	89	1774	5010	207
Grp Volume(v), veh/h	117	0	0	64	0	0	53	1213	661	63	869	468
Grp Sat Flow(s),veh/h/ln	1592	0	0	1609	0	0	1774	1695	1847	1774	1695	1826
Q Serve(g_s), s	4.1	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	2.2	0.0	0.0
Cycle Q Clear(g_c), s	8.4	0.0	0.0	4.3	0.0	0.0	3.5	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.63		0.27	0.50		0.33	1.00		0.05	1.00		0.11
Lane Grp Cap(c), veh/h	193	0	0	191	0	0	68	1771	965	470	2591	1396
V/C Ratio(X)	0.60	0.00	0.00	0.34	0.00	0.00	0.78	0.68	0.69	0.13	0.34	0.34
Avail Cap(c_a), veh/h	450	0	0	454	0	0	170	1771	965	470	2591	1396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.64	0.64	0.64	0.73	0.73	0.73
Uniform Delay (d), s/veh	53.2	0.0	0.0	51.5	0.0	0.0	54.9	0.0	0.0	21.2	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.4	0.0	0.0	4.6	1.4	2.5	0.0	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.9	0.0	0.0	2.0	0.0	0.0	1.8	0.3	0.7	1.1	0.1	0.2
LnGrp Delay(d),s/veh	54.4	0.0	0.0	51.9	0.0	0.0	59.5	1.4	2.5	21.3	0.3	0.5
LnGrp LOS	D			D			E	A	A	C	A	A
Approach Vol, veh/h		117			64			1927			1400	
Approach Delay, s/veh		54.4			51.9			3.4			1.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	37.1	68.0		14.9	8.1	97.0		14.9
Change Period (Y+Rc), s	5.3	* 5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	* 63		32.0	11.5	63.7		32.0
Max Q Clear Time (g_c+I1), s	4.2	2.0		10.4	5.5	2.0		6.3
Green Ext Time (p_c), s	1.1	35.2		0.7	0.0	20.3		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	5.1
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	500	150	120	590	120	210	1560	170	170	1100	140
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.91	1.00		0.98	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	105	526	158	126	621	126	221	1642	179	179	1158	147
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	129	573	171	152	659	133	244	2045	222	203	2119	618
Arrive On Green	0.07	0.22	0.22	0.09	0.23	0.23	0.28	0.88	0.88	0.23	0.83	0.83
Sat Flow, veh/h	1774	2645	789	1774	2877	582	1774	4647	505	1774	5085	1484
Grp Volume(v), veh/h	105	351	333	126	381	366	221	1197	624	179	1158	147
Grp Sat Flow(s),veh/h/ln	1774	1770	1665	1774	1770	1689	1774	1695	1762	1774	1695	1484
Q Serve(g_s), s	7.0	23.2	23.5	8.4	25.4	25.6	14.4	17.2	17.4	11.7	8.4	2.5
Cycle Q Clear(g_c), s	7.0	23.2	23.5	8.4	25.4	25.6	14.4	17.2	17.4	11.7	8.4	2.5
Prop In Lane	1.00		0.47	1.00		0.34	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	129	383	361	152	406	387	244	1492	776	203	2119	618
V/C Ratio(X)	0.81	0.92	0.92	0.83	0.94	0.94	0.90	0.80	0.80	0.88	0.55	0.24
Avail Cap(c_a), veh/h	214	394	370	214	406	387	392	1492	776	259	2119	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.92	0.92	0.92	0.89	0.89	0.89	0.84	0.84	0.84	0.90	0.90	0.90
Uniform Delay (d), s/veh	54.8	45.9	46.0	54.0	45.4	45.5	42.7	5.1	5.1	45.5	6.5	6.0
Incr Delay (d2), s/veh	4.2	24.2	26.9	10.9	27.8	29.7	9.4	3.9	7.4	19.2	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	14.0	13.5	4.6	15.5	15.1	7.6	8.1	9.2	6.7	3.8	1.1
LnGrp Delay(d),s/veh	59.0	70.2	72.9	64.9	73.3	75.2	52.1	9.0	12.5	64.7	7.5	6.9
LnGrp LOS	E	E	E	E	E	E	D	A	B	E	A	A
Approach Vol, veh/h		789			873			2042			1484	
Approach Delay, s/veh		69.8			72.9			14.7			14.3	
Approach LOS		E			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	54.9	12.3	32.8	17.2	57.7	13.8	31.3
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	26.5	35.1	14.5	26.7	17.5	44.1	14.5	26.7
Max Q Clear Time (g_c+I1), s	16.4	10.4	9.0	27.6	13.7	19.4	10.4	25.5
Green Ext Time (p_c), s	0.1	23.6	0.0	0.0	0.1	23.5	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	32.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	90	70	30	110	70	80	820	20	50	520	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	63	95	74	32	116	74	84	863	21	53	547	63
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	161	107	94	202	116	601	2384	58	467	2160	248
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.68	0.68	0.66	0.68	0.68	0.66
Sat Flow, veh/h	338	798	532	150	1000	575	807	3531	86	625	3199	367
Grp Volume(v), veh/h	232	0	0	222	0	0	84	432	452	53	302	308
Grp Sat Flow(s),veh/h/ln	1668	0	0	1725	0	0	807	1770	1847	625	1770	1797
Q Serve(g_s), s	0.5	0.0	0.0	0.0	0.0	0.0	3.0	6.8	6.8	2.6	4.3	4.4
Cycle Q Clear(g_c), s	7.9	0.0	0.0	7.4	0.0	0.0	7.4	6.8	6.8	9.4	4.3	4.4
Prop In Lane	0.27		0.32	0.14		0.33	1.00		0.05	1.00		0.20
Lane Grp Cap(c), veh/h	407	0	0	412	0	0	601	1195	1247	467	1195	1213
V/C Ratio(X)	0.57	0.00	0.00	0.54	0.00	0.00	0.14	0.36	0.36	0.11	0.25	0.25
Avail Cap(c_a), veh/h	711	0	0	735	0	0	601	1195	1247	467	1195	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.63	0.63	0.63	0.70	0.70	0.70
Uniform Delay (d), s/veh	23.8	0.0	0.0	23.7	0.0	0.0	5.6	4.5	4.6	6.6	4.1	4.2
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	0.3	0.5	0.5	0.3	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.9	0.0	0.0	3.7	0.0	0.0	0.7	3.4	3.6	0.5	2.2	2.3
LnGrp Delay(d),s/veh	24.3	0.0	0.0	24.1	0.0	0.0	5.9	5.1	5.1	6.9	4.5	4.5
LnGrp LOS	C			C			A	A	A	A	A	A
Approach Vol, veh/h		232			222			968			663	
Approach Delay, s/veh		24.3			24.1			5.1			4.7	
Approach LOS		C			C			A			A	

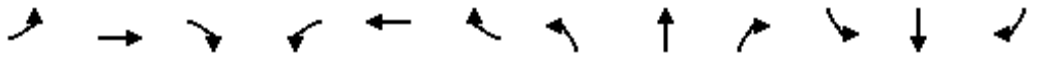
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		47.9		17.1		47.9		17.1
Change Period (Y+Rc), s		4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s		30.1		26.0		30.1		26.0
Max Q Clear Time (g_c+I1), s		9.4		9.9		11.4		9.4
Green Ext Time (p_c), s		5.0		1.8		4.8		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	9.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	780	100	80	480	90	90	550	120	90	510	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	158	821	105	84	505	95	95	579	126	95	537	126
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	956	122	99	792	148	396	1588	345	461	1564	365
Arrive On Green	0.09	0.30	0.30	0.06	0.27	0.26	1.00	1.00	1.00	0.55	0.55	0.54
Sat Flow, veh/h	1774	3156	404	1774	2974	557	769	2892	628	739	2847	665
Grp Volume(v), veh/h	158	460	466	84	299	301	95	354	351	95	333	330
Grp Sat Flow(s),veh/h/ln	1774	1770	1790	1774	1770	1761	769	1770	1750	739	1770	1743
Q Serve(g_s), s	11.5	31.9	31.9	6.1	19.4	19.6	4.0	0.0	0.0	8.6	13.6	13.8
Cycle Q Clear(g_c), s	11.5	31.9	31.9	6.1	19.4	19.6	17.7	0.0	0.0	8.6	13.6	13.8
Prop In Lane	1.00		0.23	1.00		0.32	1.00		0.36	1.00		0.38
Lane Grp Cap(c), veh/h	164	536	542	99	471	469	396	972	961	461	972	957
V/C Ratio(X)	0.96	0.86	0.86	0.85	0.64	0.64	0.24	0.36	0.37	0.21	0.34	0.34
Avail Cap(c_a), veh/h	164	803	812	177	817	813	396	972	961	461	972	957
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.69	0.69	0.69	0.56	0.56	0.56	0.49	0.49	0.49	0.27	0.27	0.27
Uniform Delay (d), s/veh	58.8	42.7	42.8	60.9	42.1	42.3	1.7	0.0	0.0	15.2	16.3	16.4
Incr Delay (d2), s/veh	48.2	2.9	2.9	4.4	0.3	0.3	0.7	0.5	0.5	0.3	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.9	16.0	16.2	3.1	9.5	9.6	0.9	0.1	0.1	1.8	6.7	6.7
LnGrp Delay(d),s/veh	107.0	45.6	45.7	65.2	42.4	42.6	2.4	0.5	0.5	15.4	16.5	16.7
LnGrp LOS	F	D	D	E	D	D	A	A	A	B	B	B
Approach Vol, veh/h		1084			684			800			758	
Approach Delay, s/veh		54.6			45.3			0.7			16.5	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		75.4	11.2	43.4		75.4	16.0	38.6
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	13.5	58.1		45.1	12.5	59.1
Max Q Clear Time (g_c+I1), s		19.7	8.1	33.9		15.8	13.5	21.6
Green Ext Time (p_c), s		5.0	0.0	4.6		5.1	0.0	4.7

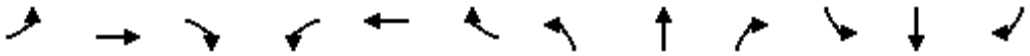
Intersection Summary	
HCM 2010 Ctrl Delay	31.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	510	90	50	660	130	110	760	70	70	420	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	105	537	95	53	695	137	116	800	74	74	442	105
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	1561	275	61	1430	282	300	1159	107	147	1005	237
Arrive On Green	0.07	0.52	0.51	0.03	0.49	0.48	0.35	0.35	0.35	0.71	0.71	0.69
Sat Flow, veh/h	1774	3008	530	1774	2948	581	855	3274	303	632	2841	670
Grp Volume(v), veh/h	105	315	317	53	417	415	116	432	442	74	274	273
Grp Sat Flow(s),veh/h/ln	1774	1770	1768	1774	1770	1759	855	1770	1807	632	1770	1740
Q Serve(g_s), s	7.6	13.5	13.7	3.9	20.6	20.7	14.6	27.2	27.2	14.1	8.5	8.8
Cycle Q Clear(g_c), s	7.6	13.5	13.7	3.9	20.6	20.7	23.4	27.2	27.2	41.3	8.5	8.8
Prop In Lane	1.00		0.30	1.00		0.33	1.00		0.17	1.00		0.38
Lane Grp Cap(c), veh/h	122	919	918	61	859	854	300	626	640	147	626	616
V/C Ratio(X)	0.86	0.34	0.35	0.86	0.49	0.49	0.39	0.69	0.69	0.50	0.44	0.44
Avail Cap(c_a), veh/h	164	919	918	123	859	854	300	626	640	147	626	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.51	0.51	0.51	0.53	0.53	0.53	0.43	0.43	0.43	0.98	0.98	0.98
Uniform Delay (d), s/veh	59.9	18.3	18.4	62.4	22.5	22.7	38.3	35.9	36.0	30.9	13.5	13.8
Incr Delay (d2), s/veh	13.2	0.5	0.5	7.0	1.0	1.1	1.6	2.7	2.7	11.6	2.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	6.7	6.8	2.0	10.3	10.3	3.6	13.7	14.0	2.9	4.5	4.5
LnGrp Delay(d),s/veh	73.2	18.8	18.9	69.4	23.6	23.7	40.0	38.6	38.7	42.5	15.7	16.1
LnGrp LOS	E	B	B	E	C	C	D	D	D	D	B	B
Approach Vol, veh/h		737			885			990			621	
Approach Delay, s/veh		26.6			26.4			38.8			19.0	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		50.0	8.5	71.5		50.0	12.9	67.1
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	9.5	62.1		45.1	12.5	59.1
Max Q Clear Time (g_c+I1), s		29.2	5.9	15.7		43.3	9.6	22.7
Green Ext Time (p_c), s		4.6	0.0	5.4		1.1	0.0	5.3

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C



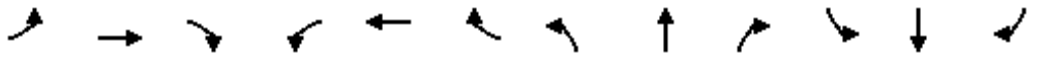
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	150	0	90	0	590	120	50	550	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor					1.00	1.00		0.95		1.00	0.95	
Frt					1.00	0.85		0.97		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1770	1583		3450		1770	3539	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1770	1583		3450		1770	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	158	0	95	0	621	126	53	579	0
RTOR Reduction (vph)	0	0	0	0	0	83	0	6	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	158	12	0	741	0	53	579	0
Turn Type				Split	NA	Perm		NA		Prot	NA	
Protected Phases				8	8			2		1	6	
Permitted Phases						8						
Actuated Green, G (s)					14.7	14.7		86.2		6.7	96.4	
Effective Green, g (s)					14.7	14.7		87.1		6.2	97.3	
Actuated g/C Ratio					0.12	0.12		0.73		0.05	0.81	
Clearance Time (s)					4.0	4.0		4.9		3.5	4.9	
Vehicle Extension (s)					1.5	1.5		1.5		1.5	1.5	
Lane Grp Cap (vph)					216	193		2504		91	2869	
v/s Ratio Prot					c0.09			c0.21		c0.03	0.16	
v/s Ratio Perm						0.01						
v/c Ratio					0.73	0.06		0.30		0.58	0.20	
Uniform Delay, d1					50.7	46.5		5.7		55.6	2.6	
Progression Factor					0.78	0.83		0.48		0.81	1.05	
Incremental Delay, d2					10.0	0.0		0.2		4.7	0.1	
Delay (s)					49.4	38.7		3.0		49.8	2.8	
Level of Service					D	D		A		D	A	
Approach Delay (s)		0.0			45.4			3.0			6.8	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	41.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	20	60	100	20	110	80	730	150	90	580	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	21	63	105	21	116	84	768	158	95	611	32
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	51	85	158	32	166	98	2273	1011	110	2220	116
Arrive On Green	0.06	0.06	0.06	0.11	0.11	0.11	0.11	1.00	1.00	0.12	1.00	1.00
Sat Flow, veh/h	909	909	1532	1490	298	1557	1774	3539	1573	1774	3420	179
Grp Volume(v), veh/h	42	0	63	126	0	116	84	768	158	95	316	327
Grp Sat Flow(s),veh/h/ln	1817	0	1532	1788	0	1557	1774	1770	1573	1774	1770	1830
Q Serve(g_s), s	2.7	0.0	4.9	8.1	0.0	8.6	5.6	0.0	0.0	6.3	0.0	0.0
Cycle Q Clear(g_c), s	2.7	0.0	4.9	8.1	0.0	8.6	5.6	0.0	0.0	6.3	0.0	0.0
Prop In Lane	0.50		1.00	0.83		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	101	0	85	190	0	166	98	2273	1011	110	1149	1188
V/C Ratio(X)	0.41	0.00	0.74	0.66	0.00	0.70	0.85	0.34	0.16	0.86	0.27	0.28
Avail Cap(c_a), veh/h	136	0	115	402	0	350	281	2273	1011	163	1149	1188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.82	0.82	0.82	0.98	0.98	0.98
Uniform Delay (d), s/veh	54.8	0.0	55.8	51.5	0.0	51.8	52.9	0.0	0.0	52.0	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	9.3	1.5	0.0	2.0	6.4	0.3	0.3	18.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.0	2.3	4.1	0.0	3.8	2.9	0.1	0.1	3.6	0.2	0.2
LnGrp Delay(d),s/veh	55.8	0.0	65.1	53.0	0.0	53.8	59.2	0.3	0.3	70.0	0.6	0.6
LnGrp LOS	E		E	D		D	E	A	A	E	A	A
Approach Vol, veh/h		105			242			1010			738	
Approach Delay, s/veh		61.3			53.4			5.2			9.5	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.5	81.1		10.7	10.7	81.9		16.8
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	11.5	56.1		9.0	19.5	48.1		27.0
Max Q Clear Time (g_c+I1), s	8.3	2.0		6.9	7.6	2.0		10.6
Green Ext Time (p_c), s	0.0	5.0		0.0	0.0	4.9		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	15.1
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	20	20	60	20	150	30	800	40	130	590	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	21	9	63	21	7	32	842	40	137	621	50
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	138	59	158	46	174	33	2405	114	157	2551	205
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.04	1.00	1.00	0.09	0.77	0.76
Sat Flow, veh/h	1356	1229	527	938	405	1550	1774	3440	163	1774	3318	267
Grp Volume(v), veh/h	42	0	30	84	0	7	32	433	449	137	331	340
Grp Sat Flow(s),veh/h/ln	1356	0	1756	1342	0	1550	1774	1770	1833	1774	1770	1815
Q Serve(g_s), s	3.6	0.0	1.9	5.8	0.0	0.5	2.2	0.0	0.0	9.2	6.4	6.4
Cycle Q Clear(g_c), s	11.2	0.0	1.9	7.6	0.0	0.5	2.2	0.0	0.0	9.2	6.4	6.4
Prop In Lane	1.00		0.30	0.75		1.00	1.00		0.09	1.00		0.15
Lane Grp Cap(c), veh/h	127	0	198	204	0	174	33	1237	1282	157	1361	1395
V/C Ratio(X)	0.33	0.00	0.15	0.41	0.00	0.04	0.97	0.35	0.35	0.87	0.24	0.24
Avail Cap(c_a), veh/h	234	0	337	318	0	297	118	1237	1282	281	1361	1395
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.94	0.94	0.94	0.69	0.69	0.69
Uniform Delay (d), s/veh	56.0	0.0	48.1	51.0	0.0	47.5	57.7	0.0	0.0	54.0	3.9	4.0
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.5	0.0	0.0	36.1	0.7	0.7	4.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.0	0.9	2.7	0.0	0.2	1.4	0.3	0.3	4.7	3.1	3.3
LnGrp Delay(d),s/veh	56.5	0.0	48.2	51.5	0.0	47.5	93.9	0.7	0.7	58.2	4.2	4.3
LnGrp LOS	E		D	D		D	F	A	A	E	A	A
Approach Vol, veh/h		72			91			914			808	
Approach Delay, s/veh		53.1			51.2			4.0			13.4	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.6	87.9		17.5	6.2	96.3		17.5
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	19.5	65.1		23.0	8.5	76.1		23.0
Max Q Clear Time (g_c+I1), s	11.2	2.0		13.2	4.2	8.4		9.6
Green Ext Time (p_c), s	0.1	4.8		0.3	0.0	4.8		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	310	110	410	350	120	400
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863
Adj Flow Rate, veh/h	326	89	432	368	126	148
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1540	414	449	1574	156	534
Arrive On Green	0.56	0.55	0.25	0.85	0.09	0.08
Sat Flow, veh/h	2850	741	1774	1863	1774	1583
Grp Volume(v), veh/h	207	208	432	368	126	148
Grp Sat Flow(s),veh/h/ln	1770	1729	1774	1863	1774	1583
Q Serve(g_s), s	7.0	7.3	28.8	4.6	8.4	8.2
Cycle Q Clear(g_c), s	7.0	7.3	28.8	4.6	8.4	8.2
Prop In Lane		0.43	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	988	966	449	1574	156	534
V/C Ratio(X)	0.21	0.21	0.96	0.23	0.81	0.28
Avail Cap(c_a), veh/h	988	966	458	1574	340	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.93	0.93	0.96	0.96
Uniform Delay (d), s/veh	13.2	13.4	44.2	1.8	53.7	29.1
Incr Delay (d2), s/veh	0.5	0.5	30.3	0.3	3.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.5	3.6	17.9	2.4	4.2	3.6
LnGrp Delay(d),s/veh	13.7	14.0	74.6	2.1	57.2	29.2
LnGrp LOS	B	B	E	A	E	C
Approach Vol, veh/h	415			800	274	
Approach Delay, s/veh	13.8			41.2	42.1	
Approach LOS	B			D	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	34.4	71.0				105.4		14.6
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	31.5	52.7				87.7		23.0
Max Q Clear Time (g_c+I1), s	30.8	9.3				6.6		10.4
Green Ext Time (p_c), s	0.0	8.3				8.7		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	33.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	740	330	210	520	20	320	10	250	20	20	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	779	296	221	547	19	345	0	71	21	21	0
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	1970	742	241	3378	117	509	0	422	80	84	0
Arrive On Green	0.01	0.54	0.53	0.14	0.67	0.66	0.14	0.00	0.13	0.05	0.05	0.00
Sat Flow, veh/h	1774	3634	1369	1774	5046	175	3548	0	1565	1774	1863	0
Grp Volume(v), veh/h	21	726	349	221	367	199	345	0	71	21	21	0
Grp Sat Flow(s),veh/h/ln	1774	1695	1612	1774	1695	1830	1774	0	1565	1774	1863	0
Q Serve(g_s), s	1.0	15.0	15.4	14.8	4.8	4.9	11.1	0.0	4.2	1.4	1.3	0.0
Cycle Q Clear(g_c), s	1.0	15.0	15.4	14.8	4.8	4.9	11.1	0.0	4.2	1.4	1.3	0.0
Prop In Lane	1.00		0.85	1.00		0.10	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	15	1838	874	241	2270	1225	509	0	422	80	84	0
V/C Ratio(X)	1.39	0.40	0.40	0.92	0.16	0.16	0.68	0.00	0.17	0.26	0.25	0.00
Avail Cap(c_a), veh/h	148	1838	874	296	2270	1225	976	0	627	237	248	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	0.93	0.93	0.93	0.95	0.00	0.95	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.5	16.0	16.4	51.2	7.3	7.4	48.8	0.0	33.7	55.4	55.3	0.0
Incr Delay (d2), s/veh	197.3	0.5	1.0	24.6	0.1	0.3	2.1	0.0	0.2	0.6	0.6	0.0
Initial Q Delay(d3),s/veh	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	7.1	7.1	8.9	2.3	2.5	5.6	0.0	1.8	0.7	0.7	0.0
LnGrp Delay(d),s/veh	278.1	16.5	17.5	75.8	7.5	7.6	50.8	0.0	33.9	56.0	55.9	0.0
LnGrp LOS	F	B	B	E	A	A	D		C	E	E	
Approach Vol, veh/h		1096			787			416			42	
Approach Delay, s/veh		21.8			26.7			48.0			55.9	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.3	69.0		9.4	5.0	84.3		21.2
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	20.5	33.7		15.1	10.5	43.7		32.1
Max Q Clear Time (g_c+I1), s	16.8	17.4		3.4	3.0	6.9		13.1
Green Ext Time (p_c), s	0.1	12.1		0.0	0.0	21.5		2.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.7
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	980	10	20	650	50	10	0	10	40	10	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	53	1032	11	21	684	53	11	0	11	42	11	137
Adj No. of Lanes	1	3	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	439	2423	26	348	2248	173	86	0	86	264	0	232
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.10	0.00	0.10	0.15	0.15	0.15
Sat Flow, veh/h	716	5187	55	538	4812	370	829	0	829	1774	0	1564
Grp Volume(v), veh/h	53	674	369	21	481	256	22	0	0	42	0	137
Grp Sat Flow(s),veh/h/ln	716	1695	1852	538	1695	1793	1658	0	0	1774	0	1564
Q Serve(g_s), s	2.1	5.7	5.7	1.2	3.8	3.8	0.5	0.0	0.0	0.9	0.0	3.5
Cycle Q Clear(g_c), s	5.9	5.7	5.7	6.8	3.8	3.8	0.5	0.0	0.0	0.9	0.0	3.5
Prop In Lane	1.00		0.03	1.00		0.21	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	439	1583	865	348	1583	837	172	0	0	264	0	232
V/C Ratio(X)	0.12	0.43	0.43	0.06	0.30	0.31	0.13	0.00	0.00	0.16	0.00	0.59
Avail Cap(c_a), veh/h	557	2142	1170	437	2142	1133	970	0	0	1038	0	915
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.9	7.6	7.6	9.8	7.1	7.1	17.4	0.0	0.0	15.9	0.0	17.0
Incr Delay (d2), s/veh	0.1	0.2	0.3	0.1	0.1	0.2	0.3	0.0	0.0	0.3	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	2.7	2.9	0.2	1.8	1.9	0.2	0.0	0.0	0.5	0.0	1.6
LnGrp Delay(d),s/veh	9.0	7.8	7.9	9.9	7.2	7.3	17.7	0.0	0.0	16.1	0.0	19.4
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		1096			758			22			179	
Approach Delay, s/veh		7.9			7.3			17.7			18.6	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		8.4		24.0		10.3		24.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		27.0		25.0		27.0
Max Q Clear Time (g_c+I1), s		2.5		7.9		5.5		8.8
Green Ext Time (p_c), s		0.1		11.5		0.5		11.1

Intersection Summary	
HCM 2010 Ctrl Delay	8.7
HCM 2010 LOS	A

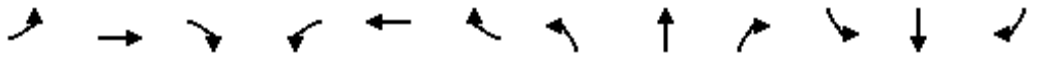
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	320	430	10	10	400	440	10	10	10	650	10	180
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	337	453	8	11	421	154	11	11	0	692	0	74
Adj No. of Lanes	1	3	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	361	3591	63	490	1614	714	30	30	0	566	0	251
Arrive On Green	0.20	0.70	0.69	0.46	0.46	0.46	0.03	0.03	0.00	0.16	0.00	0.16
Sat Flow, veh/h	1774	5146	91	922	3539	1566	909	909	0	3548	0	1574
Grp Volume(v), veh/h	337	298	163	11	421	154	22	0	0	692	0	74
Grp Sat Flow(s),veh/h/ln	1774	1695	1846	922	1770	1566	1817	0	0	1774	0	1574
Q Serve(g_s), s	19.4	3.0	3.0	0.7	7.6	6.2	1.2	0.0	0.0	16.6	0.0	4.3
Cycle Q Clear(g_c), s	19.4	3.0	3.0	0.7	7.6	6.2	1.2	0.0	0.0	16.6	0.0	4.3
Prop In Lane	1.00		0.05	1.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	361	2366	1288	490	1614	714	60	0	0	566	0	251
V/C Ratio(X)	0.93	0.13	0.13	0.02	0.26	0.22	0.37	0.00	0.00	1.22	0.00	0.29
Avail Cap(c_a), veh/h	529	2366	1288	490	1614	714	157	0	0	566	0	251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.97	0.97	0.97	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.7	5.2	5.2	15.6	17.5	17.1	49.2	0.0	0.0	43.7	0.0	38.5
Incr Delay (d2), s/veh	15.0	0.1	0.2	0.1	0.4	0.7	1.4	0.0	0.0	115.0	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.0	1.4	1.6	0.2	3.8	2.8	0.6	0.0	0.0	17.2	0.0	1.9
LnGrp Delay(d),s/veh	55.7	5.3	5.4	15.7	17.8	17.7	50.6	0.0	0.0	158.7	0.0	39.2
LnGrp LOS	E	A	A	B	B	B	D			F		D
Approach Vol, veh/h		798			586			22			766	
Approach Delay, s/veh		26.6			17.8			50.6			147.2	
Approach LOS		C			B			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		76.6		20.0	25.2	51.4		7.4
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		4.6
Max Green Setting (Gmax), s		65.7		16.0	31.5	30.7		8.4
Max Q Clear Time (g_c+I1), s		5.0		18.6	21.4	9.6		3.2
Green Ext Time (p_c), s		12.7		0.0	0.2	9.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	67.0
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.



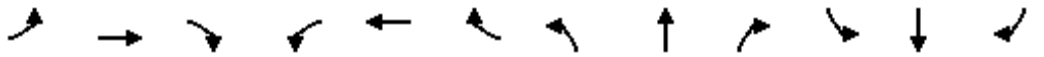
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	50	90	70	50	70	70	1450	80	40	1310	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	32	53	95	74	53	74	74	1526	84	42	1379	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	78	124	186	140	101	117	93	3037	167	53	3037	70
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.11	1.00	1.00	0.01	0.20	0.20
Sat Flow, veh/h	187	551	824	439	447	516	1714	4761	262	1714	4938	115
Grp Volume(v), veh/h	180	0	0	201	0	0	74	1050	560	42	915	496
Grp Sat Flow(s),veh/h/ln	1562	0	0	1402	0	0	1714	1638	1747	1714	1638	1777
Q Serve(g_s), s	0.0	0.0	0.0	3.9	0.0	0.0	5.1	0.0	0.0	2.9	29.4	29.4
Cycle Q Clear(g_c), s	11.7	0.0	0.0	15.6	0.0	0.0	5.1	0.0	0.0	2.9	29.4	29.4
Prop In Lane	0.18		0.53	0.37		0.37	1.00		0.15	1.00		0.06
Lane Grp Cap(c), veh/h	388	0	0	358	0	0	93	2090	1115	53	2014	1093
V/C Ratio(X)	0.46	0.00	0.00	0.56	0.00	0.00	0.80	0.50	0.50	0.79	0.45	0.45
Avail Cap(c_a), veh/h	459	0	0	424	0	0	150	2090	1115	107	2014	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.86	0.86	0.86	0.86	0.86	0.86
Uniform Delay (d), s/veh	40.5	0.0	0.0	41.8	0.0	0.0	52.9	0.0	0.0	59.0	30.1	30.1
Incr Delay (d2), s/veh	0.9	0.0	0.0	1.4	0.0	0.0	12.5	0.7	1.4	19.6	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.3	0.0	0.0	6.2	0.0	0.0	2.7	0.2	0.4	1.7	13.6	14.9
LnGrp Delay(d),s/veh	41.3	0.0	0.0	43.1	0.0	0.0	65.3	0.7	1.4	78.6	30.8	31.3
LnGrp LOS	D			D			E	A	A	E	C	C
Approach Vol, veh/h		180			201			1684			1453	
Approach Delay, s/veh		41.3			43.1			3.8			32.3	
Approach LOS		D			D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	81.5		31.3	10.0	78.7		31.3
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	67.1		* 33	10.5	64.1		* 33
Max Q Clear Time (g_c+I1), s	4.9	2.0		13.7	7.1	31.4		17.6
Green Ext Time (p_c), s	0.0	40.7		2.4	0.0	25.2		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	19.8
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	10	20	20	10	70	20	1640	20	80	1610	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	32	11	21	21	11	74	21	1726	21	84	1695	53
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	39	48	56	27	108	25	3639	44	105	3788	118
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.03	1.00	1.00	0.06	0.77	0.77
Sat Flow, veh/h	593	391	481	200	267	1080	1714	5004	61	1714	4896	153
Grp Volume(v), veh/h	64	0	0	106	0	0	21	1130	617	84	1134	614
Grp Sat Flow(s),veh/h/ln	1466	0	0	1547	0	0	1714	1638	1789	1714	1638	1773
Q Serve(g_s), s	0.0	0.0	0.0	3.1	0.0	0.0	1.5	0.0	0.0	5.8	14.4	14.4
Cycle Q Clear(g_c), s	4.7	0.0	0.0	7.8	0.0	0.0	1.5	0.0	0.0	5.8	14.4	14.4
Prop In Lane	0.50		0.33	0.20		0.70	1.00		0.03	1.00		0.09
Lane Grp Cap(c), veh/h	191	0	0	191	0	0	25	2382	1301	105	2535	1372
V/C Ratio(X)	0.33	0.00	0.00	0.56	0.00	0.00	0.84	0.47	0.47	0.80	0.45	0.45
Avail Cap(c_a), veh/h	408	0	0	421	0	0	121	2382	1301	121	2535	1372
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.33	0.33	0.33	0.66	0.66	0.66
Uniform Delay (d), s/veh	50.6	0.0	0.0	52.1	0.0	0.0	58.1	0.0	0.0	55.6	4.7	4.7
Incr Delay (d2), s/veh	1.0	0.0	0.0	2.5	0.0	0.0	21.2	0.2	0.4	19.4	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.0	0.0	0.0	3.5	0.0	0.0	0.8	0.1	0.1	3.3	6.6	7.3
LnGrp Delay(d),s/veh	51.6	0.0	0.0	54.6	0.0	0.0	79.3	0.2	0.4	75.0	5.1	5.4
LnGrp LOS	D			D			E	A	A	E	A	A
Approach Vol, veh/h		64			106			1768			1832	
Approach Delay, s/veh		51.6			54.6			1.2			8.4	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	92.6		16.6	5.2	98.2		16.6
Change Period (Y+Rc), s	3.5	5.3		4.6	3.5	5.3		4.6
Max Green Setting (Gmax), s	8.5	67.7		30.4	8.5	67.7		30.4
Max Q Clear Time (g_c+I1), s	7.8	2.0		6.7	3.5	16.4		9.8
Green Ext Time (p_c), s	0.0	51.0		1.0	0.0	41.9		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	7.1
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	40	20	160	50	140	20	1360	150	110	1210	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	63	42	21	168	53	147	21	1432	158	116	1274	42
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	137	87	44	299	71	197	25	1860	205	317	2910	96
Arrive On Green	0.08	0.08	0.08	0.17	0.17	0.17	0.01	0.41	0.41	0.18	0.60	0.60
Sat Flow, veh/h	1714	1091	546	1714	408	1132	1714	4484	495	1714	4883	161
Grp Volume(v), veh/h	63	0	63	168	0	200	21	1046	544	116	855	461
Grp Sat Flow(s),veh/h/ln	1714	0	1637	1714	0	1540	1714	1638	1702	1714	1638	1768
Q Serve(g_s), s	4.5	0.0	4.7	11.5	0.0	15.8	1.6	35.1	35.2	7.6	18.3	18.3
Cycle Q Clear(g_c), s	4.5	0.0	4.7	11.5	0.0	15.8	1.6	35.1	35.2	7.6	18.3	18.3
Prop In Lane	1.00		0.33	1.00		0.74	1.00		0.29	1.00		0.09
Lane Grp Cap(c), veh/h	137	0	131	299	0	268	25	1359	706	317	1953	1054
V/C Ratio(X)	0.46	0.00	0.48	0.56	0.00	0.75	0.83	0.77	0.77	0.37	0.44	0.44
Avail Cap(c_a), veh/h	214	0	205	376	0	338	114	1359	706	317	1953	1054
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.58	0.00	0.58	0.62	0.62	0.62	0.94	0.94	0.94
Uniform Delay (d), s/veh	56.3	0.0	56.4	48.4	0.0	50.2	62.9	32.2	32.2	45.6	14.1	14.1
Incr Delay (d2), s/veh	2.4	0.0	2.7	1.0	0.0	3.9	33.3	2.7	5.0	0.7	0.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	0.0	2.2	5.5	0.0	7.0	1.0	16.3	17.5	3.6	8.4	9.2
LnGrp Delay(d),s/veh	58.6	0.0	59.1	49.3	0.0	54.1	96.2	34.9	37.2	46.3	14.8	15.4
LnGrp LOS	E		E	D		D	F	C	D	D	B	B
Approach Vol, veh/h		126			368			1611			1432	
Approach Delay, s/veh		58.9			51.9			36.5			17.5	
Approach LOS		E			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	28.6	58.0		14.2	5.4	81.2		27.2
Change Period (Y+Rc), s	4.9	* 4.9		4.0	3.5	4.9		4.9
Max Green Setting (Gmax), s	13.5	* 53		16.0	8.5	58.1		28.1
Max Q Clear Time (g_c+I1), s	9.6	37.2		6.7	3.6	20.3		17.8
Green Ext Time (p_c), s	0.2	8.8		0.3	0.0	10.4		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	31.2
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	20	20	30	20	60	20	1490	50	40	1290	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.93	0.94		0.93	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	63	21	21	32	21	63	21	1568	53	42	1358	53
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	303	172	172	106	76	171	25	3163	107	53	3223	126
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.01	0.65	0.65	0.06	1.00	1.00
Sat Flow, veh/h	1202	797	797	314	350	789	1714	4880	165	1714	4852	189
Grp Volume(v), veh/h	63	0	42	116	0	0	21	1052	569	42	917	494
Grp Sat Flow(s),veh/h/ln	1202	0	1594	1453	0	0	1714	1638	1769	1714	1638	1765
Q Serve(g_s), s	0.0	0.0	2.5	2.6	0.0	0.0	1.5	20.0	20.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	6.7	0.0	2.5	7.7	0.0	0.0	1.5	20.0	20.0	2.9	0.0	0.0
Prop In Lane	1.00		0.50	0.28		0.54	1.00		0.09	1.00		0.11
Lane Grp Cap(c), veh/h	303	0	344	352	0	0	25	2123	1147	53	2176	1172
V/C Ratio(X)	0.21	0.00	0.12	0.33	0.00	0.00	0.84	0.50	0.50	0.79	0.42	0.42
Avail Cap(c_a), veh/h	352	0	409	410	0	0	107	2123	1147	107	2176	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.76	0.76	0.76	0.81	0.81	0.81
Uniform Delay (d), s/veh	39.5	0.0	37.9	39.8	0.0	0.0	59.0	10.9	11.0	55.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.5	0.0	0.0	40.1	0.6	1.2	19.2	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	0.0	1.1	3.3	0.0	0.0	1.0	9.1	10.0	1.7	0.1	0.3
LnGrp Delay(d),s/veh	39.8	0.0	38.0	40.4	0.0	0.0	99.0	11.6	12.1	75.1	0.5	0.9
LnGrp LOS	D		D	D			F	B	B	E	A	A
Approach Vol, veh/h		105			116			1642			1453	
Approach Delay, s/veh		39.1			40.4			12.9			2.8	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	82.7		30.1	5.2	84.6		30.1
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	69.1		* 31	7.5	69.1		* 31
Max Q Clear Time (g_c+I1), s	4.9	22.0		8.7	3.5	2.0		9.7
Green Ext Time (p_c), s	0.0	33.2		1.2	0.0	41.6		1.2

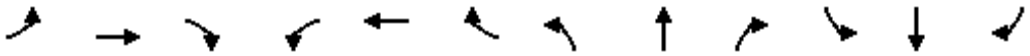
Intersection Summary	
HCM 2010 Ctrl Delay	10.3
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	70	80	1260	70	110	1280
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2		4.9		3.5	4.9
Lane Util. Factor	1.00		0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.93		0.99		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1612		4875		1710	4914
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1612		4875		1710	4914
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	74	84	1326	74	116	1347
RTOR Reduction (vph)	40	0	4	0	0	0
Lane Group Flow (vph)	118	0	1396	0	116	1347
Confl. Peds. (#/hr)		9				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Prot		NA		Prot	NA
Protected Phases	4		2 9		1	6
Permitted Phases						
Actuated Green, G (s)	14.0		70.1		13.8	68.7
Effective Green, g (s)	14.0		70.1		13.8	68.7
Actuated g/C Ratio	0.12		0.58		0.12	0.57
Clearance Time (s)	4.2				3.5	4.9
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	188		2847		196	2813
v/s Ratio Prot	c0.07		c0.29		c0.07	0.27
v/s Ratio Perm						
v/c Ratio	0.63		0.49		0.59	0.48
Uniform Delay, d1	50.5		14.5		50.4	15.1
Progression Factor	1.00		0.04		1.00	1.00
Incremental Delay, d2	6.4		0.5		4.7	0.6
Delay (s)	57.0		1.1		55.2	15.7
Level of Service	E		A		E	B
Approach Delay (s)	57.0		1.1			18.8
Approach LOS	E		A			B

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	0	50	10	10	10	30	1300	10	20	1260	70
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.93		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1710	1530		1710	1665		1710	4906		1710	4865	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1710	1530		1710	1665		1710	4906		1710	4865	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	21	0	53	11	11	11	32	1368	11	21	1326	74
RTOR Reduction (vph)	0	50	0	0	10	0	0	1	0	0	3	0
Lane Group Flow (vph)	21	3	0	11	12	0	32	1378	0	21	1397	0
Confl. Peds. (#/hr)							5		7	7		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6 10	
Permitted Phases												
Actuated Green, G (s)	5.7	5.7		14.0	14.0		5.3	58.9		13.8	78.6	
Effective Green, g (s)	5.7	5.7		14.0	14.0		5.3	58.9		13.8	78.6	
Actuated g/C Ratio	0.05	0.05		0.12	0.12		0.04	0.49		0.12	0.65	
Clearance Time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	81	72		199	194		75	2408		196	3186	
v/s Ratio Prot	c0.01	0.00		0.01	c0.01		c0.02	c0.28		0.01	c0.29	
v/s Ratio Perm												
v/c Ratio	0.26	0.03		0.06	0.06		0.43	0.57		0.11	0.44	
Uniform Delay, d1	55.1	54.5		47.1	47.2		55.9	21.6		47.6	10.0	
Progression Factor	1.00	1.00		1.00	1.00		1.46	0.27		1.70	0.07	
Incremental Delay, d2	1.7	0.2		0.1	0.1		3.3	0.8		0.2	0.4	
Delay (s)	56.8	54.7		47.2	47.3		84.7	6.7		81.3	1.1	
Level of Service	E	D		D	D		F	A		F	A	
Approach Delay (s)		55.3			47.3			8.5			2.3	
Approach LOS		E			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	42.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	120	60	140	170	80	70	1280	160	90	1210	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	63	126	63	147	179	84	74	1347	168	95	1274	53
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	81	326	153	173	455	204	94	2426	303	116	2716	113
Arrive On Green	0.05	0.15	0.15	0.10	0.20	0.20	0.02	0.18	0.18	0.14	1.00	1.00
Sat Flow, veh/h	1714	2242	1056	1714	2285	1025	1714	4422	552	1714	4837	201
Grp Volume(v), veh/h	63	94	95	147	132	131	74	998	517	95	863	464
Grp Sat Flow(s),veh/h/ln	1714	1710	1588	1714	1710	1601	1714	1638	1698	1714	1638	1763
Q Serve(g_s), s	4.4	6.0	6.5	10.1	8.0	8.6	5.2	33.3	33.3	6.5	0.0	0.0
Cycle Q Clear(g_c), s	4.4	6.0	6.5	10.1	8.0	8.6	5.2	33.3	33.3	6.5	0.0	0.0
Prop In Lane	1.00		0.66	1.00		0.64	1.00		0.32	1.00		0.11
Lane Grp Cap(c), veh/h	81	249	231	173	341	319	94	1797	931	116	1840	990
V/C Ratio(X)	0.78	0.38	0.41	0.85	0.39	0.41	0.79	0.56	0.56	0.82	0.47	0.47
Avail Cap(c_a), veh/h	207	476	442	207	476	446	121	1797	931	121	1840	990
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.85	0.85	0.85	0.67	0.67	0.67	0.86	0.86	0.86	0.91	0.91	0.91
Uniform Delay (d), s/veh	56.6	46.4	46.6	53.1	41.7	41.9	58.2	35.8	35.8	51.2	0.0	0.0
Incr Delay (d2), s/veh	13.0	0.8	1.0	17.2	0.5	0.6	19.8	1.1	2.1	30.7	0.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.4	2.9	2.9	5.6	3.9	3.8	3.0	15.4	16.2	4.0	0.2	0.4
LnGrp Delay(d),s/veh	69.6	47.2	47.6	70.3	42.2	42.5	78.0	36.9	37.9	81.8	0.8	1.4
LnGrp LOS	E	D	D	E	D	D	E	D	D	F	A	A
Approach Vol, veh/h		252			410			1589			1422	
Approach Delay, s/veh		52.9			52.3			39.1			6.4	
Approach LOS		D			D			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	70.7	15.6	22.0	10.1	72.3	9.1	28.5
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	8.5	47.1	14.5	33.4	8.5	47.1	14.5	33.4
Max Q Clear Time (g_c+I1), s	8.5	35.3	12.1	8.5	7.2	2.0	6.4	10.6
Green Ext Time (p_c), s	0.0	10.3	0.1	2.6	0.0	29.9	0.1	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	28.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	50	40	40	40	40	70	1330	40	50	1260	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	232	53	42	42	42	42	74	1400	42	53	1326	168
Adj No. of Lanes	0	1	1	0	1	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	209	35	405	40	37	19	93	2867	86	67	2801	856
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.11	1.00	1.00	0.08	1.00	1.00
Sat Flow, veh/h	561	128	1472	0	135	68	1714	4900	147	1714	4914	1502
Grp Volume(v), veh/h	285	0	42	126	0	0	74	936	506	53	1326	168
Grp Sat Flow(s),veh/h/ln	690	0	1472	203	0	0	1714	1638	1771	1714	1638	1502
Q Serve(g_s), s	0.0	0.0	2.6	0.0	0.0	0.0	5.1	0.0	0.0	3.6	0.0	0.0
Cycle Q Clear(g_c), s	33.0	0.0	2.6	33.0	0.0	0.0	5.1	0.0	0.0	3.6	0.0	0.0
Prop In Lane	0.81		1.00	0.33		0.33	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	244	0	405	96	0	0	93	1917	1036	67	2801	856
V/C Ratio(X)	1.17	0.00	0.10	1.32	0.00	0.00	0.80	0.49	0.49	0.79	0.47	0.20
Avail Cap(c_a), veh/h	244	0	405	96	0	0	179	1917	1036	121	2801	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.81	0.81	0.81	0.90	0.90	0.90
Uniform Delay (d), s/veh	47.2	0.0	32.5	41.9	0.0	0.0	52.8	0.0	0.0	54.8	0.0	0.0
Incr Delay (d2), s/veh	110.5	0.0	0.1	198.2	0.0	0.0	11.8	0.7	1.3	16.6	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	15.6	0.0	1.1	8.4	0.0	0.0	2.7	0.2	0.4	2.0	0.1	0.1
LnGrp Delay(d),s/veh	157.7	0.0	32.6	240.1	0.0	0.0	64.7	0.7	1.3	71.5	0.5	0.5
LnGrp LOS	F		C	F			E	A	A	E	A	A
Approach Vol, veh/h		327			126			1516			1547	
Approach Delay, s/veh		141.6			240.1			4.1			2.9	
Approach LOS		F			F			A			A	

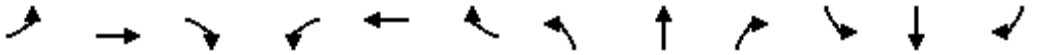
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	74.8		37.0	10.0	73.0		37.0
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	8.5	66.4		33.0	12.5	62.4		33.0
Max Q Clear Time (g_c+I1), s	5.6	2.0		35.0	7.1	2.0		35.0
Green Ext Time (p_c), s	0.0	38.4		0.0	0.1	37.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	270	40	20	340	150	30	370	50	100	340	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	284	0	21	358	158	32	389	53	105	358	42
Adj No. of Lanes	0	2	1	0	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	445	438	48	576	266	33	1737	235	122	1931	225
Arrive On Green	0.28	0.28	0.00	0.28	0.28	0.27	0.02	0.55	0.55	0.07	0.60	0.60
Sat Flow, veh/h	425	1610	1583	57	2083	960	1774	3132	424	1774	3193	372
Grp Volume(v), veh/h	74	284	0	287	0	250	32	219	223	105	197	203
Grp Sat Flow(s),veh/h/ln	425	1610	1583	1582	0	1518	1774	1770	1786	1774	1770	1796
Q Serve(g_s), s	9.5	18.6	0.0	2.4	0.0	17.2	2.2	7.5	7.7	7.0	6.0	6.1
Cycle Q Clear(g_c), s	26.7	18.6	0.0	21.0	0.0	17.2	2.2	7.5	7.7	7.0	6.0	6.1
Prop In Lane	1.00		1.00	0.07		0.63	1.00		0.24	1.00		0.21
Lane Grp Cap(c), veh/h	178	445	438	470	0	420	33	981	991	122	1070	1086
V/C Ratio(X)	0.42	0.64	0.00	0.61	0.00	0.59	0.97	0.22	0.23	0.86	0.18	0.19
Avail Cap(c_a), veh/h	345	751	739	806	0	708	148	981	991	148	1070	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.00	0.88	0.00	0.88	0.95	0.95	0.95	0.83	0.83	0.83
Uniform Delay (d), s/veh	49.2	38.1	0.0	37.6	0.0	37.8	58.8	13.6	13.7	55.3	10.5	10.6
Incr Delay (d2), s/veh	0.5	0.5	0.0	0.4	0.0	0.4	36.2	0.5	0.5	25.0	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.3	8.3	0.0	8.6	0.0	7.2	1.4	3.8	3.9	4.3	3.0	3.1
LnGrp Delay(d),s/veh	49.6	38.6	0.0	38.0	0.0	38.3	95.1	14.1	14.2	80.3	10.9	10.9
LnGrp LOS	D	D		D		D	F	B	B	F	B	B
Approach Vol, veh/h		358			537			474			505	
Approach Delay, s/veh		40.9			38.1			19.6			25.3	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.3	70.5		37.2	6.2	76.6		37.2
Change Period (Y+Rc), s	3.5	4.9		4.9	3.5	4.9		4.9
Max Green Setting (Gmax), s	10.5	41.1		55.1	10.5	41.1		55.1
Max Q Clear Time (g_c+I1), s	9.0	9.7		28.7	4.2	8.1		23.0
Green Ext Time (p_c), s	0.0	2.2		3.6	0.0	2.2		3.7

Intersection Summary	
HCM 2010 Ctrl Delay	30.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	40	70	110	70	170	60	1390	90	100	1090	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1824	1863	1863	1863	1863	1863	1863	1863	1824
Adj Flow Rate, veh/h	32	42	74	116	74	179	63	1463	95	105	1147	63
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	34	44	44	144	76	412	119	2009	897	128	2758	151
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.07	0.57	0.57	0.07	0.56	0.56
Sat Flow, veh/h	0	168	168	380	292	1576	1774	3539	1581	1774	4932	271
Grp Volume(v), veh/h	148	0	0	190	0	179	63	1463	95	105	788	422
Grp Sat Flow(s),veh/h/ln	335	0	0	672	0	1576	1774	1770	1581	1774	1695	1813
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	12.3	4.5	39.6	3.6	7.6	17.4	17.4
Cycle Q Clear(g_c), s	34.0	0.0	0.0	34.0	0.0	12.3	4.5	39.6	3.6	7.6	17.4	17.4
Prop In Lane	0.22		0.50	0.61		1.00	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	121	0	0	220	0	412	119	2009	897	128	1896	1014
V/C Ratio(X)	1.22	0.00	0.00	0.86	0.00	0.43	0.53	0.73	0.11	0.82	0.42	0.42
Avail Cap(c_a), veh/h	121	0	0	220	0	412	143	2009	897	198	1896	1014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.38	0.38	0.38
Uniform Delay (d), s/veh	43.0	0.0	0.0	48.5	0.0	40.0	58.7	20.7	12.9	59.5	16.5	16.5
Incr Delay (d2), s/veh	152.1	0.0	0.0	26.7	0.0	0.3	1.4	2.4	0.2	3.2	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.5	0.0	0.0	8.4	0.0	5.4	2.2	20.0	1.6	3.8	8.2	8.8
LnGrp Delay(d),s/veh	195.1	0.0	0.0	75.3	0.0	40.3	60.0	23.1	13.2	62.6	16.7	16.9
LnGrp LOS	F			E		D	E	C	B	E	B	B
Approach Vol, veh/h		148			369			1621			1315	
Approach Delay, s/veh		195.1			58.3			23.9			20.5	
Approach LOS		F			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.9	79.1		38.0	14.0	78.0		38.0
Change Period (Y+Rc), s	3.5	5.3		4.0	5.3	* 5.3		4.0
Max Green Setting (Gmax), s	14.5	68.7		34.0	10.5	* 73		34.0
Max Q Clear Time (g_c+I1), s	9.6	41.6		36.0	6.5	19.4		36.0
Green Ext Time (p_c), s	0.0	17.8		0.0	0.1	16.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.6
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	540	60	140	630	300	160	1210	130	170	830	110
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1788	1863	1863	1788	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	189	568	14	147	663	64	168	1274	128	179	874	103
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	922	391	169	865	368	391	1843	185	206	1267	149
Arrive On Green	0.11	0.26	0.26	0.19	0.49	0.49	0.22	0.39	0.39	0.04	0.09	0.09
Sat Flow, veh/h	1774	3539	1502	1774	3539	1505	1774	4695	472	1774	4613	541
Grp Volume(v), veh/h	189	568	14	147	663	64	168	920	482	179	641	336
Grp Sat Flow(s),veh/h/ln	1774	1770	1502	1774	1770	1505	1774	1695	1777	1774	1695	1764
Q Serve(g_s), s	13.8	18.4	0.9	10.4	19.9	1.9	10.6	29.4	29.4	13.0	23.9	24.0
Cycle Q Clear(g_c), s	13.8	18.4	0.9	10.4	19.9	1.9	10.6	29.4	29.4	13.0	23.9	24.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.31
Lane Grp Cap(c), veh/h	198	922	391	169	865	368	391	1331	698	206	931	485
V/C Ratio(X)	0.96	0.62	0.04	0.87	0.77	0.17	0.43	0.69	0.69	0.87	0.69	0.69
Avail Cap(c_a), veh/h	198	988	420	217	1026	436	391	1331	698	280	931	485
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.09	0.09	0.09	0.53	0.53	0.53	0.93	0.93	0.93	0.62	0.62	0.62
Uniform Delay (d), s/veh	57.4	42.4	35.9	51.8	30.2	9.3	43.7	32.9	32.9	61.5	53.7	53.8
Incr Delay (d2), s/veh	10.5	0.1	0.0	12.3	1.9	0.2	0.3	2.8	5.2	10.3	2.6	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.4	9.0	0.4	5.6	9.8	0.8	5.2	14.3	15.5	7.0	11.6	12.4
LnGrp Delay(d),s/veh	67.9	42.5	35.9	64.1	32.1	9.5	43.9	35.7	38.1	71.8	56.3	58.8
LnGrp LOS	E	D	D	E	C	A	D	D	D	E	E	E
Approach Vol, veh/h		771			874			1570			1156	
Approach Delay, s/veh		48.6			35.8			37.3			59.4	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	56.3	18.0	37.1	33.9	41.0	15.9	39.2
Change Period (Y+Rc), s	3.5	5.3	3.5	5.3	5.3	* 5.3	3.5	5.3
Max Green Setting (Gmax), s	20.5	39.7	14.5	37.7	24.5	* 36	15.9	36.3
Max Q Clear Time (g_c+I1), s	15.0	31.4	15.8	21.9	12.6	26.0	12.4	20.4
Green Ext Time (p_c), s	0.1	6.3	0.0	9.8	5.1	5.5	0.0	9.8

Intersection Summary	
HCM 2010 Ctrl Delay	44.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

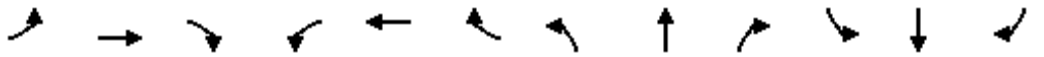
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	440	60	100	550	190	150	1500	130	210	1190	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1824	1863	1863	1824	1863	1863	1824	1863	1863	1863
Adj Flow Rate, veh/h	116	463	63	105	579	200	158	1579	137	221	1253	126
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	833	113	129	644	222	190	1910	166	245	1481	656
Arrive On Green	0.08	0.26	0.26	0.02	0.08	0.08	0.11	0.40	0.40	0.14	0.42	0.42
Sat Flow, veh/h	1774	3257	441	1774	2580	889	1774	4765	413	1774	3539	1567
Grp Volume(v), veh/h	116	261	265	105	397	382	158	1123	593	221	1253	126
Grp Sat Flow(s),veh/h/ln	1774	1840	1858	1774	1770	1700	1774	1695	1788	1774	1770	1567
Q Serve(g_s), s	8.4	16.0	16.1	7.7	28.9	29.0	11.4	38.6	38.6	15.9	41.4	4.9
Cycle Q Clear(g_c), s	8.4	16.0	16.1	7.7	28.9	29.0	11.4	38.6	38.6	15.9	41.4	4.9
Prop In Lane	1.00		0.24	1.00		0.52	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	140	471	475	129	442	424	190	1359	717	245	1481	656
V/C Ratio(X)	0.83	0.55	0.56	0.81	0.90	0.90	0.83	0.83	0.83	0.90	0.85	0.19
Avail Cap(c_a), veh/h	171	504	509	135	449	431	190	1359	717	280	1481	656
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.83	0.83	0.83	0.40	0.40	0.40	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.0	41.9	42.0	62.6	58.0	58.0	56.9	34.9	34.9	55.1	34.0	13.4
Incr Delay (d2), s/veh	19.1	1.1	1.1	23.5	17.6	18.6	11.3	2.4	4.5	25.8	6.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.9	8.2	8.4	4.6	16.3	15.9	6.2	18.4	20.0	9.6	21.4	2.2
LnGrp Delay(d),s/veh	78.2	43.0	43.1	86.1	75.6	76.6	68.2	37.3	39.4	81.0	40.2	14.0
LnGrp LOS	E	D	D	F	E	E	E	D	D	F	D	B
Approach Vol, veh/h		642			884			1874			1600	
Approach Delay, s/veh		49.4			77.3			40.6			43.7	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	57.4	12.9	38.2	19.2	59.7	13.7	37.4
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	5.3	* 5.3	3.5	4.9
Max Green Setting (Gmax), s	20.5	46.8	9.9	35.6	12.9	* 54	12.5	33.0
Max Q Clear Time (g_c+I1), s	17.9	40.6	9.7	18.1	13.4	43.4	10.4	31.0
Green Ext Time (p_c), s	0.1	5.4	0.0	7.4	0.0	8.0	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	49.2
HCM 2010 LOS	D

Notes

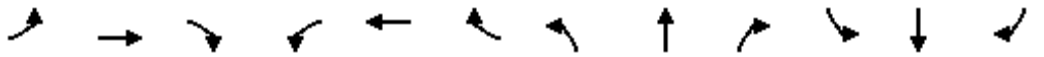
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	610	110	80	620	140	200	1280	120	140	970	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1824	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	105	642	116	84	653	147	211	1347	126	147	1021	158
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	847	153	117	791	178	212	1998	187	172	1775	274
Arrive On Green	0.10	0.38	0.38	0.13	0.55	0.55	0.12	0.42	0.42	0.10	0.40	0.40
Sat Flow, veh/h	1774	2996	540	1774	2861	643	1774	4732	443	1774	4440	686
Grp Volume(v), veh/h	105	379	379	84	404	396	211	965	508	147	779	400
Grp Sat Flow(s),veh/h/ln	1774	1770	1767	1774	1770	1735	1774	1695	1784	1774	1695	1736
Q Serve(g_s), s	7.6	24.3	24.4	5.9	24.3	24.4	15.5	29.9	29.9	10.6	23.3	23.4
Cycle Q Clear(g_c), s	7.6	24.3	24.4	5.9	24.3	24.4	15.5	29.9	29.9	10.6	23.3	23.4
Prop In Lane	1.00		0.31	1.00		0.37	1.00		0.25	1.00		0.40
Lane Grp Cap(c), veh/h	128	500	500	117	490	480	212	1432	753	172	1355	694
V/C Ratio(X)	0.82	0.76	0.76	0.72	0.82	0.83	1.00	0.67	0.67	0.86	0.57	0.58
Avail Cap(c_a), veh/h	225	573	572	184	532	522	212	1432	753	198	1355	694
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.59	0.59	0.59	0.85	0.85	0.85	0.58	0.58	0.58	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	36.7	36.7	55.3	26.4	26.5	57.2	30.3	30.3	57.8	30.4	30.4
Incr Delay (d2), s/veh	3.0	3.4	3.4	2.6	8.7	9.0	46.3	1.5	2.8	24.1	1.8	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	12.3	12.3	3.0	12.8	12.6	10.3	14.2	15.3	6.4	11.3	11.9
LnGrp Delay(d),s/veh	60.9	40.0	40.1	57.9	35.2	35.5	103.5	31.8	33.1	82.0	32.2	33.9
LnGrp LOS	E	D	D	E	D	D	F	C	C	F	C	C
Approach Vol, veh/h		863			884			1684			1326	
Approach Delay, s/veh		42.6			37.5			41.2			38.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	60.2	12.1	41.7	19.0	57.3	12.9	40.9
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	3.5	4.9
Max Green Setting (Gmax), s	14.5	42.7	13.5	42.1	15.5	41.7	16.5	39.1
Max Q Clear Time (g_c+I1), s	12.6	31.9	7.9	26.4	17.5	25.4	9.6	26.4
Green Ext Time (p_c), s	0.0	10.3	0.0	10.4	0.0	15.2	0.0	8.8

Intersection Summary	
HCM 2010 Ctrl Delay	39.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	730	30	70	650	110	40	590	130	140	390	90
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	53	768	32	74	684	116	42	621	137	147	411	95
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	1284	53	87	1162	197	360	908	765	218	908	765
Arrive On Green	0.03	0.37	0.36	0.05	0.39	0.38	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1774	3460	144	1774	3015	511	889	1863	1570	704	1863	1570
Grp Volume(v), veh/h	53	393	407	74	401	399	42	621	137	147	411	95
Grp Sat Flow(s),veh/h/ln	1774	1770	1834	1774	1770	1756	889	1863	1570	704	1863	1570
Q Serve(g_s), s	3.9	23.3	23.3	5.4	23.4	23.5	4.2	33.3	6.4	26.4	18.9	4.3
Cycle Q Clear(g_c), s	3.9	23.3	23.3	5.4	23.4	23.5	23.1	33.3	6.4	59.7	18.9	4.3
Prop In Lane	1.00		0.08	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	62	657	681	87	682	677	360	908	765	218	908	765
V/C Ratio(X)	0.86	0.60	0.60	0.85	0.59	0.59	0.12	0.68	0.18	0.67	0.45	0.12
Avail Cap(c_a), veh/h	131	657	681	164	682	677	364	917	773	222	917	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.45	0.45	0.45	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	62.4	33.0	33.1	61.3	31.7	31.9	29.5	25.6	18.7	48.6	21.9	18.2
Incr Delay (d2), s/veh	6.0	1.8	1.8	8.3	3.7	3.7	0.1	1.7	0.0	5.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.0	11.7	12.1	2.9	12.2	12.1	1.0	17.5	2.8	5.5	9.7	1.9
LnGrp Delay(d),s/veh	68.4	34.9	34.8	69.6	35.4	35.6	29.6	27.3	18.7	54.0	22.0	18.2
LnGrp LOS	E	C	C	E	D	D	C	C	B	D	C	B
Approach Vol, veh/h		853			874			800			653	
Approach Delay, s/veh		36.9			38.4			26.0			28.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		67.4	8.5	54.1		67.4	10.4	52.2
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		63.1	10.1	43.5		63.1	12.5	41.1
Max Q Clear Time (g_c+I1), s		35.3	5.9	25.5		61.7	7.4	25.3
Green Ext Time (p_c), s		4.5	0.0	5.3		0.8	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.9
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	60	110	80	910	850	80
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	63	116	84	958	895	84
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	229	204	105	2289	1596	150
Arrive On Green	0.13	0.13	0.06	0.65	0.49	0.49
Sat Flow, veh/h	1774	1583	1774	3632	3364	307
Grp Volume(v), veh/h	63	116	84	958	484	495
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1809
Q Serve(g_s), s	1.3	2.8	1.9	5.3	7.7	7.7
Cycle Q Clear(g_c), s	1.3	2.8	1.9	5.3	7.7	7.7
Prop In Lane	1.00	1.00	1.00			0.17
Lane Grp Cap(c), veh/h	229	204	105	2289	864	883
V/C Ratio(X)	0.27	0.57	0.80	0.42	0.56	0.56
Avail Cap(c_a), veh/h	1237	1104	221	2909	1058	1081
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	16.4	18.7	3.4	7.2	7.2
Incr Delay (d2), s/veh	0.6	2.5	13.2	0.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	2.6	1.3	2.6	3.8	3.8
LnGrp Delay(d),s/veh	16.4	18.9	31.8	3.6	7.8	7.8
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	179			1042	979	
Approach Delay, s/veh	18.0			5.8	7.8	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		31.0		9.2	6.4	24.6		
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0		
Max Green Setting (Gmax), s		33.0		28.0	5.0	24.0		
Max Q Clear Time (g_c+I1), s		7.3		4.8	3.9	9.7		
Green Ext Time (p_c), s		14.7		0.5	0.0	9.9		

Intersection Summary	
HCM 2010 Ctrl Delay	7.7
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	30	50	1040	50	70	830
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	32	53	1095	53	74	874
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	47	78	2333	113	80	2798
Arrive On Green	0.08	0.08	0.68	0.66	0.04	0.79
Sat Flow, veh/h	615	1018	3530	166	1774	3632
Grp Volume(v), veh/h	86	0	564	584	74	874
Grp Sat Flow(s),veh/h/ln	1652	0	1770	1833	1774	1770
Q Serve(g_s), s	3.0	0.0	9.0	9.0	2.5	4.1
Cycle Q Clear(g_c), s	3.0	0.0	9.0	9.0	2.5	4.1
Prop In Lane	0.37	0.62		0.09	1.00	
Lane Grp Cap(c), veh/h	126	0	1201	1245	80	2798
V/C Ratio(X)	0.68	0.00	0.47	0.47	0.93	0.31
Avail Cap(c_a), veh/h	468	0	1201	1245	237	2798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.57	0.57	0.87	0.87
Uniform Delay (d), s/veh	27.0	0.0	4.5	4.6	28.6	1.7
Incr Delay (d2), s/veh	2.4	0.0	0.7	0.7	14.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	0.0	4.5	4.6	1.5	2.0
LnGrp Delay(d),s/veh	29.4	0.0	5.3	5.3	42.8	2.0
LnGrp LOS	C		A	A	D	A
Approach Vol, veh/h	86		1148			948
Approach Delay, s/veh	29.4		5.3			5.2
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.7	44.7				51.4		8.6
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	22.1				34.1		17.0
Max Q Clear Time (g_c+I1), s	4.5	11.0				6.1		5.0
Green Ext Time (p_c), s	0.0	5.3				7.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	6.2
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	610	90	60	570	130	90	580	80	140	450	90
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	74	642	95	63	600	137	95	611	84	147	474	95
Adj No. of Lanes	1	2	0	1	2	0	0	2	0	0	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	877	130	123	869	198	125	843	122	158	533	112
Arrive On Green	0.05	0.28	0.28	0.07	0.30	0.30	0.10	0.10	0.10	0.15	0.15	0.14
Sat Flow, veh/h	1774	3083	455	1774	2851	649	417	2808	405	707	2391	501
Grp Volume(v), veh/h	74	368	369	63	372	365	419	0	371	380	0	336
Grp Sat Flow(s),veh/h/ln	1774	1770	1769	1774	1770	1730	1842	0	1789	1827	0	1771
Q Serve(g_s), s	5.4	24.4	24.5	4.5	24.0	24.2	28.8	0.0	26.1	26.7	0.0	24.0
Cycle Q Clear(g_c), s	5.4	24.4	24.5	4.5	24.0	24.2	28.8	0.0	26.1	26.7	0.0	24.0
Prop In Lane	1.00		0.26	1.00		0.38	0.23		0.23	0.39		0.28
Lane Grp Cap(c), veh/h	87	504	503	123	539	527	553	0	537	408	0	395
V/C Ratio(X)	0.85	0.73	0.73	0.51	0.69	0.69	0.76	0.00	0.69	0.93	0.00	0.85
Avail Cap(c_a), veh/h	123	504	503	123	539	527	553	0	537	408	0	395
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.67	0.67	0.67
Upstream Filter(I)	0.34	0.34	0.34	0.39	0.39	0.39	0.84	0.00	0.84	0.31	0.00	0.31
Uniform Delay (d), s/veh	61.3	42.0	42.1	58.4	39.8	40.0	54.0	0.0	52.8	54.3	0.0	53.3
Incr Delay (d2), s/veh	9.4	3.2	3.3	5.9	2.9	3.0	8.0	0.0	6.0	12.0	0.0	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.9	12.4	12.5	2.4	12.2	12.0	15.9	0.0	13.8	14.9	0.0	12.4
LnGrp Delay(d),s/veh	70.8	45.2	45.4	64.3	42.6	42.9	61.9	0.0	58.8	66.3	0.0	58.7
LnGrp LOS	E	D	D	E	D	D	E		E	E		E
Approach Vol, veh/h		811			800			790			716	
Approach Delay, s/veh		47.6			44.5			60.5			62.7	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		43.0	10.4	43.6		33.0	13.0	41.0
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		38.1	9.5	36.1		28.1	9.5	36.1
Max Q Clear Time (g_c+I1), s		30.8	7.4	26.2		28.7	6.5	26.5
Green Ext Time (p_c), s		1.9	0.0	3.8		0.0	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	53.5
HCM 2010 LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	60	60	1280	80	50	1100
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	63	63	1347	84	53	1158
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	91	91	2579	160	61	2928
Arrive On Green	0.11	0.11	0.76	0.76	0.03	0.83
Sat Flow, veh/h	821	821	3477	211	1774	3632
Grp Volume(v), veh/h	127	0	703	728	53	1158
Grp Sat Flow(s),veh/h/ln	1655	0	1770	1825	1774	1770
Q Serve(g_s), s	9.6	0.0	20.4	20.6	3.9	10.9
Cycle Q Clear(g_c), s	9.6	0.0	20.4	20.6	3.9	10.9
Prop In Lane	0.50	0.50		0.12	1.00	
Lane Grp Cap(c), veh/h	184	0	1348	1391	61	2928
V/C Ratio(X)	0.69	0.00	0.52	0.52	0.86	0.40
Avail Cap(c_a), veh/h	407	0	1348	1391	109	2928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.50	0.50	0.30	0.30
Uniform Delay (d), s/veh	55.6	0.0	6.1	6.2	62.4	2.9
Incr Delay (d2), s/veh	1.7	0.0	0.7	0.7	4.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	0.0	10.0	10.4	2.0	5.2
LnGrp Delay(d),s/veh	57.4	0.0	6.8	6.9	66.6	3.0
LnGrp LOS	E		A	A	E	A
Approach Vol, veh/h	127		1431			1211
Approach Delay, s/veh	57.4		6.8			5.8
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.5	103.1				111.6		18.4
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	77.1				89.1		32.0
Max Q Clear Time (g_c+I1), s	5.9	22.6				12.9		11.6
Green Ext Time (p_c), s	0.0	13.2				13.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	8.7
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	20	30	30	10	50	30	1110	50	40	770	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	21	32	32	11	53	32	1168	53	42	811	32
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	107	114	166	60	141	39	1674	76	49	1704	67
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.02	0.49	0.49	0.03	0.49	0.49
Sat Flow, veh/h	262	665	706	336	372	872	1774	3448	156	1774	3471	137
Grp Volume(v), veh/h	74	0	0	96	0	0	32	599	622	42	413	430
Grp Sat Flow(s),veh/h/ln	1634	0	0	1580	0	0	1774	1770	1835	1774	1770	1839
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.8	11.3	11.4	1.0	6.7	6.7
Cycle Q Clear(g_c), s	1.6	0.0	0.0	2.2	0.0	0.0	0.8	11.3	11.4	1.0	6.7	6.7
Prop In Lane	0.28		0.43	0.33		0.55	1.00		0.09	1.00		0.07
Lane Grp Cap(c), veh/h	371	0	0	367	0	0	39	859	891	49	869	903
V/C Ratio(X)	0.20	0.00	0.00	0.26	0.00	0.00	0.81	0.70	0.70	0.85	0.48	0.48
Avail Cap(c_a), veh/h	1137	0	0	1110	0	0	206	946	981	206	946	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	0.0	16.0	0.0	0.0	21.0	8.6	8.6	20.8	7.3	7.3
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.4	0.0	0.0	31.5	2.0	2.0	31.3	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	0.0	0.0	1.1	0.0	0.0	0.7	6.0	6.2	0.9	3.3	3.4
LnGrp Delay(d),s/veh	16.1	0.0	0.0	16.4	0.0	0.0	52.4	10.6	10.6	52.1	7.7	7.7
LnGrp LOS	B			B			D	B	B	D	A	A
Approach Vol, veh/h		74			96			1253			885	
Approach Delay, s/veh		16.1			16.4			11.7			9.8	
Approach LOS		B			B			B			A	

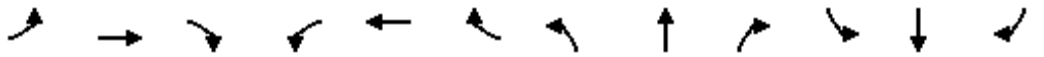
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	25.9		12.0	5.0	26.1		12.0
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	23.0		28.0	5.0	23.0		28.0
Max Q Clear Time (g_c+I1), s	3.0	13.4		3.6	2.8	8.7		4.2
Green Ext Time (p_c), s	0.0	7.5		1.0	0.0	10.4		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	11.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	10	40	70	20	40	80	1120	120	50	750	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	11	42	74	21	42	84	1179	126	53	789	11
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	66	165	221	60	73	107	1673	178	64	1766	25
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.06	0.52	0.52	0.04	0.49	0.49
Sat Flow, veh/h	134	424	1065	683	386	473	1774	3227	344	1774	3574	50
Grp Volume(v), veh/h	64	0	0	137	0	0	84	645	660	53	391	409
Grp Sat Flow(s),veh/h/ln	1623	0	0	1543	0	0	1774	1770	1802	1774	1770	1854
Q Serve(g_s), s	0.0	0.0	0.0	2.2	0.0	0.0	2.3	13.3	13.4	1.4	6.9	6.9
Cycle Q Clear(g_c), s	1.6	0.0	0.0	3.8	0.0	0.0	2.3	13.3	13.4	1.4	6.9	6.9
Prop In Lane	0.17		0.66	0.54		0.31	1.00		0.19	1.00		0.03
Lane Grp Cap(c), veh/h	339	0	0	354	0	0	107	917	934	64	875	916
V/C Ratio(X)	0.19	0.00	0.00	0.39	0.00	0.00	0.78	0.70	0.71	0.82	0.45	0.45
Avail Cap(c_a), veh/h	1010	0	0	983	0	0	331	1028	1047	184	881	923
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	0.0	0.0	18.7	0.0	0.0	22.3	8.8	8.8	23.1	7.9	7.9
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.7	0.0	0.0	11.7	1.9	1.9	22.1	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	0.0	0.0	1.7	0.0	0.0	1.4	6.9	7.1	1.1	3.5	3.6
LnGrp Delay(d),s/veh	18.2	0.0	0.0	19.4	0.0	0.0	34.1	10.7	10.7	45.1	8.3	8.2
LnGrp LOS	B			B			C	B	B	D	A	A
Approach Vol, veh/h		64			137			1389			853	
Approach Delay, s/veh		18.2			19.4			12.1			10.5	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.7	30.0		12.5	6.9	28.8		12.5
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	28.0		28.0	9.0	24.0		28.0
Max Q Clear Time (g_c+I1), s	3.4	15.4		3.6	4.3	8.9		5.8
Green Ext Time (p_c), s	0.0	9.6		1.2	0.1	11.1		1.1

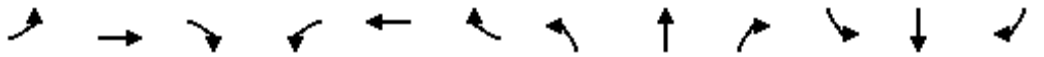
Intersection Summary	
HCM 2010 Ctrl Delay	12.1
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	480	10	20	400	70	10	10	50	130	10	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	95	505	11	21	421	74	11	11	53	137	11	137
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	1073	23	267	1073	469	77	53	920	99	4	920
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	891	3540	77	875	3539	1547	0	91	1578	0	7	1578
Grp Volume(v), veh/h	95	252	264	21	421	74	22	0	53	148	0	137
Grp Sat Flow(s),veh/h/ln	891	1770	1847	875	1770	1547	91	0	1578	7	0	1578
Q Serve(g_s), s	6.6	8.1	8.1	1.4	6.6	2.5	0.0	0.0	1.0	0.0	0.0	2.8
Cycle Q Clear(g_c), s	13.2	8.1	8.1	9.5	6.6	2.5	40.8	0.0	1.0	40.8	0.0	2.8
Prop In Lane	1.00		0.04	1.00		1.00	0.50		1.00	0.93		1.00
Lane Grp Cap(c), veh/h	289	536	560	267	1073	469	130	0	920	103	0	920
V/C Ratio(X)	0.33	0.47	0.47	0.08	0.39	0.16	0.17	0.00	0.06	1.43	0.00	0.15
Avail Cap(c_a), veh/h	427	809	844	401	1618	707	130	0	920	103	0	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	0.74	0.74	0.74	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.5	19.8	19.8	23.7	19.3	17.9	16.9	0.0	6.3	33.3	0.0	6.7
Incr Delay (d2), s/veh	0.5	0.5	0.5	0.1	0.2	0.1	2.8	0.0	0.1	241.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	4.0	4.2	0.3	3.2	1.1	0.3	0.0	0.5	8.9	0.0	1.3
LnGrp Delay(d),s/veh	25.0	20.3	20.3	23.8	19.5	18.0	19.7	0.0	6.4	274.5	0.0	7.0
LnGrp LOS	C	C	C	C	B	B	B		A	F		A
Approach Vol, veh/h		611			516			75			285	
Approach Delay, s/veh		21.1			19.4			10.3			145.9	
Approach LOS		C			B			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.8		25.2		44.8		25.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		30.0		32.0		30.0		32.0
Max Q Clear Time (g_c+I1), s		42.8		15.2		42.8		11.5
Green Ext Time (p_c), s		0.0		6.0		0.0		6.5

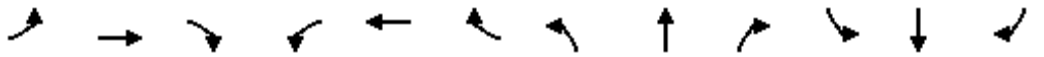
Intersection Summary	
HCM 2010 Ctrl Delay	43.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	290	40	100	330	90	70	480	140	60	440	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	63	305	42	105	347	95	74	505	147	63	463	95
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	714	97	207	628	169	87	1706	494	74	1823	372
Arrive On Green	0.23	0.23	0.22	0.23	0.23	0.22	0.05	0.63	0.62	0.04	0.62	0.61
Sat Flow, veh/h	940	3126	426	1025	2750	742	1774	2707	784	1774	2928	597
Grp Volume(v), veh/h	63	171	176	105	221	221	74	329	323	63	279	279
Grp Sat Flow(s),veh/h/ln	940	1770	1782	1025	1770	1722	1774	1770	1722	1774	1770	1755
Q Serve(g_s), s	7.6	9.9	10.1	11.7	13.2	13.6	5.0	10.1	10.3	4.2	8.5	8.6
Cycle Q Clear(g_c), s	21.2	9.9	10.1	21.9	13.2	13.6	5.0	10.1	10.3	4.2	8.5	8.6
Prop In Lane	1.00		0.24	1.00		0.43	1.00		0.46	1.00		0.34
Lane Grp Cap(c), veh/h	168	404	407	207	404	393	87	1115	1085	74	1102	1093
V/C Ratio(X)	0.37	0.42	0.43	0.51	0.55	0.56	0.85	0.30	0.30	0.85	0.25	0.26
Avail Cap(c_a), veh/h	235	531	535	281	531	517	163	1115	1085	163	1102	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	0.92	0.92	0.92	0.77	0.77	0.77	0.62	0.62	0.62
Uniform Delay (d), s/veh	50.4	39.6	39.7	49.0	40.8	41.1	56.6	10.1	10.2	57.1	10.1	10.2
Incr Delay (d2), s/veh	0.4	0.2	0.2	0.7	0.4	0.4	6.5	0.5	0.5	6.4	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.0	4.9	5.0	3.4	6.5	6.5	2.6	5.1	5.0	2.2	4.2	4.2
LnGrp Delay(d),s/veh	50.8	39.8	39.9	49.6	41.2	41.5	63.1	10.6	10.8	63.6	10.5	10.6
LnGrp LOS	D	D	D	D	D	D	E	B	B	E	B	B
Approach Vol, veh/h		410			547			726			621	
Approach Delay, s/veh		41.5			43.0			16.0			15.9	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	79.6		31.4	9.9	78.7		31.4
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	11.5	60.1		35.4	11.5	60.1		35.4
Max Q Clear Time (g_c+I1), s	6.2	12.3		23.2	7.0	10.6		23.9
Green Ext Time (p_c), s	0.0	5.0		3.0	0.0	5.0		2.9

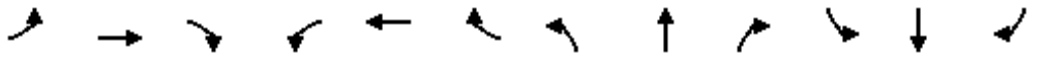
Intersection Summary	
HCM 2010 Ctrl Delay	26.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	900	10	10	950	140	10	10	10	80	10	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	179	947	11	11	1000	147	11	11	11	84	11	168
Adj No. of Lanes	1	2	0	1	3	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	2315	27	6	2741	815	45	31	384	57	4	384
Arrive On Green	0.22	1.00	1.00	0.00	0.54	0.54	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3582	42	1774	5085	1513	0	124	1538	0	16	1538
Grp Volume(v), veh/h	179	468	490	11	1000	147	22	0	11	95	0	168
Grp Sat Flow(s),veh/h/ln	1774	1770	1854	1774	1695	1513	124	0	1538	16	0	1538
Q Serve(g_s), s	11.8	0.0	0.0	0.4	13.5	6.0	0.0	0.0	0.6	0.0	0.0	11.0
Cycle Q Clear(g_c), s	11.8	0.0	0.0	0.4	13.5	6.0	30.0	0.0	0.6	30.0	0.0	11.0
Prop In Lane	1.00		0.02	1.00		1.00	0.50		1.00	0.88		1.00
Lane Grp Cap(c), veh/h	197	1144	1198	6	2741	815	76	0	384	61	0	384
V/C Ratio(X)	0.91	0.41	0.41	1.77	0.36	0.18	0.29	0.00	0.03	1.57	0.00	0.44
Avail Cap(c_a), veh/h	251	1144	1198	148	2741	815	76	0	384	61	0	384
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.46	0.46	0.46	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.1	0.0	0.0	59.8	15.9	14.1	37.4	0.0	34.0	58.0	0.0	37.9
Incr Delay (d2), s/veh	24.3	1.0	0.9	368.4	0.2	0.2	0.8	0.0	0.0	320.9	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	116.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.1	0.3	0.3	0.8	6.3	2.5	0.6	0.0	0.3	7.4	0.0	5.0
LnGrp Delay(d),s/veh	70.3	1.0	0.9	544.7	16.0	14.3	38.2	0.0	34.0	378.9	0.0	41.5
LnGrp LOS	E	A	A	F	B	B	D		C	F		D
Approach Vol, veh/h		1137			1158			33			263	
Approach Delay, s/veh		11.9			20.9			36.8			163.3	
Approach LOS		B			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	4.4	81.6		34.0	17.3	68.7
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	17.5	60.4
Max Q Clear Time (g_c+I1), s		32.0	2.4	2.0		32.0	13.8	15.5
Green Ext Time (p_c), s		0.0	0.0	32.2		0.0	0.1	26.6

Intersection Summary	
HCM 2010 Ctrl Delay	31.6
HCM 2010 LOS	C



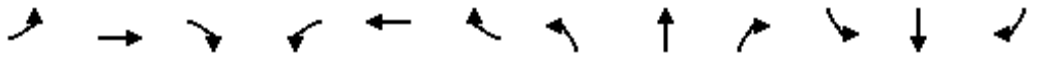
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	770	280	180	790	130	250	430	210	100	380	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	189	811	295	189	832	137	263	453	221	105	400	116
Adj No. of Lanes	1	2	0	1	3	0	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	1041	378	211	1498	245	306	607	293	122	661	189
Arrive On Green	0.06	0.14	0.13	0.04	0.11	0.11	0.09	0.27	0.26	0.07	0.25	0.24
Sat Flow, veh/h	1774	2527	918	1774	4385	717	3442	2275	1099	1774	2682	766
Grp Volume(v), veh/h	189	568	538	189	642	327	263	351	323	105	262	254
Grp Sat Flow(s),veh/h/ln	1774	1770	1675	1774	1695	1712	1721	1770	1604	1774	1770	1679
Q Serve(g_s), s	12.5	37.2	37.3	12.7	21.5	21.7	9.0	21.8	22.2	7.0	15.7	16.2
Cycle Q Clear(g_c), s	12.5	37.2	37.3	12.7	21.5	21.7	9.0	21.8	22.2	7.0	15.7	16.2
Prop In Lane	1.00		0.55	1.00		0.42	1.00		0.68	1.00		0.46
Lane Grp Cap(c), veh/h	315	729	690	211	1158	585	306	472	428	122	436	414
V/C Ratio(X)	0.60	0.78	0.78	0.90	0.55	0.56	0.86	0.74	0.75	0.86	0.60	0.61
Avail Cap(c_a), veh/h	315	729	690	296	1158	585	430	472	428	177	436	414
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	0.93	0.93	0.93	0.93	0.93	0.93	0.99	0.99	0.99
Uniform Delay (d), s/veh	52.3	46.6	46.7	56.9	44.6	44.7	53.9	40.3	40.7	55.3	40.0	40.3
Incr Delay (d2), s/veh	2.0	7.2	7.7	16.7	1.8	3.6	8.3	9.5	10.9	17.2	5.9	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.3	19.7	18.8	7.3	10.4	10.9	4.7	11.9	11.1	4.0	8.4	8.2
LnGrp Delay(d),s/veh	54.3	53.8	54.3	73.6	46.4	48.3	62.2	49.8	51.6	72.5	45.9	46.9
LnGrp LOS	D	D	D	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1295			1158			937			621	
Approach Delay, s/veh		54.1			51.4			53.9			50.8	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	36.0	18.3	53.4	14.7	33.6	26.7	45.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	12.5	31.1	20.5	39.1	15.5	28.1	19.5	* 40
Max Q Clear Time (g_c+I1), s	9.0	24.2	14.7	39.3	11.0	18.2	14.5	23.7
Green Ext Time (p_c), s	0.0	2.3	0.1	0.0	0.1	2.8	0.5	6.9

Intersection Summary	
HCM 2010 Ctrl Delay	52.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	600	180	170	670	130	320	1090	170	160	1020	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	211	632	189	179	705	137	337	1147	179	168	1074	158
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	251	974	409	223	946	396	375	2134	333	208	1937	285
Arrive On Green	0.14	0.54	0.54	0.02	0.09	0.09	0.21	0.95	0.93	0.12	0.85	0.84
Sat Flow, veh/h	3510	3610	1514	3510	3610	1511	3510	4503	702	3510	4543	667
Grp Volume(v), veh/h	211	632	189	179	705	137	337	881	445	168	817	415
Grp Sat Flow(s),veh/h/ln	1755	1805	1514	1755	1805	1511	1755	1729	1747	1755	1729	1752
Q Serve(g_s), s	7.0	14.9	9.2	6.1	22.9	10.2	11.2	3.2	3.6	5.6	7.9	8.2
Cycle Q Clear(g_c), s	7.0	14.9	9.2	6.1	22.9	10.2	11.2	3.2	3.6	5.6	7.9	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.40	1.00		0.38
Lane Grp Cap(c), veh/h	251	974	409	223	946	396	375	1639	828	208	1475	747
V/C Ratio(X)	0.84	0.65	0.46	0.80	0.75	0.35	0.90	0.54	0.54	0.81	0.55	0.56
Avail Cap(c_a), veh/h	380	993	416	380	993	416	468	1639	828	322	1475	747
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.92	0.92	0.92	0.93	0.93	0.93	0.89	0.89	0.89	0.88	0.88	0.88
Uniform Delay (d), s/veh	50.8	23.6	22.3	58.0	50.9	45.1	46.6	1.7	1.9	52.2	5.6	5.9
Incr Delay (d2), s/veh	5.8	1.0	0.3	2.4	2.4	0.2	14.0	1.1	2.2	3.7	1.3	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	7.5	3.8	3.0	11.8	4.3	6.2	1.5	1.8	2.8	3.7	4.3
LnGrp Delay(d),s/veh	56.6	24.6	22.6	60.4	53.3	45.3	60.6	2.9	4.2	55.9	7.0	8.5
LnGrp LOS	E	C	C	E	D	D	E	A	A	E	A	A
Approach Vol, veh/h		1032			1021			1663			1400	
Approach Delay, s/veh		30.8			53.5			14.9			13.3	
Approach LOS		C			D			B			B	

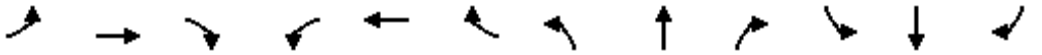
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	60.9	11.6	36.4	16.8	55.2	12.6	35.4
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	11.5	46.1	13.5	32.4	16.5	41.1	13.5	32.4
Max Q Clear Time (g_c+I1), s	7.6	5.6	8.1	16.9	13.2	10.2	9.0	24.9
Green Ext Time (p_c), s	0.0	16.9	0.1	6.3	0.1	15.2	0.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	780	60	50	830	130	80	400	70	110	410	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	116	821	63	53	874	137	84	421	74	116	432	105
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	1669	128	61	1411	221	99	766	134	135	776	187
Arrive On Green	0.15	1.00	0.99	0.03	0.46	0.46	0.02	0.08	0.08	0.03	0.09	0.09
Sat Flow, veh/h	1774	3330	255	1774	3063	480	1774	3006	524	1774	2822	680
Grp Volume(v), veh/h	116	436	448	53	505	506	84	246	249	116	269	268
Grp Sat Flow(s),veh/h/ln	1774	1770	1815	1774	1770	1774	1774	1770	1761	1774	1770	1732
Q Serve(g_s), s	7.7	0.0	0.1	3.6	25.8	25.9	5.7	16.0	16.3	7.8	17.5	17.8
Cycle Q Clear(g_c), s	7.7	0.0	0.1	3.6	25.8	25.9	5.7	16.0	16.3	7.8	17.5	17.8
Prop In Lane	1.00		0.14	1.00		0.27	1.00		0.30	1.00		0.39
Lane Grp Cap(c), veh/h	133	887	910	61	815	817	99	451	449	135	487	476
V/C Ratio(X)	0.87	0.49	0.49	0.87	0.62	0.62	0.85	0.55	0.55	0.86	0.55	0.56
Avail Cap(c_a), veh/h	177	887	910	148	815	817	148	451	449	192	487	476
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.95	0.95	0.95	0.58	0.58	0.58	0.99	0.99	0.99	0.95	0.95	0.95
Uniform Delay (d), s/veh	50.4	0.0	0.0	57.7	24.4	24.5	58.4	48.3	48.4	57.8	47.5	47.7
Incr Delay (d2), s/veh	22.8	1.8	1.8	8.0	2.0	2.0	16.4	4.6	4.8	16.5	4.3	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	0.5	0.5	1.9	13.1	13.1	3.2	8.5	8.5	4.5	9.2	9.1
LnGrp Delay(d),s/veh	73.3	1.8	1.8	65.6	26.4	26.5	74.8	52.9	53.2	74.3	51.8	52.2
LnGrp LOS	E	A	A	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1000			1064			579			653	
Approach Delay, s/veh		10.1			28.4			56.2			55.9	
Approach LOS		B			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	34.6	8.1	64.2	10.7	37.0	13.0	59.3
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	13.5	29.1	10.5	50.4	10.5	32.1	12.5	48.4
Max Q Clear Time (g_c+I1), s	9.8	18.3	5.6	2.1	7.7	19.8	9.7	27.9
Green Ext Time (p_c), s	0.0	5.6	0.0	24.3	0.0	6.1	0.0	14.4

Intersection Summary	
HCM 2010 Ctrl Delay	33.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	240	710	100	220	870	370	80	1220	140	210	1150	110
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	253	747	105	232	916	389	84	1284	147	221	1211	116
Adj No. of Lanes	1	3	0	1	3	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	1283	179	246	979	415	99	1426	163	240	1824	175
Arrive On Green	0.15	0.28	0.28	0.14	0.28	0.27	0.06	0.31	0.30	0.14	0.39	0.38
Sat Flow, veh/h	1774	4509	629	1774	3485	1478	1774	4629	530	1774	4709	451
Grp Volume(v), veh/h	253	560	292	232	891	414	84	940	491	221	872	455
Grp Sat Flow(s),veh/h/ln	1774	1695	1748	1774	1695	1573	1774	1695	1769	1774	1695	1769
Q Serve(g_s), s	18.3	18.4	18.7	16.9	33.3	33.4	6.1	34.5	34.6	16.0	27.6	27.6
Cycle Q Clear(g_c), s	18.3	18.4	18.7	16.9	33.3	33.4	6.1	34.5	34.6	16.0	27.6	27.6
Prop In Lane	1.00		0.36	1.00		0.94	1.00		0.30	1.00		0.25
Lane Grp Cap(c), veh/h	271	965	497	246	953	442	99	1044	545	240	1313	685
V/C Ratio(X)	0.93	0.58	0.59	0.94	0.94	0.94	0.85	0.90	0.90	0.92	0.66	0.66
Avail Cap(c_a), veh/h	300	965	497	246	953	442	314	1044	545	287	1313	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	39.8	40.1	55.5	45.6	46.0	60.8	43.1	43.3	55.5	32.8	33.0
Incr Delay (d2), s/veh	31.9	2.5	5.0	41.8	17.2	29.6	7.4	12.3	20.5	28.4	2.7	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.4	9.0	9.7	11.1	17.9	18.1	3.2	18.0	20.0	9.8	13.3	14.5
LnGrp Delay(d),s/veh	86.3	42.4	45.1	97.3	62.8	75.6	68.2	55.3	63.8	84.0	35.5	38.0
LnGrp LOS	F	D	D	F	E	E	E	E	E	F	D	D
Approach Vol, veh/h		1105			1537			1515			1548	
Approach Delay, s/veh		53.2			71.4			58.8			43.2	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	44.0	23.9	40.5	11.3	54.3	23.4	41.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	21.5	36.7	22.5	32.1	23.5	34.7	18.5	* 36
Max Q Clear Time (g_c+I1), s	18.0	36.6	20.3	35.4	8.1	29.6	18.9	20.7
Green Ext Time (p_c), s	0.1	0.1	0.1	0.0	0.0	4.9	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	56.9
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	880	10	20	590	110	0	10	10	90	0	20
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	42	926	11	21	621	116	0	11	11	95	0	21
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	649	2941	35	548	2445	456	0	96	96	171	3	26
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.11	0.11	0.11	0.00	0.11
Sat Flow, veh/h	717	3582	43	595	2977	555	0	853	853	1035	31	236
Grp Volume(v), veh/h	42	457	480	21	369	368	0	0	22	116	0	0
Grp Sat Flow(s),veh/h/ln	717	1770	1855	595	1770	1763	0	0	1707	1301	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	9.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	10.7	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.31	0.00		0.50	0.82		0.18
Lane Grp Cap(c), veh/h	649	1453	1523	548	1453	1447	0	0	192	201	0	0
V/C Ratio(X)	0.06	0.31	0.31	0.04	0.25	0.25	0.00	0.00	0.11	0.58	0.00	0.00
Avail Cap(c_a), veh/h	649	1453	1523	548	1453	1447	0	0	512	465	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.95	0.95	0.95	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.9	52.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.5	0.5	0.1	0.4	0.4	0.0	0.0	0.1	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.0	0.7	3.8	0.0	0.0
LnGrp Delay(d),s/veh	0.2	0.5	0.5	0.1	0.4	0.4	0.0	0.0	48.0	53.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A			D	D		
Approach Vol, veh/h		979			758			22			116	
Approach Delay, s/veh		0.5			0.4			48.0			53.5	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		17.5		102.5		17.5		102.5
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		36.0		74.7		36.0		74.7
Max Q Clear Time (g_c+I1), s		12.7		2.0		3.4		2.0
Green Ext Time (p_c), s		0.5		30.1		0.6		30.1

Intersection Summary	
HCM 2010 Ctrl Delay	4.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	940	80	130	890	90	60	30	90	80	30	50
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.96		0.95	0.96		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	989	84	137	937	95	63	32	95	84	32	53
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	1997	170	136	2139	217	283	89	265	246	137	227
Arrive On Green	0.02	0.61	0.60	0.15	1.00	1.00	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1774	3297	280	1774	3240	328	1251	397	1179	1211	609	1009
Grp Volume(v), veh/h	32	531	542	137	512	520	63	0	127	84	0	85
Grp Sat Flow(s),veh/h/ln	1774	1770	1807	1774	1770	1798	1251	0	1576	1211	0	1618
Q Serve(g_s), s	2.3	22.0	22.0	10.0	0.0	0.0	5.6	0.0	8.8	8.2	0.0	5.6
Cycle Q Clear(g_c), s	2.3	22.0	22.0	10.0	0.0	0.0	11.2	0.0	8.8	17.0	0.0	5.6
Prop In Lane	1.00		0.15	1.00		0.18	1.00		0.75	1.00		0.62
Lane Grp Cap(c), veh/h	40	1072	1095	136	1168	1187	283	0	355	246	0	364
V/C Ratio(X)	0.80	0.50	0.50	1.00	0.44	0.44	0.22	0.00	0.36	0.34	0.00	0.23
Avail Cap(c_a), veh/h	136	1072	1095	136	1168	1187	319	0	400	281	0	411
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.45	0.45	0.45	0.79	0.79	0.79	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.2	14.4	14.5	55.0	0.0	0.0	45.8	0.0	42.5	49.6	0.0	41.2
Incr Delay (d2), s/veh	6.1	0.7	0.7	69.5	0.9	0.9	0.1	0.0	0.2	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	10.8	11.1	7.5	0.3	0.3	2.0	0.0	3.9	2.8	0.0	2.5
LnGrp Delay(d),s/veh	69.4	15.2	15.2	124.5	0.9	0.9	45.9	0.0	42.7	49.9	0.0	41.3
LnGrp LOS	E	B	B	F	A	A	D		D	D		D
Approach Vol, veh/h		1105			1169			190			169	
Approach Delay, s/veh		16.7			15.4			43.8			45.6	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	82.7		33.3	6.9	89.8		33.3
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	10.5	74.4		33.0	10.5	74.4		33.0
Max Q Clear Time (g_c+I1), s	12.0	24.0		19.0	4.3	2.0		13.2
Green Ext Time (p_c), s	0.0	31.9		1.0	0.0	39.0		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	870	130	170	740	220	160	680	140	150	610	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.87	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	916	137	179	779	232	168	716	147	158	642	116
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	1451	586	198	1456	588	189	727	149	177	694	125
Arrive On Green	0.22	0.82	0.81	0.11	0.41	0.40	0.11	0.26	0.25	0.10	0.24	0.23
Sat Flow, veh/h	1774	3539	1454	1774	3539	1454	1774	2840	583	1774	2911	524
Grp Volume(v), veh/h	179	916	137	179	779	232	168	446	417	158	390	368
Grp Sat Flow(s),veh/h/ln	1774	1770	1454	1774	1770	1454	1774	1770	1653	1774	1770	1666
Q Serve(g_s), s	12.8	12.6	2.0	13.0	21.6	14.7	12.2	32.6	32.6	11.4	27.9	28.1
Cycle Q Clear(g_c), s	12.8	12.6	2.0	13.0	21.6	14.7	12.2	32.6	32.6	11.4	27.9	28.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		0.31
Lane Grp Cap(c), veh/h	195	1451	586	198	1456	588	189	453	423	177	422	397
V/C Ratio(X)	0.92	0.63	0.23	0.91	0.54	0.39	0.89	0.98	0.99	0.89	0.92	0.93
Avail Cap(c_a), veh/h	205	1451	586	246	1456	588	246	453	423	232	422	397
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	1.00	1.00	1.00	0.94	0.94	0.94	0.84	0.84	0.84
Uniform Delay (d), s/veh	50.1	8.0	3.7	57.1	28.9	27.4	57.3	48.1	48.3	57.9	48.3	48.5
Incr Delay (d2), s/veh	35.5	1.9	0.8	26.8	1.4	2.0	21.3	36.7	38.4	20.9	22.5	24.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.2	6.2	0.9	7.8	10.8	6.2	7.1	20.6	19.5	6.6	16.3	15.6
LnGrp Delay(d),s/veh	85.6	9.9	4.5	83.9	30.3	29.4	78.6	84.8	86.7	78.7	70.8	72.9
LnGrp LOS	F	A	A	F	C	C	E	F	F	E	E	E
Approach Vol, veh/h		1232			1190			1031			916	
Approach Delay, s/veh		20.3			38.2			84.5			73.0	
Approach LOS		C			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	37.3	18.5	57.3	19.2	35.0	18.3	57.5
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	4.9	* 4.9	3.5	4.9
Max Green Setting (Gmax), s	17.5	31.1	18.5	46.1	18.5	* 30	15.5	49.1
Max Q Clear Time (g_c+I1), s	13.4	34.6	15.0	14.6	14.2	30.1	14.8	23.6
Green Ext Time (p_c), s	0.0	0.0	0.0	22.0	0.2	0.0	0.0	18.8

Intersection Summary	
HCM 2010 Ctrl Delay	51.4
HCM 2010 LOS	D

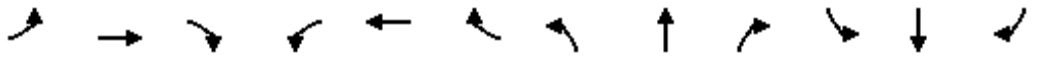
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	800	40	70	900	50	40	60	50	50	60	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.97		0.95	0.96		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	32	842	42	74	947	53	42	63	53	53	63	42
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	2167	108	87	2240	125	153	213	329	122	139	80
Arrive On Green	0.02	0.63	0.63	0.10	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3430	171	1774	3407	191	505	970	1501	372	634	364
Grp Volume(v), veh/h	32	434	450	74	492	508	105	0	53	158	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1831	1774	1770	1828	1475	0	1501	1370	0	0
Q Serve(g_s), s	2.2	14.4	14.4	4.9	0.0	0.0	0.0	0.0	3.4	6.7	0.0	0.0
Cycle Q Clear(g_c), s	2.2	14.4	14.4	4.9	0.0	0.0	6.9	0.0	3.4	13.6	0.0	0.0
Prop In Lane	1.00		0.09	1.00		0.10	0.40		1.00	0.34		0.27
Lane Grp Cap(c), veh/h	41	1118	1157	87	1163	1202	366	0	329	341	0	0
V/C Ratio(X)	0.78	0.39	0.39	0.86	0.42	0.42	0.29	0.00	0.16	0.46	0.00	0.00
Avail Cap(c_a), veh/h	148	1118	1157	148	1163	1202	413	0	375	387	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	0.70	0.70	0.70	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.3	10.8	10.8	53.7	0.0	0.0	39.0	0.0	37.9	41.9	0.0	0.0
Incr Delay (d2), s/veh	7.4	0.7	0.6	6.3	0.8	0.8	0.2	0.0	0.1	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	7.2	7.5	2.6	0.3	0.3	2.9	0.0	1.4	4.7	0.0	0.0
LnGrp Delay(d),s/veh	65.7	11.4	11.4	60.1	0.8	0.8	39.1	0.0	38.0	42.3	0.0	0.0
LnGrp LOS	E	B	B	E	A	A	D		D	D		
Approach Vol, veh/h		916			1074			158			158	
Approach Delay, s/veh		13.3			4.9			38.8			42.3	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.3	9.9	79.8		30.3	6.8	82.9
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	10.5	67.4
Max Q Clear Time (g_c+I1), s		8.9	6.9	16.4		15.6	4.2	2.0
Green Ext Time (p_c), s		1.2	0.0	24.5		1.0	0.0	27.0

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	990	40	150	620	100	40	20	260	90	20	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	1042	42	158	653	105	42	21	274	95	21	11
Adj No. of Lanes	1	2	1	2	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	0	0	0	0	0
Cap, veh/h	21	1982	884	223	1873	301	349	165	567	300	64	30
Arrive On Green	0.02	1.00	1.00	0.13	1.00	1.00	0.30	0.30	0.29	0.30	0.30	0.29
Sat Flow, veh/h	1774	3539	1578	3442	3055	491	997	551	1603	825	214	99
Grp Volume(v), veh/h	11	1042	42	158	378	380	63	0	274	127	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1578	1721	1770	1776	1549	0	1603	1138	0	0
Q Serve(g_s), s	0.7	0.0	0.0	5.3	0.0	0.0	0.0	0.0	16.0	9.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	5.3	0.0	0.0	3.3	0.0	16.0	12.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.28	0.67		1.00	0.75		0.09
Lane Grp Cap(c), veh/h	21	1982	884	223	1085	1089	515	0	567	394	0	0
V/C Ratio(X)	0.52	0.53	0.05	0.71	0.35	0.35	0.12	0.00	0.48	0.32	0.00	0.00
Avail Cap(c_a), veh/h	163	1982	884	315	1085	1089	515	0	567	394	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.84	0.84	0.84	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.2	0.0	0.0	51.1	0.0	0.0	30.5	0.0	30.3	34.5	0.0	0.0
Incr Delay (d2), s/veh	6.8	0.9	0.1	1.3	0.7	0.7	0.5	0.0	2.9	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	0.3	0.0	2.5	0.2	0.2	1.6	0.0	7.5	3.6	0.0	0.0
LnGrp Delay(d),s/veh	65.0	0.9	0.1	52.4	0.7	0.7	31.0	0.0	33.2	36.6	0.0	0.0
LnGrp LOS	E	A	A	D	A	A	C		C	D		
Approach Vol, veh/h		1095			916			337			127	
Approach Delay, s/veh		1.5			9.7			32.8			36.6	
Approach LOS		A			A			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		39.0	10.8	70.2		39.0	4.4	76.6
Change Period (Y+Rc), s		4.9	3.5	5.3		4.9	3.5	5.3
Max Green Setting (Gmax), s		34.1	10.5	61.7		34.1	10.5	61.7
Max Q Clear Time (g_c+I1), s		18.0	7.3	2.0		14.3	2.7	2.0
Green Ext Time (p_c), s		0.9	0.1	29.9		1.0	0.0	29.9

Intersection Summary	
HCM 2010 Ctrl Delay	10.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	210	1080	140	190	690	430	170	630	630	290	770	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	221	1137	133	200	726	285	179	752	361	305	811	74
Adj No. of Lanes	2	3	0	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	301	1823	213	243	1298	576	296	1118	470	347	1123	498
Arrive On Green	0.18	0.79	0.78	0.07	0.37	0.37	0.08	0.30	0.30	0.10	0.32	0.32
Sat Flow, veh/h	3442	4614	539	3442	3539	1570	3548	3725	1568	3442	3539	1568
Grp Volume(v), veh/h	221	835	435	200	726	285	179	752	361	305	811	74
Grp Sat Flow(s),veh/h/ln	1721	1695	1763	1721	1770	1570	1774	1863	1568	1721	1770	1568
Q Serve(g_s), s	7.3	12.2	12.4	6.9	19.6	12.0	5.8	21.2	25.1	10.5	24.3	2.9
Cycle Q Clear(g_c), s	7.3	12.2	12.4	6.9	19.6	12.0	5.8	21.2	25.1	10.5	24.3	2.9
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	301	1340	697	243	1298	576	296	1118	470	347	1123	498
V/C Ratio(X)	0.73	0.62	0.62	0.82	0.56	0.49	0.61	0.67	0.77	0.88	0.72	0.15
Avail Cap(c_a), veh/h	301	1340	697	402	1298	576	296	1118	470	402	1180	523
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	48.2	8.9	9.1	55.0	30.3	14.9	53.1	36.8	38.2	53.2	36.3	15.4
Incr Delay (d2), s/veh	6.7	1.9	3.6	2.6	1.7	3.0	8.9	3.2	11.4	15.3	2.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	5.7	6.5	3.4	9.9	5.6	3.2	11.4	12.3	5.7	12.3	1.3
LnGrp Delay(d),s/veh	54.9	10.7	12.7	57.7	32.0	17.9	62.0	40.1	49.6	68.5	38.5	15.6
LnGrp LOS	D	B	B	E	C	B	E	D	D	E	D	B
Approach Vol, veh/h		1491			1211			1292			1190	
Approach Delay, s/veh		17.8			32.9			45.8			44.8	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	40.0	12.5	51.4	14.0	42.1	15.9	48.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	14.5	34.7	14.5	39.1	10.5	38.7	10.5	* 43
Max Q Clear Time (g_c+I1), s	12.5	27.1	8.9	14.4	7.8	26.3	9.3	21.6
Green Ext Time (p_c), s	0.1	6.7	0.1	11.9	0.1	10.4	0.1	8.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.5
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	840	20	40	480	100	20	0	40	70	0	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	32	884	21	42	505	105	21	0	42	74	0	21
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	617	2440	58	424	2016	417	65	0	384	65	0	384
Arrive On Green	0.69	0.69	0.68	1.00	1.00	1.00	0.24	0.00	0.24	0.24	0.00	0.24
Sat Flow, veh/h	806	3533	84	613	2919	604	21	0	1581	21	0	1581
Grp Volume(v), veh/h	32	443	462	42	305	305	21	0	42	74	0	21
Grp Sat Flow(s),veh/h/ln	806	1770	1847	613	1770	1753	21	0	1581	21	0	1581
Q Serve(g_s), s	1.5	12.4	12.4	1.3	0.0	0.0	0.4	0.0	2.5	0.4	0.0	1.2
Cycle Q Clear(g_c), s	1.5	12.4	12.4	13.0	0.0	0.0	29.1	0.0	2.5	29.1	0.0	1.2
Prop In Lane	1.00		0.05	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	617	1222	1276	424	1222	1211	65	0	384	65	0	384
V/C Ratio(X)	0.05	0.36	0.36	0.10	0.25	0.25	0.32	0.00	0.11	1.14	0.00	0.05
Avail Cap(c_a), veh/h	617	1222	1276	424	1222	1211	144	0	474	143	0	474
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.59	0.59	0.59	0.96	0.96	0.96	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.0	7.7	7.7	0.9	0.0	0.0	59.9	0.0	35.3	60.0	0.0	34.9
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.4	0.5	0.5	1.0	0.0	0.0	81.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	6.2	6.5	0.3	0.2	0.2	0.7	0.0	1.1	3.6	0.0	0.5
LnGrp Delay(d),s/veh	6.1	8.2	8.1	1.4	0.5	0.5	61.0	0.0	35.4	141.9	0.0	34.9
LnGrp LOS	A	A	A	A	A	A	E		D	F		C
Approach Vol, veh/h		937			652			63			95	
Approach Delay, s/veh		8.1			0.5			43.9			118.2	
Approach LOS		A			A			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		33.5		86.5		33.5		86.5
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		36.0		74.7		36.0		74.7
Max Q Clear Time (g_c+I1), s		31.1		14.4		31.1		15.0
Green Ext Time (p_c), s		0.1		24.4		0.1		24.4

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	890	30	40	970	90	30	10	20	90	10	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	147	937	32	42	1021	95	32	11	21	95	11	126
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	2035	70	132	2707	251	157	58	83	345	29	336
Arrive On Green	0.09	0.58	0.58	0.15	1.00	1.00	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1774	3489	119	1774	4725	439	480	249	356	1344	126	1439
Grp Volume(v), veh/h	147	475	494	42	732	384	64	0	0	95	0	137
Grp Sat Flow(s),veh/h/ln	1774	1770	1838	1774	1695	1773	1084	0	0	1344	0	1564
Q Serve(g_s), s	9.8	18.4	18.4	2.5	0.0	0.0	2.2	0.0	0.0	0.0	0.0	8.8
Cycle Q Clear(g_c), s	9.8	18.4	18.4	2.5	0.0	0.0	11.0	0.0	0.0	9.3	0.0	8.8
Prop In Lane	1.00		0.06	1.00		0.25	0.50		0.33	1.00		0.92
Lane Grp Cap(c), veh/h	166	1032	1072	132	1942	1016	298	0	0	345	0	365
V/C Ratio(X)	0.88	0.46	0.46	0.32	0.38	0.38	0.21	0.00	0.00	0.28	0.00	0.38
Avail Cap(c_a), veh/h	177	1032	1072	148	1942	1016	298	0	0	345	0	365
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.46	0.46	0.46	0.94	0.94	0.94	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	14.2	14.3	48.4	0.0	0.0	39.2	0.0	0.0	38.8	0.0	38.7
Incr Delay (d2), s/veh	19.0	0.7	0.7	0.5	0.5	1.0	0.1	0.0	0.0	2.0	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.7	9.0	9.5	1.3	0.1	0.3	1.8	0.0	0.0	2.9	0.0	4.1
LnGrp Delay(d),s/veh	72.7	14.9	14.9	48.9	0.5	1.0	39.4	0.0	0.0	40.8	0.0	41.6
LnGrp LOS	E	B	B	D	A	A	D			D		D
Approach Vol, veh/h		1116			1158			64			232	
Approach Delay, s/veh		22.5			2.4			39.4			41.3	
Approach LOS		C			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.0	14.0	74.0		32.0	15.2	72.8
Change Period (Y+Rc), s		4.0	4.6	* 4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		28.0	10.5	* 69		28.0	12.5	67.4
Max Q Clear Time (g_c+I1), s		13.0	4.5	20.4		11.3	11.8	2.0
Green Ext Time (p_c), s		0.9	3.8	9.8		0.9	0.0	12.6

Intersection Summary	
HCM 2010 Ctrl Delay	15.6
HCM 2010 LOS	B

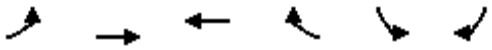
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1190	50	60	1110	80	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1541	1770	3539	1770	1514
Flt Permitted	1.00	1.00	0.12	1.00	0.95	1.00
Satd. Flow (perm)	3539	1541	223	3539	1770	1514
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1253	53	63	1168	84	42
RTOR Reduction (vph)	0	10	0	0	0	38
Lane Group Flow (vph)	1253	43	63	1168	84	4
Confl. Peds. (#/hr)		2	2			10
Turn Type	NA	Perm	D.P+P	NA	Prot	Perm
Protected Phases	1		2 4	1 2 4	3	
Permitted Phases		1	1			3
Actuated Green, G (s)	62.0	62.0	90.6	100.4	10.4	10.4
Effective Green, g (s)	62.9	62.9	93.3	101.3	11.0	11.0
Actuated g/C Ratio	0.52	0.52	0.78	0.84	0.09	0.09
Clearance Time (s)	4.9	4.9			4.6	4.6
Vehicle Extension (s)	1.5	1.5			2.5	2.5
Lane Grp Cap (vph)	1855	807	565	2987	162	138
v/s Ratio Prot	c0.35		0.03	c0.33	c0.05	
v/s Ratio Perm		0.03	0.06			0.00
v/c Ratio	0.68	0.05	0.11	0.39	0.52	0.03
Uniform Delay, d1	21.0	14.0	7.2	2.2	52.0	49.6
Progression Factor	1.00	1.00	1.10	0.02	1.00	1.00
Incremental Delay, d2	2.0	0.1	0.1	0.0	2.1	0.1
Delay (s)	23.0	14.1	8.0	0.1	54.1	49.7
Level of Service	C	B	A	A	D	D
Approach Delay (s)	22.7			0.5	52.6	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

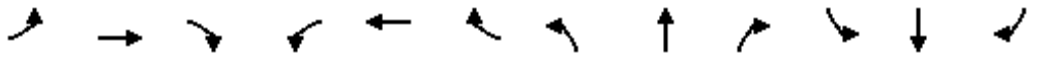
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	110	1120	1100	80	80	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.93	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1770	3539	3539	1541	1690	
Flt Permitted	0.15	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	273	3539	3539	1541	1690	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	116	1179	1158	84	84	95
RTOR Reduction (vph)	0	0	0	26	37	0
Lane Group Flow (vph)	116	1179	1158	58	142	0
Confl. Peds. (#/hr)	2			2	10	
Turn Type	D.P+P	NA	NA	Perm	Prot	
Protected Phases	2 3	1 2 3	1		4	
Permitted Phases	1			1		
Actuated Green, G (s)	86.1	91.0	62.0	62.0	19.5	
Effective Green, g (s)	84.2	88.2	62.9	62.9	20.1	
Actuated g/C Ratio	0.70	0.74	0.52	0.52	0.17	
Clearance Time (s)			4.9	4.9	4.6	
Vehicle Extension (s)			1.5	1.5	2.5	
Lane Grp Cap (vph)	457	2601	1855	807	283	
v/s Ratio Prot	0.05	c0.33	c0.33		c0.08	
v/s Ratio Perm	0.13			0.04		
v/c Ratio	0.25	0.45	0.62	0.07	0.50	
Uniform Delay, d1	9.3	6.3	20.2	14.1	45.4	
Progression Factor	2.41	0.10	0.40	0.53	1.00	
Incremental Delay, d2	0.2	0.1	1.4	0.1	1.0	
Delay (s)	22.5	0.7	9.5	7.7	46.4	
Level of Service	C	A	A	A	D	
Approach Delay (s)		2.7	9.4		46.4	
Approach LOS		A	A		D	

Intersection Summary			
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	540	290	210	490	200	320	2600	30	180	2190	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	189	568	131	221	516	48	337	2737	31	189	2305	200
Adj No. of Lanes	1	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	229	660	295	215	600	268	437	2985	34	295	2430	210
Arrive On Green	0.13	0.19	0.19	0.12	0.17	0.17	0.17	0.60	0.60	0.03	0.13	0.13
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	6581	74	3442	6053	523
Grp Volume(v), veh/h	189	568	131	221	516	48	337	1998	770	189	1829	676
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	1602	1850	1721	1602	1770
Q Serve(g_s), s	14.5	21.8	7.6	17.0	19.8	2.9	13.1	51.7	51.8	7.6	52.8	53.1
Cycle Q Clear(g_c), s	14.5	21.8	7.6	17.0	19.8	2.9	13.1	51.7	51.8	7.6	52.8	53.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		0.30
Lane Grp Cap(c), veh/h	229	660	295	215	600	268	437	2180	839	295	1929	711
V/C Ratio(X)	0.82	0.86	0.44	1.03	0.86	0.18	0.77	0.92	0.92	0.64	0.95	0.95
Avail Cap(c_a), veh/h	229	751	336	215	726	325	437	2180	839	295	1929	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	0.33	0.33	0.33
Upstream Filter(I)	0.94	0.94	0.94	0.09	0.09	0.09	0.09	0.09	0.09	0.58	0.58	0.58
Uniform Delay (d), s/veh	59.4	55.2	27.5	61.5	56.5	32.3	56.2	25.4	25.4	65.9	59.3	59.4
Incr Delay (d2), s/veh	20.0	8.6	1.0	25.4	0.9	0.0	0.8	0.8	2.0	2.7	7.5	16.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.4	11.4	3.4	9.8	9.7	1.3	6.3	22.6	26.7	3.7	24.8	29.3
LnGrp Delay(d),s/veh	79.4	63.8	28.5	87.0	57.4	32.4	57.0	26.2	27.5	68.6	66.7	75.9
LnGrp LOS	E	E	C	F	E	C	E	C	C	E	E	E
Approach Vol, veh/h		888			785			3105			2694	
Approach Delay, s/veh		61.9			64.2			29.9			69.2	
Approach LOS		E			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	69.3	22.0	32.4	23.6	62.0	24.4	30.0
Change Period (Y+Rc), s	* 4.3	5.8	5.0	6.3	5.8	* 5.8	6.3	* 6.3
Max Green Setting (Gmax), s	* 12	59.9	17.0	29.7	15.7	* 56	18.0	* 29
Max Q Clear Time (g_c+I1), s	9.6	53.8	19.0	23.8	15.1	55.1	16.5	21.8
Green Ext Time (p_c), s	0.1	5.8	0.0	2.3	0.1	1.1	0.7	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	51.4
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	350	920	0	2650	2280	850
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	368	712	0	2789	2400	0
Adj No. of Lanes	2	3	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	361	379	0	5218	5218	1289
Arrive On Green	0.10	0.10	0.00	1.00	1.00	0.00
Sat Flow, veh/h	3442	3610	0	6929	6669	1583
Grp Volume(v), veh/h	368	712	0	2789	2400	0
Grp Sat Flow(s),veh/h/ln	1721	1203	0	1602	1602	1583
Q Serve(g_s), s	14.7	14.7	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	14.7	14.7	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	361	379	0	5218	5218	1289
V/C Ratio(X)	1.02	1.88	0.00	0.53	0.46	0.00
Avail Cap(c_a), veh/h	361	379	0	5218	5218	1289
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	0.46	0.37	0.00
Uniform Delay (d), s/veh	62.7	62.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	52.1	405.2	0.0	0.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.6	23.5	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	114.8	467.8	0.0	0.2	0.1	0.0
LnGrp LOS	F	F		A	A	
Approach Vol, veh/h	1080			2789	2400	
Approach Delay, s/veh	347.5			0.2	0.1	
Approach LOS	F			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		120.0		20.0		120.0		
Change Period (Y+Rc), s		6.0		* 5.3		6.0		
Max Green Setting (Gmax), s		114.0		* 15		63.0		
Max Q Clear Time (g_c+I1), s		2.0		16.7		2.0		
Green Ext Time (p_c), s		69.0		0.0		37.1		

Intersection Summary	
HCM 2010 Ctrl Delay	60.0
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

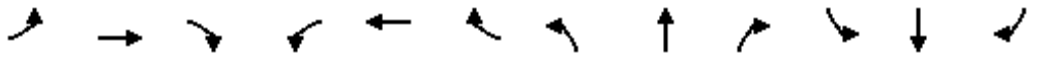
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	360	780	280	170	550	190	400	2030	370	290	2250	700
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	379	821	222	179	579	34	421	2137	245	305	2368	683
Adj No. of Lanes	2	4	0	2	2	1	2	4	1	2	4	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	401	1114	294	319	683	306	540	2726	674	339	2343	1344
Arrive On Green	0.12	0.22	0.22	0.09	0.19	0.19	0.31	0.85	0.85	0.20	0.73	0.73
Sat Flow, veh/h	3442	5091	1341	3442	3539	1583	3442	6408	1583	3442	6408	2787
Grp Volume(v), veh/h	379	774	269	179	579	34	421	2137	245	305	2368	683
Grp Sat Flow(s),veh/h/ln	1721	1602	1626	1721	1770	1583	1721	1602	1583	1721	1602	1393
Q Serve(g_s), s	15.3	21.0	21.7	7.0	22.1	1.9	15.6	20.9	4.7	12.1	51.2	0.0
Cycle Q Clear(g_c), s	15.3	21.0	21.7	7.0	22.1	1.9	15.6	20.9	4.7	12.1	51.2	0.0
Prop In Lane	1.00		0.82	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	401	1052	356	319	683	306	540	2726	674	339	2343	1344
V/C Ratio(X)	0.95	0.74	0.76	0.56	0.85	0.11	0.78	0.78	0.36	0.90	1.01	0.51
Avail Cap(c_a), veh/h	401	1287	436	347	910	407	540	2726	674	339	2343	1344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.48	0.48	0.48	0.54	0.54	0.54
Uniform Delay (d), s/veh	61.4	50.9	51.2	60.8	54.5	28.2	45.8	7.5	6.3	55.5	18.8	8.9
Incr Delay (d2), s/veh	31.4	1.8	6.0	1.7	5.8	0.2	3.6	1.1	0.7	15.8	16.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.0	9.5	10.3	3.4	11.3	0.9	7.6	8.8	2.1	6.5	24.5	3.3
LnGrp Delay(d),s/veh	92.8	52.7	57.2	62.5	60.3	28.4	49.4	8.7	7.1	71.4	35.1	9.6
LnGrp LOS	F	D	E	E	E	C	D	A	A	E	F	A
Approach Vol, veh/h		1422			792			2803			3356	
Approach Delay, s/veh		64.2			59.4			14.7			33.2	
Approach LOS		E			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	65.4	18.3	36.9	27.8	57.0	22.6	32.6
Change Period (Y+Rc), s	* 5.6	5.8	* 5.3	* 6.3	5.8	* 5.8	* 6.3	* 5.6
Max Green Setting (Gmax), s	* 14	51.6	* 14	* 38	14.2	* 51	* 16	* 36
Max Q Clear Time (g_c+I1), s	14.1	22.9	9.0	23.7	17.6	53.2	17.3	24.1
Green Ext Time (p_c), s	0.0	22.1	0.2	6.8	0.0	0.0	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	34.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	460	320	260	530	260	190	2440	390	200	1940	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	232	484	160	274	558	0	200	2568	371	211	2042	90
Adj No. of Lanes	1	2	1	1	2	1	1	4	1	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	231	611	273	250	675	302	205	2828	910	205	2798	123
Arrive On Green	0.13	0.17	0.17	0.14	0.19	0.00	0.23	0.88	0.87	0.12	0.44	0.43
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6408	1583	1774	6340	279
Grp Volume(v), veh/h	232	484	160	274	558	0	200	2568	371	211	1548	584
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1583	1774	1602	1813
Q Serve(g_s), s	18.2	18.3	10.0	19.7	21.2	0.0	15.7	33.1	2.1	16.2	37.2	37.2
Cycle Q Clear(g_c), s	18.2	18.3	10.0	19.7	21.2	0.0	15.7	33.1	2.1	16.2	37.2	37.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	231	611	273	250	675	302	205	2828	910	205	2121	800
V/C Ratio(X)	1.01	0.79	0.59	1.10	0.83	0.00	0.97	0.91	0.41	1.03	0.73	0.73
Avail Cap(c_a), veh/h	231	733	328	250	758	339	205	2828	910	205	2121	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.82	1.00	1.00	0.00	0.69	0.69	0.69	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.9	55.5	31.4	60.1	54.4	0.0	53.6	6.5	1.1	61.9	32.2	32.3
Incr Delay (d2), s/veh	55.0	4.6	2.3	85.0	7.4	0.0	44.7	3.9	0.9	70.3	2.2	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile BackOfQ(0%),veh/ln	12.4	9.4	4.5	15.6	11.1	0.0	10.2	13.9	0.9	11.9	16.9	20.0
LnGrp Delay(d),s/veh	116.0	60.1	33.7	145.1	61.8	0.0	98.3	10.5	2.0	132.3	34.5	38.1
LnGrp LOS	F	E	C	F	E		F	B	A	F	C	D
Approach Vol, veh/h		876			832			3139			2343	
Approach Delay, s/veh		70.1			89.2			15.1			44.2	
Approach LOS		E			F			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.6	65.8	25.1	28.5	20.6	65.8	22.3	31.3
Change Period (Y+Rc), s	* 4.6	5.3	* 5.6	* 5.3	* 4.6	5.3	* 4.3	* 5.6
Max Green Setting (Gmax), s	* 16	57.2	* 19	* 28	* 16	57.2	* 18	* 29
Max Q Clear Time (g_c+I1), s	18.2	35.1	21.7	20.3	17.7	39.2	20.2	23.2
Green Ext Time (p_c), s	0.0	22.0	0.0	2.8	0.0	18.0	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	39.8
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

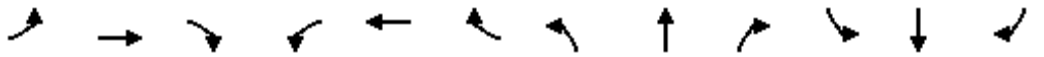
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	270	70	90	300	180	90	2820	110	140	2450	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	42	284	74	95	316	189	95	2968	116	147	2579	63
Adj No. of Lanes	1	2	1	1	2	1	1	4	0	1	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	502	224	136	544	243	161	3384	131	169	3444	851
Arrive On Green	0.07	0.14	0.14	0.08	0.15	0.15	0.18	1.00	1.00	0.19	1.00	1.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6377	248	1774	6408	1583
Grp Volume(v), veh/h	42	284	74	95	316	189	95	2232	852	147	2579	63
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1819	1774	1602	1583
Q Serve(g_s), s	3.2	10.5	5.9	7.3	11.6	16.1	6.9	0.0	0.0	11.3	0.0	0.0
Cycle Q Clear(g_c), s	3.2	10.5	5.9	7.3	11.6	16.1	6.9	0.0	0.0	11.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	122	502	224	136	544	243	161	2550	965	169	3444	851
V/C Ratio(X)	0.34	0.57	0.33	0.70	0.58	0.78	0.59	0.88	0.88	0.87	0.75	0.07
Avail Cap(c_a), veh/h	152	715	320	153	733	328	165	2550	965	215	3444	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.46	0.46	0.46	0.78	0.78	0.78	0.24	0.24	0.24	0.80	0.80	0.80
Uniform Delay (d), s/veh	62.1	56.1	54.1	63.1	55.1	56.9	54.9	0.0	0.0	55.8	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.5	0.4	9.1	0.8	6.4	1.3	1.2	3.2	21.1	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	5.2	2.6	3.9	5.8	7.4	3.4	0.3	0.9	6.5	0.3	0.0
LnGrp Delay(d),s/veh	62.9	56.5	54.5	72.2	55.8	63.3	56.3	1.2	3.2	76.9	1.2	0.1
LnGrp LOS	E	E	D	E	E	E	E	A	A	E	A	A
Approach Vol, veh/h		400			600			3179			2789	
Approach Delay, s/veh		56.8			60.8			3.4			5.2	
Approach LOS		E			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	80.6	15.6	25.8	17.0	81.5	14.0	27.5
Change Period (Y+Rc), s	* 4.6	6.3	4.9	6.0	* 4.3	6.3	* 4.3	6.0
Max Green Setting (Gmax), s	* 17	60.8	12.1	28.3	* 13	65.1	* 12	29.0
Max Q Clear Time (g_c+I1), s	13.3	2.0	9.3	12.5	8.9	2.0	5.2	18.1
Green Ext Time (p_c), s	0.1	58.4	0.0	4.1	0.1	62.6	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	12.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



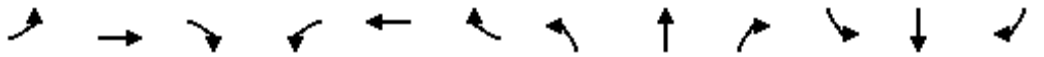
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	260	240	30	320	140	190	2290	40	190	2090	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	242	274	253	32	337	147	200	2411	42	200	2200	189
Adj No. of Lanes	1	2	0	1	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	446	399	99	365	310	177	2623	46	257	2721	233
Arrive On Green	0.11	0.25	0.25	0.06	0.20	0.20	0.10	0.40	0.40	0.29	0.90	0.90
Sat Flow, veh/h	1774	1770	1583	1774	1863	1583	1774	6535	114	1774	6058	519
Grp Volume(v), veh/h	242	274	253	32	337	147	200	1773	680	200	1744	645
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1863	1583	1774	1602	1843	1774	1602	1771
Q Serve(g_s), s	16.0	19.2	19.9	2.4	24.9	11.5	14.0	49.0	49.0	14.5	18.8	19.0
Cycle Q Clear(g_c), s	16.0	19.2	19.9	2.4	24.9	11.5	14.0	49.0	49.0	14.5	18.8	19.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.06	1.00		0.29
Lane Grp Cap(c), veh/h	203	446	399	99	365	310	177	1929	740	257	2159	796
V/C Ratio(X)	1.19	0.61	0.63	0.32	0.92	0.47	1.13	0.92	0.92	0.78	0.81	0.81
Avail Cap(c_a), veh/h	203	446	399	139	386	328	177	1929	740	257	2159	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.76	0.76	0.76	1.00	1.00	1.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	62.0	46.3	46.6	63.5	55.3	49.9	63.0	39.7	39.8	47.6	4.9	4.9
Incr Delay (d2), s/veh	125.2	2.5	3.3	1.4	22.2	0.9	105.9	8.6	18.4	10.7	2.5	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	14.9	9.7	9.1	1.2	15.1	5.1	12.1	23.2	28.7	7.8	7.9	9.7
LnGrp Delay(d),s/veh	187.2	48.9	49.9	64.9	77.4	50.8	168.9	48.3	58.2	58.3	7.4	11.5
LnGrp LOS	F	D	D	E	E	D	F	D	E	E	A	B
Approach Vol, veh/h		769			516			2653			2589	
Approach Delay, s/veh		92.7			69.1			59.9			12.4	
Approach LOS		F			E			E			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.6	61.5	12.7	40.2	18.9	68.2	20.9	32.0
Change Period (Y+Rc), s	5.3	* 5.3	4.9	* 4.9	4.9	5.3	4.9	* 4.6
Max Green Setting (Gmax), s	20.0	* 56	11.0	* 33	14.0	61.9	16.0	* 29
Max Q Clear Time (g_c+I1), s	16.5	51.0	4.4	21.9	16.0	21.0	18.0	26.9
Green Ext Time (p_c), s	2.9	4.7	0.0	3.0	0.0	27.4	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	45.6
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



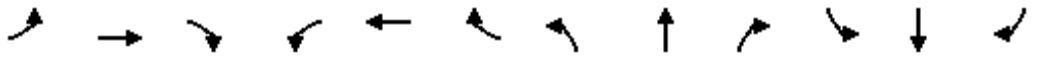
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	10	30	250	10	150	60	2450	90	280	2220	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	11	32	317	0	109	63	2579	95	295	2337	21
Adj No. of Lanes	1	1	0	2	0	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	34	99	329	0	147	127	2689	99	908	4077	37
Arrive On Green	0.08	0.08	0.08	0.09	0.00	0.09	0.14	0.84	0.84	0.53	1.00	1.00
Sat Flow, veh/h	1774	421	1225	3548	0	1583	1774	6392	235	3442	6599	59
Grp Volume(v), veh/h	32	0	43	317	0	109	63	1937	737	295	1702	656
Grp Sat Flow(s),veh/h/ln	1774	0	1647	1774	0	1583	1774	1602	1821	1721	1602	1852
Q Serve(g_s), s	2.4	0.0	3.4	12.5	0.0	9.4	4.6	46.2	47.0	6.8	0.0	0.0
Cycle Q Clear(g_c), s	2.4	0.0	3.4	12.5	0.0	9.4	4.6	46.2	47.0	6.8	0.0	0.0
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.13	1.00		0.03
Lane Grp Cap(c), veh/h	144	0	133	329	0	147	127	2022	766	908	2969	1144
V/C Ratio(X)	0.22	0.00	0.32	0.96	0.00	0.74	0.49	0.96	0.96	0.32	0.57	0.57
Avail Cap(c_a), veh/h	380	0	353	329	0	147	139	2022	766	908	2969	1144
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.23	0.23	0.23	0.60	0.60	0.60
Uniform Delay (d), s/veh	60.2	0.0	60.7	63.3	0.0	61.9	57.6	10.1	10.2	25.9	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	1.4	39.4	0.0	18.1	0.7	3.9	9.0	0.1	0.5	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	0.0	1.6	7.9	0.0	4.9	2.3	19.8	23.6	3.2	0.1	0.4
LnGrp Delay(d),s/veh	61.0	0.0	62.1	102.7	0.0	79.9	58.3	14.0	19.1	26.1	0.5	1.3
LnGrp LOS	E		E	F		E	E	B	B	C	A	A
Approach Vol, veh/h		75			426			2737			2653	
Approach Delay, s/veh		61.6			96.9			16.4			3.5	
Approach LOS		E			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	42.2	64.2		16.0	14.7	91.8		17.6
Change Period (Y+Rc), s	5.3	* 5.3		* 4.6	* 4.6	5.3		4.6
Max Green Setting (Gmax), s	19.0	* 59		* 30	* 11	66.9		13.0
Max Q Clear Time (g_c+I1), s	8.8	49.0		5.4	6.6	2.0		14.5
Green Ext Time (p_c), s	8.6	9.0		0.3	0.0	36.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	410	480	170	340	430	140	230	2480	340	190	2030	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	432	505	179	358	453	147	242	2611	358	200	2137	326
Adj No. of Lanes	2	2	0	2	2	0	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	480	541	191	404	505	163	290	2570	346	279	2535	385
Arrive On Green	0.14	0.21	0.21	0.12	0.19	0.19	0.03	0.15	0.15	0.08	0.45	0.45
Sat Flow, veh/h	3442	2567	905	3442	2635	848	3442	5756	776	3442	5658	859
Grp Volume(v), veh/h	432	347	337	358	303	297	242	2173	796	200	1814	649
Grp Sat Flow(s),veh/h/ln	1721	1770	1703	1721	1770	1713	1721	1602	1726	1721	1602	1711
Q Serve(g_s), s	17.3	27.0	27.2	14.3	23.4	23.7	9.8	62.5	62.5	7.9	46.8	47.3
Cycle Q Clear(g_c), s	17.3	27.0	27.2	14.3	23.4	23.7	9.8	62.5	62.5	7.9	46.8	47.3
Prop In Lane	1.00		0.53	1.00		0.50	1.00		0.45	1.00		0.50
Lane Grp Cap(c), veh/h	480	373	359	404	339	328	290	2145	770	279	2153	767
V/C Ratio(X)	0.90	0.93	0.94	0.89	0.89	0.90	0.83	1.01	1.03	0.72	0.84	0.85
Avail Cap(c_a), veh/h	480	379	365	418	367	355	295	2145	770	279	2153	767
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.57	0.57	0.57	0.66	0.66	0.66	0.78	0.78	0.78	0.26	0.26	0.26
Uniform Delay (d), s/veh	59.3	54.2	54.3	60.9	55.2	55.3	67.1	59.7	59.7	62.8	34.3	34.4
Incr Delay (d2), s/veh	12.5	19.5	21.3	13.9	16.1	18.0	14.5	20.3	37.6	2.3	1.1	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.1	15.2	14.9	7.6	13.0	12.9	5.3	31.8	37.9	3.9	20.9	22.9
LnGrp Delay(d),s/veh	71.8	73.8	75.6	74.8	71.3	73.3	81.6	80.0	97.3	65.1	35.4	37.6
LnGrp LOS	E	E	E	E	E	E	F	F	F	E	D	D
Approach Vol, veh/h		1116			958			3211			2663	
Approach Delay, s/veh		73.6			73.2			84.4			38.1	
Approach LOS		E			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	67.8	21.4	34.1	16.4	68.0	24.1	31.4
Change Period (Y+Rc), s	5.3	* 5.3	5.0	4.6	* 4.6	5.3	4.6	* 4.6
Max Green Setting (Gmax), s	11.0	* 63	17.0	30.0	* 12	61.5	18.7	* 29
Max Q Clear Time (g_c+I1), s	9.9	64.5	16.3	29.2	11.8	49.3	19.3	25.7
Green Ext Time (p_c), s	0.2	0.0	0.1	0.3	0.0	10.7	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	66.0
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

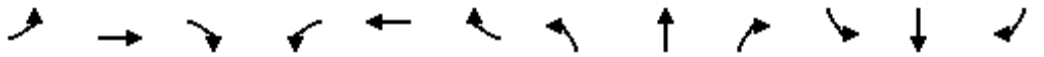
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	20	40	130	50	180	130	2500	90	280	2270	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	21	4	137	53	26	137	2632	92	295	2389	21
Adj No. of Lanes	1	1	0	1	1	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	119	23	163	186	158	127	3892	136	270	4044	36
Arrive On Green	0.07	0.08	0.08	0.09	0.10	0.10	0.14	1.00	1.00	0.16	1.00	1.00
Sat Flow, veh/h	1774	1522	290	1774	1863	1583	1774	6406	223	3442	6600	58
Grp Volume(v), veh/h	42	0	25	137	53	26	137	1973	751	295	1739	671
Grp Sat Flow(s),veh/h/ln	1774	0	1812	1774	1863	1583	1774	1602	1823	1721	1602	1853
Q Serve(g_s), s	3.1	0.0	1.8	10.6	3.7	2.1	10.0	0.0	0.0	11.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	1.8	10.6	3.7	2.1	10.0	0.0	0.0	11.0	0.0	0.0
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.12	1.00		0.03
Lane Grp Cap(c), veh/h	133	0	142	163	186	158	127	2920	1108	270	2944	1135
V/C Ratio(X)	0.32	0.00	0.18	0.84	0.29	0.16	1.08	0.68	0.68	1.09	0.59	0.59
Avail Cap(c_a), veh/h	165	0	401	219	464	395	127	2920	1108	270	2944	1135
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.52	0.52	0.52	0.26	0.26	0.26
Uniform Delay (d), s/veh	61.4	0.0	60.3	62.6	58.4	57.7	60.0	0.0	0.0	59.0	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.6	18.9	0.8	0.5	81.0	0.7	1.8	55.9	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	0.0	0.9	6.1	1.9	0.9	7.7	0.2	0.5	7.3	0.1	0.2
LnGrp Delay(d),s/veh	62.7	0.0	60.9	81.5	59.2	58.2	141.0	0.7	1.8	114.9	0.2	0.6
LnGrp LOS	E		E	F	E	E	F	A	A	F	A	A
Approach Vol, veh/h		67			216			2861			2705	
Approach Delay, s/veh		62.0			73.2			7.7			12.8	
Approach LOS		E			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	90.4	18.2	15.9	14.9	91.1	14.8	19.3
Change Period (Y+Rc), s	* 4.6	5.3	5.3	* 4.9	4.9	5.3	* 4.3	* 5.3
Max Green Setting (Gmax), s	* 11	61.6	17.3	* 31	10.0	62.3	* 13	* 35
Max Q Clear Time (g_c+I1), s	13.0	2.0	12.6	3.8	12.0	2.0	5.1	5.7
Green Ext Time (p_c), s	0.0	58.2	0.3	0.1	0.0	58.8	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



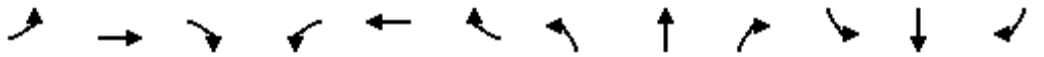
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	310	260	120	130	230	100	170	2450	140	130	2280	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	326	274	126	137	242	105	179	2579	147	137	2400	158
Adj No. of Lanes	2	2	0	1	2	0	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	378	342	153	161	302	127	424	3188	181	161	2211	145
Arrive On Green	0.18	0.24	0.24	0.09	0.12	0.12	0.24	0.51	0.51	0.03	0.12	0.12
Sat Flow, veh/h	3442	2379	1065	1774	2429	1023	1774	6251	355	1774	6191	406
Grp Volume(v), veh/h	326	202	198	137	174	173	179	1980	746	137	1862	696
Grp Sat Flow(s),veh/h/ln	1721	1770	1675	1774	1770	1682	1774	1602	1800	1774	1602	1791
Q Serve(g_s), s	12.9	15.0	15.7	10.7	13.4	14.0	12.0	48.1	48.5	10.8	50.0	50.0
Cycle Q Clear(g_c), s	12.9	15.0	15.7	10.7	13.4	14.0	12.0	48.1	48.5	10.8	50.0	50.0
Prop In Lane	1.00		0.64	1.00		0.61	1.00		0.20	1.00		0.23
Lane Grp Cap(c), veh/h	378	254	240	161	220	209	424	2451	918	161	1716	640
V/C Ratio(X)	0.86	0.79	0.82	0.85	0.79	0.83	0.42	0.81	0.81	0.85	1.08	1.09
Avail Cap(c_a), veh/h	381	341	323	196	341	324	424	2451	918	167	1716	640
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.81	0.81	0.81	0.96	0.96	0.96	0.25	0.25	0.25	0.80	0.80	0.80
Uniform Delay (d), s/veh	56.1	51.3	51.5	62.7	59.5	59.8	45.1	28.6	28.7	67.0	61.8	61.8
Incr Delay (d2), s/veh	15.0	7.4	9.9	24.0	6.5	9.3	0.2	0.8	2.1	26.3	46.8	58.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.9	7.8	7.9	6.3	6.9	7.1	5.9	21.3	24.6	6.5	29.6	35.3
LnGrp Delay(d),s/veh	71.2	58.7	61.4	86.7	66.1	69.1	45.3	29.4	30.8	93.2	108.6	120.5
LnGrp LOS	E	E	E	F	E	E	D	C	C	F	F	F
Approach Vol, veh/h		726			484			2905			2695	
Approach Delay, s/veh		65.0			73.0			30.7			110.9	
Approach LOS		E			E			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	77.7	18.3	25.7	39.7	56.3	21.0	23.0
Change Period (Y+Rc), s	* 5.6	6.3	* 5.6	* 5.6	6.3	* 6.3	5.6	* 5.6
Max Green Setting (Gmax), s	* 13	61.2	* 16	* 27	25.0	* 50	15.5	* 27
Max Q Clear Time (g_c+I1), s	12.8	50.5	12.7	17.7	14.0	52.0	14.9	16.0
Green Ext Time (p_c), s	0.0	9.8	0.1	2.4	9.3	0.0	0.3	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	69.1
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	240	650	130	200	570	160	310	2440	100	210	2200	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	253	684	137	211	600	168	326	2568	105	221	2316	168
Adj No. of Lanes	2	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	750	335	190	835	374	379	2727	111	289	2508	181
Arrive On Green	0.09	0.21	0.21	0.11	0.24	0.24	0.04	0.14	0.14	0.11	0.54	0.54
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	6363	260	3442	6145	445
Grp Volume(v), veh/h	253	684	137	211	600	168	326	1938	735	221	1810	674
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1602	1817	1721	1602	1784
Q Serve(g_s), s	10.1	26.4	8.0	15.0	21.8	9.9	13.2	55.9	56.1	8.7	48.3	48.6
Cycle Q Clear(g_c), s	10.1	26.4	8.0	15.0	21.8	9.9	13.2	55.9	56.1	8.7	48.3	48.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.25
Lane Grp Cap(c), veh/h	320	750	335	190	835	374	379	2060	779	289	1961	728
V/C Ratio(X)	0.79	0.91	0.41	1.11	0.72	0.45	0.86	0.94	0.94	0.77	0.92	0.93
Avail Cap(c_a), veh/h	320	784	351	190	835	374	418	2060	779	320	1961	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.82	0.82	0.82	0.93	0.93	0.93	0.62	0.62	0.62	0.09	0.09	0.09
Uniform Delay (d), s/veh	62.2	53.9	27.5	62.5	49.2	27.8	66.4	58.3	58.4	60.8	30.0	30.1
Incr Delay (d2), s/veh	10.6	12.4	0.7	95.5	2.8	0.8	10.2	6.9	15.1	0.9	1.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.3	14.2	3.5	12.4	11.0	4.4	6.8	26.1	31.5	4.2	21.4	24.2
LnGrp Delay(d),s/veh	72.7	66.3	28.2	158.0	52.0	28.6	76.6	65.2	73.6	61.8	30.9	32.6
LnGrp LOS	E	E	C	F	D	C	E	E	E	E	C	C
Approach Vol, veh/h		1074			979			2999			2705	
Approach Delay, s/veh		63.0			70.8			68.5			33.9	
Approach LOS		E			E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	65.8	21.0	35.6	20.4	62.9	17.6	39.0
Change Period (Y+Rc), s	5.8	* 5.8	6.0	* 6	* 5	5.8	* 4.6	6.0
Max Green Setting (Gmax), s	13.0	* 60	15.0	* 31	* 17	55.6	* 13	33.0
Max Q Clear Time (g_c+I1), s	10.7	58.1	17.0	28.4	15.2	50.6	12.1	23.8
Green Ext Time (p_c), s	0.2	1.8	0.0	1.2	0.2	4.6	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	56.0
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	20	20	170	30	130	30	2790	120	50	2310	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	21	21	179	32	137	32	2937	126	53	2432	21
Adj No. of Lanes	1	1	0	0	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	167	167	258	38	309	90	4013	171	111	4262	37
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.10	1.00	1.00	0.04	0.43	0.43
Sat Flow, veh/h	1211	856	856	1078	193	1583	1774	6350	271	1774	6602	57
Grp Volume(v), veh/h	11	0	42	211	0	137	32	2218	845	53	1770	683
Grp Sat Flow(s),veh/h/ln	1211	0	1712	1270	0	1583	1774	1602	1815	1774	1602	1853
Q Serve(g_s), s	1.2	0.0	2.8	20.2	0.0	10.7	2.4	0.0	0.0	4.1	38.9	38.9
Cycle Q Clear(g_c), s	24.3	0.0	2.8	23.0	0.0	10.7	2.4	0.0	0.0	4.1	38.9	38.9
Prop In Lane	1.00		0.50	0.85		1.00	1.00		0.15	1.00		0.03
Lane Grp Cap(c), veh/h	88	0	334	295	0	309	90	3037	1147	111	3103	1196
V/C Ratio(X)	0.12	0.00	0.13	0.71	0.00	0.44	0.35	0.73	0.74	0.48	0.57	0.57
Avail Cap(c_a), veh/h	135	0	400	350	0	370	129	3037	1147	141	3103	1196
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.27	0.27	0.27	0.21	0.21	0.21
Uniform Delay (d), s/veh	66.4	0.0	46.5	56.0	0.0	49.7	60.7	0.0	0.0	64.9	25.1	25.1
Incr Delay (d2), s/veh	0.6	0.0	0.2	5.5	0.0	1.0	0.6	0.4	1.2	0.7	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	0.0	1.4	8.4	0.0	4.8	1.2	0.1	0.4	2.0	17.3	20.1
LnGrp Delay(d),s/veh	67.0	0.0	46.7	61.5	0.0	50.7	61.4	0.4	1.2	65.5	25.3	25.5
LnGrp LOS	E		D	E		D	E	A	A	E	C	C
Approach Vol, veh/h		53			348			3095			2506	
Approach Delay, s/veh		50.9			57.3			1.3			26.2	
Approach LOS		D			E			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.6	93.8		32.6	11.7	95.7		32.6
Change Period (Y+Rc), s	4.9	5.3		* 5.3	* 4.6	5.3		* 5.3
Max Green Setting (Gmax), s	11.1	80.7		* 33	* 10	81.9		* 33
Max Q Clear Time (g_c+I1), s	6.1	2.0		26.3	4.4	40.9		25.0
Green Ext Time (p_c), s	0.0	77.3		1.0	0.0	40.6		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	1050	680	2330	0	0	2400
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863
Adj Flow Rate, veh/h	1105	716	2453	0	0	2526
Adj No. of Lanes	2	2	4	0	0	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	0	2
Cap, veh/h	971	786	4060	0	0	4060
Arrive On Green	0.28	0.28	1.00	0.00	0.00	1.00
Sat Flow, veh/h	3442	2787	6929	0	0	6929
Grp Volume(v), veh/h	1105	716	2453	0	0	2526
Grp Sat Flow(s),veh/h/ln	1721	1393	1602	0	0	1602
Q Serve(g_s), s	39.5	34.8	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	39.5	34.8	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	0.00	
Lane Grp Cap(c), veh/h	971	786	4060	0	0	4060
V/C Ratio(X)	1.14	0.91	0.60	0.00	0.00	0.62
Avail Cap(c_a), veh/h	971	786	4060	0	0	4060
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	2.00
Upstream Filter(I)	1.00	1.00	0.88	0.00	0.00	0.48
Uniform Delay (d), s/veh	50.3	48.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	74.8	14.7	0.6	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	28.8	14.9	0.2	0.0	0.0	0.1
LnGrp Delay(d),s/veh	125.0	63.2	0.6	0.0	0.0	0.3
LnGrp LOS	F	E	A			A
Approach Vol, veh/h	1821		2453			2526
Approach Delay, s/veh	100.7		0.6			0.3
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		95.0				95.0		45.0
Change Period (Y+Rc), s		6.3				6.3		5.5
Max Green Setting (Gmax), s		88.7				88.7		39.5
Max Q Clear Time (g_c+I1), s		2.0				2.0		41.5
Green Ext Time (p_c), s		86.2				86.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	340	230	0	2020	2640	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0
Adj Flow Rate, veh/h	358	242	0	2126	2779	0
Adj No. of Lanes	2	2	0	4	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	450	364	0	5030	5030	0
Arrive On Green	0.13	0.13	0.00	0.53	1.00	0.00
Sat Flow, veh/h	3442	2787	0	6929	6929	0
Grp Volume(v), veh/h	358	242	0	2126	2779	0
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1602	1602	0
Q Serve(g_s), s	14.1	11.6	0.0	28.3	0.0	0.0
Cycle Q Clear(g_c), s	14.1	11.6	0.0	28.3	0.0	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	450	364	0	5030	5030	0
V/C Ratio(X)	0.80	0.66	0.00	0.42	0.55	0.00
Avail Cap(c_a), veh/h	946	766	0	5030	5030	0
HCM Platoon Ratio	1.00	1.00	1.00	0.67	2.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.33	0.53	0.00
Uniform Delay (d), s/veh	59.0	57.9	0.0	13.8	0.0	0.0
Incr Delay (d2), s/veh	3.3	2.1	0.0	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.9	4.6	0.0	12.6	0.1	0.0
LnGrp Delay(d),s/veh	62.3	60.0	0.0	13.9	0.2	0.0
LnGrp LOS	E	E		B	A	
Approach Vol, veh/h	600			2126	2779	
Approach Delay, s/veh	61.4			13.9	0.2	
Approach LOS	E			B	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		116.2		23.8		116.2		
Change Period (Y+Rc), s		6.3		5.5		6.3		
Max Green Setting (Gmax), s		89.7		38.5		89.7		
Max Q Clear Time (g_c+I1), s		30.3		16.1		2.0		
Green Ext Time (p_c), s		58.2		2.2		85.2		

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	180	1190	1250	650	530	2020
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	189	1253	1316	317	558	2126
Adj No. of Lanes	2	2	3	1	2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	840	1211	2153	670	656	2325
Arrive On Green	0.24	0.24	0.42	0.42	0.19	0.66
Sat Flow, veh/h	3442	2787	5253	1583	3442	3632
Grp Volume(v), veh/h	189	1253	1316	317	558	2126
Grp Sat Flow(s),veh/h/ln	1721	1393	1695	1583	1721	1770
Q Serve(g_s), s	4.4	24.4	20.1	14.4	15.7	51.6
Cycle Q Clear(g_c), s	4.4	24.4	20.1	14.4	15.7	51.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	840	1211	2153	670	656	2325
V/C Ratio(X)	0.23	1.03	0.61	0.47	0.85	0.91
Avail Cap(c_a), veh/h	840	1211	2153	670	1277	2325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.50	0.50	0.79	0.79	1.00	1.00
Uniform Delay (d), s/veh	30.2	28.3	22.4	20.8	39.1	14.7
Incr Delay (d2), s/veh	0.0	27.9	1.0	1.9	2.4	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.1	21.3	9.6	6.6	7.7	27.1
LnGrp Delay(d),s/veh	30.3	56.1	23.5	22.7	41.5	21.7
LnGrp LOS	C	F	C	C	D	C
Approach Vol, veh/h	1442		1633			2684
Approach Delay, s/veh	52.7		23.3			25.8
Approach LOS	D		C			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	23.4	47.6				71.0		29.0
Change Period (Y+Rc), s	* 4.3	5.3				5.3		4.6
Max Green Setting (Gmax), s	* 37	24.3				65.7		24.4
Max Q Clear Time (g_c+I1), s	17.7	22.1				53.6		26.4
Green Ext Time (p_c), s	1.4	2.2				12.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.9
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

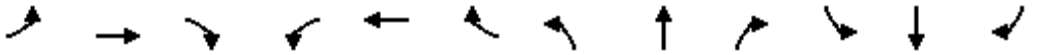
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	300	580	210	480	580	530	70	680	600	410	740	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	309	621	86	372	797	516	74	716	579	432	779	144
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	333	699	292	356	748	668	93	756	654	393	1141	211
Arrive On Green	0.39	0.39	0.39	0.21	0.21	0.21	0.05	0.22	0.22	0.23	0.40	0.40
Sat Flow, veh/h	1714	3600	1504	1714	3600	1528	1714	3420	1520	1714	2881	533
Grp Volume(v), veh/h	309	621	86	372	797	516	74	716	579	432	462	461
Grp Sat Flow(s),veh/h/ln	1714	1800	1504	1714	1800	1528	1714	1710	1520	1714	1710	1704
Q Serve(g_s), s	22.4	20.9	5.1	27.0	27.0	27.0	5.5	26.8	28.7	29.8	29.1	29.1
Cycle Q Clear(g_c), s	22.4	20.9	5.1	27.0	27.0	27.0	5.5	26.8	28.7	29.8	29.1	29.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	333	699	292	356	748	668	93	756	654	393	677	675
V/C Ratio(X)	0.93	0.89	0.29	1.04	1.07	0.77	0.79	0.95	0.89	1.10	0.68	0.68
Avail Cap(c_a), veh/h	343	720	301	356	748	668	195	756	654	393	677	675
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	0.74	0.74	0.74	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	38.4	33.6	51.5	51.5	31.1	60.7	49.9	29.4	50.1	32.5	32.5
Incr Delay (d2), s/veh	28.0	11.6	0.5	53.2	47.6	4.2	12.2	20.0	14.4	74.9	5.5	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	13.1	11.5	2.2	18.0	18.3	16.4	2.9	14.7	23.4	22.3	14.8	14.7
LnGrp Delay(d),s/veh	66.9	50.0	34.1	104.7	99.1	35.3	72.9	69.9	43.9	125.0	38.0	38.1
LnGrp LOS	E	D	C	F	F	D	E	E	D	F	D	D
Approach Vol, veh/h		1016			1685			1369			1355	
Approach Delay, s/veh		53.8			80.8			59.1			65.8	
Approach LOS		D			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	34.0	33.7		30.3	11.3	56.5		32.0
Change Period (Y+Rc), s	* 4.2	5.0		5.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s	* 30	28.0		26.0	* 15	43.0		27.0
Max Q Clear Time (g_c+I1), s	31.8	30.7		24.4	7.5	31.1		29.0
Green Ext Time (p_c), s	0.0	0.0		0.9	0.1	8.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	66.5
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.



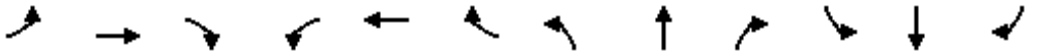
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	940	200	0	0	340	90	770	110	60	100	0	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	989	211	0	0	358	0	811	116	58	105	0	30
Adj No. of Lanes	2	1	0	0	2	1	2	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	1123	1035	0	0	530	237	983	335	168	0	0	0
Arrive On Green	0.33	0.56	0.00	0.00	0.15	0.00	0.29	0.29	0.29	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	3632	1583	3442	1173	586		0	
Grp Volume(v), veh/h	989	211	0	0	358	0	811	0	174		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1583	1721	0	1759			
Q Serve(g_s), s	16.1	3.4	0.0	0.0	5.7	0.0	13.0	0.0	4.6			
Cycle Q Clear(g_c), s	16.1	3.4	0.0	0.0	5.7	0.0	13.0	0.0	4.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.33			
Lane Grp Cap(c), veh/h	1123	1035	0	0	530	237	983	0	503			
V/C Ratio(X)	0.88	0.20	0.00	0.00	0.67	0.00	0.82	0.00	0.35			
Avail Cap(c_a), veh/h	2366	1926	0	0	945	423	2116	0	1082			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	18.9	6.6	0.0	0.0	23.8	0.0	19.8	0.0	16.8			
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.0	0.6	0.0	0.7	0.0	0.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(0%),veh/ln	7.7	1.7	0.0	0.0	2.8	0.0	6.3	0.0	2.2			
LnGrp Delay(d),s/veh	19.8	6.6	0.0	0.0	24.4	0.0	20.4	0.0	16.9			
LnGrp LOS	B	A			C		C		B			
Approach Vol, veh/h		1200			358			985				
Approach Delay, s/veh		17.5			24.4			19.8				
Approach LOS		B			C			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		21.6		37.6			24.0	13.6
Change Period (Y+Rc), s		* 4.7		* 4.7			* 4.7	* 4.7
Max Green Setting (Gmax), s		* 36		* 61			* 41	* 16
Max Q Clear Time (g_c+I1), s		15.0		5.4			18.1	7.7
Green Ext Time (p_c), s		1.9		1.8			1.2	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	19.4
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



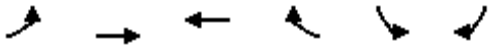
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	520	0	0	570	20	940	20	220	40	0	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	0	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	42	547	0	0	600	21	989	21	232	42	0	42
Adj No. of Lanes	1	3	0	0	3	0	2	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	68	2364	0	0	1869	65	924	500	425	80	0	71
Arrive On Green	0.04	0.48	0.00	0.00	0.38	0.38	0.28	0.28	0.28	0.05	0.00	0.05
Sat Flow, veh/h	1714	5076	0	0	5037	170	3326	1800	1530	1714	0	1530
Grp Volume(v), veh/h	42	547	0	0	402	219	989	21	232	42	0	42
Grp Sat Flow(s),veh/h/ln	1714	1638	0	0	1638	1769	1663	1800	1530	1714	0	1530
Q Serve(g_s), s	1.7	4.7	0.0	0.0	6.2	6.3	20.0	0.6	9.3	1.7	0.0	1.9
Cycle Q Clear(g_c), s	1.7	4.7	0.0	0.0	6.2	6.3	20.0	0.6	9.3	1.7	0.0	1.9
Prop In Lane	1.00		0.00	0.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	68	2364	0	0	1256	678	924	500	425	80	0	71
V/C Ratio(X)	0.62	0.23	0.00	0.00	0.32	0.32	1.07	0.04	0.55	0.52	0.00	0.59
Avail Cap(c_a), veh/h	186	2364	0	0	1256	678	924	500	425	381	0	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.12	0.12	0.00	0.00	0.95	0.95	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.0	10.9	0.0	0.0	15.6	15.6	26.0	19.0	22.1	33.5	0.0	33.6
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.0	0.6	1.2	50.4	0.0	1.5	5.2	0.0	7.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	2.1	0.0	0.0	2.9	3.3	15.6	0.3	4.1	0.9	0.0	1.0
LnGrp Delay(d),s/veh	35.1	10.9	0.0	0.0	16.2	16.8	76.4	19.0	23.6	38.8	0.0	41.1
LnGrp LOS	D	B			B	B	F	B	C	D		D
Approach Vol, veh/h		589			621			1242			84	
Approach Delay, s/veh		12.7			16.4			65.6			39.9	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		39.6		7.4	7.0	32.6		25.0
Change Period (Y+Rc), s		5.0		4.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s		22.0		16.0	* 7.8	10.0		20.0
Max Q Clear Time (g_c+I1), s		6.7		3.9	3.7	8.3		22.0
Green Ext Time (p_c), s		6.2		0.2	0.0	1.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.4
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	700	780	0	410	30
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1800	1800
Adj Flow Rate, veh/h	0	737	821	0	462	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2290	2290	0	611	273
Arrive On Green	0.00	0.67	0.67	0.00	0.18	0.00
Sat Flow, veh/h	0	3600	3600	0	3429	1530
Grp Volume(v), veh/h	0	737	821	0	462	0
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1714	1530
Q Serve(g_s), s	0.0	5.9	6.8	0.0	8.3	0.0
Cycle Q Clear(g_c), s	0.0	5.9	6.8	0.0	8.3	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2290	2290	0	611	273
V/C Ratio(X)	0.00	0.32	0.36	0.00	0.76	0.00
Avail Cap(c_a), veh/h	0	2290	2290	0	1076	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.94	0.09	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.5	4.7	0.0	25.4	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.0	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	2.9	3.1	0.0	4.1	0.0
LnGrp Delay(d),s/veh	0.0	4.9	4.7	0.0	27.3	0.0
LnGrp LOS		A	A		C	
Approach Vol, veh/h		737	821		462	
Approach Delay, s/veh		4.9	4.7		27.3	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		48.8		16.2		48.8		
Change Period (Y+Rc), s		5.3		4.6		5.3		
Max Green Setting (Gmax), s		34.7		20.4		34.7		
Max Q Clear Time (g_c+I1), s		7.9		10.3		8.8		
Green Ext Time (p_c), s		11.6		1.3		11.4		

Intersection Summary	
HCM 2010 Ctrl Delay	9.9
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	200	570	0	2050	920	520
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	211	469	0	2158	968	0
Adj No. of Lanes	1	2	0	3	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	358	639	0	3085	2147	961
Arrive On Green	0.21	0.21	0.00	1.00	0.63	0.00
Sat Flow, veh/h	1714	3060	0	5238	3510	1530
Grp Volume(v), veh/h	211	469	0	2158	968	0
Grp Sat Flow(s),veh/h/ln	1714	1530	0	1638	1710	1530
Q Serve(g_s), s	6.7	8.6	0.0	0.0	8.8	0.0
Cycle Q Clear(g_c), s	6.7	8.6	0.0	0.0	8.8	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	358	639	0	3085	2147	961
V/C Ratio(X)	0.59	0.73	0.00	0.70	0.45	0.00
Avail Cap(c_a), veh/h	577	1030	0	3085	2147	961
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.00	0.52	0.88	0.00
Uniform Delay (d), s/veh	21.4	22.2	0.0	0.0	5.8	0.0
Incr Delay (d2), s/veh	1.4	1.5	0.0	0.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	3.7	0.0	0.2	4.2	0.0
LnGrp Delay(d),s/veh	22.8	23.7	0.0	0.7	6.4	0.0
LnGrp LOS	C	C		A	A	
Approach Vol, veh/h	680			2158	968	
Approach Delay, s/veh	23.4			0.7	6.4	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		42.7		17.3		42.7		
Change Period (Y+Rc), s		5.0		* 4.8		5.0		
Max Green Setting (Gmax), s		30.0		* 20		30.0		
Max Q Clear Time (g_c+I1), s		2.0		10.6		10.8		
Green Ext Time (p_c), s		24.0		1.9		17.1		

Intersection Summary	
HCM 2010 Ctrl Delay	6.2
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

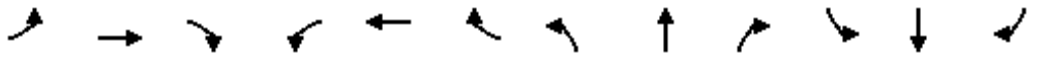
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	210	20	30	150	370	0	0	0	560	90	100
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800				1800	1800	1800
Adj Flow Rate, veh/h	126	221	7	32	158	129				657	0	38
Adj No. of Lanes	1	2	0	0	2	1				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	597	1171	37	277	1004	527				1116	0	497
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35				0.33	0.00	0.33
Sat Flow, veh/h	1048	3384	107	280	2901	1523				3429	0	1529
Grp Volume(v), veh/h	126	111	117	103	87	129				657	0	38
Grp Sat Flow(s),veh/h/ln	1048	1710	1781	1625	1556	1523				1714	0	1529
Q Serve(g_s), s	2.5	1.2	1.2	0.0	1.0	1.6				4.2	0.0	0.5
Cycle Q Clear(g_c), s	3.5	1.2	1.2	1.0	1.0	1.6				4.2	0.0	0.5
Prop In Lane	1.00		0.06	0.31		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	597	592	616	742	538	527				1116	0	497
V/C Ratio(X)	0.21	0.19	0.19	0.14	0.16	0.24				0.59	0.00	0.08
Avail Cap(c_a), veh/h	1464	2006	2089	1989	1825	1787				2712	0	1209
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	7.1	6.0	6.0	5.9	5.9	6.1				7.4	0.0	6.1
Incr Delay (d2), s/veh	0.2	0.2	0.1	0.1	0.1	0.2				0.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.6	0.6	0.5	0.5	0.7				2.0	0.0	0.2
LnGrp Delay(d),s/veh	7.3	6.1	6.1	6.0	6.1	6.4				7.9	0.0	6.2
LnGrp LOS	A	A	A	A	A	A				A		A
Approach Vol, veh/h		354			319						695	
Approach Delay, s/veh		6.6			6.2						7.8	
Approach LOS		A			A						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		13.4		12.8		13.4		
Change Period (Y+Rc), s		* 4.3		* 4.3		* 4.3		
Max Green Setting (Gmax), s		* 31		* 21		* 31		
Max Q Clear Time (g_c+I1), s		5.5		6.2		3.6		
Green Ext Time (p_c), s		3.6		2.3		3.6		

Intersection Summary	
HCM 2010 Ctrl Delay	7.1
HCM 2010 LOS	A

Notes

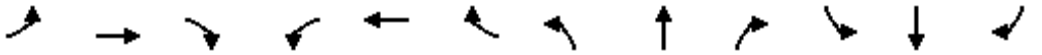
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	1300	240	130	1320	330	200	1040	150	220	950	170
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1937	1863	1863	1937	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	158	1368	182	137	1389	128	211	1095	149	232	1000	167
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	1222	547	182	1171	545	259	1027	140	266	1008	168
Arrive On Green	0.10	0.33	0.33	0.21	0.66	0.66	0.15	0.32	0.32	0.15	0.32	0.32
Sat Flow, veh/h	1774	3681	1647	1774	3539	1647	1774	3257	442	1774	3158	527
Grp Volume(v), veh/h	158	1368	182	137	1389	128	211	618	626	232	582	585
Grp Sat Flow(s),veh/h/ln	1774	1840	1647	1774	1770	1647	1774	1840	1859	1774	1840	1844
Q Serve(g_s), s	11.4	43.1	10.8	9.4	43.0	4.0	15.0	41.0	41.0	16.6	41.0	41.1
Cycle Q Clear(g_c), s	11.4	43.1	10.8	9.4	43.0	4.0	15.0	41.0	41.0	16.6	41.0	41.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		0.29
Lane Grp Cap(c), veh/h	184	1222	547	182	1171	545	259	580	586	266	588	589
V/C Ratio(X)	0.86	1.12	0.33	0.75	1.19	0.24	0.81	1.06	1.07	0.87	0.99	0.99
Avail Cap(c_a), veh/h	184	1222	547	184	1171	545	266	580	586	266	588	589
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.55	0.55	0.55	0.95	0.95	0.95	0.59	0.59	0.59	0.85	0.85	0.85
Uniform Delay (d), s/veh	57.3	43.4	32.6	50.1	22.0	15.4	53.8	44.5	44.5	54.0	44.1	44.1
Incr Delay (d2), s/veh	18.5	60.6	0.9	13.4	92.3	1.0	9.9	47.4	48.4	21.6	31.8	32.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.5	32.2	5.0	5.2	35.5	1.9	8.0	28.4	28.9	9.7	26.1	26.2
LnGrp Delay(d),s/veh	75.8	104.1	33.5	63.5	114.3	16.4	63.7	91.9	92.9	75.7	75.9	76.4
LnGrp LOS	E	F	C	E	F	B	E	F	F	E	E	E
Approach Vol, veh/h		1708			1654			1455			1399	
Approach Delay, s/veh		93.9			102.6			88.3			76.1	
Approach LOS		F			F			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	47.1	21.5	45.5	16.0	47.0	22.0	45.0
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0
Max Green Setting (Gmax), s	11.5	41.0	17.5	39.0	11.5	41.0	17.5	39.0
Max Q Clear Time (g_c+I1), s	11.4	45.1	17.0	43.1	13.4	45.0	18.6	43.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	90.9
HCM 2010 LOS	F



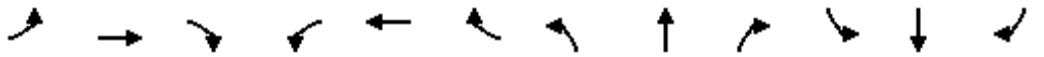
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	630	110	370	810	210	210	1390	340	130	990	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1863	1863	1863	1863	1863	1863	1788
Adj Flow Rate, veh/h	211	663	116	389	853	99	221	1463	185	137	1042	38
Adj No. of Lanes	2	2	0	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	738	129	447	1137	509	278	1695	528	316	1879	562
Arrive On Green	0.08	0.25	0.25	0.13	0.32	0.32	0.08	0.33	0.33	0.18	0.74	0.74
Sat Flow, veh/h	3442	3013	527	3442	3539	1583	3442	5085	1583	3442	5085	1520
Grp Volume(v), veh/h	211	389	390	389	853	99	221	1463	185	137	1042	38
Grp Sat Flow(s),veh/h/ln	1721	1770	1770	1721	1770	1583	1721	1695	1583	1721	1695	1520
Q Serve(g_s), s	7.2	25.5	25.6	13.3	25.9	3.9	7.6	32.3	10.6	4.2	10.9	0.8
Cycle Q Clear(g_c), s	7.2	25.5	25.6	13.3	25.9	3.9	7.6	32.3	10.6	4.2	10.9	0.8
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	434	434	447	1137	509	278	1695	528	316	1879	562
V/C Ratio(X)	0.78	0.90	0.90	0.87	0.75	0.19	0.80	0.86	0.35	0.43	0.55	0.07
Avail Cap(c_a), veh/h	459	516	516	488	1137	509	373	1695	528	316	1879	562
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00	0.94	0.94	0.94
Uniform Delay (d), s/veh	54.3	43.8	43.9	51.2	36.4	15.2	54.2	37.4	30.2	46.2	11.3	10.0
Incr Delay (d2), s/veh	1.6	12.9	13.1	13.8	2.5	0.1	5.9	6.1	1.8	0.3	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.5	14.0	14.0	7.2	13.1	1.7	3.8	16.0	4.9	2.0	5.0	0.4
LnGrp Delay(d),s/veh	55.8	56.7	56.9	65.1	38.9	15.2	60.1	43.5	32.0	46.5	12.4	10.2
LnGrp LOS	E	E	E	E	D	B	E	D	C	D	B	B
Approach Vol, veh/h		990			1341			1869			1217	
Approach Delay, s/veh		56.6			44.8			44.3			16.2	
Approach LOS		E			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	35.4	12.7	50.3	12.4	44.6	17.0	46.0
Change Period (Y+Rc), s	* 6	* 6	3.0	* 6	3.0	* 6	* 6	* 6
Max Green Setting (Gmax), s	* 17	* 35	13.0	* 37	16.0	* 36	* 10	* 40
Max Q Clear Time (g_c+I1), s	15.3	27.6	9.6	12.9	9.2	27.9	6.2	34.3
Green Ext Time (p_c), s	0.3	1.8	0.1	5.0	0.2	3.1	0.2	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	40.4
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



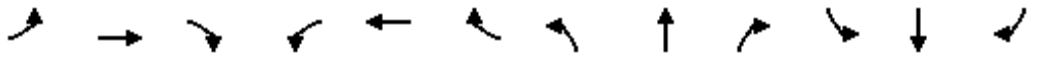
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	420	80	80	670	110	170	1480	90	160	1290	160
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	158	442	84	84	705	116	179	1558	95	168	1358	168
Adj No. of Lanes	1	2	0	1	2	0	1	3	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	900	170	328	835	137	205	1963	554	236	1874	582
Arrive On Green	0.09	0.30	0.30	0.06	0.27	0.27	0.12	0.35	0.35	0.13	0.37	0.37
Sat Flow, veh/h	1774	2969	560	1774	3040	500	1774	5588	1578	1774	5085	1579
Grp Volume(v), veh/h	158	262	264	84	410	411	179	1558	95	168	1358	168
Grp Sat Flow(s),veh/h/ln	1774	1770	1759	1774	1770	1770	1774	1863	1578	1774	1695	1579
Q Serve(g_s), s	7.3	14.5	14.7	4.0	26.3	26.3	11.9	30.1	5.0	10.9	27.6	9.0
Cycle Q Clear(g_c), s	7.3	14.5	14.7	4.0	26.3	26.3	11.9	30.1	5.0	10.9	27.6	9.0
Prop In Lane	1.00		0.32	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	537	534	328	486	486	205	1963	554	236	1874	582
V/C Ratio(X)	0.61	0.49	0.49	0.26	0.84	0.84	0.87	0.79	0.17	0.71	0.72	0.29
Avail Cap(c_a), veh/h	259	537	534	380	501	502	207	1963	554	266	1874	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.54	0.54	0.54	1.00	1.00	1.00	0.44	0.44	0.44	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	34.2	34.3	28.2	41.1	41.1	52.2	35.0	26.9	49.8	32.6	26.8
Incr Delay (d2), s/veh	1.6	0.1	0.1	0.2	11.4	11.5	15.5	1.5	0.3	5.8	2.5	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	7.2	7.2	1.9	14.4	14.5	6.8	15.7	2.2	5.7	13.4	4.1
LnGrp Delay(d),s/veh	31.3	34.3	34.4	28.4	52.5	52.6	67.7	36.5	27.2	55.7	35.1	28.0
LnGrp LOS	C	C	C	C	D	D	E	D	C	E	D	C
Approach Vol, veh/h		684			905			1832			1694	
Approach Delay, s/veh		33.7			50.3			39.1			36.5	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	41.4	17.9	49.2	14.9	38.0	19.9	47.1
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	11.0	34.0	14.0	43.0	11.0	34.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	6.0	16.7	13.9	29.6	9.3	28.3	12.9	32.1
Green Ext Time (p_c), s	0.0	4.9	0.0	10.6	0.0	1.7	0.1	6.0

Intersection Summary	
HCM 2010 Ctrl Delay	39.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	660	70	90	910	180	80	630	80	100	380	80
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	137	695	74	95	958	189	84	663	84	105	400	84
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	1501	160	117	1298	256	105	768	97	128	746	155
Arrive On Green	0.09	0.46	0.46	0.07	0.44	0.44	0.06	0.24	0.24	0.07	0.26	0.26
Sat Flow, veh/h	1774	3228	343	1774	2949	581	1774	3162	400	1774	2918	607
Grp Volume(v), veh/h	137	381	388	95	575	572	84	371	376	105	241	243
Grp Sat Flow(s),veh/h/ln	1774	1770	1802	1774	1770	1760	1774	1770	1792	1774	1770	1756
Q Serve(g_s), s	9.9	19.1	19.1	6.9	35.0	35.1	6.1	26.1	26.2	7.6	15.3	15.5
Cycle Q Clear(g_c), s	9.9	19.1	19.1	6.9	35.0	35.1	6.1	26.1	26.2	7.6	15.3	15.5
Prop In Lane	1.00		0.19	1.00		0.33	1.00		0.22	1.00		0.35
Lane Grp Cap(c), veh/h	161	823	838	117	779	775	105	430	435	128	453	449
V/C Ratio(X)	0.85	0.46	0.46	0.81	0.74	0.74	0.80	0.86	0.86	0.82	0.53	0.54
Avail Cap(c_a), veh/h	191	823	838	218	779	775	246	490	496	191	453	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.61	0.61	0.61	1.00	1.00	1.00	0.89	0.89	0.89
Uniform Delay (d), s/veh	58.2	23.7	23.7	59.9	30.2	30.2	60.4	47.1	47.2	59.5	41.7	41.8
Incr Delay (d2), s/veh	16.1	1.2	1.2	3.1	3.8	3.9	5.1	13.4	13.4	8.8	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.6	9.6	9.8	3.5	17.9	17.9	3.1	14.4	14.6	4.0	7.6	7.7
LnGrp Delay(d),s/veh	74.4	24.9	24.9	63.0	34.0	34.1	65.5	60.5	60.6	68.3	42.8	43.0
LnGrp LOS	E	C	C	E	C	C	E	E	E	E	D	D
Approach Vol, veh/h		906			1242			831			589	
Approach Delay, s/veh		32.4			36.2			61.1			47.4	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	66.4	11.7	39.2	15.8	63.2	13.4	37.6
Change Period (Y+Rc), s	4.0	* 6	4.0	* 6	4.0	* 6	4.0	* 6
Max Green Setting (Gmax), s	16.0	* 44	18.0	* 32	14.0	* 46	14.0	* 36
Max Q Clear Time (g_c+I1), s	8.9	21.1	8.1	17.5	11.9	37.1	9.6	28.2
Green Ext Time (p_c), s	0.0	14.1	0.0	6.2	0.0	6.9	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	42.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

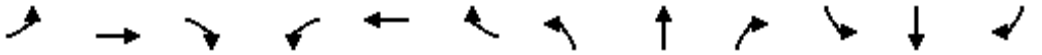
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1120	190	290	1220	310	190	990	270	0	820	170
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	1179	200	305	1284	326	200	1042	284	0	863	179
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1	825	139	242	1244	310	222	1304	353	1	917	190
Arrive On Green	0.00	0.27	0.27	0.14	0.44	0.44	0.13	0.47	0.47	0.00	0.31	0.31
Sat Flow, veh/h	1774	3031	512	1774	2808	700	1774	2754	746	1774	2920	606
Grp Volume(v), veh/h	0	686	693	305	800	810	200	667	659	0	523	519
Grp Sat Flow(s),veh/h/ln	1774	1770	1772	1774	1770	1739	1774	1770	1731	1774	1770	1756
Q Serve(g_s), s	0.0	39.9	39.9	20.0	64.9	64.9	16.3	46.7	47.4	0.0	42.2	42.2
Cycle Q Clear(g_c), s	0.0	39.9	39.9	20.0	64.9	64.9	16.3	46.7	47.4	0.0	42.2	42.2
Prop In Lane	1.00		0.29	1.00		0.40	1.00		0.43	1.00		0.34
Lane Grp Cap(c), veh/h	1	482	483	242	784	770	222	837	819	1	556	551
V/C Ratio(X)	0.00	1.42	1.44	1.26	1.02	1.05	0.90	0.80	0.80	0.00	0.94	0.94
Avail Cap(c_a), veh/h	242	482	483	242	784	770	242	837	819	242	601	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	53.3	53.3	63.3	40.8	40.8	63.2	32.6	32.8	0.0	48.9	49.0
Incr Delay (d2), s/veh	0.0	202.6	207.8	145.8	37.7	46.7	30.0	5.0	5.4	0.0	21.6	21.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	46.5	47.3	19.6	39.8	41.0	9.9	24.0	23.9	0.0	24.0	23.8
LnGrp Delay(d),s/veh	0.0	255.9	261.2	209.1	78.5	87.6	93.2	37.6	38.3	0.0	70.6	70.8
LnGrp LOS		F	F	F	F	F	F	D	D		E	E
Approach Vol, veh/h		1379			1915			1526			1042	
Approach Delay, s/veh		258.6			103.1			45.2			70.7	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	46.0	23.3	52.2	0.0	71.0	0.0	75.6
Change Period (Y+Rc), s	5.0	* 6.1	5.0	* 6.2	5.0	* 6.1	5.0	* 6.2
Max Green Setting (Gmax), s	20.0	* 40	20.0	* 50	20.0	* 40	20.0	* 50
Max Q Clear Time (g_c+I1), s	22.0	41.9	18.3	44.2	0.0	66.9	0.0	49.4
Green Ext Time (p_c), s	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	118.8
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	470	150	200	500	300	150	1300	100	200	1400	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	147	495	158	211	526	316	158	1368	105	211	1474	95
Adj No. of Lanes	1	3	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	189	886	273	276	488	292	184	1683	129	236	1851	119
Arrive On Green	0.08	0.24	0.24	0.08	0.24	0.24	0.11	0.36	0.36	0.28	0.79	0.79
Sat Flow, veh/h	1714	3703	1141	1714	2039	1222	1714	4650	357	1714	4714	304
Grp Volume(v), veh/h	147	436	217	211	441	401	158	964	509	211	1024	545
Grp Sat Flow(s),veh/h/ln	1714	1638	1568	1714	1710	1551	1714	1638	1731	1714	1638	1741
Q Serve(g_s), s	7.7	14.0	14.7	9.0	28.7	28.7	10.9	31.9	31.9	14.2	21.5	21.5
Cycle Q Clear(g_c), s	7.7	14.0	14.7	9.0	28.7	28.7	10.9	31.9	31.9	14.2	21.5	21.5
Prop In Lane	1.00		0.73	1.00		0.79	1.00		0.21	1.00		0.17
Lane Grp Cap(c), veh/h	189	784	375	276	409	371	184	1186	627	236	1286	684
V/C Ratio(X)	0.78	0.56	0.58	0.77	1.08	1.08	0.86	0.81	0.81	0.89	0.80	0.80
Avail Cap(c_a), veh/h	189	784	375	276	409	371	214	1186	627	371	1286	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.77	0.77	0.77	1.00	1.00	1.00	0.89	0.89	0.89
Uniform Delay (d), s/veh	34.3	40.1	40.3	36.9	45.7	45.7	52.7	34.6	34.6	42.6	10.1	10.1
Incr Delay (d2), s/veh	18.6	0.9	2.2	9.5	61.9	64.7	25.0	6.1	11.0	14.1	4.7	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	6.5	6.6	6.0	20.6	18.9	6.4	15.5	17.2	7.6	9.9	11.3
LnGrp Delay(d),s/veh	52.9	40.9	42.5	46.4	107.6	110.3	77.7	40.7	45.6	56.7	14.8	18.6
LnGrp LOS	D	D	D	D	F	F	E	D	D	E	B	B
Approach Vol, veh/h		800			1053			1631			1780	
Approach Delay, s/veh		43.6			96.4			45.8			20.9	
Approach LOS		D			F			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	49.4	14.0	35.0	17.9	53.1	14.0	35.0
Change Period (Y+Rc), s	5.0	* 6	5.0	* 6.3	5.0	* 6	5.0	* 6.3
Max Green Setting (Gmax), s	26.0	* 34	9.0	* 29	15.0	* 45	9.0	* 29
Max Q Clear Time (g_c+I1), s	16.2	33.9	11.0	16.7	12.9	23.5	9.7	30.7
Green Ext Time (p_c), s	0.4	0.1	0.0	6.8	0.1	18.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.2
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	440	30	50	470	230	60	680	50	90	560	90
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	137	463	32	53	495	242	63	716	53	95	589	95
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	263	1424	98	371	979	476	317	847	720	153	1389	224
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	718	3360	232	899	2310	1124	754	1863	1583	697	3054	491
Grp Volume(v), veh/h	137	243	252	53	379	358	63	716	53	95	341	343
Grp Sat Flow(s),veh/h/ln	718	1770	1822	899	1770	1664	754	1863	1583	697	1770	1776
Q Serve(g_s), s	17.1	9.1	9.1	4.1	15.5	15.6	6.1	33.7	1.9	11.3	12.9	12.9
Cycle Q Clear(g_c), s	32.8	9.1	9.1	13.3	15.5	15.6	19.0	33.7	1.9	45.0	12.9	12.9
Prop In Lane	1.00		0.13	1.00		0.68	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	263	750	772	371	750	705	317	847	720	153	805	808
V/C Ratio(X)	0.52	0.32	0.33	0.14	0.50	0.51	0.20	0.84	0.07	0.62	0.42	0.42
Avail Cap(c_a), veh/h	286	805	829	399	805	757	317	847	720	153	805	808
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.0	19.0	19.1	23.5	20.9	20.9	24.6	23.9	15.2	44.7	18.2	18.2
Incr Delay (d2), s/veh	2.3	0.4	0.3	0.2	0.8	0.8	0.4	8.1	0.1	8.8	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	4.5	4.6	1.1	7.7	7.3	1.3	19.2	0.8	3.0	6.4	6.4
LnGrp Delay(d),s/veh	35.2	19.4	19.4	23.7	21.6	21.7	25.1	32.0	15.3	53.5	18.7	18.7
LnGrp LOS	D	B	B	C	C	C	C	C	B	D	B	B
Approach Vol, veh/h		632			790			832			779	
Approach Delay, s/veh		22.8			21.8			30.4			23.0	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		51.0		47.9		51.0		47.9
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		47.0		17.6		35.7		34.8
Green Ext Time (p_c), s		0.0		14.0		7.3		7.1

Intersection Summary	
HCM 2010 Ctrl Delay	24.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	10	0	20	0	1490	30	30	1060	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1976	1863	1824	0	1863	1824	1863	1863	0
Adj Flow Rate, veh/h				11	0	21	0	1568	32	32	1116	0
Adj No. of Lanes				0	1	0	0	3	0	1	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	2	0	0	2	2	2	2	0
Cap, veh/h				15	0	28	0	3935	80	357	3901	0
Arrive On Green				0.03	0.00	0.03	0.00	0.77	0.77	0.77	0.77	0.00
Sat Flow, veh/h				509	0	971	0	5297	105	316	5253	0
Grp Volume(v), veh/h				32	0	0	0	1036	564	32	1116	0
Grp Sat Flow(s),veh/h/ln				1480	0	0	0	1695	1844	316	1695	0
Q Serve(g_s), s				1.1	0.0	0.0	0.0	5.0	5.0	1.8	3.2	0.0
Cycle Q Clear(g_c), s				1.1	0.0	0.0	0.0	5.0	5.0	6.9	3.2	0.0
Prop In Lane				0.34		0.66	0.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h				43	0	0	0	2601	1415	357	3901	0
V/C Ratio(X)				0.75	0.00	0.00	0.00	0.40	0.40	0.09	0.29	0.00
Avail Cap(c_a), veh/h				483	0	0	0	2601	1415	357	3901	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.78	0.78	0.74	0.74	0.00
Uniform Delay (d), s/veh				23.6	0.0	0.0	0.0	1.9	1.9	3.1	1.7	0.0
Incr Delay (d2), s/veh				22.8	0.0	0.0	0.0	0.4	0.7	0.4	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln				0.7	0.0	0.0	0.0	2.4	2.8	0.2	1.5	0.0
LnGrp Delay(d),s/veh				46.4	0.0	0.0	0.0	2.3	2.6	3.4	1.8	0.0
LnGrp LOS				D				A	A	A	A	
Approach Vol, veh/h					32			1600			1148	
Approach Delay, s/veh					46.4			2.4			1.9	
Approach LOS					D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		43.6				43.6		5.4
Change Period (Y+Rc), s		* 6				* 6		4.0
Max Green Setting (Gmax), s		* 23				* 23		16.0
Max Q Clear Time (g_c+I1), s		7.0				8.9		3.1
Green Ext Time (p_c), s		14.9				13.3		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	2.7
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	20	70	160	50	120	90	1370	230	70	960	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1863	1863	1863	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	32	21	74	168	53	126	95	1442	242	74	1011	32
Adj No. of Lanes	0	1	0	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	62	153	266	338	287	127	2157	362	314	3128	99
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.07	0.49	0.49	0.18	0.62	0.62
Sat Flow, veh/h	261	343	844	1294	1863	1581	1774	4388	735	1774	5064	160
Grp Volume(v), veh/h	127	0	0	168	53	126	95	1114	570	74	677	366
Grp Sat Flow(s),veh/h/ln	1448	0	0	1294	1863	1581	1774	1695	1733	1774	1695	1834
Q Serve(g_s), s	3.3	0.0	0.0	8.7	2.9	8.5	6.3	29.8	29.9	4.3	11.4	11.5
Cycle Q Clear(g_c), s	9.0	0.0	0.0	17.7	2.9	8.5	6.3	29.8	29.9	4.3	11.4	11.5
Prop In Lane	0.25		0.58	1.00		1.00	1.00		0.42	1.00		0.09
Lane Grp Cap(c), veh/h	300	0	0	266	338	287	127	1667	852	314	2094	1133
V/C Ratio(X)	0.42	0.00	0.00	0.63	0.16	0.44	0.75	0.67	0.67	0.24	0.32	0.32
Avail Cap(c_a), veh/h	385	0	0	344	450	382	251	1667	852	314	2094	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	43.8	0.0	0.0	48.2	41.4	43.7	54.6	23.1	23.1	42.4	11.0	11.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	4.2	0.4	1.8	3.2	2.1	4.2	0.1	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.9	0.0	0.0	5.7	1.5	3.9	3.2	14.4	15.2	2.1	5.5	6.0
LnGrp Delay(d),s/veh	44.7	0.0	0.0	52.4	41.8	45.5	57.8	25.2	27.3	42.5	11.4	11.7
LnGrp LOS	D			D	D	D	E	C	C	D	B	B
Approach Vol, veh/h		127			347			1779			1117	
Approach Delay, s/veh		44.7			48.3			27.6			13.5	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.8	12.1	80.1		27.8	27.2	65.0
Change Period (Y+Rc), s		* 6	3.5	* 6		* 6	* 6	* 6
Max Green Setting (Gmax), s		* 29	17.0	* 59		* 29	* 14	* 59
Max Q Clear Time (g_c+I1), s		11.0	8.3	13.5		19.7	6.3	31.9
Green Ext Time (p_c), s		2.8	0.0	13.7		2.0	0.6	19.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	560	270	250	660	40	440	20	420	30	20	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1900	1863	1900	1863	1900
Adj Flow Rate, veh/h	11	589	233	263	695	40	463	21	62	32	21	5
Adj No. of Lanes	1	2	0	1	2	0	2	0	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	824	326	309	1701	98	586	0	270	42	27	7
Arrive On Green	0.01	0.33	0.33	0.17	0.50	0.50	0.17	0.17	0.17	0.04	0.04	0.04
Sat Flow, veh/h	1774	2480	979	1774	3402	196	3442	0	1583	986	647	154
Grp Volume(v), veh/h	11	420	402	263	361	374	463	0	62	58	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1690	1774	1770	1828	1721	0	1583	1786	0	0
Q Serve(g_s), s	0.4	14.7	14.8	10.2	9.1	9.1	9.1	0.0	2.4	2.3	0.0	0.0
Cycle Q Clear(g_c), s	0.4	14.7	14.8	10.2	9.1	9.1	9.1	0.0	2.4	2.3	0.0	0.0
Prop In Lane	1.00		0.58	1.00		0.11	1.00		1.00	0.55		0.09
Lane Grp Cap(c), veh/h	12	588	562	309	885	914	586	0	270	76	0	0
V/C Ratio(X)	0.92	0.71	0.72	0.85	0.41	0.41	0.79	0.00	0.23	0.77	0.00	0.00
Avail Cap(c_a), veh/h	500	883	843	500	886	915	776	0	357	622	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.2	20.7	20.7	28.4	11.1	11.1	28.2	0.0	25.4	33.6	0.0	0.0
Incr Delay (d2), s/veh	55.9	0.6	0.6	4.0	0.1	0.1	4.1	0.0	0.4	5.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	7.2	6.9	5.3	4.4	4.6	4.6	0.0	1.1	1.3	0.0	0.0
LnGrp Delay(d),s/veh	91.1	21.3	21.4	32.3	11.2	11.2	32.3	0.0	25.8	39.5	0.0	0.0
LnGrp LOS	F	C	C	C	B	B	C		C	D		
Approach Vol, veh/h		833			998			525			58	
Approach Delay, s/veh		22.3			16.8			31.5			39.5	
Approach LOS		C			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.1	17.4	29.2		8.3	5.5	41.1
Change Period (Y+Rc), s		4.0	5.0	* 5.6		5.3	5.0	* 5.6
Max Green Setting (Gmax), s		16.0	20.0	* 35		24.7	20.0	* 36
Max Q Clear Time (g_c+I1), s		11.1	12.2	16.8		4.3	2.4	11.1
Green Ext Time (p_c), s		0.9	0.2	6.8		0.1	0.0	7.5

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	60	210	20	70	50	350	500	20	40	360	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	63	41	21	74	26	368	526	19	42	379	87
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	372	428	364	396	303	107	432	1533	55	51	645	147
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.24	0.44	0.44	0.03	0.23	0.23
Sat Flow, veh/h	1290	1863	1583	1285	1318	463	1774	3484	126	1774	2866	651
Grp Volume(v), veh/h	179	63	41	21	0	100	368	267	278	42	232	234
Grp Sat Flow(s),veh/h/ln	1290	1863	1583	1285	0	1781	1774	1770	1841	1774	1770	1748
Q Serve(g_s), s	7.0	1.4	1.1	0.7	0.0	2.4	10.6	5.3	5.3	1.3	6.3	6.4
Cycle Q Clear(g_c), s	9.5	1.4	1.1	2.1	0.0	2.4	10.6	5.3	5.3	1.3	6.3	6.4
Prop In Lane	1.00		1.00	1.00		0.26	1.00		0.07	1.00		0.37
Lane Grp Cap(c), veh/h	372	428	364	396	0	410	432	779	810	51	399	394
V/C Ratio(X)	0.48	0.15	0.11	0.05	0.00	0.24	0.85	0.34	0.34	0.83	0.58	0.59
Avail Cap(c_a), veh/h	812	1063	904	839	0	1024	996	1338	1392	664	1007	995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	16.4	16.3	17.2	0.0	16.8	19.3	9.9	9.9	25.8	18.5	18.5
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.0	0.0	0.1	1.9	0.1	0.1	12.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.5	0.7	0.5	0.3	0.0	1.2	5.3	2.6	2.7	0.8	3.1	3.1
LnGrp Delay(d),s/veh	21.0	16.4	16.3	17.3	0.0	16.9	21.2	10.0	10.0	37.8	19.0	19.0
LnGrp LOS	C	B	B	B		B	C	A	A	D	B	B
Approach Vol, veh/h		283			121			913			508	
Approach Delay, s/veh		19.3			17.0			14.5			20.6	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	29.1		17.8	18.0	17.6		17.8
Change Period (Y+Rc), s	5.0	* 5.6		5.5	5.0	* 5.6		* 5.5
Max Green Setting (Gmax), s	20.0	* 40		30.5	30.0	* 30		* 31
Max Q Clear Time (g_c+I1), s	3.3	7.3		11.5	12.6	8.4		4.4
Green Ext Time (p_c), s	0.0	3.8		0.8	0.5	3.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	17.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	30	30	20	20	40	20	680	20	30	590	20
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	32	32	21	21	42	21	716	21	32	621	21
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	66	59	165	53	89	467	1015	30	405	1010	34
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	485	627	556	338	499	837	784	1801	53	718	1791	61
Grp Volume(v), veh/h	96	0	0	84	0	0	21	0	737	32	0	642
Grp Sat Flow(s),veh/h/ln	1667	0	0	1675	0	0	784	0	1853	718	0	1852
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	0.0	0.6	0.0	10.0	1.2	0.0	8.1
Cycle Q Clear(g_c), s	1.8	0.0	0.0	1.5	0.0	0.0	8.7	0.0	10.0	11.2	0.0	8.1
Prop In Lane	0.33		0.33	0.25		0.50	1.00		0.03	1.00		0.03
Lane Grp Cap(c), veh/h	315	0	0	307	0	0	467	0	1044	405	0	1044
V/C Ratio(X)	0.31	0.00	0.00	0.27	0.00	0.00	0.04	0.00	0.71	0.08	0.00	0.62
Avail Cap(c_a), veh/h	1744	0	0	1740	0	0	814	0	1864	722	0	1862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.7	0.0	0.0	14.6	0.0	0.0	8.0	0.0	5.5	9.6	0.0	5.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.9	0.0	0.0	0.8	0.0	0.0	0.1	0.0	5.0	0.2	0.0	4.0
LnGrp Delay(d),s/veh	14.9	0.0	0.0	14.8	0.0	0.0	8.0	0.0	5.8	9.6	0.0	5.3
LnGrp LOS	B			B			A		A	A		A
Approach Vol, veh/h		96			84			758			674	
Approach Delay, s/veh		14.9			14.8			5.9			5.5	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		25.6		9.2		25.6		9.2
Change Period (Y+Rc), s		6.0		5.5		6.0		5.5
Max Green Setting (Gmax), s		35.0		35.5		35.0		35.5
Max Q Clear Time (g_c+I1), s		13.2		3.8		12.0		3.5
Green Ext Time (p_c), s		6.4		0.7		6.5		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	330	100	230	290	120	100	720	120	50	520	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	147	347	105	242	305	126	105	758	126	53	547	126
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	282	763	227	403	1282	519	247	1127	187	179	1061	244
Arrive On Green	0.28	0.28	0.28	0.18	0.52	0.52	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	953	2689	802	1774	2461	995	762	3038	505	626	2860	656
Grp Volume(v), veh/h	147	227	225	242	217	214	105	441	443	53	338	335
Grp Sat Flow(s),veh/h/ln	953	1770	1721	1774	1770	1687	762	1770	1774	626	1770	1747
Q Serve(g_s), s	13.3	9.7	10.0	13.4	6.2	6.4	11.5	19.3	19.4	7.2	13.7	13.8
Cycle Q Clear(g_c), s	19.7	9.7	10.0	13.4	6.2	6.4	25.3	19.3	19.4	26.5	13.7	13.8
Prop In Lane	1.00		0.47	1.00		0.59	1.00		0.28	1.00		0.38
Lane Grp Cap(c), veh/h	282	502	488	0	922	879	247	657	658	179	657	648
V/C Ratio(X)	0.52	0.45	0.46	0.00	0.24	0.24	0.43	0.67	0.67	0.30	0.51	0.52
Avail Cap(c_a), veh/h	372	669	651	0	922	879	252	669	671	184	669	661
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	27.2	27.3	0.0	12.1	12.2	32.5	24.4	24.4	35.5	22.6	22.7
Incr Delay (d2), s/veh	3.2	1.4	1.5	0.0	0.3	0.3	2.5	3.5	3.5	1.9	1.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	4.9	5.0	0.0	3.1	3.0	2.6	10.1	10.1	1.3	6.9	6.9
LnGrp Delay(d),s/veh	36.9	28.6	28.8	0.0	12.4	12.5	35.0	27.9	27.9	37.5	24.0	24.0
LnGrp LOS	D	C	C		B	B	C	C	C	D	C	C
Approach Vol, veh/h		599			673			989			726	
Approach Delay, s/veh		30.7			8.0			28.6			25.0	
Approach LOS		C			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		39.3	22.0	31.2		39.3		53.2
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s		35.0	35.0	35.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		27.3	15.4	21.7		28.5		8.4
Green Ext Time (p_c), s		6.8	1.5	4.6		5.8		12.1

Intersection Summary	
HCM 2010 Ctrl Delay	23.5
HCM 2010 LOS	C

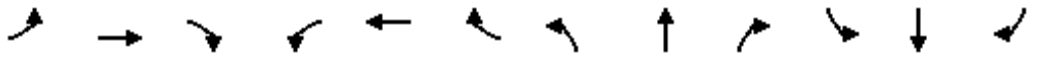
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	940	200	360	1090	0	380	0	500	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.98		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	989	211	379	1147	0	400	0	289	0	0	0
Adj No. of Lanes	1	2	0	1	3	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	325	1590	338	518	3513	0	406	0	400	0	483	0
Arrive On Green	0.00	1.00	1.00	0.12	0.69	0.00	0.26	0.00	0.26	0.00	0.00	0.00
Sat Flow, veh/h	1774	2896	616	1774	5253	0	1379	0	1547	0	1863	0
Grp Volume(v), veh/h	0	604	596	379	1147	0	400	0	289	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1742	1774	1695	0	1379	0	1547	0	1863	0
Q Serve(g_s), s	0.0	0.0	0.0	10.6	10.8	0.0	31.0	0.0	20.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	10.6	10.8	0.0	31.0	0.0	20.5	0.0	0.0	0.0
Prop In Lane	1.00		0.35	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	325	972	957	518	3513	0	416	0	400	0	483	0
V/C Ratio(X)	0.00	0.62	0.62	0.73	0.33	0.00	0.96	0.00	0.72	0.00	0.00	0.00
Avail Cap(c_a), veh/h	487	972	957	636	3513	0	416	0	400	0	483	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.87	0.87	1.00	1.00	0.00	0.86	0.00	0.86	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	8.2	7.4	0.0	46.5	0.0	40.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.6	2.7	2.4	0.2	0.0	30.8	0.0	4.8	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.7	0.7	5.5	5.1	0.0	16.7	0.0	9.3	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	2.6	2.7	10.6	7.7	0.0	77.3	0.0	45.4	0.0	0.0	0.0
LnGrp LOS		A	A	B	A		E		D			
Approach Vol, veh/h		1200			1526			689			0	
Approach Delay, s/veh		2.6			8.4			63.9			0.0	
Approach LOS		A			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	85.9		34.1	17.0	68.9		34.1
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		* 5
Max Green Setting (Gmax), s	10.0	67.0		29.0	21.0	56.0		* 29
Max Q Clear Time (g_c+I1), s	0.0	12.8		0.0	12.6	2.0		33.0
Green Ext Time (p_c), s	0.0	16.2		0.0	0.4	16.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.6
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	950	30	60	1260	150	40	10	40	180	10	70
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	116	1000	32	63	1326	158	42	11	42	189	11	74
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	380	2479	79	435	3206	382	148	48	121	302	0	289
Arrive On Green	0.04	0.71	0.70	0.06	1.00	1.00	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1774	3498	112	1774	4597	548	571	259	658	1335	0	1568
Grp Volume(v), veh/h	116	506	526	63	978	506	95	0	0	189	0	74
Grp Sat Flow(s),veh/h/ln	1774	1770	1841	1774	1695	1755	1489	0	0	1335	0	1568
Q Serve(g_s), s	2.2	14.0	14.0	1.2	0.0	0.0	3.8	0.0	0.0	10.1	0.0	4.8
Cycle Q Clear(g_c), s	2.2	14.0	14.0	1.2	0.0	0.0	6.4	0.0	0.0	16.5	0.0	4.8
Prop In Lane	1.00		0.06	1.00		0.31	0.44		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	380	1254	1304	435	2365	1224	317	0	0	302	0	289
V/C Ratio(X)	0.31	0.40	0.40	0.14	0.41	0.41	0.30	0.00	0.00	0.63	0.00	0.26
Avail Cap(c_a), veh/h	496	1254	1304	570	2365	1224	426	0	0	401	0	405
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.5	7.1	7.1	5.4	0.0	0.0	42.6	0.0	0.0	46.8	0.0	41.9
Incr Delay (d2), s/veh	0.2	1.0	0.9	0.1	0.5	1.0	0.2	0.0	0.0	0.8	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.0	7.1	7.4	0.6	0.2	0.3	2.8	0.0	0.0	6.1	0.0	2.1
LnGrp Delay(d),s/veh	4.7	8.1	8.1	5.5	0.5	1.0	42.8	0.0	0.0	47.6	0.0	42.1
LnGrp LOS	A	A	A	A	A	A	D			D		D
Approach Vol, veh/h		1148			1547			95			263	
Approach Delay, s/veh		7.7			0.9			42.8			46.0	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	86.7		25.1	6.9	88.0		25.1
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	12.0	65.0		29.0	12.0	65.0		29.0
Max Q Clear Time (g_c+I1), s	4.2	2.0		8.4	3.2	16.0		18.5
Green Ext Time (p_c), s	0.1	17.7		0.8	0.0	16.8		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	8.6
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	20	20	1630	10	10	2940
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	21	1716	11	11	3095
Adj No. of Lanes	1	1	3	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	89	80	4212	1308	38	4491
Arrive On Green	0.05	0.05	1.00	1.00	0.04	1.00
Sat Flow, veh/h	1774	1583	5253	1580	1774	5253
Grp Volume(v), veh/h	21	21	1716	11	11	3095
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1580	1774	1695
Q Serve(g_s), s	1.4	1.5	0.0	0.0	0.7	0.0
Cycle Q Clear(g_c), s	1.4	1.5	0.0	0.0	0.7	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	89	80	4212	1308	38	4491
V/C Ratio(X)	0.24	0.26	0.41	0.01	0.29	0.69
Avail Cap(c_a), veh/h	473	422	4212	1308	355	4491
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.89	0.89	0.72	0.72
Uniform Delay (d), s/veh	54.8	54.9	0.0	0.0	56.5	0.0
Incr Delay (d2), s/veh	0.5	0.6	0.3	0.0	1.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.7	0.1	0.0	0.4	0.3
LnGrp Delay(d),s/veh	55.3	55.5	0.3	0.0	57.6	0.6
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	42		1727			3106
Approach Delay, s/veh	55.4		0.3			0.8
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.6	103.4				110.0		10.0
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	50.7				78.7		32.0
Max Q Clear Time (g_c+I1), s	2.7	2.0				2.0		3.5
Green Ext Time (p_c), s	0.0	48.5				76.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.1
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	40	210	1550	70	70	2310
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	42	4	1632	61	74	2432
Adj No. of Lanes	1	1	2	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	70	62	2791	1247	128	4547
Arrive On Green	0.04	0.04	1.00	1.00	0.14	1.00
Sat Flow, veh/h	1774	1583	3632	1581	1774	5253
Grp Volume(v), veh/h	42	4	1632	61	74	2432
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1581	1774	1695
Q Serve(g_s), s	2.8	0.3	0.0	0.0	4.7	0.0
Cycle Q Clear(g_c), s	2.8	0.3	0.0	0.0	4.7	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	70	62	2791	1247	128	4547
V/C Ratio(X)	0.60	0.06	0.58	0.05	0.58	0.53
Avail Cap(c_a), veh/h	444	396	2791	1247	355	4547
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.70	0.70	0.83	0.83
Uniform Delay (d), s/veh	56.7	55.5	0.0	0.0	49.6	0.0
Incr Delay (d2), s/veh	3.1	0.2	0.6	0.1	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.1	0.2	0.0	2.3	0.2
LnGrp Delay(d),s/veh	59.8	55.7	0.6	0.1	50.9	0.4
LnGrp LOS	E	E	A	A	D	A
Approach Vol, veh/h	46		1693			2506
Approach Delay, s/veh	59.5		0.6			1.9
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.7	98.6				111.3		8.7
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	52.7				80.7		30.0
Max Q Clear Time (g_c+I1), s	6.7	2.0				2.0		4.8
Green Ext Time (p_c), s	0.0	50.4				77.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	2.0
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	20	10	10	1750	2380	20
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	11	11	1842	2505	21
Adj No. of Lanes	1	1	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	58	52	6	3187	4392	1368
Arrive On Green	0.03	0.03	0.01	1.00	0.86	0.86
Sat Flow, veh/h	1774	1583	1774	3632	5253	1583
Grp Volume(v), veh/h	21	11	11	1842	2505	21
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1695	1583
Q Serve(g_s), s	1.4	0.8	0.4	0.0	15.9	0.2
Cycle Q Clear(g_c), s	1.4	0.8	0.4	0.0	15.9	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	58	52	6	3187	4392	1368
V/C Ratio(X)	0.36	0.21	1.77	0.58	0.57	0.02
Avail Cap(c_a), veh/h	458	409	118	3187	4392	1368
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.76	0.76	0.64	0.64
Uniform Delay (d), s/veh	56.8	56.5	59.6	0.0	2.2	1.1
Incr Delay (d2), s/veh	1.4	0.7	382.0	0.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	116.5	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.7	0.9	0.3	7.3	0.1
LnGrp Delay(d),s/veh	58.2	57.3	558.0	0.6	2.5	1.1
LnGrp LOS	E	E	F	A	A	A
Approach Vol, veh/h	32			1853	2526	
Approach Delay, s/veh	57.9			3.9	2.5	
Approach LOS	E			A	A	

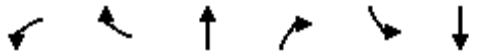
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		112.1		7.9	4.4	107.6		
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		
Max Green Setting (Gmax), s		79.7		31.0	8.5	67.7		
Max Q Clear Time (g_c+I1), s		2.0		3.4	2.4	17.9		
Green Ext Time (p_c), s		77.3		0.0	0.0	49.6		

Intersection Summary	
HCM 2010 Ctrl Delay	3.5
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	140	40	1580	130	190	2750
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	147	42	1663	137	200	2895
Adj No. of Lanes	1	1	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	175	156	3718	1158	242	4246
Arrive On Green	0.10	0.10	0.73	0.73	0.14	1.00
Sat Flow, veh/h	1774	1583	5253	1583	3442	5253
Grp Volume(v), veh/h	147	42	1663	137	200	2895
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1583	1721	1695
Q Serve(g_s), s	9.8	2.9	15.7	3.1	6.8	0.0
Cycle Q Clear(g_c), s	9.8	2.9	15.7	3.1	6.8	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	175	156	3718	1158	242	4246
V/C Ratio(X)	0.84	0.27	0.45	0.12	0.83	0.68
Avail Cap(c_a), veh/h	237	211	3718	1158	602	4246
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.70	0.70
Uniform Delay (d), s/veh	53.2	50.1	6.4	4.7	50.8	0.0
Incr Delay (d2), s/veh	13.9	0.3	0.4	0.2	1.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.5	1.3	7.4	1.4	3.3	0.3
LnGrp Delay(d),s/veh	67.1	50.4	6.8	5.0	52.8	0.6
LnGrp LOS	E	D	A	A	D	A
Approach Vol, veh/h	189		1800			3095
Approach Delay, s/veh	63.4		6.7			4.0
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.4	91.7				104.2		15.8
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	21.5	69.7				94.7		16.0
Max Q Clear Time (g_c+I1), s	8.8	17.7				2.0		11.8
Green Ext Time (p_c), s	0.2	51.8				92.1		0.1

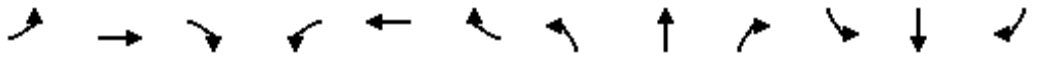
Intersection Summary	
HCM 2010 Ctrl Delay	7.2
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	20	80	1690	10	20	2830
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	21	84	1779	11	21	2979
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	120	107	4144	26	67	4403
Arrive On Green	0.07	0.07	1.00	1.00	0.08	1.00
Sat Flow, veh/h	1774	1583	5383	32	1774	5253
Grp Volume(v), veh/h	21	84	1156	634	21	2979
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1857	1774	1695
Q Serve(g_s), s	1.3	6.3	0.0	0.0	1.3	0.0
Cycle Q Clear(g_c), s	1.3	6.3	0.0	0.0	1.3	0.0
Prop In Lane	1.00	1.00		0.02	1.00	
Lane Grp Cap(c), veh/h	120	107	2694	1476	67	4403
V/C Ratio(X)	0.18	0.79	0.43	0.43	0.31	0.68
Avail Cap(c_a), veh/h	458	409	2694	1476	355	4403
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.09	0.09
Uniform Delay (d), s/veh	52.8	55.1	0.0	0.0	54.0	0.0
Incr Delay (d2), s/veh	0.3	4.7	0.5	0.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	2.9	0.2	0.4	0.7	0.0
LnGrp Delay(d),s/veh	53.0	59.8	0.5	0.9	54.1	0.1
LnGrp LOS	D	E	A	A	D	A
Approach Vol, veh/h	105		1790			3000
Approach Delay, s/veh	58.4		0.6			0.5
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.5	99.4				107.9		12.1
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	51.7				79.7		31.0
Max Q Clear Time (g_c+I1), s	3.3	2.0				2.0		8.3
Green Ext Time (p_c), s	0.0	49.5				77.3		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	1.8
HCM 2010 LOS	A



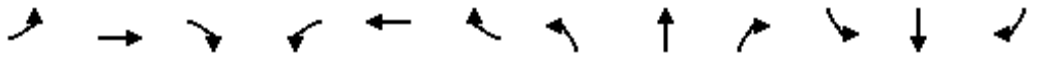
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	390	620	110	540	80	400	1300	50	90	2120	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	189	411	470	116	568	20	421	1368	50	95	2232	60
Adj No. of Lanes	1	2	1	1	2	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	708	313	137	740	327	454	2699	99	132	2249	697
Arrive On Green	0.08	0.20	0.20	0.05	0.14	0.14	0.26	1.00	1.00	0.03	0.30	0.30
Sat Flow, veh/h	1774	3539	1564	1774	3539	1565	3442	5036	184	3442	5085	1577
Grp Volume(v), veh/h	189	411	470	116	568	20	421	921	497	95	2232	60
Grp Sat Flow(s),veh/h/ln	1774	1770	1564	1774	1770	1565	1721	1695	1830	1721	1695	1577
Q Serve(g_s), s	10.0	12.6	17.1	7.8	18.6	1.3	14.3	0.0	0.0	3.3	52.5	3.3
Cycle Q Clear(g_c), s	10.0	12.6	17.1	7.8	18.6	1.3	14.3	0.0	0.0	3.3	52.5	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	148	708	313	137	740	327	454	1817	980	132	2249	697
V/C Ratio(X)	1.28	0.58	1.50	0.84	0.77	0.06	0.93	0.51	0.51	0.72	0.99	0.09
Avail Cap(c_a), veh/h	148	973	430	148	973	430	459	1817	980	287	2249	697
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	0.91	0.91	0.91	0.82	0.82	0.82
Uniform Delay (d), s/veh	55.0	43.4	24.2	56.2	48.8	41.4	43.6	0.0	0.0	57.8	42.0	24.7
Incr Delay (d2), s/veh	167.2	0.3	241.7	26.7	1.6	0.0	23.1	0.9	1.7	2.3	15.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.8	6.2	28.3	4.8	9.3	0.6	8.2	0.2	0.5	1.6	27.9	1.5
LnGrp Delay(d),s/veh	222.2	43.7	265.9	82.9	50.4	41.4	66.7	0.9	1.7	60.1	57.5	24.9
LnGrp LOS	F	D	F	F	D	D	E	A	A	E	E	C
Approach Vol, veh/h		1070			704			1839			2387	
Approach Delay, s/veh		172.8			55.5			16.2			56.8	
Approach LOS		F			E			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	68.3	15.1	28.0	19.8	57.1	14.0	29.1
Change Period (Y+Rc), s	3.5	5.3	5.3	* 6	3.5	5.3	3.5	5.3
Max Green Setting (Gmax), s	10.5	49.7	10.5	* 31	16.5	43.7	10.5	31.7
Max Q Clear Time (g_c+I1), s	5.3	2.0	9.8	19.1	16.3	54.5	12.0	20.6
Green Ext Time (p_c), s	0.0	32.6	0.2	1.9	0.0	0.0	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	64.9
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



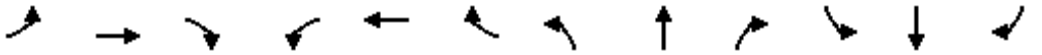
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	680	150	140	690	140	110	460	110	200	850	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1863	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	116	716	158	147	726	147	116	484	116	211	895	211
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1712	374	195	1742	542	171	821	196	256	964	227
Arrive On Green	0.30	0.79	0.79	0.22	0.69	0.69	0.03	0.09	0.09	0.29	0.65	0.65
Sat Flow, veh/h	1774	4347	948	1774	5085	1583	1774	2951	703	1774	2958	697
Grp Volume(v), veh/h	116	579	295	147	726	147	116	301	299	211	557	549
Grp Sat Flow(s),veh/h/ln	1774	1763	1770	1774	1695	1583	1774	1840	1813	1774	1840	1814
Q Serve(g_s), s	6.3	6.2	6.4	9.3	7.6	2.9	7.8	18.8	19.0	13.3	32.0	32.1
Cycle Q Clear(g_c), s	6.3	6.2	6.4	9.3	7.6	2.9	7.8	18.8	19.0	13.3	32.0	32.1
Prop In Lane	1.00		0.54	1.00		1.00	1.00		0.39	1.00		0.38
Lane Grp Cap(c), veh/h	266	1389	697	195	1742	542	171	512	504	256	600	592
V/C Ratio(X)	0.44	0.42	0.42	0.75	0.42	0.27	0.68	0.59	0.59	0.82	0.93	0.93
Avail Cap(c_a), veh/h	266	1389	697	214	1742	542	214	569	561	273	630	621
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.96	0.96	0.96	0.98	0.98	0.98	0.98	0.98	0.98	0.89	0.89	0.89
Uniform Delay (d), s/veh	37.9	8.4	8.4	45.2	13.6	6.0	56.2	47.9	48.0	41.2	19.6	19.6
Incr Delay (d2), s/veh	0.4	0.9	1.8	10.5	0.7	1.2	3.3	0.7	0.7	14.3	17.5	17.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	3.1	3.3	5.1	3.6	1.4	4.0	9.7	9.7	7.5	18.7	18.5
LnGrp Delay(d),s/veh	38.3	9.3	10.2	55.8	14.3	7.2	59.5	48.5	48.7	55.6	37.1	37.5
LnGrp LOS	D	A	B	E	B	A	E	D	D	E	D	D
Approach Vol, veh/h		990			1020			716			1317	
Approach Delay, s/veh		12.9			19.3			50.4			40.2	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	36.3	14.7	50.2	13.1	42.0	20.9	44.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	16.5	35.1	12.5	39.1	12.5	39.1	12.5	* 39
Max Q Clear Time (g_c+I1), s	15.3	21.0	11.3	8.4	9.8	34.1	8.3	9.6
Green Ext Time (p_c), s	0.0	6.1	0.0	8.4	0.0	3.1	1.8	8.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



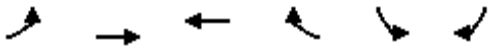
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	610	190	330	670	160	130	940	270	290	1700	170
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1788	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	126	642	200	347	705	168	137	989	284	305	1789	179
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	1117	342	441	1771	529	242	1519	436	399	2396	789
Arrive On Green	0.02	0.10	0.10	0.26	0.70	0.70	0.14	0.77	0.77	0.15	0.57	0.57
Sat Flow, veh/h	3442	3862	1182	3442	5085	1520	3442	3928	1126	3548	5588	1583
Grp Volume(v), veh/h	126	562	280	347	705	168	137	853	420	305	1789	179
Grp Sat Flow(s),veh/h/ln	1721	1695	1654	1721	1695	1520	1721	1695	1664	1774	1863	1583
Q Serve(g_s), s	4.3	19.0	19.5	11.3	7.0	5.2	4.5	13.8	13.8	9.9	28.7	6.0
Cycle Q Clear(g_c), s	4.3	19.0	19.5	11.3	7.0	5.2	4.5	13.8	13.8	9.9	28.7	6.0
Prop In Lane	1.00		0.71	1.00		1.00	1.00		0.68	1.00		1.00
Lane Grp Cap(c), veh/h	238	980	478	441	1771	529	242	1311	644	399	2396	789
V/C Ratio(X)	0.53	0.57	0.59	0.79	0.40	0.32	0.57	0.65	0.65	0.76	0.75	0.23
Avail Cap(c_a), veh/h	387	980	478	502	1771	529	387	1311	644	399	2396	789
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	0.97	0.97	0.97	0.97	0.97	0.97	0.83	0.83	0.83	0.55	0.55	0.55
Uniform Delay (d), s/veh	56.7	47.2	47.4	43.1	12.9	12.7	49.8	9.9	9.9	49.5	20.9	12.5
Incr Delay (d2), s/veh	0.7	2.4	5.0	5.9	0.7	1.5	0.6	2.1	4.3	4.4	1.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.1	9.3	9.6	5.7	3.2	2.3	2.1	6.5	6.8	5.1	14.9	2.7
LnGrp Delay(d),s/veh	57.4	49.6	52.4	49.0	13.6	14.2	50.5	12.0	14.2	53.8	22.1	12.9
LnGrp LOS	E	D	D	D	B	B	D	B	B	D	C	B
Approach Vol, veh/h		968			1220			1410			2273	
Approach Delay, s/veh		51.4			23.7			16.4			25.6	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	55.2	9.8	45.1	15.0	50.1	16.9	38.0
Change Period (Y+Rc), s	3.5	5.7	3.5	5.3	3.5	5.7	3.5	5.3
Max Green Setting (Gmax), s	11.5	42.3	11.5	36.7	11.5	42.3	15.5	32.7
Max Q Clear Time (g_c+I1), s	6.5	30.7	6.3	9.0	11.9	15.8	13.3	21.5
Green Ext Time (p_c), s	0.1	11.3	0.1	16.6	0.0	25.4	0.1	8.5

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	80	990	860	100	90	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.2	5.2	5.2	5.5	5.5
Lane Util. Factor	1.00	0.91	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	3539	1583	1770	1559
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	3539	1583	1770	1559
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	1042	905	105	95	189
RTOR Reduction (vph)	0	0	0	0	0	172
Lane Group Flow (vph)	84	1042	905	105	95	17
Confl. Peds. (#/hr)					1	1
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	8.9	79.3	74.8	74.8	10.8	10.8
Effective Green, g (s)	8.4	80.6	76.1	76.1	11.0	11.0
Actuated g/C Ratio	0.07	0.67	0.63	0.63	0.09	0.09
Clearance Time (s)	3.5	6.5	6.5	6.5	5.7	5.7
Vehicle Extension (s)	2.0	4.3	4.3	4.3	2.0	2.0
Lane Grp Cap (vph)	123	3415	2244	1003	162	142
v/s Ratio Prot	c0.05	0.20	c0.26		c0.05	
v/s Ratio Perm				0.07		0.01
v/c Ratio	0.68	0.31	0.40	0.10	0.59	0.12
Uniform Delay, d1	54.5	8.1	10.8	8.6	52.3	50.1
Progression Factor	1.00	1.00	0.15	0.05	1.00	1.00
Incremental Delay, d2	11.8	0.2	0.5	0.2	3.5	0.1
Delay (s)	66.3	8.4	2.1	0.7	55.8	50.2
Level of Service	E	A	A	A	E	D
Approach Delay (s)		12.7	1.9		52.1	
Approach LOS		B	A		D	

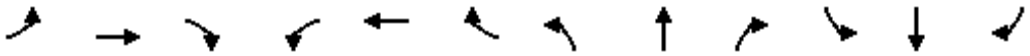
Intersection Summary			
HCM 2000 Control Delay	12.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1000	80	30	940	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	6.5	4.0	5.2	5.5	5.5
Lane Util. Factor	0.95	1.00	1.00	0.91	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	5085	1770	1563
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	1770	5085	1770	1563
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1053	84	32	989	21	21
RTOR Reduction (vph)	0	24	0	0	0	20
Lane Group Flow (vph)	1053	60	32	989	21	1
Confl. Peds. (#/hr)					4	1
Turn Type	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	4		3	8	5	
Permitted Phases		4				5
Actuated Green, G (s)	79.3	79.3	4.4	74.8	4.1	4.1
Effective Green, g (s)	80.6	79.3	3.9	76.1	4.3	4.3
Actuated g/C Ratio	0.67	0.66	0.03	0.63	0.04	0.04
Clearance Time (s)	6.5	6.5	3.5	6.5	5.7	5.7
Vehicle Extension (s)	4.3	4.3	1.5	4.3	2.0	2.0
Lane Grp Cap (vph)	2377	1046	57	3224	63	56
v/s Ratio Prot	c0.30		c0.02	0.19	c0.01	
v/s Ratio Perm		0.04				0.00
v/c Ratio	0.44	0.06	0.56	0.31	0.33	0.01
Uniform Delay, d1	9.2	7.2	57.2	10.0	56.5	55.8
Progression Factor	0.46	0.09	1.05	1.21	1.00	1.00
Incremental Delay, d2	0.6	0.1	6.9	0.2	1.1	0.0
Delay (s)	4.8	0.8	66.9	12.3	57.6	55.8
Level of Service	A	A	E	B	E	E
Approach Delay (s)	4.5			14.0	56.7	
Approach LOS	A			B	E	

Intersection Summary			
HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

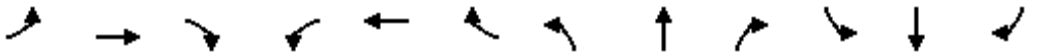
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	900	60	60	830	80	20	10	10	30	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	11	10	11	11	11	11	11	11
Total Lost time (s)	1.5	3.0		1.5	3.0	3.0		2.6			1.5	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00			1.00	
Frt	1.00	0.99		1.00	1.00	0.85		0.97			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.98	
Satd. Flow (prot)	3204	5038		1652	4916	1478		1697			1679	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.88			0.86	
Satd. Flow (perm)	3204	5038		1652	4916	1478		1536			1484	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	947	63	63	874	84	21	11	11	32	11	21
RTOR Reduction (vph)	0	4	0	0	0	24	0	9	0	0	18	0
Lane Group Flow (vph)	95	1006	0	63	874	60	0	34	0	0	46	0
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2 5			1 6	
Permitted Phases						8	2 5			1 6		
Actuated Green, G (s)	8.0	75.1		13.6	80.7	80.7		15.3			14.1	
Effective Green, g (s)	10.0	77.1		15.6	82.7	82.7		19.3			18.1	
Actuated g/C Ratio	0.08	0.64		0.13	0.69	0.69		0.16			0.15	
Clearance Time (s)	3.5	5.0		3.5	5.0	5.0						
Vehicle Extension (s)	1.5	3.9		1.5	3.9	3.9						
Lane Grp Cap (vph)	267	3236		214	3387	1018		247			223	
v/s Ratio Prot	c0.03	c0.20		c0.04	0.18							
v/s Ratio Perm						0.04		c0.02			c0.03	
v/c Ratio	0.36	0.31		0.29	0.26	0.06		0.14			0.21	
Uniform Delay, d1	52.0	9.6		47.2	7.1	6.0		43.2			44.7	
Progression Factor	1.00	1.00		0.69	0.35	0.05		1.00			1.00	
Incremental Delay, d2	0.3	0.3		0.3	0.2	0.1		0.1			0.2	
Delay (s)	52.3	9.8		32.9	2.7	0.4		43.3			44.8	
Level of Service	D	A		C	A	A		D			D	
Approach Delay (s)		13.5			4.3			43.3			44.8	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	37.1%	ICU Level of Service	A
Analysis Period (min)	15		

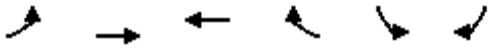
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	800	90	90	870	40	50	30	70	40	20	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	13	13	10	10	10	10	14	14
Total Lost time (s)	1.5	3.0		1.5	3.0		1.5	2.6		1.5	2.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.90		1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	4841		1652	5220		1652	1557		1652	1773	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1652	4841		1652	5220		1652	1557		1652	1773	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	842	95	95	916	42	53	32	74	42	21	53
RTOR Reduction (vph)	0	6	0	0	2	0	0	68	0	0	49	0
Lane Group Flow (vph)	53	931	0	95	956	0	53	38	0	42	25	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	8.0	75.1		13.6	80.7		6.9	8.4		6.3	7.8	
Effective Green, g (s)	10.0	77.1		15.6	82.7		8.9	10.4		8.3	9.8	
Actuated g/C Ratio	0.08	0.64		0.13	0.69		0.07	0.09		0.07	0.08	
Clearance Time (s)	3.5	5.0		3.5	5.0		3.5	4.6		3.5	4.6	
Vehicle Extension (s)	1.5	3.9		1.5	3.9		1.5	2.0		1.5	2.0	
Lane Grp Cap (vph)	137	3110		214	3597		122	134		114	144	
v/s Ratio Prot	c0.03	c0.19		c0.06	0.18		c0.03	c0.02		0.03	0.01	
v/s Ratio Perm												
v/c Ratio	0.39	0.30		0.44	0.27		0.43	0.29		0.37	0.18	
Uniform Delay, d1	52.1	9.5		48.2	7.1		53.1	51.3		53.3	51.3	
Progression Factor	1.23	0.22		0.69	0.26		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.2		0.5	0.2		0.9	0.4		0.7	0.2	
Delay (s)	64.5	2.3		33.6	2.0		54.0	51.8		54.1	51.6	
Level of Service	E	A		C	A		D	D		D	D	
Approach Delay (s)		5.6			4.9			52.5			52.5	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	41.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	10	870	1330	60	20	30
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	11	916	1400	63	21	32
Adj No. of Lanes	1	3	3	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	41	4565	4378	1455	103	94
Arrive On Green	0.05	1.00	1.00	1.00	0.06	0.06
Sat Flow, veh/h	1703	5253	5253	1583	1774	1615
Grp Volume(v), veh/h	11	916	1400	63	21	32
Grp Sat Flow(s),veh/h/ln	1703	1695	1695	1583	1774	1615
Q Serve(g_s), s	0.7	0.0	0.0	0.0	1.4	2.3
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.0	1.4	2.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	41	4565	4378	1455	103	94
V/C Ratio(X)	0.27	0.20	0.32	0.04	0.20	0.34
Avail Cap(c_a), veh/h	263	4565	4378	1455	532	484
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.74	0.74	1.00	1.00
Uniform Delay (d), s/veh	56.0	0.0	0.0	0.0	53.9	54.3
Incr Delay (d2), s/veh	1.2	0.1	0.1	0.0	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	0.0	0.1	0.0	0.7	2.1
LnGrp Delay(d),s/veh	57.3	0.1	0.1	0.0	54.2	55.1
LnGrp LOS	E	A	A	A	D	E
Approach Vol, veh/h		927	1463		53	
Approach Delay, s/veh		0.8	0.1		54.8	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				111.0		9.0	4.4	106.6
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				76.7		34.0	16.5	56.7
Max Q Clear Time (g_c+I1), s				2.0		4.3	2.7	2.0
Green Ext Time (p_c), s				52.6		0.1	0.0	41.9

Intersection Summary	
HCM 2010 Ctrl Delay	1.6
HCM 2010 LOS	A

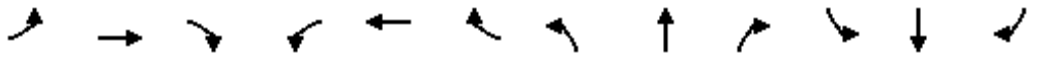
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	390	70	140	940	240	110	550	190	260	870	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1937	1863	1937	1976
Adj Flow Rate, veh/h	53	411	52	147	989	65	116	579	99	274	916	80
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	954	118	202	1361	424	169	1483	690	323	1732	151
Arrive On Green	0.05	0.21	0.21	0.08	0.18	0.18	0.10	0.42	0.42	0.24	0.67	0.67
Sat Flow, veh/h	1774	4583	569	1774	5085	1583	1774	3539	1647	1774	3426	299
Grp Volume(v), veh/h	53	302	161	147	989	65	116	579	99	274	492	504
Grp Sat Flow(s),veh/h/ln	1774	1695	1762	1774	1695	1583	1774	1770	1647	1774	1840	1884
Q Serve(g_s), s	3.5	9.3	9.6	9.7	22.0	4.2	7.6	13.6	4.5	17.7	16.3	16.3
Cycle Q Clear(g_c), s	3.5	9.3	9.6	9.7	22.0	4.2	7.6	13.6	4.5	17.7	16.3	16.3
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	97	706	367	202	1361	424	169	1483	690	323	931	953
V/C Ratio(X)	0.55	0.43	0.44	0.73	0.73	0.15	0.69	0.39	0.14	0.85	0.53	0.53
Avail Cap(c_a), veh/h	200	754	392	303	1428	445	362	1483	690	436	931	953
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00	0.73	0.73	0.73
Uniform Delay (d), s/veh	55.3	41.3	41.4	53.6	45.1	37.8	52.5	24.2	21.5	43.9	12.4	12.4
Incr Delay (d2), s/veh	1.8	0.7	1.3	1.8	2.0	0.3	1.8	0.8	0.4	6.6	1.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	4.4	4.8	4.9	10.6	1.9	3.8	6.8	2.1	9.2	8.6	8.8
LnGrp Delay(d),s/veh	57.0	42.0	42.7	55.4	47.1	38.0	54.4	25.0	22.0	50.5	14.0	13.9
LnGrp LOS	E	D	D	E	D	D	D	C	C	D	B	B
Approach Vol, veh/h		516			1201			794			1270	
Approach Delay, s/veh		43.7			47.6			28.9			21.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.3	53.2	15.2	28.3	13.0	63.6	8.1	35.4
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	27.5	32.1	18.5	24.7	22.5	37.1	11.5	31.7
Max Q Clear Time (g_c+I1), s	19.7	15.6	11.7	11.6	9.6	18.3	5.5	24.0
Green Ext Time (p_c), s	0.2	12.2	0.1	9.6	0.1	13.5	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	34.5
HCM 2010 LOS	C



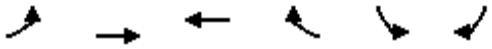
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	630	140	460	1120	450	70	1000	180	190	1400	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1788	1937	1937
Adj Flow Rate, veh/h	158	663	59	484	1179	271	74	1053	167	200	1474	99
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1123	430	599	1741	542	174	1997	622	300	2290	713
Arrive On Green	0.10	0.29	0.29	0.17	0.34	0.34	0.10	0.79	0.79	0.18	0.87	0.87
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	5085	1583	3304	5289	1647
Grp Volume(v), veh/h	158	663	59	484	1179	271	74	1053	167	200	1474	99
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1583	1652	1763	1647
Q Serve(g_s), s	5.3	13.4	1.9	16.2	23.8	16.3	2.4	9.1	1.9	6.8	10.1	1.1
Cycle Q Clear(g_c), s	5.3	13.4	1.9	16.2	23.8	16.3	2.4	9.1	1.9	6.8	10.1	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1123	430	599	1741	542	174	1997	622	300	2290	713
V/C Ratio(X)	0.59	0.59	0.14	0.81	0.68	0.50	0.42	0.53	0.27	0.67	0.64	0.14
Avail Cap(c_a), veh/h	387	1123	430	731	1741	542	387	1997	622	537	2290	713
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.95	0.95	0.95	0.91	0.91	0.91
Uniform Delay (d), s/veh	52.0	37.7	13.6	47.6	33.8	31.3	52.3	8.8	2.4	47.4	5.2	4.6
Incr Delay (d2), s/veh	0.8	2.3	0.7	4.6	2.1	3.3	0.6	1.0	1.0	0.9	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.5	6.5	0.9	8.1	11.5	7.6	1.2	4.3	0.9	3.1	4.6	0.5
LnGrp Delay(d),s/veh	52.8	40.0	14.2	52.2	35.9	34.6	52.9	9.7	3.4	48.3	6.5	5.0
LnGrp LOS	D	D	B	D	D	C	D	A	A	D	A	A
Approach Vol, veh/h		880			1934			1294			1773	
Approach Delay, s/veh		40.6			39.8			11.4			11.2	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	51.2	25.4	31.0	7.6	56.1	10.8	45.6
Change Period (Y+Rc), s	3.5	6.1	6.5	* 6.5	3.5	6.1	3.5	6.5
Max Green Setting (Gmax), s	17.5	34.9	23.5	* 25	11.5	40.9	11.5	36.5
Max Q Clear Time (g_c+I1), s	8.8	11.1	18.2	15.4	4.4	12.1	7.3	25.8
Green Ext Time (p_c), s	0.1	22.0	0.7	4.1	0.0	26.2	0.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	25.0
HCM 2010 LOS	C

Notes

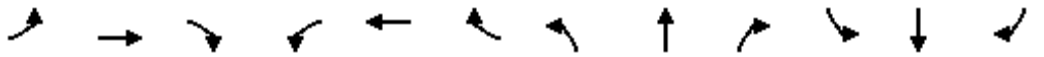
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	100	850	730	160	440	250
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1863	1788	1863	1937
Adj Flow Rate, veh/h	105	895	768	168	463	263
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	381	2062	1983	851	573	532
Arrive On Green	0.75	0.75	0.56	0.56	0.32	0.32
Sat Flow, veh/h	596	3778	3632	1520	1774	1647
Grp Volume(v), veh/h	105	895	768	168	463	263
Grp Sat Flow(s),veh/h/ln	596	1840	1770	1520	1774	1647
Q Serve(g_s), s	5.8	5.5	7.3	3.3	14.3	7.7
Cycle Q Clear(g_c), s	13.1	5.5	7.3	3.3	14.3	7.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	381	2062	1983	851	573	532
V/C Ratio(X)	0.28	0.43	0.39	0.20	0.81	0.49
Avail Cap(c_a), veh/h	381	2062	1983	851	967	897
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.62	0.62	0.95	0.95
Uniform Delay (d), s/veh	7.0	4.1	7.4	6.5	18.6	16.4
Incr Delay (d2), s/veh	1.6	0.6	0.4	0.3	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	2.8	3.6	1.4	7.1	3.5
LnGrp Delay(d),s/veh	8.7	4.7	7.8	6.8	19.6	16.6
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h		1000	936		726	
Approach Delay, s/veh		5.1	7.6		18.5	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				37.3		22.7		37.3
Change Period (Y+Rc), s				5.7		5.3		5.7
Max Green Setting (Gmax), s				18.3		30.7		18.3
Max Q Clear Time (g_c+I1), s				15.1		16.3		9.3
Green Ext Time (p_c), s				3.0		1.0		7.9

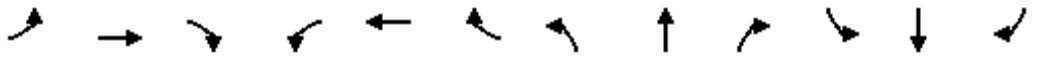
Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	1070	20	20	1020	10	30	10	10	30	10	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1900	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	32	1126	21	21	1074	11	32	11	11	32	11	116
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	4131	77	55	3969	41	140	120	120	231	19	205
Arrive On Green	0.04	0.77	0.77	0.01	0.25	0.25	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1774	5346	100	1774	5190	53	1258	890	890	1384	145	1524
Grp Volume(v), veh/h	32	743	404	21	701	384	32	0	22	32	0	127
Grp Sat Flow(s),veh/h/ln	1774	1763	1920	1774	1695	1853	1258	0	1780	1384	0	1668
Q Serve(g_s), s	2.1	7.3	7.3	1.4	19.9	19.9	2.9	0.0	1.3	2.5	0.0	8.6
Cycle Q Clear(g_c), s	2.1	7.3	7.3	1.4	19.9	19.9	11.5	0.0	1.3	3.8	0.0	8.6
Prop In Lane	1.00		0.05	1.00		0.03	1.00		0.50	1.00		0.91
Lane Grp Cap(c), veh/h	70	2725	1484	55	2592	1417	140	0	239	231	0	224
V/C Ratio(X)	0.46	0.27	0.27	0.38	0.27	0.27	0.23	0.00	0.09	0.14	0.00	0.57
Avail Cap(c_a), veh/h	214	2725	1484	214	2592	1417	341	0	525	453	0	492
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.73	0.92	0.92	0.92	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.4	3.9	3.9	58.2	18.0	18.0	54.0	0.0	45.5	47.2	0.0	48.6
Incr Delay (d2), s/veh	1.3	0.2	0.3	1.5	0.2	0.4	0.3	0.0	0.1	0.1	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	3.6	4.0	0.7	9.5	10.4	1.0	0.0	0.6	1.0	0.0	4.0
LnGrp Delay(d),s/veh	57.7	4.1	4.3	59.7	18.2	18.4	54.3	0.0	45.6	47.3	0.0	49.5
LnGrp LOS	E	A	A	E	B	B	D		D	D		D
Approach Vol, veh/h		1179			1106			54			159	
Approach Delay, s/veh		5.6			19.1			50.8			49.0	
Approach LOS		A			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		18.7	5.2	96.0		18.7	6.2	95.1
Change Period (Y+Rc), s		4.6	3.5	5.3		4.6	3.5	5.3
Max Green Setting (Gmax), s		33.4	12.5	60.7		33.4	12.5	60.7
Max Q Clear Time (g_c+I1), s		13.5	3.4	9.3		10.6	4.1	21.9
Green Ext Time (p_c), s		0.7	0.0	33.3		0.7	0.0	27.5

Intersection Summary	
HCM 2010 Ctrl Delay	15.3
HCM 2010 LOS	B



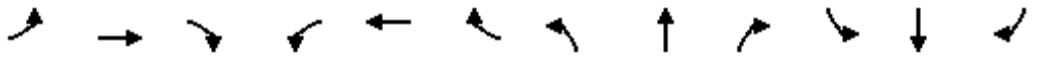
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	720	290	190	520	150	140	860	80	310	1340	80
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	211	758	305	200	547	158	147	905	84	326	1411	84
Adj No. of Lanes	2	3	0	2	3	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	839	335	304	1177	870	564	1505	139	487	1434	85
Arrive On Green	0.09	0.23	0.23	0.09	0.23	0.23	0.10	0.10	0.10	0.55	0.55	0.55
Sat Flow, veh/h	3442	3576	1425	3442	5085	1583	1774	4737	438	1774	5222	311
Grp Volume(v), veh/h	211	718	345	200	547	158	147	647	342	326	1007	488
Grp Sat Flow(s),veh/h/ln	1721	1695	1611	1721	1695	1583	1774	1695	1785	1774	1863	1808
Q Serve(g_s), s	7.7	26.7	27.1	7.3	12.0	6.5	9.9	23.7	23.8	17.0	34.4	34.4
Cycle Q Clear(g_c), s	7.7	26.7	27.1	7.3	12.0	6.5	9.9	23.7	23.8	17.0	34.4	34.4
Prop In Lane	1.00		0.88	1.00		1.00	1.00		0.25	1.00		0.17
Lane Grp Cap(c), veh/h	315	796	378	304	1177	870	564	1077	567	487	1023	496
V/C Ratio(X)	0.67	0.90	0.91	0.66	0.46	0.18	0.26	0.60	0.60	0.67	0.98	0.98
Avail Cap(c_a), veh/h	463	796	378	463	1177	870	564	1077	567	487	1023	496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	0.88	0.88	0.88	0.24	0.24	0.24
Uniform Delay (d), s/veh	57.2	48.3	48.4	57.4	43.0	14.7	44.1	50.3	50.4	25.1	29.0	29.0
Incr Delay (d2), s/veh	0.9	15.5	28.6	0.9	1.3	0.4	1.0	2.2	4.2	1.0	10.2	15.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	14.2	15.1	3.5	5.8	4.9	5.0	11.5	12.4	8.3	18.8	19.0
LnGrp Delay(d),s/veh	58.1	63.8	77.0	58.2	44.3	15.1	45.1	52.5	54.5	26.1	39.3	44.9
LnGrp LOS	E	E	E	E	D	B	D	D	D	C	D	D
Approach Vol, veh/h		1274			905			1136			1821	
Approach Delay, s/veh		66.4			42.3			52.1			38.4	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.6	13.4	33.0		39.0	13.0	33.4
Change Period (Y+Rc), s		5.3	3.5	4.9		5.3	3.5	4.9
Max Green Setting (Gmax), s		33.7	15.5	28.1		33.7	15.5	28.1
Max Q Clear Time (g_c+I1), s		25.8	9.7	14.0		36.4	9.3	29.1
Green Ext Time (p_c), s		5.0	0.2	10.9		0.0	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	49.1
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



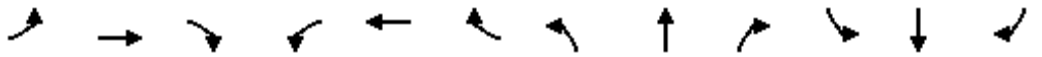
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	900	60	160	810	110	30	10	40	40	10	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	84	947	63	168	853	116	32	11	42	42	11	42
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	522	3535	235	223	2439	330	141	40	153	155	35	188
Arrive On Green	0.59	1.00	1.00	0.08	0.35	0.35	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1774	5067	336	1774	4713	638	1346	339	1295	853	292	1583
Grp Volume(v), veh/h	84	658	352	168	637	332	32	0	53	53	0	42
Grp Sat Flow(s),veh/h/ln	1774	1763	1878	1774	1763	1825	1346	0	1634	1144	0	1583
Q Serve(g_s), s	2.6	0.0	0.0	11.1	16.1	16.2	2.7	0.0	3.5	3.5	0.0	2.9
Cycle Q Clear(g_c), s	2.6	0.0	0.0	11.1	16.1	16.2	9.7	0.0	3.5	7.0	0.0	2.9
Prop In Lane	1.00		0.18	1.00		0.35	1.00		0.79	0.79		1.00
Lane Grp Cap(c), veh/h	522	2459	1310	223	1825	944	141	0	194	189	0	188
V/C Ratio(X)	0.16	0.27	0.27	0.75	0.35	0.35	0.23	0.00	0.27	0.28	0.00	0.22
Avail Cap(c_a), veh/h	522	2459	1310	229	1825	944	379	0	482	441	0	467
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	0.0	53.1	24.2	24.2	54.3	0.0	48.2	50.6	0.0	47.9
Incr Delay (d2), s/veh	0.0	0.2	0.4	10.7	0.5	1.0	0.3	0.0	0.3	0.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	0.1	0.2	6.1	8.0	8.4	1.0	0.0	1.6	1.7	0.0	1.3
LnGrp Delay(d),s/veh	18.0	0.2	0.4	63.8	24.7	25.2	54.6	0.0	48.5	50.9	0.0	48.1
LnGrp LOS	B	A	A	E	C	C	D		D	D		D
Approach Vol, veh/h		1094			1137			85			95	
Approach Delay, s/veh		1.7			30.6			50.8			49.7	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.8	16.6	86.6		16.8	38.2	65.0
Change Period (Y+Rc), s		4.6	3.5	4.9		4.6	4.9	* 4.9
Max Green Setting (Gmax), s		33.4	13.5	60.1		33.4	13.5	* 60
Max Q Clear Time (g_c+I1), s		11.7	13.1	2.0		9.0	4.6	18.2
Green Ext Time (p_c), s		0.5	0.0	11.4		0.5	5.0	10.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	1080	60	10	660	80	50	20	20	120	30	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	32	1137	63	11	695	84	53	21	21	126	32	74
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	2752	152	41	2485	300	173	131	131	227	77	177
Arrive On Green	0.10	1.00	1.00	0.02	0.75	0.75	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1774	3547	196	1774	3308	399	1283	890	890	1359	521	1204
Grp Volume(v), veh/h	32	590	610	11	386	393	53	0	42	126	0	106
Grp Sat Flow(s),veh/h/ln	1774	1840	1903	1774	1840	1867	1283	0	1780	1359	0	1725
Q Serve(g_s), s	2.2	0.0	0.0	0.8	8.6	8.6	5.1	0.0	2.7	11.6	0.0	7.3
Cycle Q Clear(g_c), s	2.2	0.0	0.0	0.8	8.6	8.6	12.4	0.0	2.7	14.3	0.0	7.3
Prop In Lane	1.00		0.10	1.00		0.21	1.00		0.50	1.00		0.70
Lane Grp Cap(c), veh/h	85	1428	1476	41	1382	1402	173	0	262	227	0	254
V/C Ratio(X)	0.38	0.41	0.41	0.27	0.28	0.28	0.31	0.00	0.16	0.55	0.00	0.42
Avail Cap(c_a), veh/h	252	1428	1476	252	1382	1402	402	0	581	471	0	563
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.51	0.51	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	0.0	0.0	62.4	5.1	5.1	56.0	0.0	48.4	54.7	0.0	50.4
Incr Delay (d2), s/veh	0.5	0.4	0.4	1.3	0.5	0.5	0.4	0.0	0.1	0.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	0.2	0.2	0.4	4.5	4.6	1.8	0.0	1.3	4.4	0.0	3.5
LnGrp Delay(d),s/veh	57.5	0.4	0.4	63.7	5.6	5.6	56.4	0.0	48.5	55.4	0.0	50.8
LnGrp LOS	E	A	A	E	A	A	E		D	E		D
Approach Vol, veh/h		1232			790			95			232	
Approach Delay, s/veh		1.9			6.4			52.9			53.3	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	103.8		21.7	7.7	100.6		21.7
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	16.5	60.1		40.4	16.5	60.1		40.4
Max Q Clear Time (g_c+I1), s	2.8	2.0		16.3	4.2	10.6		14.4
Green Ext Time (p_c), s	0.0	34.9		0.9	0.0	31.7		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	10.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	800	20	50	1310	30	20	10	70	20	10	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1900	1863	1863	1900	1976	1937	1976	1900	1863	1863
Adj Flow Rate, veh/h	11	842	21	53	1379	32	21	11	74	21	11	21
Adj No. of Lanes	1	3	0	1	4	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	537	4033	100	96	3338	77	60	25	114	131	59	157
Arrive On Green	0.63	1.00	1.00	0.11	1.00	1.00	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1703	5103	127	1774	6492	151	241	256	1150	825	596	1583
Grp Volume(v), veh/h	11	559	304	53	1021	390	106	0	0	32	0	21
Grp Sat Flow(s),veh/h/ln	1703	1695	1840	1774	1602	1836	1648	0	0	1422	0	1583
Q Serve(g_s), s	0.3	0.0	0.0	3.4	0.0	0.0	4.4	0.0	0.0	0.0	0.0	1.5
Cycle Q Clear(g_c), s	0.3	0.0	0.0	3.4	0.0	0.0	7.4	0.0	0.0	2.2	0.0	1.5
Prop In Lane	1.00		0.07	1.00		0.08	0.20		0.70	0.66		1.00
Lane Grp Cap(c), veh/h	537	2679	1454	96	2471	944	199	0	0	190	0	157
V/C Ratio(X)	0.02	0.21	0.21	0.55	0.41	0.41	0.53	0.00	0.00	0.17	0.00	0.13
Avail Cap(c_a), veh/h	537	2679	1454	273	2471	944	525	0	0	483	0	475
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.96	0.96	0.96	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	0.0	52.1	0.0	0.0	52.0	0.0	0.0	49.6	0.0	49.4
Incr Delay (d2), s/veh	0.0	0.2	0.3	1.8	0.5	1.3	0.8	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	0.1	0.1	1.7	0.1	0.3	3.4	0.0	0.0	1.0	0.0	0.6
LnGrp Delay(d),s/veh	15.2	0.2	0.3	53.9	0.5	1.3	52.8	0.0	0.0	49.8	0.0	49.5
LnGrp LOS	B	A	A	D	A	A	D			D		D
Approach Vol, veh/h		874			1464			106			53	
Approach Delay, s/veh		0.4			2.6			52.8			49.7	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.9	8.0	98.1		13.9	41.1	65.0
Change Period (Y+Rc), s		4.0	3.5	5.3		4.0	5.3	* 5.3
Max Green Setting (Gmax), s		34.0	16.5	56.7		34.0	13.5	* 60
Max Q Clear Time (g_c+I1), s		9.4	5.4	2.0		4.2	2.3	2.0
Green Ext Time (p_c), s		0.6	0.0	10.6		0.6	2.8	22.2

Intersection Summary	
HCM 2010 Ctrl Delay	5.0
HCM 2010 LOS	A

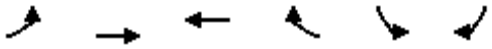
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	890	170	140	860	150	90	320	200	120	470	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	53	937	179	147	905	158	95	337	211	126	495	116
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	2302	438	201	2602	452	195	673	413	212	910	212
Arrive On Green	0.02	0.17	0.17	0.11	0.57	0.57	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1774	4463	850	1774	4535	789	807	2194	1346	856	2965	691
Grp Volume(v), veh/h	53	740	376	147	703	360	95	282	266	126	306	305
Grp Sat Flow(s),veh/h/ln	1774	1763	1787	1774	1763	1798	807	1840	1700	856	1840	1815
Q Serve(g_s), s	3.6	22.4	22.5	9.6	12.7	12.8	13.3	15.0	15.5	17.0	16.6	16.8
Cycle Q Clear(g_c), s	3.6	22.4	22.5	9.6	12.7	12.8	30.1	15.0	15.5	32.5	16.6	16.8
Prop In Lane	1.00		0.48	1.00		0.44	1.00		0.79	1.00		0.38
Lane Grp Cap(c), veh/h	98	1818	922	201	2023	1032	195	565	522	212	565	557
V/C Ratio(X)	0.54	0.41	0.41	0.73	0.35	0.35	0.49	0.50	0.51	0.59	0.54	0.55
Avail Cap(c_a), veh/h	214	1818	922	273	2023	1032	197	569	525	214	569	561
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	0.78	0.78	0.78	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	33.4	33.5	51.5	13.6	13.6	47.2	34.0	34.2	47.5	34.6	34.6
Incr Delay (d2), s/veh	1.7	0.7	1.3	3.6	0.5	0.9	0.5	0.2	0.3	2.9	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	11.1	11.5	4.9	6.3	6.6	3.0	7.7	7.3	4.2	8.5	8.5
LnGrp Delay(d),s/veh	59.1	34.1	34.8	55.0	14.1	14.6	47.7	34.2	34.4	50.5	35.1	35.2
LnGrp LOS	E	C	C	E	B	B	D	C	C	D	D	D
Approach Vol, veh/h		1169			1210			643			737	
Approach Delay, s/veh		35.4			19.2			36.3			37.8	
Approach LOS		D			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.1	65.2		39.7	8.1	72.1		39.7
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	16.5	54.7		35.1	12.5	58.7		35.1
Max Q Clear Time (g_c+I1), s	11.6	24.5		34.5	5.6	14.8		32.1
Green Ext Time (p_c), s	0.0	22.6		0.4	0.0	29.5		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	30.8
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	30	790	1310	30	30	20
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	32	832	1379	32	26	27
Adj No. of Lanes	1	3	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	69	4565	5494	127	103	94
Arrive On Green	0.08	1.00	1.00	1.00	0.06	0.06
Sat Flow, veh/h	1774	5253	6752	151	1774	1615
Grp Volume(v), veh/h	32	832	1021	390	26	27
Grp Sat Flow(s),veh/h/ln	1774	1695	1602	1836	1774	1615
Q Serve(g_s), s	2.1	0.0	0.0	0.0	1.7	1.9
Cycle Q Clear(g_c), s	2.1	0.0	0.0	0.0	1.7	1.9
Prop In Lane	1.00			0.08	1.00	1.00
Lane Grp Cap(c), veh/h	69	4565	4067	1554	103	94
V/C Ratio(X)	0.46	0.18	0.25	0.25	0.25	0.29
Avail Cap(c_a), veh/h	214	4565	4067	1554	517	471
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	54.1	0.0	0.0	0.0	54.0	54.1
Incr Delay (d2), s/veh	1.5	0.1	0.1	0.4	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.0	0.0	0.1	0.2	0.8	1.8
LnGrp Delay(d),s/veh	55.7	0.1	0.1	0.4	54.5	54.8
LnGrp LOS	E	A	A	A	D	D
Approach Vol, veh/h		864	1411		53	
Approach Delay, s/veh		2.1	0.2		54.6	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				111.0		9.0	6.2	104.9
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				77.7		33.0	12.5	61.7
Max Q Clear Time (g_c+I1), s				2.0		3.9	4.1	2.0
Green Ext Time (p_c), s				48.4		0.1	0.0	41.5

Intersection Summary	
HCM 2010 Ctrl Delay	2.2
HCM 2010 LOS	A

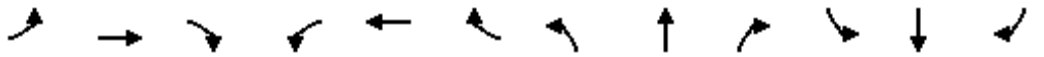
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	380	10	240	40	20	20	100	1040	20	10	2030	440
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	400	11	253	42	21	21	105	1095	21	11	2137	463
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	422	21	484	167	83	68	128	2910	56	18	2130	443
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.14	1.00	1.00	0.02	1.00	1.00
Sat Flow, veh/h	1359	66	1527	385	263	216	1774	5137	98	1774	4221	877
Grp Volume(v), veh/h	400	0	264	84	0	0	105	723	393	11	1699	901
Grp Sat Flow(s),veh/h/ln	1359	0	1593	864	0	0	1774	1695	1845	1774	1695	1708
Q Serve(g_s), s	18.0	0.0	16.3	3.7	0.0	0.0	6.9	0.0	0.0	0.7	0.0	58.6
Cycle Q Clear(g_c), s	38.0	0.0	16.3	20.0	0.0	0.0	6.9	0.0	0.0	0.7	0.0	58.6
Prop In Lane	1.00		0.96	0.50		0.25	1.00		0.05	1.00		0.51
Lane Grp Cap(c), veh/h	422	0	505	319	0	0	128	1920	1045	18	1711	862
V/C Ratio(X)	0.95	0.00	0.52	0.26	0.00	0.00	0.82	0.38	0.38	0.61	0.99	1.05
Avail Cap(c_a), veh/h	422	0	505	319	0	0	185	1920	1045	185	1711	862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.79	0.79	0.79	0.18	0.18	0.18
Uniform Delay (d), s/veh	44.3	0.0	33.6	35.7	0.0	0.0	50.6	0.0	0.0	58.5	0.0	0.0
Incr Delay (d2), s/veh	30.2	0.0	0.5	0.2	0.0	0.0	9.4	0.4	0.8	2.2	7.8	27.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	16.8	0.0	7.3	2.4	0.0	0.0	3.7	0.1	0.2	0.4	1.8	6.5
LnGrp Delay(d),s/veh	74.5	0.0	34.1	35.9	0.0	0.0	60.0	0.4	0.8	60.7	7.8	27.2
LnGrp LOS	E		C	D			E	A	A	E	A	F
Approach Vol, veh/h		664			84			1221			2611	
Approach Delay, s/veh		58.4			35.9			5.7			14.7	
Approach LOS		E			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.1	65.9		42.0	4.7	73.3		42.0
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	56.7		38.0	12.5	56.7		38.0
Max Q Clear Time (g_c+I1), s	8.9	60.6		40.0	2.7	2.0		22.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	53.2		2.1

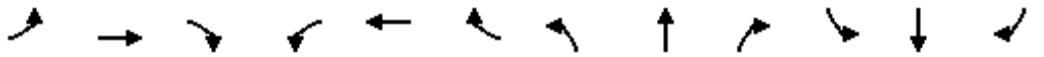
Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	20	40	50	20	60	20	1010	40	30	1930	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	63	21	42	53	21	63	21	1063	42	32	2032	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	37	53	98	37	80	25	3804	150	40	3951	62
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.00	0.25	0.25	0.05	1.00	1.00
Sat Flow, veh/h	608	327	467	497	331	705	1774	5020	198	1774	5157	81
Grp Volume(v), veh/h	126	0	0	137	0	0	21	718	387	32	1335	729
Grp Sat Flow(s),veh/h/ln	1402	0	0	1534	0	0	1774	1695	1828	1774	1695	1848
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	0.0	1.4	20.5	20.5	2.1	0.0	0.0
Cycle Q Clear(g_c), s	10.7	0.0	0.0	10.4	0.0	0.0	1.4	20.5	20.5	2.1	0.0	0.0
Prop In Lane	0.50		0.33	0.39		0.46	1.00		0.11	1.00		0.04
Lane Grp Cap(c), veh/h	203	0	0	215	0	0	25	2569	1385	40	2597	1416
V/C Ratio(X)	0.62	0.00	0.00	0.64	0.00	0.00	0.82	0.28	0.28	0.80	0.51	0.51
Avail Cap(c_a), veh/h	465	0	0	484	0	0	185	2569	1385	185	2597	1416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.92	0.92	0.92	0.23	0.23	0.23
Uniform Delay (d), s/veh	51.8	0.0	0.0	51.7	0.0	0.0	59.6	18.6	18.6	57.0	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.2	0.0	0.0	19.6	0.2	0.5	3.2	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	0.0	0.0	4.5	0.0	0.0	0.8	9.7	10.6	1.1	0.1	0.1
LnGrp Delay(d),s/veh	52.9	0.0	0.0	52.9	0.0	0.0	79.1	18.8	19.0	60.2	0.2	0.3
LnGrp LOS	D			D			E	B	B	E	A	A
Approach Vol, veh/h		126			137			1126			2096	
Approach Delay, s/veh		52.9			52.9			20.0			1.1	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	96.2		17.5	5.2	97.2		17.5
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	59.7		35.0	12.5	59.7		35.0
Max Q Clear Time (g_c+I1), s	4.1	22.5		12.7	3.4	2.0		12.4
Green Ext Time (p_c), s	0.0	35.0		1.1	0.0	52.7		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	600	220	130	730	140	160	810	110	220	1870	120
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.90	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	105	632	232	137	768	147	168	853	116	232	1968	126
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	126	623	229	164	791	151	185	1663	225	255	2081	619
Arrive On Green	0.02	0.08	0.08	0.03	0.09	0.09	0.21	0.74	0.74	0.29	0.82	0.82
Sat Flow, veh/h	1774	2485	911	1774	2903	555	1774	4500	608	1774	5085	1513
Grp Volume(v), veh/h	105	450	414	137	468	447	168	641	328	232	1968	126
Grp Sat Flow(s),veh/h/ln	1774	1770	1626	1774	1770	1688	1774	1695	1718	1774	1695	1513
Q Serve(g_s), s	7.1	30.1	30.1	9.2	31.7	31.7	11.1	9.5	9.7	15.1	37.3	2.2
Cycle Q Clear(g_c), s	7.1	30.1	30.1	9.2	31.7	31.7	11.1	9.5	9.7	15.1	37.3	2.2
Prop In Lane	1.00		0.56	1.00		0.33	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	126	444	408	164	482	460	185	1253	635	255	2081	619
V/C Ratio(X)	0.84	1.01	1.02	0.83	0.97	0.97	0.91	0.51	0.52	0.91	0.95	0.20
Avail Cap(c_a), veh/h	126	444	408	170	482	460	185	1253	635	377	2081	619
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.57	0.57	0.57	0.81	0.81	0.81	0.97	0.97	0.97	0.09	0.09	0.09
Uniform Delay (d), s/veh	57.9	55.0	55.0	57.3	54.1	54.1	46.9	11.1	11.1	42.0	9.8	6.6
Incr Delay (d2), s/veh	22.3	35.8	37.6	22.1	29.5	30.5	39.8	1.4	2.9	1.8	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.3	19.2	17.8	5.5	19.5	18.7	7.5	4.5	4.9	7.5	16.3	0.8
LnGrp Delay(d),s/veh	80.2	90.8	92.7	79.3	83.7	84.6	86.7	12.6	14.0	43.8	11.1	6.7
LnGrp LOS	F	F	F	E	F	F	F	B	B	D	B	A
Approach Vol, veh/h		969			1052			1137			2326	
Approach Delay, s/veh		90.5			83.5			23.9			14.1	
Approach LOS		F			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	54.0	12.0	38.0	20.8	49.2	14.6	35.4
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	12.5	49.1	8.5	32.7	25.5	36.1	11.5	29.7
Max Q Clear Time (g_c+I1), s	13.1	39.3	9.1	33.7	17.1	11.7	11.2	32.1
Green Ext Time (p_c), s	0.0	9.5	0.0	0.0	0.1	23.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	100	60	30	70	60	90	570	40	140	1030	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.88		0.82	0.90		0.82	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	53	105	63	32	74	63	95	600	42	147	1084	53
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	167	90	76	159	118	355	2430	170	515	2488	122
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.24	0.24	0.24	0.73	0.73	0.72
Sat Flow, veh/h	280	806	433	192	764	568	492	3348	234	784	3429	168
Grp Volume(v), veh/h	221	0	0	169	0	0	95	317	325	147	559	578
Grp Sat Flow(s),veh/h/ln	1519	0	0	1525	0	0	492	1770	1813	784	1770	1827
Q Serve(g_s), s	4.3	0.0	0.0	0.0	0.0	0.0	19.8	17.4	17.4	11.6	15.2	15.3
Cycle Q Clear(g_c), s	15.6	0.0	0.0	11.3	0.0	0.0	35.1	17.4	17.4	29.0	15.2	15.3
Prop In Lane	0.24		0.29	0.19		0.37	1.00		0.13	1.00		0.09
Lane Grp Cap(c), veh/h	353	0	0	352	0	0	355	1284	1316	515	1284	1326
V/C Ratio(X)	0.63	0.00	0.00	0.48	0.00	0.00	0.27	0.25	0.25	0.29	0.44	0.44
Avail Cap(c_a), veh/h	366	0	0	365	0	0	355	1284	1316	515	1284	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.93	0.93	0.93	0.33	0.33	0.33
Uniform Delay (d), s/veh	43.7	0.0	0.0	42.1	0.0	0.0	32.4	19.1	19.1	13.0	6.6	6.6
Incr Delay (d2), s/veh	2.3	0.0	0.0	0.4	0.0	0.0	1.7	0.4	0.4	0.5	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.0	0.0	0.0	5.0	0.0	0.0	2.9	8.7	8.9	2.6	7.4	7.7
LnGrp Delay(d),s/veh	46.0	0.0	0.0	42.5	0.0	0.0	34.1	19.5	19.6	13.4	7.0	7.0
LnGrp LOS	D			D			C	B	B	B	A	A
Approach Vol, veh/h		221			169			737			1284	
Approach Delay, s/veh		46.0			42.5			21.4			7.7	
Approach LOS		D			D			C			A	

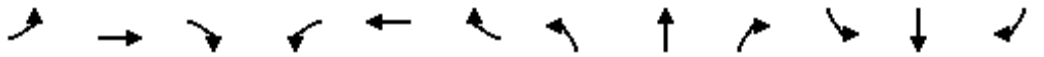
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		91.1		28.9		91.1		28.9
Change Period (Y+Rc), s		4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s		85.1		26.0		85.1		26.0
Max Q Clear Time (g_c+I1), s		37.1		17.6		31.0		13.3
Green Ext Time (p_c), s		8.3		1.2		8.3		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	450	150	90	550	80	140	420	130	90	580	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	474	158	95	579	84	147	442	137	95	611	242
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	630	209	111	689	100	329	1591	489	518	1478	585
Arrive On Green	0.08	0.24	0.23	0.12	0.44	0.43	0.79	0.79	0.78	0.40	0.40	0.39
Sat Flow, veh/h	1774	2611	864	1774	3102	449	644	2667	820	831	2478	980
Grp Volume(v), veh/h	126	320	312	95	330	333	147	292	287	95	436	417
Grp Sat Flow(s),veh/h/ln	1774	1770	1706	1774	1770	1781	644	1770	1717	831	1770	1689
Q Serve(g_s), s	8.4	20.1	20.4	6.3	19.8	20.0	17.4	5.2	5.4	9.4	21.3	21.4
Cycle Q Clear(g_c), s	8.4	20.1	20.4	6.3	19.8	20.0	38.8	5.2	5.4	14.8	21.3	21.4
Prop In Lane	1.00		0.51	1.00		0.25	1.00		0.48	1.00		0.58
Lane Grp Cap(c), veh/h	144	427	412	111	393	396	329	1055	1024	518	1055	1007
V/C Ratio(X)	0.87	0.75	0.76	0.86	0.84	0.84	0.45	0.28	0.28	0.18	0.41	0.41
Avail Cap(c_a), veh/h	148	678	654	237	767	772	329	1055	1024	518	1055	1007
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33	0.67	0.67	0.67
Upstream Filter(I)	0.44	0.44	0.44	0.67	0.67	0.67	0.85	0.85	0.85	0.31	0.31	0.31
Uniform Delay (d), s/veh	54.5	42.2	42.5	52.0	31.4	31.7	15.8	5.5	5.7	20.8	20.9	21.1
Incr Delay (d2), s/veh	20.3	0.4	0.5	4.9	1.3	1.3	3.7	0.6	0.6	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.9	9.8	9.7	3.2	9.7	9.8	3.4	2.7	2.7	2.2	10.5	10.1
LnGrp Delay(d),s/veh	74.8	42.6	43.0	56.9	32.7	33.0	19.5	6.1	6.3	21.1	21.3	21.5
LnGrp LOS	E	D	D	E	C	C	B	A	A	C	C	C
Approach Vol, veh/h		758			758			726			948	
Approach Delay, s/veh		48.1			35.9			8.9			21.3	
Approach LOS		D			D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		75.6	11.5	32.9		75.6	13.8	30.7
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	16.5	45.1		45.1	10.5	51.1
Max Q Clear Time (g_c+I1), s		40.8	8.3	22.4		23.4	10.4	22.0
Green Ext Time (p_c), s		2.4	0.0	3.7		5.6	0.0	3.8

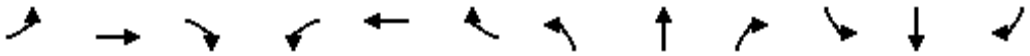
Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	660	160	120	610	200	70	410	100	120	800	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	105	695	168	126	642	211	74	432	105	126	842	116
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	851	206	143	819	269	219	1463	353	431	1617	223
Arrive On Green	0.07	0.30	0.29	0.16	0.63	0.61	0.52	0.52	0.51	0.17	0.17	0.17
Sat Flow, veh/h	1774	2824	682	1774	2615	859	584	2826	681	863	3123	430
Grp Volume(v), veh/h	105	435	428	126	434	419	74	269	268	126	477	481
Grp Sat Flow(s),veh/h/ln	1774	1770	1737	1774	1770	1704	584	1770	1737	863	1770	1783
Q Serve(g_s), s	7.0	27.4	27.4	8.3	21.6	21.8	12.7	10.4	10.6	15.8	29.4	29.5
Cycle Q Clear(g_c), s	7.0	27.4	27.4	8.3	21.6	21.8	42.1	10.4	10.6	26.4	29.4	29.5
Prop In Lane	1.00		0.39	1.00		0.50	1.00		0.39	1.00		0.24
Lane Grp Cap(c), veh/h	122	533	523	143	555	534	219	916	899	431	916	923
V/C Ratio(X)	0.86	0.82	0.82	0.88	0.78	0.78	0.34	0.29	0.30	0.29	0.52	0.52
Avail Cap(c_a), veh/h	133	782	767	177	826	795	219	916	899	431	916	923
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.35	0.35	0.35	0.34	0.34	0.34	0.75	0.75	0.75	0.91	0.91	0.91
Uniform Delay (d), s/veh	55.3	38.8	39.0	49.7	19.4	19.8	36.4	16.5	16.6	39.7	36.2	36.2
Incr Delay (d2), s/veh	15.4	0.9	1.0	11.8	0.5	0.5	3.1	0.6	0.6	1.6	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.0	13.4	13.3	4.5	10.5	10.1	2.2	5.2	5.2	4.0	15.0	15.1
LnGrp Delay(d),s/veh	70.7	39.8	40.0	61.6	19.9	20.4	39.5	17.1	17.2	41.3	38.1	38.1
LnGrp LOS	E	D	D	E	B	C	D	B	B	D	D	D
Approach Vol, veh/h		968			979			611			1084	
Approach Delay, s/veh		43.2			25.5			19.9			38.5	
Approach LOS		D			C			B			D	

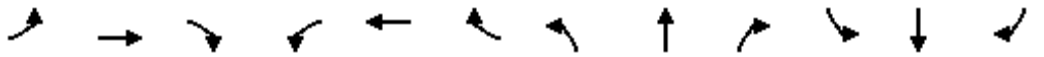
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		66.1	13.7	40.2		66.1	12.3	41.6
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		42.1	12.5	52.1		42.1	9.5	55.1
Max Q Clear Time (g_c+I1), s		44.1	10.3	29.4		31.5	9.0	23.8
Green Ext Time (p_c), s		0.0	0.0	5.9		4.2	0.0	6.2

Intersection Summary	
HCM 2010 Ctrl Delay	33.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	300	0	80	0	420	180	60	620	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor					1.00	1.00		0.95		1.00	0.95	
Frt					1.00	0.85		0.96		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1770	1583		3380		1770	3539	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1770	1583		3380		1770	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	316	0	84	0	442	189	63	653	0
RTOR Reduction (vph)	0	0	0	0	0	66	0	22	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	316	18	0	609	0	63	653	0
Turn Type				Split	NA	Perm		NA		Prot	NA	
Protected Phases				8	8			2		1	6	
Permitted Phases						8						
Actuated Green, G (s)					25.4	25.4		74.9		7.3	85.7	
Effective Green, g (s)					25.4	25.4		75.8		6.8	86.6	
Actuated g/C Ratio					0.21	0.21		0.63		0.06	0.72	
Clearance Time (s)					4.0	4.0		4.9		3.5	4.9	
Vehicle Extension (s)					1.5	1.5		1.5		1.5	1.5	
Lane Grp Cap (vph)					374	335		2135		100	2553	
v/s Ratio Prot					c0.18			c0.18		c0.04	0.18	
v/s Ratio Perm						0.01						
v/c Ratio					0.84	0.05		0.29		0.63	0.26	
Uniform Delay, d1					45.4	37.7		9.9		55.4	5.7	
Progression Factor					0.64	0.66		0.47		1.20	0.51	
Incremental Delay, d2					14.3	0.0		0.3		8.6	0.2	
Delay (s)					43.4	24.9		4.9		75.2	3.1	
Level of Service					D	C		A		E	A	
Approach Delay (s)		0.0			39.5			4.9			9.5	
Approach LOS		A			D			A			A	

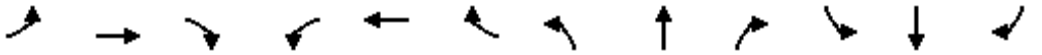
Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	80	340	30	50	20	250	560	40	60	860	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	84	84	358	32	53	21	263	589	42	63	905	53
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	212	367	52	86	117	237	1828	815	73	1442	84
Arrive On Green	0.23	0.23	0.23	0.08	0.08	0.08	0.27	1.00	1.00	0.08	0.85	0.83
Sat Flow, veh/h	909	909	1573	688	1140	1552	1774	3539	1579	1774	3397	199
Grp Volume(v), veh/h	168	0	358	85	0	21	263	589	42	63	471	487
Grp Sat Flow(s),veh/h/ln	1817	0	1573	1828	0	1552	1774	1770	1579	1774	1770	1827
Q Serve(g_s), s	9.4	0.0	27.1	5.4	0.0	1.5	16.0	0.0	0.0	4.2	10.3	10.4
Cycle Q Clear(g_c), s	9.4	0.0	27.1	5.4	0.0	1.5	16.0	0.0	0.0	4.2	10.3	10.4
Prop In Lane	0.50		1.00	0.38		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	424	0	367	138	0	117	237	1828	815	73	751	776
V/C Ratio(X)	0.40	0.00	0.98	0.62	0.00	0.18	1.11	0.32	0.05	0.86	0.63	0.63
Avail Cap(c_a), veh/h	424	0	367	411	0	349	237	1828	815	145	751	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.89	0.89	0.89	0.84	0.84	0.84
Uniform Delay (d), s/veh	38.9	0.0	45.7	53.8	0.0	52.0	44.0	0.0	0.0	54.7	6.0	6.1
Incr Delay (d2), s/veh	0.2	0.0	40.1	1.7	0.0	0.3	88.7	0.4	0.1	8.8	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.7	0.0	15.8	2.8	0.0	0.7	13.6	0.1	0.0	2.2	5.4	5.6
LnGrp Delay(d),s/veh	39.1	0.0	85.8	55.4	0.0	52.3	132.7	0.4	0.1	63.5	9.3	9.3
LnGrp LOS	D		F	E		D	F	A	A	E	A	A
Approach Vol, veh/h		526			106			894			1021	
Approach Delay, s/veh		70.9			54.8			39.3			12.6	
Approach LOS		E			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	66.0		32.0	20.0	54.9		13.1
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	10.3	38.3		28.0	16.5	32.1		27.0
Max Q Clear Time (g_c+I1), s	6.2	2.0		29.1	18.0	12.4		7.4
Green Ext Time (p_c), s	0.0	5.3		0.0	0.0	4.9		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	90	60	20	100	30	40	530	10	60	890	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	211	95	63	21	105	32	42	558	11	63	937	274
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	200	132	67	294	301	46	2367	47	74	1842	537
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.05	1.00	1.00	0.04	0.68	0.67
Sat Flow, veh/h	1239	1042	691	165	1533	1568	1774	3550	70	1774	2700	787
Grp Volume(v), veh/h	211	0	158	126	0	32	42	278	291	63	613	598
Grp Sat Flow(s),veh/h/ln	1239	0	1733	1698	0	1568	1774	1770	1850	1774	1770	1718
Q Serve(g_s), s	13.2	0.0	9.7	0.1	0.0	2.0	2.8	0.0	0.0	4.2	20.2	20.5
Cycle Q Clear(g_c), s	23.0	0.0	9.7	9.8	0.0	2.0	2.8	0.0	0.0	4.2	20.2	20.5
Prop In Lane	1.00		0.40	0.17		1.00	1.00		0.04	1.00		0.46
Lane Grp Cap(c), veh/h	196	0	332	360	0	301	46	1180	1234	74	1207	1172
V/C Ratio(X)	1.08	0.00	0.48	0.35	0.00	0.11	0.90	0.24	0.24	0.86	0.51	0.51
Avail Cap(c_a), veh/h	196	0	332	360	0	301	118	1180	1234	118	1207	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	0.61	0.61	0.61
Uniform Delay (d), s/veh	55.4	0.0	43.1	42.1	0.0	40.0	56.7	0.0	0.0	57.2	9.3	9.4
Incr Delay (d2), s/veh	85.6	0.0	0.4	0.2	0.0	0.1	19.7	0.5	0.4	10.8	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.2	0.0	4.7	3.6	0.0	0.9	1.6	0.1	0.2	2.3	10.0	10.0
LnGrp Delay(d),s/veh	141.0	0.0	43.5	42.3	0.0	40.1	76.4	0.5	0.4	67.9	10.2	10.4
LnGrp LOS	F		D	D		D	E	A	A	E	B	B
Approach Vol, veh/h		369			158			611			1274	
Approach Delay, s/veh		99.3			41.8			5.7			13.2	
Approach LOS		F			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	84.0		27.0	7.1	85.9		27.0
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	8.5	76.1		23.0	8.5	76.1		23.0
Max Q Clear Time (g_c+I1), s	6.2	2.0		25.0	4.8	22.5		11.8
Green Ext Time (p_c), s	0.0	6.2		0.0	0.0	6.2		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	370	150	360	330	80	330
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863
Adj Flow Rate, veh/h	389	158	379	347	84	347
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1208	484	396	1391	331	642
Arrive On Green	0.49	0.48	0.37	1.00	0.19	0.18
Sat Flow, veh/h	2558	988	1774	1863	1774	1583
Grp Volume(v), veh/h	278	269	379	347	84	347
Grp Sat Flow(s),veh/h/ln	1770	1684	1774	1863	1774	1583
Q Serve(g_s), s	11.4	11.8	25.0	0.0	4.9	20.0
Cycle Q Clear(g_c), s	11.4	11.8	25.0	0.0	4.9	20.0
Prop In Lane		0.59	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	867	825	396	1391	331	642
V/C Ratio(X)	0.32	0.33	0.96	0.25	0.25	0.54
Avail Cap(c_a), veh/h	867	825	621	1391	473	769
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.97	0.97
Uniform Delay (d), s/veh	18.5	18.8	37.1	0.0	41.7	27.1
Incr Delay (d2), s/veh	1.0	1.1	15.2	0.4	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.8	5.7	13.8	0.2	2.4	8.8
LnGrp Delay(d),s/veh	19.5	19.9	52.2	0.4	41.8	27.4
LnGrp LOS	B	B	D	A	D	C
Approach Vol, veh/h	547			726	431	
Approach Delay, s/veh	19.7			27.5	30.2	
Approach LOS	B			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	30.8	62.8				93.6		26.4
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	42.5	32.7				78.7		32.0
Max Q Clear Time (g_c+I1), s	27.0	13.8				2.0		22.0
Green Ext Time (p_c), s	0.3	7.4				10.4		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	25.7
HCM 2010 LOS	C

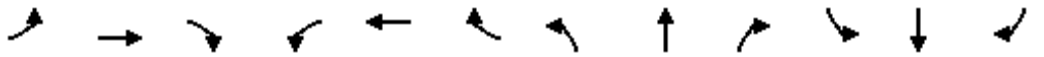
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	690	370	300	520	50	180	10	170	20	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	726	389	316	547	53	197	0	179	21	11	11
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	1817	845	231	3104	297	524	0	418	83	39	39
Arrive On Green	0.01	0.54	0.52	0.13	0.66	0.65	0.15	0.00	0.14	0.05	0.05	0.04
Sat Flow, veh/h	1774	3390	1576	1774	4718	452	3548	0	1562	1774	840	840
Grp Volume(v), veh/h	21	726	389	316	391	209	197	0	179	21	0	22
Grp Sat Flow(s),veh/h/ln	1774	1695	1576	1774	1695	1780	1774	0	1562	1774	0	1679
Q Serve(g_s), s	1.0	14.5	17.8	15.0	5.1	5.3	5.8	0.0	10.9	1.3	0.0	1.5
Cycle Q Clear(g_c), s	1.0	14.5	17.8	15.0	5.1	5.3	5.8	0.0	10.9	1.3	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	15	1817	845	231	2231	1171	524	0	418	83	0	79
V/C Ratio(X)	1.41	0.40	0.46	1.37	0.18	0.18	0.38	0.00	0.43	0.25	0.00	0.28
Avail Cap(c_a), veh/h	123	1817	845	231	2231	1171	956	0	609	123	0	117
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	0.92	0.92	0.92	0.98	0.00	0.98	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	15.8	16.9	50.0	7.6	7.7	44.2	0.0	35.0	52.9	0.0	53.2
Incr Delay (d2), s/veh	207.1	0.5	1.4	187.9	0.2	0.3	0.6	0.0	0.9	0.6	0.0	0.7
Initial Q Delay(d3),s/veh	20.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	6.9	8.0	19.4	2.4	2.7	2.9	0.0	4.8	0.7	0.0	0.7
LnGrp Delay(d),s/veh	284.2	16.3	18.3	237.9	7.8	8.0	44.8	0.0	35.9	53.5	0.0	53.9
LnGrp LOS	F	B	B	F	A	A	D		D	D		D
Approach Vol, veh/h		1136			916			376			43	
Approach Delay, s/veh		21.9			87.2			40.6			53.7	
Approach LOS		C			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.0	65.6		9.4	5.0	79.7		21.0
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	15.5	43.7		7.1	8.5	50.7		30.1
Max Q Clear Time (g_c+I1), s	17.0	19.8		3.5	3.0	7.3		12.9
Green Ext Time (p_c), s	0.0	16.9		0.0	0.0	25.0		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	49.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	850	10	10	700	20	10	0	10	80	0	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	21	895	11	11	737	21	11	0	11	84	0	295
Adj No. of Lanes	1	3	0	1	3	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	2472	30	446	2425	69	305	50	189	610	0	435
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.28	0.00	0.28	0.28	0.00	0.28
Sat Flow, veh/h	696	5175	64	607	5077	144	504	183	686	1406	0	1578
Grp Volume(v), veh/h	21	586	320	11	491	267	22	0	0	84	0	295
Grp Sat Flow(s),veh/h/ln	696	1695	1849	607	1695	1831	1372	0	0	1406	0	1578
Q Serve(g_s), s	0.6	3.5	3.5	0.4	2.9	2.9	0.0	0.0	0.0	1.1	0.0	5.4
Cycle Q Clear(g_c), s	3.5	3.5	3.5	3.9	2.9	2.9	0.3	0.0	0.0	1.4	0.0	5.4
Prop In Lane	1.00		0.03	1.00		0.08	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	493	1619	883	446	1619	875	545	0	0	610	0	435
V/C Ratio(X)	0.04	0.36	0.36	0.02	0.30	0.30	0.04	0.00	0.00	0.14	0.00	0.68
Avail Cap(c_a), veh/h	632	2300	1255	568	2300	1242	982	0	0	1085	0	974
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.2	5.3	5.3	6.6	5.2	5.2	8.6	0.0	0.0	9.0	0.0	10.5
Incr Delay (d2), s/veh	0.0	0.1	0.3	0.0	0.1	0.2	0.0	0.0	0.0	0.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	1.7	1.8	0.1	1.3	1.5	0.1	0.0	0.0	0.6	0.0	2.5
LnGrp Delay(d),s/veh	6.3	5.5	5.6	6.6	5.3	5.4	8.6	0.0	0.0	9.1	0.0	12.3
LnGrp LOS	A	A	A	A	A	A	A			A		B
Approach Vol, veh/h		927			769			22			379	
Approach Delay, s/veh		5.5			5.3			8.6			11.6	
Approach LOS		A			A			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		12.9		19.5		12.9		19.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		22.0		20.0		22.0
Max Q Clear Time (g_c+I1), s		2.3		5.5		7.4		5.9
Green Ext Time (p_c), s		1.5		9.5		1.3		9.4

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A

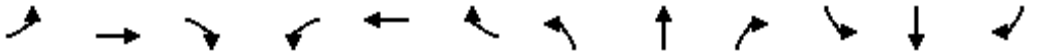
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	290	430	10	10	360	390	10	10	10	640	10	210
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	305	453	8	11	379	137	11	11	0	682	0	76
Adj No. of Lanes	1	3	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	3502	62	492	1605	713	31	31	0	601	0	268
Arrive On Green	0.19	0.68	0.67	0.45	0.45	0.45	0.03	0.03	0.00	0.17	0.00	0.17
Sat Flow, veh/h	1774	5146	91	923	3539	1571	909	909	0	3548	0	1581
Grp Volume(v), veh/h	305	298	163	11	379	137	22	0	0	682	0	76
Grp Sat Flow(s),veh/h/ln	1774	1695	1846	923	1770	1571	1817	0	0	1774	0	1581
Q Serve(g_s), s	16.6	3.0	3.0	0.6	6.4	5.1	1.2	0.0	0.0	16.6	0.0	4.1
Cycle Q Clear(g_c), s	16.6	3.0	3.0	0.6	6.4	5.1	1.2	0.0	0.0	16.6	0.0	4.1
Prop In Lane	1.00		0.05	1.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	2307	1256	492	1605	713	61	0	0	601	0	268
V/C Ratio(X)	0.92	0.13	0.13	0.02	0.24	0.19	0.36	0.00	0.00	1.13	0.00	0.28
Avail Cap(c_a), veh/h	489	2307	1256	492	1605	713	148	0	0	601	0	268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.99	0.99	0.99	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.2	5.5	5.5	14.8	16.4	16.0	46.3	0.0	0.0	40.7	0.0	35.5
Incr Delay (d2), s/veh	14.0	0.1	0.2	0.1	0.3	0.6	1.3	0.0	0.0	79.8	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.4	1.4	1.6	0.2	3.2	2.3	0.6	0.0	0.0	14.8	0.0	1.8
LnGrp Delay(d),s/veh	53.2	5.6	5.7	14.9	16.7	16.6	47.6	0.0	0.0	120.5	0.0	36.1
LnGrp LOS	D	A	A	B	B	B	D			F		D
Approach Vol, veh/h		766			527			22			758	
Approach Delay, s/veh		24.6			16.7			47.6			112.0	
Approach LOS		C			B			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		70.7		20.0	22.2	48.5		7.3
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		4.6
Max Green Setting (Gmax), s		60.7		16.0	27.5	29.7		7.4
Max Q Clear Time (g_c+I1), s		5.0		18.6	18.6	8.4		3.2
Green Ext Time (p_c), s		11.6		0.0	0.2	8.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	54.8
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



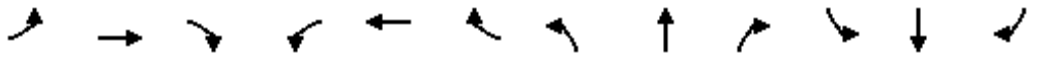
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	80	130	70	110	110	40	1040	40	20	1600	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	42	84	137	74	116	116	42	1095	42	21	1684	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	77	144	202	109	156	139	439	2972	114	25	1782	34
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.51	1.00	1.00	0.00	0.12	0.12
Sat Flow, veh/h	159	536	755	268	581	518	1714	4854	186	1714	4963	94
Grp Volume(v), veh/h	263	0	0	306	0	0	42	739	398	21	1112	604
Grp Sat Flow(s),veh/h/ln	1450	0	0	1367	0	0	1714	1638	1764	1714	1638	1781
Q Serve(g_s), s	0.0	0.0	0.0	6.8	0.0	0.0	1.5	0.0	0.0	1.5	40.4	40.4
Cycle Q Clear(g_c), s	19.0	0.0	0.0	25.8	0.0	0.0	1.5	0.0	0.0	1.5	40.4	40.4
Prop In Lane	0.16		0.52	0.24		0.38	1.00		0.11	1.00		0.05
Lane Grp Cap(c), veh/h	424	0	0	404	0	0	439	2006	1080	25	1177	640
V/C Ratio(X)	0.62	0.00	0.00	0.76	0.00	0.00	0.10	0.37	0.37	0.84	0.94	0.95
Avail Cap(c_a), veh/h	701	0	0	677	0	0	439	2006	1080	250	1177	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.97	0.97	0.97	0.71	0.71	0.71
Uniform Delay (d), s/veh	38.7	0.0	0.0	41.4	0.0	0.0	22.1	0.0	0.0	59.6	51.7	51.7
Incr Delay (d2), s/veh	1.5	0.0	0.0	2.9	0.0	0.0	0.1	0.5	0.9	37.5	12.4	19.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.9	0.0	0.0	9.9	0.0	0.0	0.7	0.1	0.3	1.0	20.4	23.4
LnGrp Delay(d),s/veh	40.2	0.0	0.0	44.3	0.0	0.0	22.2	0.5	0.9	97.1	64.1	71.0
LnGrp LOS	D			D			C	A	A	F	E	E
Approach Vol, veh/h		263			306			1179			1737	
Approach Delay, s/veh		40.2			44.3			1.4			66.9	
Approach LOS		D			D			A			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	78.4		36.4	35.6	48.0		36.4
Change Period (Y+Rc), s	3.5	4.9		* 4.2	4.9	* 4.9		* 4.2
Max Green Setting (Gmax), s	17.5	35.1		* 55	9.5	* 43		* 55
Max Q Clear Time (g_c+I1), s	3.5	2.0		21.0	3.5	42.4		27.8
Green Ext Time (p_c), s	0.0	8.7		4.5	0.1	0.6		4.3

Intersection Summary	
HCM 2010 Ctrl Delay	40.7
HCM 2010 LOS	D

Notes

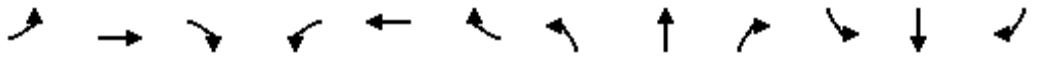
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	10	30	20	10	60	10	1150	10	40	1960	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	53	11	32	21	11	63	11	1211	11	42	2063	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	115	27	48	60	30	104	13	3819	35	53	3907	61
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.02	1.00	1.00	0.06	1.00	1.00
Sat Flow, veh/h	704	282	493	239	304	1070	1714	5022	46	1714	4985	77
Grp Volume(v), veh/h	96	0	0	95	0	0	11	790	432	42	1355	740
Grp Sat Flow(s),veh/h/ln	1479	0	0	1614	0	0	1714	1638	1792	1714	1638	1786
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	7.3	0.0	0.0	6.5	0.0	0.0	0.8	0.0	0.0	2.9	0.0	0.0
Prop In Lane	0.55		0.33	0.22		0.66	1.00		0.03	1.00		0.04
Lane Grp Cap(c), veh/h	190	0	0	193	0	0	13	2491	1363	53	2567	1400
V/C Ratio(X)	0.51	0.00	0.00	0.49	0.00	0.00	0.84	0.32	0.32	0.79	0.53	0.53
Avail Cap(c_a), veh/h	408	0	0	427	0	0	121	2491	1363	121	2567	1400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.58	0.58	0.58	0.69	0.69	0.69
Uniform Delay (d), s/veh	52.1	0.0	0.0	51.9	0.0	0.0	59.0	0.0	0.0	55.9	0.0	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.0	1.9	0.0	0.0	51.4	0.2	0.4	16.6	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.2	0.0	0.0	3.1	0.0	0.0	0.5	0.1	0.1	1.6	0.2	0.4
LnGrp Delay(d),s/veh	54.2	0.0	0.0	53.9	0.0	0.0	110.4	0.2	0.4	72.5	0.5	1.0
LnGrp LOS	D			D			F	A	A	E	A	A
Approach Vol, veh/h		96			95			1233			2137	
Approach Delay, s/veh		54.2			53.9			1.2			2.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	96.6		16.2	4.4	99.3		16.2
Change Period (Y+Rc), s	3.5	5.3		4.6	3.5	5.3		4.6
Max Green Setting (Gmax), s	8.5	67.7		30.4	8.5	67.7		30.4
Max Q Clear Time (g_c+I1), s	4.9	2.0		9.3	2.8	2.0		8.5
Green Ext Time (p_c), s	0.0	48.6		1.1	0.0	48.6		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	4.6
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	110	50	190	160	70	70	840	140	140	1430	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.92		0.80	0.89		0.80	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	137	116	53	200	168	74	74	884	147	147	1505	168
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	122	201	92	175	204	90	94	2119	350	261	2746	306
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.06	0.50	0.50	0.15	0.61	0.61
Sat Flow, veh/h	1002	1078	493	1036	1094	482	1714	4229	699	1714	4466	498
Grp Volume(v), veh/h	137	0	169	200	0	242	74	684	347	147	1104	569
Grp Sat Flow(s),veh/h/ln	1002	0	1571	1036	0	1576	1714	1638	1652	1714	1638	1688
Q Serve(g_s), s	3.3	0.0	8.4	7.6	0.0	12.7	3.7	11.3	11.4	6.8	16.8	16.9
Cycle Q Clear(g_c), s	16.0	0.0	8.4	16.0	0.0	12.7	3.7	11.3	11.4	6.8	16.8	16.9
Prop In Lane	1.00		0.31	1.00		0.31	1.00		0.42	1.00		0.30
Lane Grp Cap(c), veh/h	122	0	292	175	0	293	94	1642	828	261	2014	1038
V/C Ratio(X)	1.12	0.00	0.58	1.14	0.00	0.83	0.78	0.42	0.42	0.56	0.55	0.55
Avail Cap(c_a), veh/h	122	0	292	175	0	293	189	1642	828	289	2014	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.44	0.00	0.44	0.89	0.89	0.89	0.69	0.69	0.69
Uniform Delay (d), s/veh	42.5	0.0	31.9	41.0	0.0	33.7	40.1	13.5	13.5	33.8	9.6	9.6
Incr Delay (d2), s/veh	117.6	0.0	2.8	90.3	0.0	8.3	11.9	0.7	1.4	1.4	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.9	0.0	3.9	8.5	0.0	6.2	2.0	5.2	5.5	3.3	7.7	8.2
LnGrp Delay(d),s/veh	160.1	0.0	34.7	131.3	0.0	42.0	52.1	14.2	14.9	35.2	10.4	11.1
LnGrp LOS	F		C	F		D	D	B	B	D	B	B
Approach Vol, veh/h		306			442			1105			1820	
Approach Delay, s/veh		90.9			82.4			17.0			12.6	
Approach LOS		F			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.0	48.0		20.0	8.2	57.8		20.0
Change Period (Y+Rc), s	4.9	* 4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	14.5	* 43		16.0	9.5	48.1		16.0
Max Q Clear Time (g_c+I1), s	8.8	13.4		18.0	5.7	18.9		18.0
Green Ext Time (p_c), s	0.3	7.4		0.0	0.0	14.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	30	10	60	40	130	120	940	40	60	1620	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.68	0.71		0.70	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	53	32	11	63	42	137	126	989	42	63	1705	189
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	210	282	97	96	65	161	107	2892	123	79	2610	288
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.06	0.60	0.60	0.09	1.00	1.00
Sat Flow, veh/h	1048	1128	388	233	260	644	1714	4830	205	1714	4481	495
Grp Volume(v), veh/h	53	0	43	242	0	0	126	670	361	63	1245	649
Grp Sat Flow(s),veh/h/ln	1048	0	1516	1138	0	0	1714	1638	1759	1714	1638	1700
Q Serve(g_s), s	0.0	0.0	2.6	18.5	0.0	0.0	7.5	12.4	12.4	4.3	0.0	0.0
Cycle Q Clear(g_c), s	11.0	0.0	2.6	24.1	0.0	0.0	7.5	12.4	12.4	4.3	0.0	0.0
Prop In Lane	1.00		0.26	0.26		0.57	1.00		0.12	1.00		0.29
Lane Grp Cap(c), veh/h	210	0	379	322	0	0	107	1961	1053	79	1908	990
V/C Ratio(X)	0.25	0.00	0.11	0.75	0.00	0.00	1.18	0.34	0.34	0.79	0.65	0.66
Avail Cap(c_a), veh/h	217	0	389	330	0	0	107	1961	1053	107	1908	990
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.83	0.83	0.83	0.67	0.67	0.67
Uniform Delay (d), s/veh	37.9	0.0	34.7	42.4	0.0	0.0	56.3	12.1	12.2	53.9	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.1	9.1	0.0	0.0	134.3	0.4	0.7	17.4	1.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	0.0	1.1	8.4	0.0	0.0	7.5	5.7	6.2	2.4	0.3	0.6
LnGrp Delay(d),s/veh	38.5	0.0	34.9	51.5	0.0	0.0	190.5	12.5	12.9	71.3	1.2	2.3
LnGrp LOS	D		C	D			F	B	B	E	A	A
Approach Vol, veh/h		96			242			1157			1957	
Approach Delay, s/veh		36.9			51.5			32.0			3.8	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	76.7		34.2	11.0	74.8		34.2
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	69.1		* 31	7.5	69.1		* 31
Max Q Clear Time (g_c+I1), s	6.3	14.4		13.0	9.5	2.0		26.1
Green Ext Time (p_c), s	0.0	38.0		2.4	0.0	43.5		1.0

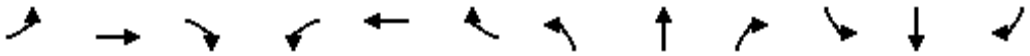
Intersection Summary	
HCM 2010 Ctrl Delay	17.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	100	100	1090	60	100	1390
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2		4.9		3.5	4.9
Lane Util. Factor	1.00		0.91		1.00	0.91
Frpb, ped/bikes	0.98		1.00		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.93		0.99		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1600		4876		1710	4914
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1600		4876		1710	4914
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	105	105	1147	63	105	1463
RTOR Reduction (vph)	33	0	4	0	0	0
Lane Group Flow (vph)	177	0	1206	0	105	1463
Confl. Peds. (#/hr)		27				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Prot		NA		Prot	NA
Protected Phases	4		2 9		1	6
Permitted Phases						
Actuated Green, G (s)	18.4		60.5		13.5	54.8
Effective Green, g (s)	18.4		60.5		13.5	54.8
Actuated g/C Ratio	0.15		0.50		0.11	0.46
Clearance Time (s)	4.2				3.5	4.9
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	245		2458		192	2244
v/s Ratio Prot	c0.11		c0.25		c0.06	c0.30
v/s Ratio Perm						
v/c Ratio	0.72		0.49		0.55	0.65
Uniform Delay, d1	48.4		19.6		50.4	25.2
Progression Factor	1.00		0.17		0.91	0.71
Incremental Delay, d2	10.0		0.6		1.9	0.9
Delay (s)	58.4		3.8		47.5	18.7
Level of Service	E		A		D	B
Approach Delay (s)	58.4		3.8			20.7
Approach LOS	E		A			C

Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	0	130	20	10	10	70	1060	10	10	1330	150
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.93		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1710	1530		1710	1665		1710	4903		1710	4808	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1710	1530		1710	1665		1710	4903		1710	4808	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	0	137	21	11	11	74	1116	11	11	1400	158
RTOR Reduction (vph)	0	124	0	0	9	0	0	1	0	0	9	0
Lane Group Flow (vph)	84	13	0	21	13	0	74	1126	0	11	1549	0
Confl. Peds. (#/hr)							12		17	17		12
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6 10	
Permitted Phases												
Actuated Green, G (s)	11.2	11.2		18.4	18.4		9.3	49.9		13.5	64.7	
Effective Green, g (s)	11.2	11.2		18.4	18.4		9.3	49.9		13.5	64.7	
Actuated g/C Ratio	0.09	0.09		0.15	0.15		0.08	0.42		0.11	0.54	
Clearance Time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	159	142		262	255		132	2038		192	2592	
v/s Ratio Prot	c0.05	0.01		c0.01	0.01		c0.04	0.23		0.01	c0.32	
v/s Ratio Perm												
v/c Ratio	0.53	0.09		0.08	0.05		0.56	0.55		0.06	0.60	
Uniform Delay, d1	51.9	49.7		43.5	43.3		53.4	26.6		47.6	18.8	
Progression Factor	1.00	1.00		1.00	1.00		1.40	0.29		1.76	0.10	
Incremental Delay, d2	3.1	0.3		0.1	0.1		4.8	1.0		0.1	0.8	
Delay (s)	55.0	50.0		43.7	43.4		79.7	8.7		83.8	2.7	
Level of Service	E	D		D	D		E	A		F	A	
Approach Delay (s)		51.9			43.5			13.1			3.3	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	220	90	150	240	100	80	930	180	90	1420	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	126	232	95	158	253	105	84	979	189	95	1495	53
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	157	478	189	179	484	194	106	1517	292	304	2412	86
Arrive On Green	0.09	0.20	0.20	0.10	0.21	0.21	0.02	0.12	0.12	0.36	0.99	0.99
Sat Flow, veh/h	1714	2372	937	1714	2360	948	1714	4128	795	1714	4871	173
Grp Volume(v), veh/h	126	165	162	158	181	177	84	776	392	95	1005	543
Grp Sat Flow(s),veh/h/ln	1714	1710	1599	1714	1710	1597	1714	1638	1647	1714	1638	1768
Q Serve(g_s), s	8.6	10.2	10.8	10.9	11.3	11.9	5.9	27.1	27.2	4.8	0.9	0.9
Cycle Q Clear(g_c), s	8.6	10.2	10.8	10.9	11.3	11.9	5.9	27.1	27.2	4.8	0.9	0.9
Prop In Lane	1.00		0.59	1.00		0.59	1.00		0.48	1.00		0.10
Lane Grp Cap(c), veh/h	157	345	322	179	351	328	106	1204	605	304	1622	875
V/C Ratio(X)	0.80	0.48	0.50	0.88	0.52	0.54	0.80	0.64	0.65	0.31	0.62	0.62
Avail Cap(c_a), veh/h	179	504	472	179	504	471	121	1204	605	304	1622	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.81	0.81	0.81	0.85	0.85	0.85	0.94	0.94	0.94	0.78	0.78	0.78
Uniform Delay (d), s/veh	53.5	42.3	42.6	53.0	42.4	42.6	58.0	45.3	45.3	33.4	0.3	0.3
Incr Delay (d2), s/veh	17.2	0.8	1.0	33.1	1.0	1.2	25.3	2.5	5.0	0.5	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.8	4.9	4.9	6.8	5.4	5.4	3.5	12.7	13.3	2.3	0.5	0.8
LnGrp Delay(d),s/veh	70.7	43.2	43.5	86.1	43.4	43.8	83.4	47.8	50.3	33.8	1.7	2.9
LnGrp LOS	E	D	D	F	D	D	F	D	D	C	A	A
Approach Vol, veh/h		453			516			1252			1643	
Approach Delay, s/veh		51.0			56.6			50.9			3.9	
Approach LOS		D			E			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.2	49.0	16.0	28.8	10.9	64.3	15.6	29.2
Change Period (Y+Rc), s	4.9	* 4.9	3.5	4.6	3.5	4.9	4.6	* 4.6
Max Green Setting (Gmax), s	11.5	* 44	12.5	35.4	8.5	47.1	12.5	* 35
Max Q Clear Time (g_c+I1), s	6.8	29.2	12.9	12.8	7.9	2.9	10.6	13.9
Green Ext Time (p_c), s	2.6	6.5	0.0	2.2	0.0	14.9	0.4	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	10	30	20	30	50	20	1020	30	30	1700	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	42	11	32	21	32	53	21	1074	32	32	1789	105
Adj No. of Lanes	0	1	1	0	1	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	168	38	182	59	72	95	25	3695	110	40	3748	1134
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.03	1.00	1.00	0.05	1.00	1.00
Sat Flow, veh/h	935	309	1496	192	591	783	1714	4899	146	1714	4914	1487
Grp Volume(v), veh/h	53	0	32	106	0	0	21	718	388	32	1789	105
Grp Sat Flow(s),veh/h/ln	1245	0	1496	1565	0	0	1714	1638	1769	1714	1638	1487
Q Serve(g_s), s	0.0	0.0	2.3	2.1	0.0	0.0	1.5	0.0	0.0	2.2	0.0	0.0
Cycle Q Clear(g_c), s	4.9	0.0	2.3	7.5	0.0	0.0	1.5	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.79		1.00	0.20		0.50	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	206	0	182	227	0	0	25	2471	1334	40	3748	1134
V/C Ratio(X)	0.26	0.00	0.18	0.47	0.00	0.00	0.84	0.29	0.29	0.81	0.48	0.09
Avail Cap(c_a), veh/h	498	0	511	562	0	0	121	2471	1334	121	3748	1134
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.89	0.89	0.89	0.78	0.78	0.78
Uniform Delay (d), s/veh	48.3	0.0	47.3	49.5	0.0	0.0	58.1	0.0	0.0	57.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.5	1.5	0.0	0.0	45.0	0.3	0.5	24.8	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	0.0	1.0	3.4	0.0	0.0	1.0	0.1	0.2	1.3	0.1	0.0
LnGrp Delay(d),s/veh	49.0	0.0	47.7	51.0	0.0	0.0	103.1	0.3	0.5	81.8	0.3	0.1
LnGrp LOS	D		D	D			F	A	A	F	A	A
Approach Vol, veh/h		85			106			1127			1926	
Approach Delay, s/veh		48.5			51.0			2.3			1.7	
Approach LOS		D			D			A			A	

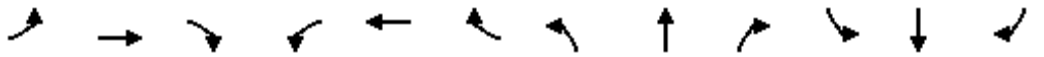
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.3	95.1		18.6	5.2	96.1		18.6
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	8.5	58.4		41.0	8.5	58.4		41.0
Max Q Clear Time (g_c+I1), s	4.2	2.0		6.9	3.5	2.0		9.5
Green Ext Time (p_c), s	0.0	40.1		1.1	0.0	40.1		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	4.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	330	90	80	470	200	30	180	40	120	570	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	347	0	84	495	211	32	189	42	126	600	74
Adj No. of Lanes	0	2	1	0	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	949	560	121	640	300	33	1342	292	145	1673	206
Arrive On Green	0.35	0.35	0.00	0.35	0.35	0.35	0.02	0.46	0.46	0.08	0.53	0.52
Sat Flow, veh/h	81	2682	1583	238	1807	847	1774	2891	629	1774	3172	390
Grp Volume(v), veh/h	158	210	0	407	0	383	32	114	117	126	334	340
Grp Sat Flow(s),veh/h/ln	1153	1610	1583	1357	0	1536	1774	1770	1750	1774	1770	1793
Q Serve(g_s), s	1.5	11.6	0.0	23.5	0.0	25.8	2.2	4.4	4.6	8.4	13.2	13.3
Cycle Q Clear(g_c), s	27.3	11.6	0.0	35.1	0.0	25.8	2.2	4.4	4.6	8.4	13.2	13.3
Prop In Lane	0.13		1.00	0.21		0.55	1.00		0.36	1.00		0.22
Lane Grp Cap(c), veh/h	442	570	560	517	0	544	33	821	812	145	933	946
V/C Ratio(X)	0.36	0.37	0.00	0.79	0.00	0.70	0.97	0.14	0.14	0.87	0.36	0.36
Avail Cap(c_a), veh/h	617	751	739	696	0	717	133	821	812	310	933	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.00	0.83	0.00	0.83	0.97	0.97	0.97	0.71	0.71	0.71
Uniform Delay (d), s/veh	28.2	28.8	0.0	38.2	0.0	33.6	58.8	18.4	18.6	54.4	16.5	16.6
Incr Delay (d2), s/veh	0.2	0.1	0.0	2.5	0.0	0.9	36.6	0.3	0.4	4.3	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	5.2	0.0	13.0	0.0	11.1	1.4	2.2	2.3	4.3	6.6	6.7
LnGrp Delay(d),s/veh	28.3	28.9	0.0	40.7	0.0	34.5	95.4	18.8	18.9	58.7	17.3	17.4
LnGrp LOS	C	C		D		C	F	B	B	E	B	B
Approach Vol, veh/h		368			790			263			800	
Approach Delay, s/veh		28.7			37.7			28.2			23.8	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	59.7		46.5	6.2	67.3		46.5
Change Period (Y+Rc), s	3.5	4.9		4.9	3.5	4.9		4.9
Max Green Setting (Gmax), s	21.5	30.1		55.1	9.5	42.1		55.1
Max Q Clear Time (g_c+I1), s	10.4	6.6		29.3	4.2	15.3		37.1
Green Ext Time (p_c), s	0.1	2.4		4.9	0.0	2.4		4.5

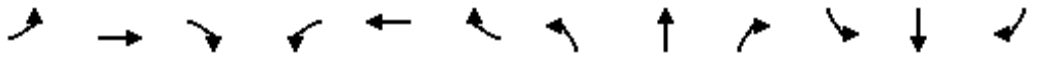
Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	70	100	70	30	130	40	1020	90	90	1760	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1824	1863	1863	1863	1863	1863	1863	1863	1824
Adj Flow Rate, veh/h	53	74	105	74	32	137	42	1074	95	95	1853	32
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	101	117	167	64	405	89	2069	921	112	3076	53
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.05	0.58	0.58	0.06	0.60	0.59
Sat Flow, veh/h	155	389	450	463	248	1556	1774	3539	1577	1774	5148	89
Grp Volume(v), veh/h	232	0	0	106	0	137	42	1074	95	95	1220	665
Grp Sat Flow(s),veh/h/ln	994	0	0	711	0	1556	1774	1770	1577	1774	1695	1846
Q Serve(g_s), s	13.1	0.0	0.0	0.0	0.0	9.3	3.0	23.5	3.5	6.9	29.4	29.5
Cycle Q Clear(g_c), s	30.9	0.0	0.0	17.8	0.0	9.3	3.0	23.5	3.5	6.9	29.4	29.5
Prop In Lane	0.23		0.45	0.70		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	293	0	0	232	0	405	89	2069	921	112	2025	1103
V/C Ratio(X)	0.79	0.00	0.00	0.46	0.00	0.34	0.47	0.52	0.10	0.85	0.60	0.60
Avail Cap(c_a), veh/h	339	0	0	275	0	455	150	2069	921	218	2025	1103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	48.3	0.0	0.0	41.5	0.0	39.0	60.1	16.1	11.9	60.3	16.5	16.5
Incr Delay (d2), s/veh	9.0	0.0	0.0	0.5	0.0	0.2	1.4	0.9	0.2	0.6	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.9	0.0	0.0	3.4	0.0	4.0	1.5	11.8	1.6	3.4	13.8	15.0
LnGrp Delay(d),s/veh	57.3	0.0	0.0	42.0	0.0	39.2	61.5	17.0	12.2	60.9	16.6	16.7
LnGrp LOS	E			D		D	E	B	B	E	B	B
Approach Vol, veh/h		232			243			1211			1980	
Approach Delay, s/veh		57.3			40.4			18.2			18.7	
Approach LOS		E			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	80.0		37.8	10.5	81.7		37.8
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	16.5	62.7		38.0	11.5	67.7		38.0
Max Q Clear Time (g_c+I1), s	8.9	25.5		32.9	5.0	31.5		19.8
Green Ext Time (p_c), s	0.0	34.6		0.9	0.0	33.7		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C



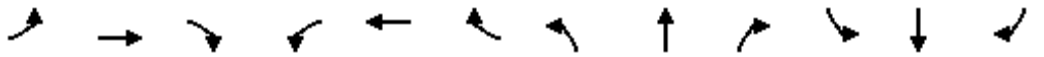
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	630	190	140	490	170	130	750	100	400	1830	100
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1788	1863	1863	1788	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	126	663	101	147	516	37	137	789	91	421	1926	100
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	862	369	139	895	381	258	1464	168	423	1957	101
Arrive On Green	0.07	0.24	0.24	0.16	0.51	0.51	0.15	0.32	0.31	0.32	0.53	0.51
Sat Flow, veh/h	1774	3539	1514	1774	3539	1507	1774	4626	530	1774	4950	256
Grp Volume(v), veh/h	126	663	101	147	516	37	137	577	303	421	1318	708
Grp Sat Flow(s),veh/h/ln	1774	1770	1514	1774	1770	1507	1774	1695	1767	1774	1695	1816
Q Serve(g_s), s	9.0	22.7	7.0	10.2	13.2	1.1	9.3	18.2	18.4	30.8	49.6	50.0
Cycle Q Clear(g_c), s	9.0	22.7	7.0	10.2	13.2	1.1	9.3	18.2	18.4	30.8	49.6	50.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.30	1.00		0.14
Lane Grp Cap(c), veh/h	123	862	369	139	895	381	258	1073	559	423	1340	718
V/C Ratio(X)	1.03	0.77	0.27	1.06	0.58	0.10	0.53	0.54	0.54	1.00	0.98	0.99
Avail Cap(c_a), veh/h	123	909	389	139	942	401	259	1073	559	423	1340	718
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	0.09	0.09	0.09	0.61	0.61	0.61	0.97	0.97	0.97	0.09	0.09	0.09
Uniform Delay (d), s/veh	60.5	45.8	39.9	54.8	27.3	11.2	51.4	36.6	36.8	44.3	30.4	30.6
Incr Delay (d2), s/veh	31.2	0.4	0.1	75.0	0.7	0.1	1.0	1.9	3.6	12.0	4.4	7.5
Initial Q Delay(d3),s/veh	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.5	11.1	2.9	7.8	6.5	0.5	4.6	8.8	9.6	16.5	23.9	26.3
LnGrp Delay(d),s/veh	92.0	46.2	39.9	129.9	28.0	11.3	52.4	38.5	40.5	56.3	34.8	38.1
LnGrp LOS	F	D	D	F	C	B	D	D	D	E	C	D
Approach Vol, veh/h		890			700			1017			2447	
Approach Delay, s/veh		52.0			48.5			40.9			39.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	35.0	45.1	13.0	36.9	24.7	55.4	14.2	35.7
Change Period (Y+Rc), s	3.5	5.3	3.5	5.3	5.3	* 5.3	3.5	5.3
Max Green Setting (Gmax), s	31.5	38.1	9.5	33.3	19.5	* 50	10.7	32.1
Max Q Clear Time (g_c+I1), s	32.8	20.4	11.0	15.2	11.3	52.0	12.2	24.7
Green Ext Time (p_c), s	0.0	7.3	0.0	10.6	4.4	0.0	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	43.2
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



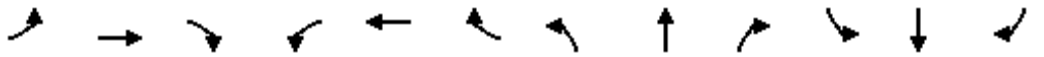
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	520	150	90	400	140	110	940	90	200	1500	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1824	1863	1863	1824	1863	1863	1824	1863	1863	1863
Adj Flow Rate, veh/h	126	547	158	95	421	147	116	989	95	211	1579	126
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	702	202	112	596	206	179	2050	196	230	1590	706
Arrive On Green	0.08	0.25	0.24	0.06	0.23	0.22	0.03	0.14	0.14	0.13	0.45	0.45
Sat Flow, veh/h	1774	2813	809	1774	2573	889	1774	4717	452	1774	3539	1572
Grp Volume(v), veh/h	126	357	348	95	288	280	116	710	374	211	1579	126
Grp Sat Flow(s),veh/h/ln	1774	1840	1782	1774	1770	1692	1774	1695	1779	1774	1770	1572
Q Serve(g_s), s	9.1	23.5	23.7	6.9	19.4	19.8	8.4	25.1	25.2	15.3	57.7	4.4
Cycle Q Clear(g_c), s	9.1	23.5	23.7	6.9	19.4	19.8	8.4	25.1	25.2	15.3	57.7	4.4
Prop In Lane	1.00		0.45	1.00		0.53	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	144	459	445	112	410	392	179	1473	773	230	1590	706
V/C Ratio(X)	0.88	0.78	0.78	0.85	0.70	0.71	0.65	0.48	0.48	0.92	0.99	0.18
Avail Cap(c_a), veh/h	153	501	485	139	468	448	179	1473	773	322	1590	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.61	0.61	0.61	0.71	0.71	0.71	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.1	45.4	45.7	60.3	45.8	46.2	60.5	42.2	42.3	55.9	35.6	10.7
Incr Delay (d2), s/veh	33.2	6.2	6.6	17.9	2.5	2.8	4.4	0.8	1.5	20.4	21.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.8	12.7	12.5	3.9	9.8	9.6	4.4	12.0	12.8	8.8	32.7	2.0
LnGrp Delay(d),s/veh	92.3	51.6	52.3	78.2	48.3	49.0	65.0	43.0	43.8	76.3	56.6	11.2
LnGrp LOS	F	D	D	E	D	D	E	D	D	E	E	B
Approach Vol, veh/h		831			663			1200			1916	
Approach Delay, s/veh		58.1			52.9			45.4			55.8	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	60.5	12.2	36.4	18.9	62.4	14.5	34.1
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	5.3	* 5.3	3.5	4.9
Max Green Setting (Gmax), s	24.1	43.5	10.7	34.5	10.5	* 57	11.7	33.5
Max Q Clear Time (g_c+I1), s	17.3	27.2	8.9	25.7	10.4	59.7	11.1	21.8
Green Ext Time (p_c), s	0.1	8.6	0.0	4.7	0.0	0.0	0.0	5.7

Intersection Summary	
HCM 2010 Ctrl Delay	53.1
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



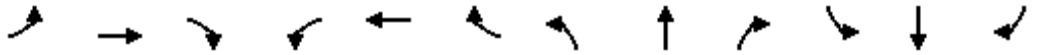
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	560	380	120	540	140	140	870	90	130	1750	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1824	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	95	589	400	126	568	147	147	916	95	137	1842	95
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	664	451	144	718	185	123	1790	185	150	1970	101
Arrive On Green	0.14	0.33	0.33	0.08	0.26	0.26	0.02	0.13	0.12	0.08	0.40	0.39
Sat Flow, veh/h	1774	2018	1371	1774	2784	718	1774	4681	484	1774	4952	255
Grp Volume(v), veh/h	95	516	473	126	360	355	147	663	348	137	1260	677
Grp Sat Flow(s),veh/h/ln	1774	1770	1619	1774	1770	1732	1774	1695	1775	1774	1695	1817
Q Serve(g_s), s	6.3	36.0	35.9	9.1	24.7	24.8	9.0	23.7	23.9	10.0	46.3	46.5
Cycle Q Clear(g_c), s	6.3	36.0	35.9	9.1	24.7	24.8	9.0	23.7	23.9	10.0	46.3	46.5
Prop In Lane	1.00		0.85	1.00		0.41	1.00		0.27	1.00		0.14
Lane Grp Cap(c), veh/h	250	582	532	144	457	447	123	1297	679	150	1349	723
V/C Ratio(X)	0.38	0.89	0.89	0.88	0.79	0.79	1.20	0.51	0.51	0.91	0.93	0.94
Avail Cap(c_a), veh/h	250	626	573	177	667	653	123	1297	679	150	1349	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.61	0.61	0.61	0.75	0.75	0.75	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.7	41.4	41.2	59.1	44.9	44.9	63.5	45.4	45.5	59.0	37.5	37.7
Incr Delay (d2), s/veh	0.3	11.8	12.7	18.8	3.1	3.2	133.0	1.1	2.1	47.6	13.1	21.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	19.4	17.9	5.2	12.4	12.3	9.0	11.3	12.2	6.9	24.2	27.6
LnGrp Delay(d),s/veh	51.0	53.1	53.9	77.9	48.0	48.2	196.6	46.5	47.6	106.6	50.6	58.8
LnGrp LOS	D	D	D	E	D	D	F	D	D	F	D	E
Approach Vol, veh/h		1084			841			1158			2074	
Approach Delay, s/veh		53.3			52.5			65.9			57.0	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	53.7	14.5	46.7	13.0	55.7	23.7	37.5
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	11.5	42.7	13.5	45.1	9.5	44.7	10.5	* 48
Max Q Clear Time (g_c+I1), s	12.0	25.9	11.1	38.0	11.0	48.5	8.3	26.8
Green Ext Time (p_c), s	0.0	16.1	0.0	3.9	0.0	0.0	1.5	5.8

Intersection Summary	
HCM 2010 Ctrl Delay	57.5
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	490	180	160	470	80	160	380	90	110	530	170
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.85	1.00		0.85	0.97		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	137	516	189	168	495	84	168	400	95	116	558	179
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	768	279	188	970	163	247	899	647	357	899	656
Arrive On Green	0.09	0.31	0.30	0.11	0.33	0.32	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1774	2465	896	1774	2945	495	718	1863	1340	872	1863	1360
Grp Volume(v), veh/h	137	369	336	168	295	284	168	400	95	116	558	179
Grp Sat Flow(s),veh/h/ln	1774	1770	1591	1774	1770	1670	718	1863	1340	872	1863	1360
Q Serve(g_s), s	9.2	21.8	22.2	11.2	16.1	16.5	27.1	17.0	4.7	12.1	26.6	9.4
Cycle Q Clear(g_c), s	9.2	21.8	22.2	11.2	16.1	16.5	53.7	17.0	4.7	29.1	26.6	9.4
Prop In Lane	1.00		0.56	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	551	496	188	583	550	247	899	647	357	899	656
V/C Ratio(X)	0.88	0.67	0.68	0.89	0.51	0.52	0.68	0.45	0.15	0.32	0.62	0.27
Avail Cap(c_a), veh/h	234	551	496	237	583	550	254	916	659	365	916	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.18	0.18	0.18	1.00	1.00	1.00	1.00	1.00	1.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	54.1	35.9	36.3	53.0	32.4	32.6	42.8	20.5	17.3	30.1	23.0	18.5
Incr Delay (d2), s/veh	3.4	1.2	1.4	24.7	3.1	3.4	5.6	0.1	0.0	0.1	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	10.9	9.9	6.8	8.4	8.1	5.8	8.7	1.8	2.9	13.8	3.5
LnGrp Delay(d),s/veh	57.4	37.1	37.7	77.7	35.5	36.0	48.4	20.6	17.3	30.2	23.6	18.6
LnGrp LOS	E	D	D	E	D	D	D	C	B	C	C	B
Approach Vol, veh/h		842			747			663			853	
Approach Delay, s/veh		40.7			45.2			27.2			23.5	
Approach LOS		D			D			C			C	

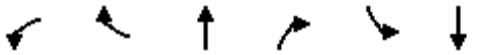
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		61.9	14.6	43.5		61.9	16.7	41.4
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		58.1	16.3	32.3		58.1	16.5	32.1
Max Q Clear Time (g_c+I1), s		55.7	11.2	18.5		31.1	13.2	24.2
Green Ext Time (p_c), s		1.3	0.0	3.6		4.8	0.0	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	34.1
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	130	210	110	540	990	120
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	137	47	116	568	1042	114
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	224	200	147	2331	1545	169
Arrive On Green	0.13	0.13	0.08	0.66	0.48	0.48
Sat Flow, veh/h	1774	1583	1774	3632	3312	352
Grp Volume(v), veh/h	137	47	116	568	573	583
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1801
Q Serve(g_s), s	3.1	1.1	2.7	2.7	10.4	10.4
Cycle Q Clear(g_c), s	3.1	1.1	2.7	2.7	10.4	10.4
Prop In Lane	1.00	1.00	1.00			0.20
Lane Grp Cap(c), veh/h	224	200	147	2331	850	865
V/C Ratio(X)	0.61	0.23	0.79	0.24	0.67	0.67
Avail Cap(c_a), veh/h	1186	1058	212	2788	1014	1032
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	16.5	18.8	2.9	8.4	8.4
Incr Delay (d2), s/veh	2.7	0.6	11.7	0.1	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	1.0	1.8	1.3	5.3	5.4
LnGrp Delay(d),s/veh	20.0	17.1	30.6	3.0	9.7	9.7
LnGrp LOS	C	B	C	A	A	A
Approach Vol, veh/h	184			684	1156	
Approach Delay, s/veh	19.3			7.6	9.7	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		32.6		9.3	7.5	25.1		
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0		
Max Green Setting (Gmax), s		33.0		28.0	5.0	24.0		
Max Q Clear Time (g_c+I1), s		4.7		5.1	4.7	12.4		
Green Ext Time (p_c), s		13.4		0.5	0.0	7.7		

Intersection Summary	
HCM 2010 Ctrl Delay	9.9
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	120	90	650	100	80	1030
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	126	95	684	105	84	1084
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	154	116	1807	277	93	2500
Arrive On Green	0.16	0.16	0.59	0.57	0.05	0.71
Sat Flow, veh/h	958	722	3170	472	1774	3632
Grp Volume(v), veh/h	222	0	393	396	84	1084
Grp Sat Flow(s),veh/h/ln	1687	0	1770	1779	1774	1770
Q Serve(g_s), s	7.6	0.0	7.1	7.1	2.8	7.8
Cycle Q Clear(g_c), s	7.6	0.0	7.1	7.1	2.8	7.8
Prop In Lane	0.57	0.43		0.27	1.00	
Lane Grp Cap(c), veh/h	271	0	1039	1045	93	2500
V/C Ratio(X)	0.82	0.00	0.38	0.38	0.90	0.43
Avail Cap(c_a), veh/h	534	0	1039	1045	237	2500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.85	0.85	0.67	0.67
Uniform Delay (d), s/veh	24.4	0.0	6.6	6.7	28.3	3.7
Incr Delay (d2), s/veh	2.4	0.0	0.9	0.9	8.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	0.0	3.6	3.7	1.6	3.9
LnGrp Delay(d),s/veh	26.7	0.0	7.5	7.5	36.4	4.1
LnGrp LOS	C		A	A	D	A
Approach Vol, veh/h	222		789			1168
Approach Delay, s/veh	26.7		7.5			6.4
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.1	39.2				46.4		13.6
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	20.1				32.1		19.0
Max Q Clear Time (g_c+I1), s	4.8	9.1				9.8		9.6
Green Ext Time (p_c), s	0.0	5.0				6.7		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	8.9
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	480	110	60	660	60	120	300	60	130	540	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	63	505	116	63	695	63	126	316	63	137	568	137
Adj No. of Lanes	1	2	0	1	2	0	0	2	0	0	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	981	224	136	1059	96	165	436	90	148	639	162
Arrive On Green	0.09	0.34	0.34	0.08	0.32	0.32	0.06	0.06	0.06	0.53	0.53	0.51
Sat Flow, veh/h	1774	2857	653	1774	3279	297	860	2269	470	558	2417	613
Grp Volume(v), veh/h	63	312	309	63	375	383	267	0	238	450	0	392
Grp Sat Flow(s),veh/h/ln	1774	1770	1740	1774	1770	1807	1820	0	1779	1835	0	1754
Q Serve(g_s), s	4.4	18.3	18.5	4.4	23.6	23.7	18.7	0.0	17.1	29.5	0.0	24.8
Cycle Q Clear(g_c), s	4.4	18.3	18.5	4.4	23.6	23.7	18.7	0.0	17.1	29.5	0.0	24.8
Prop In Lane	1.00		0.38	1.00		0.16	0.47		0.26	0.30		0.35
Lane Grp Cap(c), veh/h	153	608	597	136	572	584	350	0	342	485	0	464
V/C Ratio(X)	0.41	0.51	0.52	0.46	0.66	0.66	0.76	0.00	0.70	0.93	0.00	0.85
Avail Cap(c_a), veh/h	153	608	597	136	572	584	350	0	342	550	0	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.39	0.39	0.39	0.49	0.49	0.49	0.93	0.00	0.93	0.23	0.00	0.23
Uniform Delay (d), s/veh	56.2	34.0	34.2	57.4	37.8	37.9	57.9	0.0	57.2	29.5	0.0	28.7
Incr Delay (d2), s/veh	0.3	1.2	1.3	5.4	2.9	2.8	13.5	0.0	10.4	6.2	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	9.1	9.1	2.4	12.0	12.3	10.8	0.0	9.4	15.6	0.0	12.1
LnGrp Delay(d),s/veh	56.5	35.2	35.5	62.8	40.7	40.7	71.5	0.0	67.6	35.7	0.0	31.2
LnGrp LOS	E	D	D	E	D	D	E		E	D		C
Approach Vol, veh/h		684			821			505			842	
Approach Delay, s/veh		37.3			42.4			69.7			33.6	
Approach LOS		D			D			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	14.0	48.6		38.4	16.6	46.0
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	4.9	* 4.9
Max Green Setting (Gmax), s		24.1	10.5	39.1		38.1	8.5	* 41
Max Q Clear Time (g_c+I1), s		20.7	6.4	20.5		31.5	6.4	25.7
Green Ext Time (p_c), s		0.7	0.0	1.6		1.9	0.5	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	43.4
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

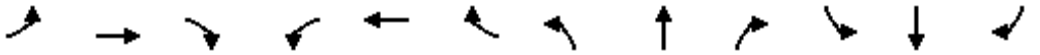
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	90	250	710	150	20	1160
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.84		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	95	263	747	158	21	1221
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	93	257	1868	395	29	2450
Arrive On Green	0.25	0.25	0.64	0.64	0.02	0.69
Sat Flow, veh/h	377	1043	2989	612	1774	3632
Grp Volume(v), veh/h	359	0	456	449	21	1221
Grp Sat Flow(s),veh/h/ln	1424	0	1770	1739	1774	1770
Q Serve(g_s), s	32.0	0.0	16.0	16.1	1.5	21.1
Cycle Q Clear(g_c), s	32.0	0.0	16.0	16.1	1.5	21.1
Prop In Lane	0.26	0.73		0.35	1.00	
Lane Grp Cap(c), veh/h	351	0	1141	1121	29	2450
V/C Ratio(X)	1.02	0.00	0.40	0.40	0.71	0.50
Avail Cap(c_a), veh/h	351	0	1141	1121	109	2450
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.52	0.52	0.41	0.41
Uniform Delay (d), s/veh	49.0	0.0	11.0	11.1	63.6	9.4
Incr Delay (d2), s/veh	54.3	0.0	0.5	0.6	4.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	17.9	0.0	7.9	7.9	0.8	10.3
LnGrp Delay(d),s/veh	103.3	0.0	11.6	11.7	68.4	9.7
LnGrp LOS	F		B	B	E	A
Approach Vol, veh/h	359		905			1242
Approach Delay, s/veh	103.3		11.6			10.7
Approach LOS	F		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.2	87.8				94.0		36.0
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	77.1				89.1		32.0
Max Q Clear Time (g_c+I1), s	3.5	18.1				23.1		34.0
Green Ext Time (p_c), s	0.0	9.4				9.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Notes

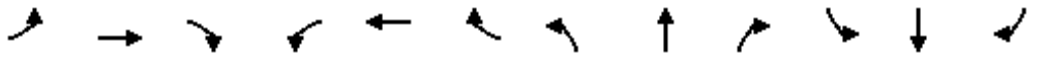
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	120	80	50	120	50	90	570	20	40	870	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	126	84	53	126	53	95	600	21	42	916	137
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	235	197	113	153	301	110	121	1500	52	50	1205	180
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.07	0.43	0.43	0.03	0.39	0.39
Sat Flow, veh/h	507	702	403	251	1072	392	1774	3489	122	1774	3089	462
Grp Volume(v), veh/h	336	0	0	232	0	0	95	304	317	42	525	528
Grp Sat Flow(s),veh/h/ln	1612	0	0	1716	0	0	1774	1770	1841	1774	1770	1781
Q Serve(g_s), s	3.9	0.0	0.0	0.0	0.0	0.0	2.8	6.3	6.4	1.3	13.8	13.8
Cycle Q Clear(g_c), s	9.6	0.0	0.0	5.7	0.0	0.0	2.8	6.3	6.4	1.3	13.8	13.8
Prop In Lane	0.37		0.25	0.23		0.23	1.00		0.07	1.00		0.26
Lane Grp Cap(c), veh/h	544	0	0	564	0	0	121	761	792	50	691	695
V/C Ratio(X)	0.62	0.00	0.00	0.41	0.00	0.00	0.79	0.40	0.40	0.83	0.76	0.76
Avail Cap(c_a), veh/h	905	0	0	947	0	0	166	761	792	166	759	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	0.0	15.9	0.0	0.0	24.6	10.5	10.5	25.9	14.2	14.2
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.5	0.0	0.0	15.6	0.3	0.3	28.3	4.1	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	0.0	0.0	2.9	0.0	0.0	1.9	3.1	3.2	1.0	7.5	7.5
LnGrp Delay(d),s/veh	18.3	0.0	0.0	16.4	0.0	0.0	40.1	10.9	10.8	54.2	18.3	18.2
LnGrp LOS	B			B			D	B	B	D	B	B
Approach Vol, veh/h		336			232			716			1095	
Approach Delay, s/veh		18.3			16.4			14.7			19.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	28.0		20.0	7.7	25.9		20.0
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	23.0		28.0	5.0	23.0		28.0
Max Q Clear Time (g_c+I1), s	3.3	8.4		11.6	4.8	15.8		7.7
Green Ext Time (p_c), s	0.0	8.8		3.4	0.0	5.1		3.7

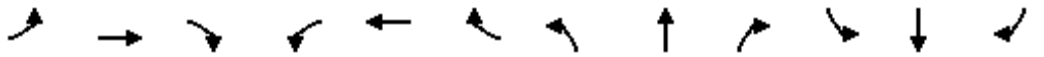
Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	50	150	170	50	30	90	570	130	30	920	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	53	158	179	53	32	95	600	137	32	968	21
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	121	300	333	92	43	121	1322	301	37	1467	32
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.07	0.46	0.46	0.02	0.41	0.41
Sat Flow, veh/h	73	460	1138	847	347	165	1774	2865	653	1774	3542	77
Grp Volume(v), veh/h	232	0	0	264	0	0	95	370	367	32	484	505
Grp Sat Flow(s),veh/h/ln	1670	0	0	1358	0	0	1774	1770	1748	1774	1770	1849
Q Serve(g_s), s	0.0	0.0	0.0	3.0	0.0	0.0	2.9	7.9	7.9	1.0	12.2	12.2
Cycle Q Clear(g_c), s	6.6	0.0	0.0	9.6	0.0	0.0	2.9	7.9	7.9	1.0	12.2	12.2
Prop In Lane	0.09		0.68	0.68		0.12	1.00		0.37	1.00		0.04
Lane Grp Cap(c), veh/h	512	0	0	468	0	0	121	816	806	37	733	766
V/C Ratio(X)	0.45	0.00	0.00	0.56	0.00	0.00	0.78	0.45	0.45	0.86	0.66	0.66
Avail Cap(c_a), veh/h	904	0	0	786	0	0	161	898	887	161	898	939
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	0.0	0.0	18.3	0.0	0.0	25.3	10.1	10.1	26.9	13.0	13.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.1	0.0	0.0	16.6	0.4	0.4	38.7	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	0.0	0.0	3.8	0.0	0.0	2.0	3.9	3.9	0.9	6.2	6.4
LnGrp Delay(d),s/veh	18.0	0.0	0.0	19.4	0.0	0.0	41.9	10.5	10.5	65.6	14.3	14.3
LnGrp LOS	B			B			D	B	B	E	B	B
Approach Vol, veh/h		232			264			832			1021	
Approach Delay, s/veh		18.0			19.4			14.1			15.9	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	30.5		19.6	7.8	27.9		19.6
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	28.0		28.0	5.0	28.0		28.0
Max Q Clear Time (g_c+I1), s	3.0	9.9		8.6	4.9	14.2		11.6
Green Ext Time (p_c), s	0.0	10.4		3.2	0.0	8.7		3.0

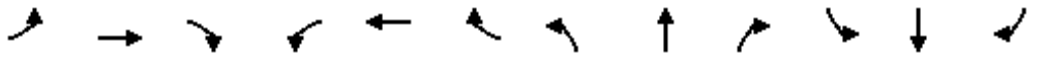
Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	470	10	10	450	30	20	10	60	60	10	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	63	495	11	11	474	32	21	11	63	63	11	63
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	506	1407	31	502	1407	624	278	107	537	336	42	537
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	886	3539	79	886	3539	1569	244	313	1571	347	123	1571
Grp Volume(v), veh/h	63	247	259	11	474	32	32	0	63	74	0	63
Grp Sat Flow(s),veh/h/ln	886	1770	1848	886	1770	1569	557	0	1571	470	0	1571
Q Serve(g_s), s	1.6	3.0	3.0	0.3	2.9	0.4	0.2	0.0	0.8	1.1	0.0	0.8
Cycle Q Clear(g_c), s	4.4	3.0	3.0	3.2	2.9	0.4	8.0	0.0	0.8	8.4	0.0	0.8
Prop In Lane	1.00		0.04	1.00		1.00	0.66		1.00	0.85		1.00
Lane Grp Cap(c), veh/h	506	703	735	502	1407	624	385	0	537	378	0	537
V/C Ratio(X)	0.12	0.35	0.35	0.02	0.34	0.05	0.08	0.00	0.12	0.20	0.00	0.12
Avail Cap(c_a), veh/h	789	1269	1325	785	2537	1125	838	0	1024	804	0	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.0	6.5	6.5	7.6	6.4	5.7	7.5	0.0	6.9	10.7	0.0	6.9
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.0	0.1	0.0	0.1	0.0	0.1	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	1.5	1.6	0.1	1.4	0.2	0.2	0.0	0.4	0.6	0.0	0.4
LnGrp Delay(d),s/veh	8.1	6.8	6.8	7.6	6.6	5.7	7.6	0.0	7.0	10.9	0.0	7.0
LnGrp LOS	A	A	A	A	A	A	A		A	B		A
Approach Vol, veh/h		569			517			95			137	
Approach Delay, s/veh		6.9			6.5			7.2			9.1	
Approach LOS		A			A			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		15.0		16.3		15.0		16.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		22.0		20.0		22.0
Max Q Clear Time (g_c+I1), s		10.0		6.4		10.4		5.2
Green Ext Time (p_c), s		0.7		5.7		0.6		5.9

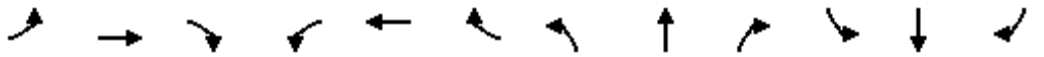
Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	360	90	150	360	60	80	250	80	60	600	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	379	95	158	379	63	84	263	84	63	632	137
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	885	219	249	959	158	99	1440	450	74	1529	331
Arrive On Green	0.32	0.32	0.31	0.32	0.32	0.31	0.06	0.54	0.53	0.04	0.53	0.52
Sat Flow, veh/h	939	2802	694	912	3034	500	1774	2655	829	1774	2894	626
Grp Volume(v), veh/h	84	238	236	158	220	222	84	173	174	63	386	383
Grp Sat Flow(s),veh/h/ln	939	1770	1726	912	1770	1764	1774	1770	1715	1774	1770	1751
Q Serve(g_s), s	9.2	12.7	13.0	19.9	11.6	11.9	5.6	6.0	6.2	4.2	15.8	15.9
Cycle Q Clear(g_c), s	21.1	12.7	13.0	33.0	11.6	11.9	5.6	6.0	6.2	4.2	15.8	15.9
Prop In Lane	1.00		0.40	1.00		0.28	1.00		0.48	1.00		0.36
Lane Grp Cap(c), veh/h	264	559	545	249	559	557	99	960	930	74	935	925
V/C Ratio(X)	0.32	0.43	0.43	0.63	0.39	0.40	0.85	0.18	0.19	0.85	0.41	0.41
Avail Cap(c_a), veh/h	288	605	590	272	605	603	163	960	930	310	935	925
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.96	0.96	0.96	0.92	0.92	0.92	0.78	0.78	0.78
Uniform Delay (d), s/veh	40.4	32.4	32.6	45.6	32.1	32.2	56.2	13.9	14.1	57.1	17.1	17.2
Incr Delay (d2), s/veh	0.2	0.2	0.2	2.7	0.2	0.2	9.2	0.4	0.4	7.8	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.4	6.2	6.2	5.2	5.7	5.8	3.0	3.0	3.1	2.2	8.0	8.0
LnGrp Delay(d),s/veh	40.6	32.6	32.8	48.3	32.2	32.4	65.4	14.3	14.5	64.9	18.1	18.3
LnGrp LOS	D	C	C	D	C	C	E	B	B	E	B	B
Approach Vol, veh/h		558			600			431			832	
Approach Delay, s/veh		33.9			36.5			24.3			21.7	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	69.1		41.9	10.7	67.4		41.9
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	21.5	45.1		40.4	11.5	55.1		40.4
Max Q Clear Time (g_c+I1), s	6.2	8.2		23.1	7.6	17.9		35.0
Green Ext Time (p_c), s	0.0	4.5		4.3	0.0	4.5		2.3

Intersection Summary		
HCM 2010 Ctrl Delay		28.7
HCM 2010 LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	980	10	20	890	70	10	10	20	30	10	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	84	1032	11	21	937	74	11	11	21	32	11	84
Adj No. of Lanes	1	2	0	1	3	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	2300	25	15	3020	902	90	76	384	126	36	384
Arrive On Green	0.02	0.21	0.21	0.01	0.59	0.59	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3586	38	1774	5085	1519	179	303	1538	294	144	1538
Grp Volume(v), veh/h	84	509	534	21	937	74	22	0	21	43	0	84
Grp Sat Flow(s),veh/h/ln	1774	1770	1854	1774	1695	1519	482	0	1538	438	0	1538
Q Serve(g_s), s	5.7	30.1	30.1	1.0	11.0	2.5	0.3	0.0	1.2	2.5	0.0	5.2
Cycle Q Clear(g_c), s	5.7	30.1	30.1	1.0	11.0	2.5	23.2	0.0	1.2	24.3	0.0	5.2
Prop In Lane	1.00		0.02	1.00		1.00	0.50		1.00	0.74		1.00
Lane Grp Cap(c), veh/h	99	1135	1189	15	3020	902	165	0	384	162	0	384
V/C Ratio(X)	0.84	0.45	0.45	1.39	0.31	0.08	0.13	0.00	0.05	0.27	0.00	0.22
Avail Cap(c_a), veh/h	237	1135	1189	148	3020	902	165	0	384	162	0	384
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.66	0.66	0.66	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.4	28.8	28.8	59.5	12.1	10.4	36.0	0.0	34.2	47.6	0.0	35.7
Incr Delay (d2), s/veh	6.6	1.2	1.1	194.5	0.2	0.1	0.1	0.0	0.0	4.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.0	15.2	15.9	1.3	5.2	1.1	0.6	0.0	0.5	1.5	0.0	2.4
LnGrp Delay(d),s/veh	65.0	30.0	29.9	275.4	12.3	10.5	36.1	0.0	34.2	51.6	0.0	37.0
LnGrp LOS	E	C	C	F	B	B	D		C	D		D
Approach Vol, veh/h		1127			1032			43			127	
Approach Delay, s/veh		32.6			17.5			35.2			41.9	
Approach LOS		C			B			D			D	

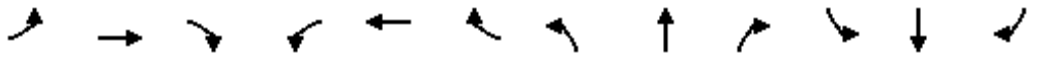
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	5.0	81.0		34.0	10.7	75.3
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	16.5	61.4
Max Q Clear Time (g_c+I1), s		25.2	3.0	32.1		26.3	7.7	13.0
Green Ext Time (p_c), s		0.2	0.0	22.7		0.1	0.0	27.4

Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	690	380	180	740	90	230	370	170	190	500	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	116	726	400	189	779	95	242	389	179	200	526	147
Adj No. of Lanes	1	2	0	1	3	0	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	802	441	207	1869	226	285	602	272	221	813	226
Arrive On Green	0.03	0.12	0.12	0.23	0.82	0.80	0.08	0.26	0.25	0.04	0.10	0.10
Sat Flow, veh/h	1774	2183	1200	1774	4584	555	3442	2330	1053	1774	2708	753
Grp Volume(v), veh/h	116	588	538	189	575	299	242	294	274	200	343	330
Grp Sat Flow(s),veh/h/ln	1774	1770	1614	1774	1695	1749	1721	1770	1613	1774	1770	1691
Q Serve(g_s), s	7.8	39.4	39.5	12.5	5.7	5.9	8.3	17.7	18.3	13.5	22.4	22.6
Cycle Q Clear(g_c), s	7.8	39.4	39.5	12.5	5.7	5.9	8.3	17.7	18.3	13.5	22.4	22.6
Prop In Lane	1.00		0.74	1.00		0.32	1.00		0.65	1.00		0.44
Lane Grp Cap(c), veh/h	135	650	593	207	1382	713	285	457	417	221	531	508
V/C Ratio(X)	0.86	0.90	0.91	0.92	0.42	0.42	0.85	0.64	0.66	0.90	0.64	0.65
Avail Cap(c_a), veh/h	163	650	593	237	1382	713	373	457	417	222	531	508
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.88	0.88	0.88	0.94	0.94	0.94	0.90	0.90	0.90	0.98	0.98	0.98
Uniform Delay (d), s/veh	57.9	50.7	50.8	45.5	7.1	7.3	54.3	39.6	40.0	56.8	47.9	48.1
Incr Delay (d2), s/veh	24.5	16.7	18.3	30.8	0.9	1.7	10.0	6.1	7.1	34.3	5.8	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.8	22.4	20.7	7.9	2.7	3.0	4.4	9.4	9.0	8.7	11.8	11.5
LnGrp Delay(d),s/veh	82.4	67.3	69.1	76.2	8.0	9.0	64.3	45.7	47.2	91.2	53.7	54.3
LnGrp LOS	F	E	E	E	A	A	E	D	D	F	D	D
Approach Vol, veh/h		1242			1063			810			873	
Approach Delay, s/veh		69.5			20.4			51.8			62.5	
Approach LOS		E			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	35.0	18.0	48.1	13.9	40.0	13.1	52.9
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	3.5	4.9
Max Green Setting (Gmax), s	15.5	30.1	16.5	41.1	13.5	32.1	11.5	46.1
Max Q Clear Time (g_c+I1), s	15.5	20.3	14.5	41.5	10.3	24.6	9.8	7.9
Green Ext Time (p_c), s	0.0	2.9	0.0	0.0	0.1	2.6	0.0	24.5

Intersection Summary	
HCM 2010 Ctrl Delay	51.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	640	230	250	570	80	210	800	160	170	1340	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.93	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	189	674	65	263	600	18	221	842	144	179	1411	195
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	233	846	360	322	970	415	261	1801	305	391	2088	288
Arrive On Green	0.02	0.08	0.08	0.03	0.09	0.09	0.15	0.82	0.80	0.22	0.91	0.90
Sat Flow, veh/h	3510	3610	1534	3510	3610	1545	3510	4411	748	3510	4566	631
Grp Volume(v), veh/h	189	674	65	263	600	18	221	658	328	179	1068	538
Grp Sat Flow(s),veh/h/ln	1755	1805	1534	1755	1805	1545	1755	1729	1701	1755	1729	1739
Q Serve(g_s), s	6.4	22.0	3.8	8.9	19.2	0.9	7.4	6.8	7.1	5.3	8.3	8.8
Cycle Q Clear(g_c), s	6.4	22.0	3.8	8.9	19.2	0.9	7.4	6.8	7.1	5.3	8.3	8.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		0.36
Lane Grp Cap(c), veh/h	233	846	360	322	970	415	261	1412	695	391	1581	795
V/C Ratio(X)	0.81	0.80	0.18	0.82	0.62	0.04	0.85	0.47	0.47	0.46	0.68	0.68
Avail Cap(c_a), veh/h	351	993	422	351	993	425	351	1412	695	391	1581	795
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.89	0.89	0.89	0.94	0.94	0.94	0.95	0.95	0.95	0.89	0.89	0.89
Uniform Delay (d), s/veh	57.9	52.5	28.7	57.2	48.7	21.4	50.4	7.1	7.4	43.5	3.1	3.4
Incr Delay (d2), s/veh	4.2	3.0	0.1	11.1	0.8	0.0	10.2	1.1	2.2	0.3	2.1	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	11.4	1.6	4.9	9.7	0.4	3.9	3.3	3.6	2.5	3.7	4.6
LnGrp Delay(d),s/veh	62.2	55.5	28.8	68.3	49.5	21.4	60.6	8.2	9.6	43.8	5.2	7.5
LnGrp LOS	E	E	C	E	D	C	E	A	A	D	A	A
Approach Vol, veh/h		928			881			1207			1785	
Approach Delay, s/veh		55.0			54.5			18.2			9.8	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	53.0	16.1	32.1	12.9	58.9	12.0	36.3
Change Period (Y+Rc), s	4.9	* 4.9	4.6	* 4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	10.5	* 48	12.5	* 32	12.5	46.1	12.5	32.4
Max Q Clear Time (g_c+I1), s	7.3	9.1	10.9	24.0	9.4	10.8	8.4	21.2
Green Ext Time (p_c), s	0.2	4.5	0.6	2.1	0.1	8.8	0.1	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

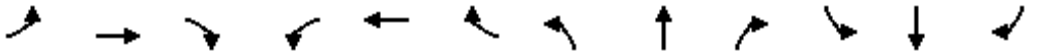
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	800	60	80	710	110	90	250	50	130	590	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	116	842	63	84	747	116	95	263	53	137	621	137
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	1279	96	117	1176	183	112	954	189	148	959	211
Arrive On Green	0.15	0.77	0.76	0.07	0.38	0.38	0.02	0.11	0.10	0.17	0.67	0.65
Sat Flow, veh/h	1774	3336	250	1774	3067	476	1774	2939	583	1774	2878	634
Grp Volume(v), veh/h	116	447	458	84	431	432	95	157	159	137	381	377
Grp Sat Flow(s),veh/h/ln	1774	1770	1816	1774	1770	1773	1774	1770	1752	1774	1770	1743
Q Serve(g_s), s	7.7	14.3	14.3	5.6	23.8	23.9	6.4	9.8	10.1	9.1	15.1	15.4
Cycle Q Clear(g_c), s	7.7	14.3	14.3	5.6	23.8	23.9	6.4	9.8	10.1	9.1	15.1	15.4
Prop In Lane	1.00		0.14	1.00		0.27	1.00		0.33	1.00		0.36
Lane Grp Cap(c), veh/h	133	678	696	117	679	680	112	574	569	148	590	581
V/C Ratio(X)	0.87	0.66	0.66	0.72	0.63	0.64	0.85	0.27	0.28	0.93	0.65	0.65
Avail Cap(c_a), veh/h	237	678	696	148	679	680	118	574	569	148	590	581
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.91	0.91	0.91	0.66	0.66	0.66	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	50.4	10.3	10.4	54.9	30.1	30.2	58.2	40.5	40.7	49.6	15.9	16.2
Incr Delay (d2), s/veh	6.0	4.5	4.4	5.0	3.0	3.0	37.4	1.2	1.2	47.3	4.7	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.0	7.6	7.7	2.9	12.2	12.2	4.3	5.0	5.1	6.4	8.0	7.9
LnGrp Delay(d),s/veh	56.4	14.8	14.8	59.9	33.1	33.2	95.6	41.7	41.9	96.9	20.5	21.0
LnGrp LOS	E	B	B	E	C	C	F	D	D	F	C	C
Approach Vol, veh/h		1021			947			411			895	
Approach Delay, s/veh		19.5			35.5			54.2			32.4	
Approach LOS		B			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	43.0	13.0	50.0	13.0	44.0	13.0	50.0
Change Period (Y+Rc), s	3.5	4.9	4.6	* 4.6	4.9	* 4.9	3.5	4.6
Max Green Setting (Gmax), s	10.5	37.1	10.5	* 45	8.5	* 39	16.5	39.4
Max Q Clear Time (g_c+I1), s	11.1	12.1	7.6	16.3	8.4	17.4	9.7	25.9
Green Ext Time (p_c), s	0.0	2.3	0.1	8.0	0.0	6.3	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	32.0
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	740	80	130	480	270	80	930	130	330	1310	110
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	158	779	84	137	505	284	84	979	137	347	1379	116
Adj No. of Lanes	1	3	0	1	3	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	1076	115	176	816	371	99	1622	226	314	2275	191
Arrive On Green	0.10	0.23	0.22	0.10	0.24	0.23	0.06	0.36	0.35	0.18	0.48	0.47
Sat Flow, veh/h	1774	4664	500	1774	3390	1541	1774	4511	630	1774	4766	401
Grp Volume(v), veh/h	158	565	298	137	505	284	84	735	381	347	981	514
Grp Sat Flow(s),veh/h/ln	1774	1695	1774	1774	1695	1541	1774	1695	1750	1774	1695	1776
Q Serve(g_s), s	11.4	20.0	20.2	9.8	17.3	22.4	6.1	23.1	23.2	23.0	27.7	27.7
Cycle Q Clear(g_c), s	11.4	20.0	20.2	9.8	17.3	22.4	6.1	23.1	23.2	23.0	27.7	27.7
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.36	1.00		0.23
Lane Grp Cap(c), veh/h	177	782	409	176	816	371	99	1219	629	314	1619	848
V/C Ratio(X)	0.89	0.72	0.73	0.78	0.62	0.77	0.85	0.60	0.61	1.11	0.61	0.61
Avail Cap(c_a), veh/h	232	782	409	246	816	371	273	1219	629	314	1619	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.8	46.2	46.4	57.2	44.0	46.4	60.8	34.0	34.3	53.5	25.0	25.1
Incr Delay (d2), s/veh	23.5	5.7	10.8	6.4	3.5	14.0	7.3	2.2	4.3	82.2	1.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.8	10.0	11.2	5.1	8.5	10.9	3.2	11.2	12.0	18.4	13.3	14.3
LnGrp Delay(d),s/veh	81.4	51.9	57.2	63.6	47.5	60.4	68.1	36.3	38.6	135.7	26.7	28.3
LnGrp LOS	F	D	E	E	D	E	E	D	D	F	C	C
Approach Vol, veh/h		1021			926			1200			1842	
Approach Delay, s/veh		58.0			53.9			39.2			47.7	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	50.7	17.0	35.3	11.3	66.5	18.3	34.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	* 5.3	4.9	* 4.9
Max Green Setting (Gmax), s	23.5	41.7	17.5	30.1	20.5	* 45	18.5	* 29
Max Q Clear Time (g_c+I1), s	25.0	25.2	13.4	24.4	8.1	29.7	11.8	22.2
Green Ext Time (p_c), s	0.0	15.3	0.1	3.0	0.1	14.4	1.7	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	48.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

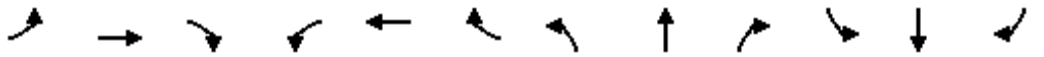
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	650	10	10	750	70	20	10	20	190	10	60
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	32	684	11	11	789	74	21	11	21	200	11	63
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	1485	24	391	1362	128	331	183	282	562	42	149
Arrive On Green	0.83	0.83	0.79	0.42	0.42	0.40	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	638	3564	57	745	3269	307	549	406	627	1017	94	332
Grp Volume(v), veh/h	32	339	356	11	427	436	53	0	0	274	0	0
Grp Sat Flow(s),veh/h/ln	638	1770	1852	745	1770	1806	1582	0	0	1443	0	0
Q Serve(g_s), s	1.8	3.1	3.1	0.6	11.1	11.2	0.0	0.0	0.0	6.5	0.0	0.0
Cycle Q Clear(g_c), s	13.0	3.1	3.1	3.7	11.1	11.2	1.0	0.0	0.0	7.5	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.17	0.40		0.40	0.73		0.23
Lane Grp Cap(c), veh/h	267	737	772	391	737	753	796	0	0	753	0	0
V/C Ratio(X)	0.12	0.46	0.46	0.03	0.58	0.58	0.07	0.00	0.00	0.36	0.00	0.00
Avail Cap(c_a), veh/h	267	737	772	391	737	753	796	0	0	753	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.89	0.89	0.89	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.3	3.2	3.2	12.3	13.5	13.6	9.4	0.0	0.0	11.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	2.0	1.9	0.1	3.0	2.9	0.0	0.0	0.0	1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	1.7	1.8	0.1	5.9	6.1	0.5	0.0	0.0	3.3	0.0	0.0
LnGrp Delay(d),s/veh	8.2	5.2	5.1	12.4	16.4	16.5	9.4	0.0	0.0	12.4	0.0	0.0
LnGrp LOS	A	A	A	B	B	B	A			B		
Approach Vol, veh/h		727			874			53			274	
Approach Delay, s/veh		5.3			16.4			9.4			12.4	
Approach LOS		A			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.0		29.0		31.0		29.0
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		27.0		23.7		27.0		23.7
Max Q Clear Time (g_c+I1), s		9.5		13.2		3.0		15.0
Green Ext Time (p_c), s		1.3		8.1		1.4		6.9

Intersection Summary	
HCM 2010 Ctrl Delay	11.4
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	710	160	130	710	50	70	50	60	150	160	60
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.97		0.95	0.96		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	747	168	137	747	53	74	53	63	158	168	63
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	1677	377	155	2199	156	181	170	202	265	288	108
Arrive On Green	0.02	0.59	0.58	0.17	1.00	1.00	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1774	2861	643	1774	3348	237	1112	752	894	1221	1271	477
Grp Volume(v), veh/h	21	462	453	137	395	405	74	0	116	158	0	231
Grp Sat Flow(s),veh/h/ln	1774	1770	1735	1774	1770	1816	1112	0	1646	1221	0	1747
Q Serve(g_s), s	1.4	17.5	17.6	9.0	0.0	0.0	7.6	0.0	7.0	14.8	0.0	14.1
Cycle Q Clear(g_c), s	1.4	17.5	17.6	9.0	0.0	0.0	21.8	0.0	7.0	21.9	0.0	14.1
Prop In Lane	1.00		0.37	1.00		0.13	1.00		0.54	1.00		0.27
Lane Grp Cap(c), veh/h	30	1037	1017	155	1162	1193	181	0	373	265	0	396
V/C Ratio(X)	0.70	0.45	0.45	0.88	0.34	0.34	0.41	0.00	0.31	0.60	0.00	0.58
Avail Cap(c_a), veh/h	89	1037	1017	296	1162	1193	188	0	384	273	0	408
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.44	0.44	0.44	0.85	0.85	0.85	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.7	13.9	14.0	48.9	0.0	0.0	51.1	0.0	38.6	47.7	0.0	41.4
Incr Delay (d2), s/veh	4.9	0.6	0.6	5.4	0.7	0.7	0.6	0.0	0.2	2.2	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	8.6	8.5	4.6	0.2	0.2	2.4	0.0	3.2	5.2	0.0	6.9
LnGrp Delay(d),s/veh	63.6	14.5	14.6	54.3	0.7	0.7	51.6	0.0	38.8	50.0	0.0	42.7
LnGrp LOS	E	B	B	D	A	A	D		D	D		D
Approach Vol, veh/h		936			937			190			389	
Approach Delay, s/veh		15.7			8.5			43.8			45.6	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.5	74.3		31.2	6.0	82.8		31.2
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	20.5	59.4		28.0	6.5	73.4		28.0
Max Q Clear Time (g_c+I1), s	11.0	19.6		23.9	3.4	2.0		23.8
Green Ext Time (p_c), s	0.1	21.3		0.9	0.0	27.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.9
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	720	120	150	670	70	130	390	130	220	740	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.92	1.00		0.86	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	758	126	158	705	74	137	411	137	232	779	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	1354	541	178	1514	613	156	607	198	252	953	91
Arrive On Green	0.11	0.76	0.75	0.10	0.43	0.42	0.09	0.24	0.23	0.14	0.30	0.29
Sat Flow, veh/h	1774	3539	1444	1774	3539	1459	1774	2509	818	1774	3225	306
Grp Volume(v), veh/h	84	758	126	158	705	74	137	287	261	232	427	426
Grp Sat Flow(s),veh/h/ln	1774	1770	1444	1774	1770	1459	1774	1770	1557	1774	1770	1761
Q Serve(g_s), s	5.6	10.6	3.2	10.6	17.1	3.7	9.2	17.6	18.3	15.5	26.9	27.0
Cycle Q Clear(g_c), s	5.6	10.6	3.2	10.6	17.1	3.7	9.2	17.6	18.3	15.5	26.9	27.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.53	1.00		0.17
Lane Grp Cap(c), veh/h	98	1354	541	178	1514	613	156	428	377	252	523	521
V/C Ratio(X)	0.86	0.56	0.23	0.89	0.47	0.12	0.88	0.67	0.69	0.92	0.82	0.82
Avail Cap(c_a), veh/h	157	1354	541	296	1514	613	207	442	389	281	523	521
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	0.97	0.97	0.97	0.77	0.77	0.77
Uniform Delay (d), s/veh	52.9	10.0	9.8	53.3	24.5	21.3	54.1	41.2	41.7	50.8	39.2	39.3
Incr Delay (d2), s/veh	11.7	1.4	0.9	9.5	1.0	0.4	21.6	2.9	4.0	25.6	7.3	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.0	5.3	1.3	5.6	8.5	1.6	5.4	9.0	8.3	9.4	14.2	14.2
LnGrp Delay(d),s/veh	64.6	11.4	10.6	62.8	25.6	21.7	75.6	44.1	45.6	76.4	46.5	46.7
LnGrp LOS	E	B	B	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		968			937			685			1085	
Approach Delay, s/veh		15.9			31.5			51.0			53.0	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	33.0	16.1	49.9	14.6	39.5	10.6	55.3
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	3.5	4.9
Max Green Setting (Gmax), s	19.5	29.1	20.5	34.1	14.5	34.1	11.1	43.5
Max Q Clear Time (g_c+I1), s	17.5	20.3	12.6	12.6	11.2	29.0	7.6	19.1
Green Ext Time (p_c), s	0.0	2.3	0.1	14.0	0.0	2.2	0.0	15.3

Intersection Summary	
HCM 2010 Ctrl Delay	37.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	830	90	80	820	20	50	50	120	50	150	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.98		0.95	0.97		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	32	874	95	84	863	21	53	53	126	53	158	84
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	1796	195	151	2223	54	138	124	374	78	196	95
Arrive On Green	0.02	0.56	0.55	0.17	1.00	1.00	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3218	350	1774	3531	86	376	501	1510	171	791	383
Grp Volume(v), veh/h	32	481	488	84	433	451	106	0	126	295	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1798	1774	1770	1847	877	0	1510	1345	0	0
Q Serve(g_s), s	2.2	19.8	19.8	5.2	0.0	0.0	0.0	0.0	8.2	14.3	0.0	0.0
Cycle Q Clear(g_c), s	2.2	19.8	19.8	5.2	0.0	0.0	11.9	0.0	8.2	26.2	0.0	0.0
Prop In Lane	1.00		0.19	1.00		0.05	0.50		1.00	0.18		0.28
Lane Grp Cap(c), veh/h	41	988	1004	151	1114	1163	262	0	374	368	0	0
V/C Ratio(X)	0.78	0.49	0.49	0.56	0.39	0.39	0.40	0.00	0.34	0.80	0.00	0.00
Avail Cap(c_a), veh/h	148	988	1004	151	1114	1163	277	0	390	386	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	0.68	0.68	0.68	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.3	16.1	16.1	47.7	0.0	0.0	37.6	0.0	37.1	44.4	0.0	0.0
Incr Delay (d2), s/veh	6.5	1.0	1.0	1.8	0.7	0.7	0.4	0.0	0.2	10.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	9.9	10.0	2.6	0.2	0.2	3.0	0.0	3.5	10.5	0.0	0.0
LnGrp Delay(d),s/veh	64.8	17.0	17.1	49.5	0.7	0.7	37.9	0.0	37.3	54.5	0.0	0.0
LnGrp LOS	E	B	B	D	A	A	D		D	D		
Approach Vol, veh/h		1001			968			232			295	
Approach Delay, s/veh		18.6			4.9			37.6			54.5	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		33.7	15.3	71.0		33.7	6.8	79.5
Change Period (Y+Rc), s		4.0	4.6	* 4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		31.0	10.5	* 66		31.0	10.5	66.4
Max Q Clear Time (g_c+I1), s		13.9	7.2	21.8		28.2	4.2	2.0
Green Ext Time (p_c), s		1.9	0.2	9.7		0.6	0.0	8.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	790	60	160	780	50	40	10	120	160	20	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	832	63	168	821	53	42	11	126	168	21	11
Adj No. of Lanes	1	2	1	2	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	0	0	0	0	0
Cap, veh/h	24	1662	740	258	1792	116	498	123	667	447	54	25
Arrive On Green	0.01	0.47	0.47	0.07	0.53	0.52	0.36	0.36	0.34	0.36	0.36	0.35
Sat Flow, veh/h	1774	3539	1577	3442	3376	218	1198	345	1605	1051	153	70
Grp Volume(v), veh/h	11	832	63	168	430	444	53	0	126	200	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1577	1721	1770	1824	1543	0	1605	1274	0	0
Q Serve(g_s), s	0.6	14.7	2.0	4.3	13.6	13.6	0.0	0.0	4.5	10.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	14.7	2.0	4.3	13.6	13.6	1.8	0.0	4.5	11.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.12	0.79		1.00	0.84		0.05
Lane Grp Cap(c), veh/h	24	1662	740	258	939	968	620	0	667	527	0	0
V/C Ratio(X)	0.46	0.50	0.09	0.65	0.46	0.46	0.09	0.00	0.19	0.38	0.00	0.00
Avail Cap(c_a), veh/h	158	1662	740	421	939	968	620	0	667	527	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.84	0.84	0.84	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.1	16.6	13.2	40.5	13.1	13.1	19.3	0.0	16.7	23.0	0.0	0.0
Incr Delay (d2), s/veh	4.3	1.0	0.2	0.9	1.3	1.3	0.3	0.0	0.6	2.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.3	7.4	0.9	2.1	6.9	7.1	0.9	0.0	2.1	4.1	0.0	0.0
LnGrp Delay(d),s/veh	48.4	17.5	13.4	41.3	14.4	14.5	19.5	0.0	17.3	25.0	0.0	0.0
LnGrp LOS	D	B	B	D	B	B	B		B	C		
Approach Vol, veh/h		906			1042			179			200	
Approach Delay, s/veh		17.6			18.8			18.0			25.0	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	9.7	45.3		35.0	4.2	50.8
Change Period (Y+Rc), s		4.9	3.5	5.3		4.9	3.5	5.3
Max Green Setting (Gmax), s		30.1	10.5	35.7		30.1	7.5	38.7
Max Q Clear Time (g_c+I1), s		6.5	6.3	16.7		13.8	2.6	15.6
Green Ext Time (p_c), s		1.1	0.1	13.6		1.0	0.0	15.7

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	780	240	310	680	250	160	350	550	280	1110	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	137	821	206	326	716	81	168	436	207	295	1168	92
Adj No. of Lanes	2	3	0	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	1320	329	370	1209	536	355	1248	526	339	1180	523
Arrive On Green	0.08	0.33	0.32	0.11	0.34	0.34	0.10	0.33	0.33	0.10	0.33	0.33
Sat Flow, veh/h	3442	4054	1010	3442	3539	1569	3548	3725	1569	3442	3539	1569
Grp Volume(v), veh/h	137	686	341	326	716	81	168	436	207	295	1168	92
Grp Sat Flow(s),veh/h/ln	1721	1695	1673	1721	1770	1569	1774	1863	1569	1721	1770	1569
Q Serve(g_s), s	4.6	20.5	20.8	11.2	20.0	3.1	5.4	10.6	12.1	10.1	39.4	3.6
Cycle Q Clear(g_c), s	4.6	20.5	20.8	11.2	20.0	3.1	5.4	10.6	12.1	10.1	39.4	3.6
Prop In Lane	1.00		0.60	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	1104	545	370	1209	536	355	1248	526	339	1180	523
V/C Ratio(X)	0.50	0.62	0.63	0.88	0.59	0.15	0.47	0.35	0.39	0.87	0.99	0.18
Avail Cap(c_a), veh/h	315	1104	545	516	1209	536	355	1248	526	459	1180	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	0.64	0.64	0.64
Uniform Delay (d), s/veh	52.9	34.2	34.5	52.8	32.6	14.5	51.0	30.1	30.6	53.3	39.8	15.1
Incr Delay (d2), s/veh	0.5	2.3	4.7	9.7	2.1	0.6	4.5	0.8	2.2	7.0	18.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	10.0	10.3	5.8	10.1	1.4	2.9	5.6	5.5	5.2	22.2	1.6
LnGrp Delay(d),s/veh	53.3	36.5	39.2	62.5	34.7	15.1	55.5	30.8	32.8	60.4	58.4	15.2
LnGrp LOS	D	D	D	E	C	B	E	C	C	E	E	B
Approach Vol, veh/h		1164			1123			811			1555	
Approach Delay, s/veh		39.3			41.4			36.4			56.2	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	44.2	16.9	43.1	16.0	44.0	15.0	45.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	16.5	34.7	18.5	33.1	12.5	38.7	11.5	* 40
Max Q Clear Time (g_c+I1), s	12.1	14.1	13.2	22.8	7.4	41.4	6.6	22.0
Green Ext Time (p_c), s	0.2	14.9	0.2	5.6	0.1	0.0	0.4	6.2

Intersection Summary	
HCM 2010 Ctrl Delay	45.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	460	10	30	610	180	30	20	60	180	20	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	32	484	11	32	642	189	32	21	63	189	21	63
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	380	1592	36	445	1212	356	96	41	659	114	7	659
Arrive On Green	0.45	0.45	0.43	0.90	0.90	0.86	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	656	3537	80	896	2694	792	0	98	1582	0	17	1582
Grp Volume(v), veh/h	32	242	253	32	421	410	53	0	63	210	0	63
Grp Sat Flow(s),veh/h/ln	656	1770	1848	896	1770	1716	98	0	1582	17	0	1582
Q Serve(g_s), s	1.9	5.2	5.2	0.6	2.7	3.2	0.0	0.0	1.5	0.0	0.0	1.5
Cycle Q Clear(g_c), s	5.1	5.2	5.2	5.9	2.7	3.2	25.0	0.0	1.5	25.0	0.0	1.5
Prop In Lane	1.00		0.04	1.00		0.46	0.60		1.00	0.90		1.00
Lane Grp Cap(c), veh/h	380	796	832	445	796	772	137	0	659	121	0	659
V/C Ratio(X)	0.08	0.30	0.30	0.07	0.53	0.53	0.39	0.00	0.10	1.74	0.00	0.10
Avail Cap(c_a), veh/h	380	796	832	445	796	772	137	0	659	121	0	659
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.78	0.78	0.78	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.5	10.5	10.5	2.7	1.8	2.2	15.2	0.0	10.6	28.6	0.0	10.6
Incr Delay (d2), s/veh	0.4	0.9	0.8	0.2	2.0	2.0	8.1	0.0	0.3	363.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	2.7	2.9	0.2	1.4	1.7	0.8	0.0	0.7	14.2	0.0	0.7
LnGrp Delay(d),s/veh	11.9	11.4	11.4	3.0	3.7	4.2	23.2	0.0	10.9	392.2	0.0	10.9
LnGrp LOS	B	B	B	A	A	A	C		B	F		B
Approach Vol, veh/h		527			863			116			273	
Approach Delay, s/veh		11.4			3.9			16.5			304.2	
Approach LOS		B			A			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		31.0		29.0		31.0
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		25.0		25.7		25.0		25.7
Max Q Clear Time (g_c+I1), s		27.0		7.2		27.0		7.9
Green Ext Time (p_c), s		0.0		11.2		0.0		11.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.1
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	930	10	10	900	90	10	0	10	50	0	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	979	11	11	947	95	11	0	11	53	0	84
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	2377	27	6	2696	270	177	14	146	381	0	360
Arrive On Green	0.17	1.00	1.00	0.00	0.19	0.19	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1774	3584	40	1774	4688	469	568	60	628	1366	0	1543
Grp Volume(v), veh/h	126	483	507	11	684	358	22	0	0	53	0	84
Grp Sat Flow(s),veh/h/ln	1774	1770	1855	1774	1695	1767	1256	0	0	1366	0	1543
Q Serve(g_s), s	8.3	0.0	0.0	0.4	21.0	21.1	0.1	0.0	0.0	0.0	0.0	5.3
Cycle Q Clear(g_c), s	8.3	0.0	0.0	0.4	21.0	21.1	5.4	0.0	0.0	3.6	0.0	5.3
Prop In Lane	1.00		0.02	1.00		0.27	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	146	1174	1230	6	1949	1016	338	0	0	381	0	360
V/C Ratio(X)	0.86	0.41	0.41	1.77	0.35	0.35	0.07	0.00	0.00	0.14	0.00	0.23
Avail Cap(c_a), veh/h	163	1174	1230	163	1949	1016	338	0	0	381	0	360
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.31	0.31	0.31	0.96	0.96	0.96	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.4	0.0	0.0	59.9	29.2	29.2	35.8	0.0	0.0	36.6	0.0	37.3
Incr Delay (d2), s/veh	11.7	0.3	0.3	390.9	0.5	0.9	0.0	0.0	0.0	0.8	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	116.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	0.1	0.1	0.9	10.0	10.6	0.6	0.0	0.0	1.5	0.0	2.4
LnGrp Delay(d),s/veh	61.2	0.3	0.3	567.3	29.7	30.2	35.8	0.0	0.0	37.4	0.0	38.8
LnGrp LOS	E	A	A	F	C	C	D			D		D
Approach Vol, veh/h		1116			1053			22			137	
Approach Delay, s/veh		7.2			35.4			35.8			38.3	
Approach LOS		A			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.0	4.4	83.6		32.0	15.0	73.0
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	4.6	* 4.6
Max Green Setting (Gmax), s		28.0	11.5	68.4		28.0	11.5	* 68
Max Q Clear Time (g_c+I1), s		7.4	2.4	2.0		7.3	10.3	23.1
Green Ext Time (p_c), s		0.5	0.0	10.1		0.5	0.1	10.9

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

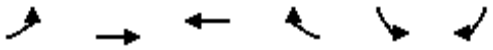
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1010	20	30	1100	60	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1541	1770	3539	1770	1508
Flt Permitted	1.00	1.00	0.17	1.00	0.95	1.00
Satd. Flow (perm)	3539	1541	318	3539	1770	1508
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1063	21	32	1158	63	32
RTOR Reduction (vph)	0	5	0	0	0	29
Lane Group Flow (vph)	1063	16	32	1158	63	3
Confl. Peds. (#/hr)		2	2			10
Turn Type	NA	Perm	D.P+P	NA	Prot	Perm
Protected Phases	1		2 4	1 2 4	3	
Permitted Phases		1	1			3
Actuated Green, G (s)	60.4	60.4	91.6	101.4	9.4	9.4
Effective Green, g (s)	61.3	61.3	94.3	102.3	10.0	10.0
Actuated g/C Ratio	0.51	0.51	0.79	0.85	0.08	0.08
Clearance Time (s)	4.9	4.9			4.6	4.6
Vehicle Extension (s)	1.5	1.5			2.5	2.5
Lane Grp Cap (vph)	1807	787	649	3016	147	125
v/s Ratio Prot	c0.30		0.01	c0.33	c0.04	
v/s Ratio Perm		0.01	0.03			0.00
v/c Ratio	0.59	0.02	0.05	0.38	0.43	0.02
Uniform Delay, d1	20.5	14.5	5.1	1.9	52.3	50.5
Progression Factor	1.00	1.00	0.05	0.03	1.00	1.00
Incremental Delay, d2	1.4	0.0	0.0	0.0	1.5	0.1
Delay (s)	21.9	14.6	0.3	0.1	53.7	50.6
Level of Service	C	B	A	A	D	D
Approach Delay (s)	21.8			0.1	52.7	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		

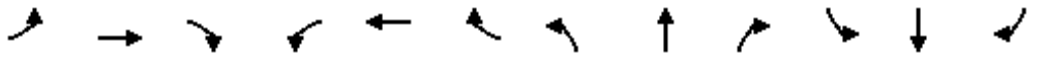
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	60	980	1010	70	130	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.93	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1770	3539	3539	1541	1695	
Flt Permitted	0.17	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	318	3539	3539	1541	1695	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	1032	1063	74	137	137
RTOR Reduction (vph)	0	0	0	27	31	0
Lane Group Flow (vph)	63	1032	1063	47	243	0
Confl. Peds. (#/hr)	2			2	10	
Turn Type	D.P+P	NA	NA	Perm	Prot	
Protected Phases	2 3	1 2 3	1		4	
Permitted Phases	1			1		
Actuated Green, G (s)	81.5	86.4	60.4	60.4	24.1	
Effective Green, g (s)	79.6	83.6	61.3	61.3	24.7	
Actuated g/C Ratio	0.66	0.70	0.51	0.51	0.21	
Clearance Time (s)			4.9	4.9	4.6	
Vehicle Extension (s)			1.5	1.5	2.5	
Lane Grp Cap (vph)	432	2465	1807	787	348	
v/s Ratio Prot	0.02	c0.29	c0.30		c0.14	
v/s Ratio Perm	0.07			0.03		
v/c Ratio	0.15	0.42	0.59	0.06	0.70	
Uniform Delay, d1	9.5	7.8	20.5	14.8	44.2	
Progression Factor	0.14	0.10	0.68	0.82	1.00	
Incremental Delay, d2	0.1	0.1	1.2	0.1	5.5	
Delay (s)	1.4	0.9	15.1	12.3	49.7	
Level of Service	A	A	B	B	D	
Approach Delay (s)		0.9	14.9		49.7	
Approach LOS		A	B		D	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	630	430	180	500	120	280	2070	20	180	2660	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	663	282	189	526	22	295	2179	20	189	2800	162
Adj No. of Lanes	1	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	767	343	152	699	313	424	2966	27	295	2508	144
Arrive On Green	0.11	0.22	0.22	0.09	0.20	0.20	0.25	0.90	0.90	0.11	0.53	0.53
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	6597	61	3442	6246	359
Grp Volume(v), veh/h	179	663	282	189	526	22	295	1587	612	189	2150	812
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	1602	1852	1721	1602	1799
Q Serve(g_s), s	13.9	25.3	23.8	12.0	19.6	1.6	10.9	13.7	13.7	7.3	56.2	56.2
Cycle Q Clear(g_c), s	13.9	25.3	23.8	12.0	19.6	1.6	10.9	13.7	13.7	7.3	56.2	56.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.20
Lane Grp Cap(c), veh/h	203	767	343	152	699	313	424	2161	833	295	1929	722
V/C Ratio(X)	0.88	0.86	0.82	1.24	0.75	0.07	0.70	0.73	0.73	0.64	1.11	1.12
Avail Cap(c_a), veh/h	228	877	392	152	726	325	424	2161	833	295	1929	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	0.83	0.83	0.83	0.35	0.35	0.35	0.59	0.59	0.59	0.39	0.39	0.39
Uniform Delay (d), s/veh	61.1	52.8	52.2	64.0	52.9	45.7	50.4	4.6	4.6	60.0	32.6	32.6
Incr Delay (d2), s/veh	25.0	6.9	9.9	127.7	1.6	0.0	3.0	1.4	3.5	1.8	54.8	63.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.2	13.1	11.3	11.3	9.7	0.7	5.3	5.5	6.9	3.6	34.3	40.4
LnGrp Delay(d),s/veh	86.1	59.7	62.2	191.7	54.5	45.7	53.3	5.9	8.0	61.8	87.4	96.5
LnGrp LOS	F	E	E	F	D	D	D	A	A	E	F	F
Approach Vol, veh/h		1124			737			2494			3151	
Approach Delay, s/veh		64.5			89.4			12.0			88.2	
Approach LOS		E			F			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	68.7	18.3	36.7	23.0	62.0	21.0	34.0
Change Period (Y+Rc), s	* 4.3	5.8	6.3	* 6.3	5.8	* 5.8	5.0	6.3
Max Green Setting (Gmax), s	* 12	59.9	12.0	* 35	15.7	* 56	18.0	28.7
Max Q Clear Time (g_c+I1), s	9.3	15.7	14.0	27.3	12.9	58.2	15.9	21.6
Green Ext Time (p_c), s	0.1	25.8	0.0	3.1	1.4	0.0	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	59.5
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	160	480	0	2230	2870	940
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	168	254	0	2347	3021	0
Adj No. of Lanes	3	2	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	522	291	0	5222	5222	1290
Arrive On Green	0.10	0.10	0.00	1.00	1.00	0.00
Sat Flow, veh/h	5003	2787	0	6929	6669	1583
Grp Volume(v), veh/h	168	254	0	2347	3021	0
Grp Sat Flow(s),veh/h/ln	1668	1393	0	1602	1602	1583
Q Serve(g_s), s	4.4	12.6	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.4	12.6	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	522	291	0	5222	5222	1290
V/C Ratio(X)	0.32	0.87	0.00	0.45	0.58	0.00
Avail Cap(c_a), veh/h	525	293	0	5222	5222	1290
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	0.57	0.09	0.00
Uniform Delay (d), s/veh	58.1	61.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	23.9	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.0	10.3	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	58.5	85.7	0.0	0.2	0.0	0.0
LnGrp LOS	E	F		A	A	
Approach Vol, veh/h	422			2347	3021	
Approach Delay, s/veh	74.9			0.2	0.0	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		120.1		19.9		120.1		
Change Period (Y+Rc), s		6.0		* 5.3		6.0		
Max Green Setting (Gmax), s		114.0		* 15		73.0		
Max Q Clear Time (g_c+I1), s		2.0		14.6		2.0		
Green Ext Time (p_c), s		44.1		0.0		56.5		

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

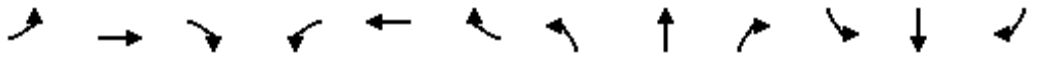
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	900	140	140	430	280	140	1730	230	450	2460	430
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	242	947	70	147	453	111	147	1821	136	474	2589	356
Adj No. of Lanes	2	4	0	2	2	1	2	4	1	2	4	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	1294	95	319	770	345	294	2450	605	516	2864	1484
Arrive On Green	0.09	0.21	0.21	0.09	0.22	0.22	0.17	0.76	0.76	0.20	0.59	0.59
Sat Flow, veh/h	3442	6139	450	3442	3539	1583	3442	6408	1583	3442	6408	2787
Grp Volume(v), veh/h	242	740	277	147	453	111	147	1821	136	474	2589	356
Grp Sat Flow(s),veh/h/ln	1721	1602	1783	1721	1770	1583	1721	1602	1583	1721	1602	1393
Q Serve(g_s), s	9.7	20.1	20.3	5.7	16.1	8.3	5.4	21.7	3.4	18.9	49.6	7.4
Cycle Q Clear(g_c), s	9.7	20.1	20.3	5.7	16.1	8.3	5.4	21.7	3.4	18.9	49.6	7.4
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	295	1013	376	319	770	345	294	2450	605	516	2864	1484
V/C Ratio(X)	0.82	0.73	0.74	0.46	0.59	0.32	0.50	0.74	0.22	0.92	0.90	0.24
Avail Cap(c_a), veh/h	295	1177	437	320	910	407	295	2450	605	526	2864	1484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	0.44	0.44	0.44
Uniform Delay (d), s/veh	62.9	51.5	51.6	60.2	49.1	46.1	55.3	12.7	10.6	55.2	25.8	12.5
Incr Delay (d2), s/veh	16.6	2.0	5.5	1.0	0.7	0.5	1.1	1.7	0.7	11.2	2.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.3	9.1	10.6	2.7	7.9	3.7	2.6	9.4	1.6	9.8	22.1	2.9
LnGrp Delay(d),s/veh	79.6	53.5	57.1	61.3	49.9	46.6	56.4	14.4	11.3	66.4	28.2	12.6
LnGrp LOS	E	D	E	E	D	D	E	B	B	E	C	B
Approach Vol, veh/h		1259			711			2104			3419	
Approach Delay, s/veh		59.3			51.7			17.2			31.9	
Approach LOS		E			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.6	59.3	18.3	35.8	17.6	68.4	17.3	36.8
Change Period (Y+Rc), s	* 5.6	5.8	* 5.3	* 6.3	* 5.6	5.8	* 5.3	* 6.3
Max Green Setting (Gmax), s	* 21	48.3	* 13	* 34	* 12	57.7	* 12	* 36
Max Q Clear Time (g_c+I1), s	20.9	23.7	7.7	22.3	7.4	51.6	11.7	18.1
Green Ext Time (p_c), s	0.1	24.3	0.2	7.2	0.2	6.1	0.0	9.3

Intersection Summary	
HCM 2010 Ctrl Delay	34.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



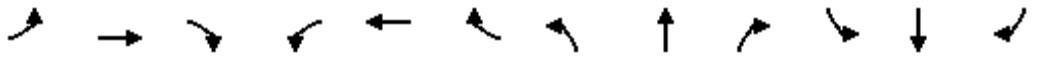
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	470	340	300	550	170	180	1950	270	160	2400	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	189	495	209	316	579	33	189	2053	237	168	2526	71
Adj No. of Lanes	1	2	1	1	2	1	1	4	1	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	624	279	247	715	320	167	2632	858	247	2975	84
Arrive On Green	0.12	0.18	0.18	0.14	0.20	0.20	0.13	0.55	0.54	0.14	0.46	0.45
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6408	1583	1774	6455	181
Grp Volume(v), veh/h	189	495	209	316	579	33	189	2053	237	168	1880	717
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1583	1774	1602	1831
Q Serve(g_s), s	14.7	18.8	13.9	19.5	21.9	1.7	13.2	35.5	0.0	12.6	48.5	48.7
Cycle Q Clear(g_c), s	14.7	18.8	13.9	19.5	21.9	1.7	13.2	35.5	0.0	12.6	48.5	48.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	214	624	279	247	715	320	167	2632	858	247	2215	844
V/C Ratio(X)	0.88	0.79	0.75	1.28	0.81	0.10	1.13	0.78	0.28	0.68	0.85	0.85
Avail Cap(c_a), veh/h	231	733	328	247	758	339	167	2632	858	247	2215	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.6	55.2	34.4	60.3	53.3	23.6	61.2	26.8	12.9	57.3	33.4	33.5
Incr Delay (d2), s/veh	25.8	5.2	8.1	152.9	6.7	0.2	102.7	2.0	0.7	6.0	4.3	10.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.7	9.7	6.7	20.0	11.4	0.8	11.2	16.0	3.8	6.6	22.3	27.0
LnGrp Delay(d),s/veh	86.4	60.5	42.5	213.1	60.0	23.8	163.9	28.7	13.6	63.3	37.7	44.0
LnGrp LOS	F	E	D	F	E	C	F	C	B	E	D	D
Approach Vol, veh/h		893			928			2479			2765	
Approach Delay, s/veh		61.7			110.8			37.6			40.9	
Approach LOS		E			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.6	61.5	24.9	29.0	17.6	68.5	21.0	32.9
Change Period (Y+Rc), s	5.3	* 5.3	* 5.6	* 5.3	* 4.6	5.3	* 4.3	* 5.6
Max Green Setting (Gmax), s	17.0	* 56	* 19	* 28	* 13	60.2	* 18	* 29
Max Q Clear Time (g_c+I1), s	14.6	37.5	21.5	20.8	15.2	50.7	16.7	23.9
Green Ext Time (p_c), s	1.8	16.4	0.0	2.9	0.0	9.3	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	51.6
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	400	140	100	380	140	110	2390	90	150	2710	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	74	421	147	105	400	147	116	2516	95	158	2853	84
Adj No. of Lanes	1	2	1	1	2	1	1	4	0	1	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	556	249	137	558	250	163	2860	108	266	3334	824
Arrive On Green	0.08	0.16	0.16	0.08	0.16	0.16	0.03	0.15	0.15	0.30	1.00	1.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6386	241	1774	6408	1583
Grp Volume(v), veh/h	74	421	147	105	400	147	116	1892	719	158	2853	84
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1820	1774	1602	1583
Q Serve(g_s), s	5.6	15.9	12.1	8.1	15.0	8.7	9.1	54.0	54.2	10.6	0.0	0.0
Cycle Q Clear(g_c), s	5.6	15.9	12.1	8.1	15.0	8.7	9.1	54.0	54.2	10.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	144	556	249	137	558	250	163	2152	815	266	3334	824
V/C Ratio(X)	0.52	0.76	0.59	0.77	0.72	0.59	0.71	0.88	0.88	0.59	0.86	0.10
Avail Cap(c_a), veh/h	152	683	305	170	733	328	165	2152	815	266	3334	824
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.88	0.88	0.88	0.87	0.87	0.87	0.53	0.53	0.53	0.76	0.76	0.76
Uniform Delay (d), s/veh	61.7	56.4	54.8	63.4	56.0	28.2	66.0	55.9	56.0	45.4	0.0	0.0
Incr Delay (d2), s/veh	2.5	3.4	2.0	13.4	2.0	1.9	7.4	3.1	7.7	2.7	2.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.9	8.0	5.4	4.5	7.5	3.9	4.8	24.6	29.1	5.4	0.5	0.0
LnGrp Delay(d),s/veh	64.2	59.9	56.8	76.7	58.0	30.1	73.4	59.0	63.7	48.1	2.4	0.2
LnGrp LOS	E	E	E	E	E	C	E	E	E	D	A	A
Approach Vol, veh/h		642			652			2727			3095	
Approach Delay, s/veh		59.7			54.7			60.9			4.6	
Approach LOS		E			D			E			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.3	69.0	15.7	28.0	17.2	79.1	15.6	28.1
Change Period (Y+Rc), s	6.3	* 6.3	4.9	6.0	* 4.3	6.3	* 4.3	6.0
Max Green Setting (Gmax), s	15.1	* 63	13.4	27.0	* 13	65.1	* 12	29.0
Max Q Clear Time (g_c+I1), s	12.6	56.2	10.1	17.9	11.1	2.0	7.6	17.0
Green Ext Time (p_c), s	0.7	6.0	0.1	4.1	0.0	49.6	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	35.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

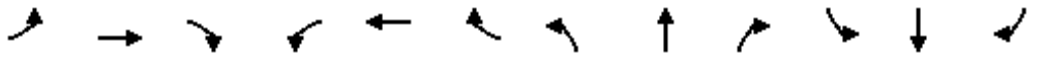
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	410	310	70	200	140	120	1680	60	110	2350	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	232	432	326	74	211	147	126	1768	63	116	2474	168
Adj No. of Lanes	1	2	0	1	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	387	290	132	249	211	168	3242	116	138	2996	203
Arrive On Green	0.14	0.20	0.20	0.07	0.13	0.13	0.09	0.51	0.51	0.08	0.49	0.49
Sat Flow, veh/h	1774	1930	1447	1774	1863	1583	1774	6400	228	1774	6177	418
Grp Volume(v), veh/h	232	396	362	74	211	147	126	1328	503	116	1923	719
Grp Sat Flow(s),veh/h/ln	1774	1770	1607	1774	1863	1583	1774	1602	1823	1774	1602	1789
Q Serve(g_s), s	18.0	28.1	28.1	5.6	15.5	10.4	9.7	26.4	26.4	9.0	48.1	48.5
Cycle Q Clear(g_c), s	18.0	28.1	28.1	5.6	15.5	10.4	9.7	26.4	26.4	9.0	48.1	48.5
Prop In Lane	1.00		0.90	1.00		1.00	1.00		0.13	1.00		0.23
Lane Grp Cap(c), veh/h	254	355	323	132	249	211	168	2434	923	138	2331	868
V/C Ratio(X)	0.91	1.11	1.12	0.56	0.85	0.70	0.75	0.55	0.55	0.84	0.82	0.83
Avail Cap(c_a), veh/h	254	355	323	139	386	328	168	2434	923	139	2331	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	0.70	0.70	0.70
Uniform Delay (d), s/veh	59.1	56.0	56.0	62.6	59.3	40.3	61.8	23.6	23.6	63.7	30.9	31.1
Incr Delay (d2), s/veh	33.9	82.5	87.3	3.9	8.8	3.5	17.3	0.9	2.3	25.8	2.5	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.2	21.9	20.3	2.9	8.6	4.7	5.6	11.9	13.9	5.4	21.7	25.3
LnGrp Delay(d),s/veh	93.0	138.4	143.2	66.5	68.1	43.8	79.1	24.4	25.9	89.5	33.4	37.6
LnGrp LOS	F	F	F	E	E	D	E	C	C	F	C	D
Approach Vol, veh/h		990			432			1957			2758	
Approach Delay, s/veh		129.5			59.6			28.3			36.9	
Approach LOS		F			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	76.2	15.3	33.0	18.5	73.2	25.0	23.3
Change Period (Y+Rc), s	* 4.6	5.3	4.9	* 4.9	5.3	* 5.3	4.9	* 4.6
Max Green Setting (Gmax), s	* 11	70.2	11.0	* 28	13.0	* 68	11.0	* 29
Max Q Clear Time (g_c+I1), s	11.0	28.4	7.6	30.1	11.7	50.5	20.0	17.5
Green Ext Time (p_c), s	0.0	18.1	0.0	0.0	0.9	14.7	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	50.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	10	50	80	0	40	40	1880	50	160	2510	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	11	53	97	0	28	42	1979	53	168	2642	11
Adj No. of Lanes	1	1	0	2	0	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	24	117	222	0	138	103	3269	88	1075	5072	21
Arrive On Green	0.09	0.09	0.09	0.09	0.00	0.09	0.06	0.51	0.51	0.31	0.76	0.76
Sat Flow, veh/h	1377	279	1346	2665	0	1583	1774	6465	173	3442	6636	28
Grp Volume(v), veh/h	32	0	64	97	0	28	42	1471	561	168	1913	740
Grp Sat Flow(s),veh/h/ln	1377	0	1625	1332	0	1583	1774	1602	1832	1721	1602	1858
Q Serve(g_s), s	3.5	0.0	6.0	5.7	0.0	2.6	3.7	34.9	34.9	5.6	24.9	25.0
Cycle Q Clear(g_c), s	3.5	0.0	6.0	11.7	0.0	2.6	3.7	34.9	34.9	5.6	24.9	25.0
Prop In Lane	1.00		0.83	1.00		1.00	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	165	0	141	222	0	138	103	2430	926	1075	3673	1420
V/C Ratio(X)	0.19	0.00	0.45	0.44	0.00	0.20	0.41	0.61	0.61	0.16	0.52	0.52
Avail Cap(c_a), veh/h	303	0	305	257	0	158	122	2430	926	1075	3673	1420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.76	0.76	0.76	0.70	0.70	0.70
Uniform Delay (d), s/veh	68.3	0.0	69.4	75.0	0.0	67.9	72.7	28.2	28.2	39.8	7.4	7.4
Incr Delay (d2), s/veh	0.6	0.0	2.3	1.4	0.0	0.7	2.0	0.9	2.3	0.0	0.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.0	2.8	2.2	0.0	1.2	1.9	15.6	18.2	2.7	11.1	13.1
LnGrp Delay(d),s/veh	68.8	0.0	71.7	76.3	0.0	68.6	74.7	29.0	30.4	39.8	7.8	8.4
LnGrp LOS	E		E	E		E	E	C	C	D	A	A
Approach Vol, veh/h		96			125			2074			2821	
Approach Delay, s/veh		70.7			74.6			30.3			9.8	
Approach LOS		E			E			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	55.3	86.2		18.5	13.9	127.6		18.5
Change Period (Y+Rc), s	5.3	* 5.3		* 4.6	* 4.6	5.3		* 4.6
Max Green Setting (Gmax), s	15.0	* 81		* 30	* 11	84.9		* 16
Max Q Clear Time (g_c+I1), s	7.6	36.9		8.0	5.7	27.0		13.7
Green Ext Time (p_c), s	5.1	20.7		0.8	0.0	37.8		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

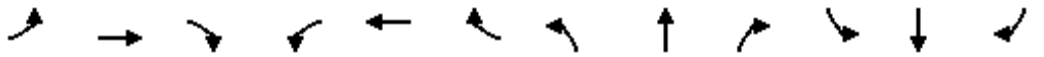
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	250	430	160	420	430	150	210	1990	150	210	2480	430
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	263	453	168	442	453	158	221	2095	158	221	2611	453
Adj No. of Lanes	2	2	0	2	2	0	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	401	509	187	369	502	174	270	2822	213	300	2638	446
Arrive On Green	0.12	0.20	0.20	0.11	0.19	0.19	0.03	0.15	0.15	0.12	0.63	0.63
Sat Flow, veh/h	3442	2535	933	3442	2582	893	3442	6126	462	3442	5562	940
Grp Volume(v), veh/h	263	315	306	442	309	302	221	1643	610	221	2247	817
Grp Sat Flow(s),veh/h/ln	1721	1770	1698	1721	1770	1705	1721	1602	1781	1721	1602	1697
Q Serve(g_s), s	10.2	24.2	24.6	15.0	23.9	24.2	8.9	45.8	45.8	8.7	63.9	66.4
Cycle Q Clear(g_c), s	10.2	24.2	24.6	15.0	23.9	24.2	8.9	45.8	45.8	8.7	63.9	66.4
Prop In Lane	1.00		0.55	1.00		0.52	1.00		0.26	1.00		0.55
Lane Grp Cap(c), veh/h	401	355	341	369	344	331	270	2214	821	300	2279	805
V/C Ratio(X)	0.66	0.89	0.90	1.20	0.90	0.91	0.82	0.74	0.74	0.74	0.99	1.02
Avail Cap(c_a), veh/h	411	379	364	369	367	353	270	2214	821	300	2279	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.40	0.40	0.40	0.73	0.73	0.73	0.90	0.90	0.90	0.09	0.09	0.09
Uniform Delay (d), s/veh	59.2	54.4	54.5	62.5	55.1	55.2	67.2	51.4	51.4	60.3	25.4	25.8
Incr Delay (d2), s/veh	1.5	9.7	11.1	107.3	18.4	20.6	16.0	2.1	5.5	0.9	3.3	13.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.9	12.8	12.6	12.6	13.4	13.3	4.9	20.8	23.9	4.2	28.7	33.8
LnGrp Delay(d),s/veh	60.6	64.1	65.6	169.8	73.5	75.8	83.2	53.5	56.9	61.2	28.7	39.6
LnGrp LOS	E	E	E	F	E	E	F	D	E	E	C	F
Approach Vol, veh/h		884			1053			2474			3285	
Approach Delay, s/veh		63.6			114.6			57.0			33.6	
Approach LOS		E			F			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	69.8	20.0	32.7	15.6	71.7	20.9	31.8
Change Period (Y+Rc), s	5.3	* 5.3	5.0	4.6	* 4.6	5.3	4.6	* 4.6
Max Green Setting (Gmax), s	11.0	* 65	15.0	30.0	* 11	64.5	16.7	* 29
Max Q Clear Time (g_c+I1), s	10.7	47.8	17.0	26.6	10.9	68.4	12.2	26.2
Green Ext Time (p_c), s	0.0	12.7	0.0	1.5	0.0	0.0	1.9	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.6
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.



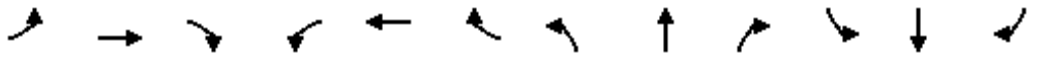
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	30	30	60	20	110	60	1920	70	170	2440	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	32	32	63	21	116	63	2021	74	179	2568	21
Adj No. of Lanes	1	1	0	1	1	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	67	67	139	169	144	116	3019	111	780	4204	34
Arrive On Green	0.07	0.08	0.08	0.08	0.09	0.09	0.07	0.47	0.47	0.45	1.00	1.00
Sat Flow, veh/h	1774	856	856	1774	1863	1583	1774	6393	234	3442	6605	54
Grp Volume(v), veh/h	32	0	64	63	21	116	63	1519	576	179	1868	721
Grp Sat Flow(s),veh/h/ln	1774	0	1712	1774	1863	1583	1774	1602	1821	1721	1602	1853
Q Serve(g_s), s	2.4	0.0	5.0	4.8	1.5	6.7	4.8	34.2	34.2	4.4	0.0	0.0
Cycle Q Clear(g_c), s	2.4	0.0	5.0	4.8	1.5	6.7	4.8	34.2	34.2	4.4	0.0	0.0
Prop In Lane	1.00		0.50	1.00		1.00	1.00		0.13	1.00		0.03
Lane Grp Cap(c), veh/h	117	0	134	139	169	144	116	2269	860	780	3059	1179
V/C Ratio(X)	0.27	0.00	0.48	0.45	0.12	0.81	0.54	0.67	0.67	0.23	0.61	0.61
Avail Cap(c_a), veh/h	165	0	384	152	399	339	128	2269	860	780	3059	1179
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	0.30	0.30	0.30
Uniform Delay (d), s/veh	62.2	0.0	61.7	61.7	58.5	27.8	63.4	28.5	28.5	30.8	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	2.6	2.3	0.3	10.1	3.2	1.3	3.4	0.0	0.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	0.0	2.5	2.4	0.8	3.3	2.5	15.3	17.9	2.1	0.1	0.2
LnGrp Delay(d),s/veh	63.4	0.0	64.3	64.0	58.9	38.0	66.7	29.8	31.9	30.8	0.3	0.7
LnGrp LOS	E		E	E	E	D	E	C	C	C	A	A
Approach Vol, veh/h		96			200			2158			2768	
Approach Delay, s/veh		64.0			48.3			31.5			2.4	
Approach LOS		E			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.0	71.4	15.3	16.3	14.0	94.4	13.6	18.0
Change Period (Y+Rc), s	5.3	* 5.3	* 4.3	* 5.3	4.9	5.3	* 4.3	* 5.3
Max Green Setting (Gmax), s	11.4	* 66	* 12	* 31	10.1	67.1	* 13	* 30
Max Q Clear Time (g_c+I1), s	6.4	36.2	6.8	7.0	6.8	2.0	4.4	8.7
Green Ext Time (p_c), s	3.4	17.7	0.0	0.8	0.0	39.2	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



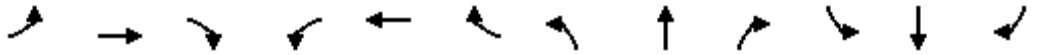
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	270	240	120	140	270	130	100	2060	110	110	2980	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	284	253	126	147	284	137	105	2168	116	116	3137	116
Adj No. of Lanes	2	2	0	1	2	0	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	319	154	171	350	165	149	3281	175	138	3329	122
Arrive On Green	0.08	0.14	0.14	0.10	0.15	0.15	0.08	0.52	0.52	0.16	1.00	1.00
Sat Flow, veh/h	3442	2316	1119	1774	2339	1100	1774	6274	335	1774	6393	235
Grp Volume(v), veh/h	284	191	188	147	213	208	105	1660	624	116	2352	901
Grp Sat Flow(s),veh/h/ln	1721	1770	1665	1774	1770	1669	1774	1602	1804	1774	1602	1821
Q Serve(g_s), s	11.5	14.6	15.3	11.4	16.3	16.9	8.1	35.2	35.3	8.9	0.0	0.0
Cycle Q Clear(g_c), s	11.5	14.6	15.3	11.4	16.3	16.9	8.1	35.2	35.3	8.9	0.0	0.0
Prop In Lane	1.00		0.67	1.00		0.66	1.00		0.19	1.00		0.13
Lane Grp Cap(c), veh/h	291	244	229	171	265	250	149	2514	943	138	2503	948
V/C Ratio(X)	0.98	0.79	0.82	0.86	0.80	0.83	0.70	0.66	0.66	0.84	0.94	0.95
Avail Cap(c_a), veh/h	291	341	321	233	430	405	152	2514	943	144	2503	948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.95	0.95	0.95	0.94	0.94	0.94	0.44	0.44	0.44	0.66	0.66	0.66
Uniform Delay (d), s/veh	64.0	58.4	58.7	62.3	57.5	57.8	62.4	24.3	24.3	58.3	0.0	0.0
Incr Delay (d2), s/veh	45.0	7.4	10.3	19.3	5.4	7.3	6.2	0.6	1.6	23.6	6.0	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.3	7.7	7.7	6.5	8.4	8.3	4.2	15.7	17.9	5.2	1.4	3.8
LnGrp Delay(d),s/veh	109.0	65.8	69.0	81.6	62.9	65.0	68.6	24.9	26.0	81.9	6.0	14.4
LnGrp LOS	F	E	E	F	E	E	E	C	C	F	A	B
Approach Vol, veh/h		663			568			2389			3369	
Approach Delay, s/veh		85.2			68.5			27.1			10.9	
Approach LOS		F			E			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	79.5	19.1	24.9	16.8	79.2	17.4	26.6
Change Period (Y+Rc), s	* 5.6	6.3	* 5.6	* 5.6	5.0	6.3	5.6	* 5.6
Max Green Setting (Gmax), s	* 11	60.1	* 18	* 27	12.0	60.1	11.4	* 34
Max Q Clear Time (g_c+I1), s	10.9	37.3	13.4	17.3	10.1	2.0	13.5	18.9
Green Ext Time (p_c), s	0.0	22.7	0.1	1.9	0.0	57.3	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.2
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



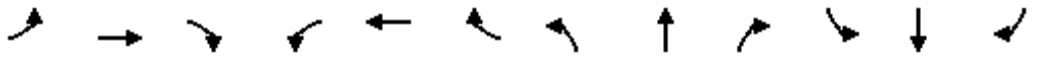
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	630	150	230	530	140	210	2170	90	220	2410	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	232	663	158	242	558	147	221	2284	95	232	2537	126
Adj No. of Lanes	2	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	736	329	190	822	368	287	2793	116	295	2728	135
Arrive On Green	0.09	0.21	0.21	0.11	0.23	0.23	0.08	0.44	0.44	0.03	0.14	0.14
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	6358	264	3442	6302	312
Grp Volume(v), veh/h	232	663	158	242	558	147	221	1726	653	232	1933	730
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1602	1816	1721	1602	1808
Q Serve(g_s), s	9.2	25.6	12.3	15.0	20.1	11.0	8.8	44.0	44.1	9.4	55.7	55.9
Cycle Q Clear(g_c), s	9.2	25.6	12.3	15.0	20.1	11.0	8.8	44.0	44.1	9.4	55.7	55.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.17
Lane Grp Cap(c), veh/h	320	736	329	190	822	368	287	2111	798	295	2080	782
V/C Ratio(X)	0.73	0.90	0.48	1.27	0.68	0.40	0.77	0.82	0.82	0.79	0.93	0.93
Avail Cap(c_a), veh/h	320	784	351	190	834	373	295	2111	798	344	2080	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.68	0.68	0.68	0.94	0.94	0.94	0.76	0.76	0.76	0.09	0.09	0.09
Uniform Delay (d), s/veh	61.8	54.0	48.8	62.5	49.0	45.5	62.8	34.3	34.4	66.7	57.9	58.0
Incr Delay (d2), s/veh	5.6	9.5	0.7	155.8	2.1	0.7	8.9	2.8	7.1	1.0	1.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	13.5	5.5	15.6	10.1	4.9	4.6	20.0	23.7	4.5	24.9	28.6
LnGrp Delay(d),s/veh	67.3	63.6	49.5	218.3	51.1	46.1	71.7	37.2	41.5	67.7	58.9	60.6
LnGrp LOS	E	E	D	F	D	D	E	D	D	E	E	E
Approach Vol, veh/h		1053			947			2600			2895	
Approach Delay, s/veh		62.3			93.0			41.2			60.0	
Approach LOS		E			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	67.3	21.0	35.1	17.5	66.4	17.6	38.5
Change Period (Y+Rc), s	* 4.6	5.8	6.0	* 6	5.8	* 5.8	* 4.6	6.0
Max Green Setting (Gmax), s	* 14	59.0	15.0	* 31	12.0	* 61	* 13	33.0
Max Q Clear Time (g_c+I1), s	11.4	46.1	17.0	27.6	10.8	57.9	11.2	22.1
Green Ext Time (p_c), s	0.2	10.9	0.0	1.5	0.1	2.5	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	58.0
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	40	40	70	20	40	10	2170	240	110	2760	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	42	42	74	21	42	11	2284	253	116	2905	11
Adj No. of Lanes	1	1	0	0	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	145	146	146	185	47	270	44	3774	416	140	4620	17
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	1.00	1.00	0.11	0.93	0.93
Sat Flow, veh/h	1334	856	856	817	276	1583	1774	5903	651	1774	6639	25
Grp Volume(v), veh/h	84	0	84	95	0	42	11	1858	679	116	2103	813
Grp Sat Flow(s),veh/h/ln	1334	0	1712	1094	0	1583	1774	1602	1748	1774	1602	1858
Q Serve(g_s), s	8.7	0.0	6.0	8.1	0.0	3.2	0.8	0.0	0.0	9.0	10.9	10.9
Cycle Q Clear(g_c), s	22.8	0.0	6.0	14.1	0.0	3.2	0.8	0.0	0.0	9.0	10.9	10.9
Prop In Lane	1.00		0.50	0.78		1.00	1.00		0.37	1.00		0.01
Lane Grp Cap(c), veh/h	145	0	292	232	0	270	44	3073	1118	140	3344	1293
V/C Ratio(X)	0.58	0.00	0.29	0.41	0.00	0.16	0.25	0.60	0.61	0.83	0.63	0.63
Avail Cap(c_a), veh/h	145	0	292	232	0	270	128	3073	1118	374	3344	1293
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.49	0.49	0.49	0.20	0.20	0.20
Uniform Delay (d), s/veh	64.6	0.0	50.6	56.0	0.0	49.5	65.3	0.0	0.0	61.7	2.0	2.0
Incr Delay (d2), s/veh	5.6	0.0	0.5	1.2	0.0	0.3	1.4	0.4	1.2	2.6	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.4	0.0	2.9	3.5	0.0	1.4	0.4	0.1	0.4	4.5	4.5	5.4
LnGrp Delay(d),s/veh	70.2	0.0	51.2	57.1	0.0	49.7	66.7	0.4	1.2	64.3	2.2	2.5
LnGrp LOS	E		D	E		D	E	A	A	E	A	A
Approach Vol, veh/h		168			137			2548			3032	
Approach Delay, s/veh		60.7			54.9			0.9			4.6	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.0	94.8		29.2	8.1	102.7		29.2
Change Period (Y+Rc), s	4.9	5.3		* 5.3	* 4.6	5.3		* 5.3
Max Green Setting (Gmax), s	29.5	71.1		* 24	* 10	90.8		* 24
Max Q Clear Time (g_c+I1), s	11.0	2.0		24.8	2.8	12.9		16.1
Green Ext Time (p_c), s	0.2	67.8		0.0	0.0	76.2		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	920	670	1530	0	0	2850
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863
Adj Flow Rate, veh/h	968	705	1611	0	0	3000
Adj No. of Lanes	2	2	4	0	0	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	0	2
Cap, veh/h	971	786	4060	0	0	4060
Arrive On Green	0.28	0.28	0.21	0.00	0.00	1.00
Sat Flow, veh/h	3442	2787	6929	0	0	6929
Grp Volume(v), veh/h	968	705	1611	0	0	3000
Grp Sat Flow(s),veh/h/ln	1721	1393	1602	0	0	1602
Q Serve(g_s), s	39.3	34.0	30.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	39.3	34.0	30.4	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	0.00	
Lane Grp Cap(c), veh/h	971	786	4060	0	0	4060
V/C Ratio(X)	1.00	0.90	0.40	0.00	0.00	0.74
Avail Cap(c_a), veh/h	971	786	4060	0	0	4060
HCM Platoon Ratio	1.00	1.00	0.33	1.00	1.00	2.00
Upstream Filter(I)	1.00	1.00	0.93	0.00	0.00	0.24
Uniform Delay (d), s/veh	50.2	48.3	32.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	28.1	13.0	0.3	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	22.5	14.5	13.6	0.0	0.0	0.1
LnGrp Delay(d),s/veh	78.3	61.3	32.6	0.0	0.0	0.3
LnGrp LOS	E	E	C			A
Approach Vol, veh/h	1673		1611			3000
Approach Delay, s/veh	71.1		32.6			0.3
Approach LOS	E		C			A

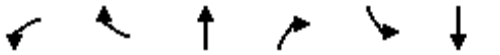
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		95.0				95.0		45.0
Change Period (Y+Rc), s		6.3				6.3		5.5
Max Green Setting (Gmax), s		88.7				88.7		39.5
Max Q Clear Time (g_c+I1), s		32.4				2.0		41.3
Green Ext Time (p_c), s		56.0				86.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.4
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	220	370	0	1680	3080	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0
Adj Flow Rate, veh/h	232	389	0	1768	3242	0
Adj No. of Lanes	2	2	0	4	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	560	453	0	4826	4826	0
Arrive On Green	0.16	0.16	0.00	1.00	0.75	0.00
Sat Flow, veh/h	3442	2787	0	6929	6929	0
Grp Volume(v), veh/h	232	389	0	1768	3242	0
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1602	1602	0
Q Serve(g_s), s	8.5	19.0	0.0	0.0	35.4	0.0
Cycle Q Clear(g_c), s	8.5	19.0	0.0	0.0	35.4	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	560	453	0	4826	4826	0
V/C Ratio(X)	0.41	0.86	0.00	0.37	0.67	0.00
Avail Cap(c_a), veh/h	750	607	0	4826	4826	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.56	0.49	0.00
Uniform Delay (d), s/veh	52.6	57.1	0.0	0.0	8.6	0.0
Incr Delay (d2), s/veh	0.5	9.2	0.0	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.1	7.9	0.0	0.0	15.7	0.0
LnGrp Delay(d),s/veh	53.1	66.3	0.0	0.1	9.0	0.0
LnGrp LOS	D	E		A	A	
Approach Vol, veh/h	621			1768	3242	
Approach Delay, s/veh	61.4			0.1	9.0	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		111.7		28.3		111.7		
Change Period (Y+Rc), s		6.3		5.5		6.3		
Max Green Setting (Gmax), s		97.7		30.5		97.7		
Max Q Clear Time (g_c+I1), s		2.0		21.0		37.4		
Green Ext Time (p_c), s		93.7		1.7		59.5		

Intersection Summary	
HCM 2010 Ctrl Delay	12.0
HCM 2010 LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	150	1120	1180	540	600	1960
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	158	1179	1242	246	632	2063
Adj No. of Lanes	2	2	3	1	2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	737	1190	2192	683	733	2431
Arrive On Green	0.21	0.21	0.43	0.43	0.21	0.69
Sat Flow, veh/h	3442	2787	5253	1583	3442	3632
Grp Volume(v), veh/h	158	1179	1242	246	632	2063
Grp Sat Flow(s),veh/h/ln	1721	1393	1695	1583	1721	1770
Q Serve(g_s), s	3.8	21.4	18.4	10.5	17.7	43.7
Cycle Q Clear(g_c), s	3.8	21.4	18.4	10.5	17.7	43.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	737	1190	2192	683	733	2431
V/C Ratio(X)	0.21	0.99	0.57	0.36	0.86	0.85
Avail Cap(c_a), veh/h	737	1190	2192	683	1263	2431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.81	0.81	1.00	1.00
Uniform Delay (d), s/veh	32.4	28.5	21.4	19.2	37.9	11.7
Incr Delay (d2), s/veh	0.0	18.3	0.9	1.2	2.4	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	19.1	8.7	4.8	8.7	22.2
LnGrp Delay(d),s/veh	32.4	46.8	22.3	20.4	40.3	15.7
LnGrp LOS	C	D	C	C	D	B
Approach Vol, veh/h	1337		1488			2695
Approach Delay, s/veh	45.1		22.0			21.4
Approach LOS	D		C			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	25.6	48.4				74.0		26.0
Change Period (Y+Rc), s	* 4.3	5.3				5.3		4.6
Max Green Setting (Gmax), s	* 37	27.7				68.7		21.4
Max Q Clear Time (g_c+I1), s	19.7	20.4				45.7		23.4
Green Ext Time (p_c), s	1.6	7.3				22.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	340	670	180	480	540	670	60	550	610	410	790	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	354	710	72	358	774	665	63	579	589	432	832	114
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	357	750	316	357	750	673	80	684	623	397	1163	159
Arrive On Green	0.42	0.42	0.42	0.07	0.07	0.07	0.02	0.07	0.07	0.23	0.38	0.38
Sat Flow, veh/h	1714	3600	1517	1714	3600	1528	1714	3420	1523	1714	3022	414
Grp Volume(v), veh/h	354	710	72	358	774	665	63	579	589	432	471	475
Grp Sat Flow(s),veh/h/ln	1714	1800	1517	1714	1800	1528	1714	1710	1523	1714	1710	1726
Q Serve(g_s), s	24.6	22.8	3.7	25.0	25.0	25.0	4.4	20.1	24.0	27.8	28.0	28.0
Cycle Q Clear(g_c), s	24.6	22.8	3.7	25.0	25.0	25.0	4.4	20.1	24.0	27.8	28.0	28.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	357	750	316	357	750	673	80	684	623	397	658	664
V/C Ratio(X)	0.99	0.95	0.23	1.00	1.03	0.99	0.78	0.85	0.94	1.09	0.72	0.72
Avail Cap(c_a), veh/h	357	750	316	357	750	673	111	684	623	397	658	664
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.33	0.33	0.33	0.86	0.86	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	34.4	28.8	55.9	55.9	36.8	58.5	54.2	32.8	46.1	31.3	31.3
Incr Delay (d2), s/veh	42.2	19.1	0.3	28.1	27.8	17.3	18.8	10.8	22.4	70.8	6.5	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	15.6	13.2	1.5	14.7	15.4	24.8	2.5	10.6	23.5	20.9	14.4	14.5
LnGrp Delay(d),s/veh	77.1	53.4	29.1	83.9	83.6	54.1	77.2	65.0	55.2	116.9	37.9	37.8
LnGrp LOS	E	D	C	F	F	D	E	E	E	F	D	D
Approach Vol, veh/h		1136			1797			1231			1378	
Approach Delay, s/veh		59.3			72.8			61.0			62.6	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	32.0	29.0		29.0	9.8	51.2		30.0
Change Period (Y+Rc), s	* 4.2	5.0		4.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s	* 28	24.0		25.0	* 7.8	44.0		25.0
Max Q Clear Time (g_c+I1), s	29.8	26.0		26.6	6.4	30.0		27.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	9.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	64.9
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	940	220	0	0	250	100	790	100	40	250	0	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	989	232	0	0	263	0	832	105	40	263	0	35
Adj No. of Lanes	2	1	0	0	2	1	2	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	1123	1000	0	0	445	199	1012	378	144	0	0	0
Arrive On Green	0.33	0.54	0.00	0.00	0.13	0.00	0.29	0.29	0.29	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	3632	1583	3442	1286	490		0	
Grp Volume(v), veh/h	989	232	0	0	263	0	832	0	145		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1583	1721	0	1776			
Q Serve(g_s), s	15.1	3.7	0.0	0.0	3.9	0.0	12.5	0.0	3.5			
Cycle Q Clear(g_c), s	15.1	3.7	0.0	0.0	3.9	0.0	12.5	0.0	3.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.28			
Lane Grp Cap(c), veh/h	1123	1000	0	0	445	199	1012	0	523			
V/C Ratio(X)	0.88	0.23	0.00	0.00	0.59	0.00	0.82	0.00	0.28			
Avail Cap(c_a), veh/h	1566	1518	0	0	974	436	3114	0	1607			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	17.7	6.8	0.0	0.0	22.9	0.0	18.3	0.0	15.1			
Incr Delay (d2), s/veh	3.6	0.0	0.0	0.0	0.5	0.0	0.7	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(0%),veh/ln	7.7	1.9	0.0	0.0	1.9	0.0	6.0	0.0	1.7			
LnGrp Delay(d),s/veh	21.3	6.9	0.0	0.0	23.4	0.0	18.9	0.0	15.2			
LnGrp LOS	C	A			C		B		B			
Approach Vol, veh/h		1221			263			977				
Approach Delay, s/veh		18.5			23.4			18.4				
Approach LOS		B			C			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		21.1		34.5			22.8	11.7
Change Period (Y+Rc), s		* 4.7		* 4.7			* 4.7	* 4.7
Max Green Setting (Gmax), s		* 50		* 45			* 25	* 15
Max Q Clear Time (g_c+I1), s		14.5		5.7			17.1	5.9
Green Ext Time (p_c), s		1.8		1.5			1.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

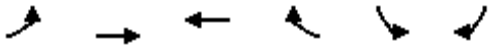
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	570	0	0	550	20	1040	50	210	10	0	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	0	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	32	600	0	0	579	16	1095	53	50	11	0	0
Adj No. of Lanes	1	3	0	0	3	0	2	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	2339	0	0	1827	50	887	480	408	24	0	21
Arrive On Green	0.01	0.16	0.00	0.00	0.37	0.37	0.27	0.27	0.27	0.01	0.00	0.00
Sat Flow, veh/h	1714	5076	0	0	5079	135	3326	1800	1530	1714	0	1530
Grp Volume(v), veh/h	32	600	0	0	385	210	1095	53	50	11	0	0
Grp Sat Flow(s),veh/h/ln	1714	1638	0	0	1638	1776	1663	1800	1530	1714	0	1530
Q Serve(g_s), s	1.1	6.4	0.0	0.0	5.0	5.1	16.0	1.3	1.5	0.4	0.0	0.0
Cycle Q Clear(g_c), s	1.1	6.4	0.0	0.0	5.0	5.1	16.0	1.3	1.5	0.4	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	2339	0	0	1217	660	887	480	408	24	0	21
V/C Ratio(X)	0.54	0.26	0.00	0.00	0.32	0.32	1.23	0.11	0.12	0.46	0.00	0.00
Avail Cap(c_a), veh/h	223	2339	0	0	1217	660	887	480	408	211	0	189
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.95	0.95	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.2	16.0	0.0	0.0	13.4	13.4	22.0	16.6	16.7	29.4	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.0	0.6	1.2	115.4	0.1	0.1	13.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.5	2.9	0.0	0.0	2.4	2.7	21.5	0.7	0.6	0.3	0.0	0.0
LnGrp Delay(d),s/veh	29.9	16.0	0.0	0.0	14.1	14.6	137.4	16.7	16.8	42.5	0.0	0.0
LnGrp LOS	C	B			B	B	F	B	B	D		
Approach Vol, veh/h		632			595			1198			11	
Approach Delay, s/veh		16.7			14.3			127.0			42.5	
Approach LOS		B			B			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		33.6		5.4	6.3	27.3		21.0
Change Period (Y+Rc), s		5.0		4.6	* 4.2	5.0		5.0
Max Green Setting (Gmax), s		22.0		7.4	* 7.8	10.0		16.0
Max Q Clear Time (g_c+I1), s		8.4		2.4	3.1	7.1		18.0
Green Ext Time (p_c), s		6.0		0.0	0.0	1.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	70.5
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	720	710	0	440	30
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1800	1800
Adj Flow Rate, veh/h	0	758	747	0	493	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2199	2199	0	658	294
Arrive On Green	0.00	1.00	0.64	0.00	0.19	0.00
Sat Flow, veh/h	0	3600	3600	0	3429	1530
Grp Volume(v), veh/h	0	758	747	0	493	0
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1714	1530
Q Serve(g_s), s	0.0	0.0	6.0	0.0	8.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	6.0	0.0	8.1	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2199	2199	0	658	294
V/C Ratio(X)	0.00	0.34	0.34	0.00	0.75	0.00
Avail Cap(c_a), veh/h	0	2199	2199	0	1166	520
HCM Platoon Ratio	1.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.93	0.09	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	4.9	0.0	22.9	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.1	2.8	0.0	4.0	0.0
LnGrp Delay(d),s/veh	0.0	0.4	4.9	0.0	24.6	0.0
LnGrp LOS		A	A		C	
Approach Vol, veh/h		758	747		493	
Approach Delay, s/veh		0.4	4.9		24.6	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.9		16.1		43.9		
Change Period (Y+Rc), s		5.3		4.6		5.3		
Max Green Setting (Gmax), s		29.7		20.4		29.7		
Max Q Clear Time (g_c+I1), s		2.0		10.1		8.0		
Green Ext Time (p_c), s		11.3		1.4		10.1		

Intersection Summary	
HCM 2010 Ctrl Delay	8.1
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	140	480	0	1500	1260	360
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	147	457	0	1579	1326	0
Adj No. of Lanes	1	2	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	347	619	0	3927	3927	970
Arrive On Green	0.20	0.20	0.00	1.00	0.63	0.00
Sat Flow, veh/h	1714	3060	0	6696	6444	1530
Grp Volume(v), veh/h	147	457	0	1579	1326	0
Grp Sat Flow(s),veh/h/ln	1714	1530	0	1548	1548	1530
Q Serve(g_s), s	4.5	8.4	0.0	0.0	6.0	0.0
Cycle Q Clear(g_c), s	4.5	8.4	0.0	0.0	6.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	347	619	0	3927	3927	970
V/C Ratio(X)	0.42	0.74	0.00	0.40	0.34	0.00
Avail Cap(c_a), veh/h	577	1030	0	3927	3927	970
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.00	0.77	0.72	0.00
Uniform Delay (d), s/veh	20.9	22.4	0.0	0.0	5.1	0.0
Incr Delay (d2), s/veh	0.8	1.7	0.0	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	3.7	0.0	0.1	2.5	0.0
LnGrp Delay(d),s/veh	21.7	24.1	0.0	0.2	5.3	0.0
LnGrp LOS	C	C		A	A	
Approach Vol, veh/h	604			1579	1326	
Approach Delay, s/veh	23.5			0.2	5.3	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.1		16.9		43.1		
Change Period (Y+Rc), s		5.0		* 4.8		5.0		
Max Green Setting (Gmax), s		30.0		* 20		30.0		
Max Q Clear Time (g_c+I1), s		2.0		10.4		8.0		
Green Ext Time (p_c), s		23.2		1.7		18.9		

Intersection Summary	
HCM 2010 Ctrl Delay	6.1
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

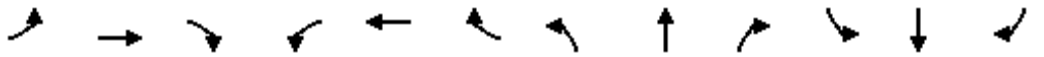
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	170	10	20	190	220	0	0	0	450	30	30
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800				1800	1800	1800
Adj Flow Rate, veh/h	63	179	4	21	200	81				497	0	10
Adj No. of Lanes	1	2	0	0	2	1				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	618	1073	24	240	986	480				976	0	435
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31				0.28	0.00	0.28
Sat Flow, veh/h	1057	3420	76	137	3143	1530				3429	0	1530
Grp Volume(v), veh/h	63	89	94	121	100	81				497	0	10
Grp Sat Flow(s),veh/h/ln	1057	1710	1787	1724	1556	1530				1714	0	1530
Q Serve(g_s), s	1.0	0.8	0.8	0.0	1.0	0.8				2.6	0.0	0.1
Cycle Q Clear(g_c), s	2.0	0.8	0.8	1.1	1.0	0.8				2.6	0.0	0.1
Prop In Lane	1.00		0.04	0.17		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	618	536	560	738	488	480				976	0	435
V/C Ratio(X)	0.10	0.17	0.17	0.16	0.21	0.17				0.51	0.00	0.02
Avail Cap(c_a), veh/h	1802	2452	2562	2577	2232	2194				4116	0	1837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	6.1	5.3	5.3	5.4	5.4	5.3				6.4	0.0	5.5
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.1	0.2	0.2				0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.3	0.4	0.4	0.5	0.4	0.4				1.2	0.0	0.0
LnGrp Delay(d),s/veh	6.2	5.5	5.5	5.5	5.6	5.5				6.8	0.0	5.5
LnGrp LOS	A	A	A	A	A	A				A		A
Approach Vol, veh/h		246			302						507	
Approach Delay, s/veh		5.7			5.5						6.8	
Approach LOS		A			A						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		11.0		10.4		11.0		
Change Period (Y+Rc), s		* 4.3		* 4.3		* 4.3		
Max Green Setting (Gmax), s		* 31		* 26		* 31		
Max Q Clear Time (g_c+I1), s		4.0		4.6		3.1		
Green Ext Time (p_c), s		3.0		1.8		3.0		

Intersection Summary	
HCM 2010 Ctrl Delay	6.2
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	960	290	110	970	140	200	540	160	150	1000	140
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1937	1863	1863	1937	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	158	1011	305	116	1021	147	211	568	168	158	1053	147
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	1348	603	162	1205	561	252	912	269	208	974	136
Arrive On Green	0.12	0.37	0.37	0.18	0.68	0.68	0.14	0.33	0.33	0.12	0.30	0.30
Sat Flow, veh/h	1774	3681	1647	1774	3539	1647	1774	2805	827	1774	3245	452
Grp Volume(v), veh/h	158	1011	305	116	1021	147	211	372	364	158	597	603
Grp Sat Flow(s),veh/h/ln	1774	1840	1647	1774	1770	1647	1774	1840	1791	1774	1840	1857
Q Serve(g_s), s	11.2	31.2	18.7	8.0	28.3	4.5	15.1	22.2	22.4	11.2	39.0	39.0
Cycle Q Clear(g_c), s	11.2	31.2	18.7	8.0	28.3	4.5	15.1	22.2	22.4	11.2	39.0	39.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.46	1.00		0.24
Lane Grp Cap(c), veh/h	208	1348	603	162	1205	561	252	598	582	208	552	557
V/C Ratio(X)	0.76	0.75	0.51	0.71	0.85	0.26	0.84	0.62	0.62	0.76	1.08	1.08
Avail Cap(c_a), veh/h	252	1348	603	252	1205	561	252	598	582	252	552	557
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.54	0.54	0.54	0.97	0.97	0.97	0.69	0.69	0.69	0.64	0.64	0.64
Uniform Delay (d), s/veh	55.6	36.0	32.1	51.5	18.2	14.4	54.3	37.1	37.2	55.6	45.5	45.5
Incr Delay (d2), s/veh	4.4	2.1	1.6	2.1	7.3	1.1	14.6	1.6	1.7	5.2	54.7	55.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.7	16.3	8.8	4.0	14.5	2.2	8.4	11.5	11.3	5.8	28.2	28.5
LnGrp Delay(d),s/veh	60.0	38.1	33.7	53.6	25.5	15.5	68.9	38.7	38.8	60.8	100.2	100.9
LnGrp LOS	E	D	C	D	C	B	E	D	D	E	F	F
Approach Vol, veh/h		1474			1284			947			1358	
Approach Delay, s/veh		39.6			26.9			45.5			95.9	
Approach LOS		D			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	51.6	21.0	43.0	17.7	48.3	17.7	46.3
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0
Max Green Setting (Gmax), s	16.5	39.0	16.5	37.0	16.5	39.0	16.5	37.0
Max Q Clear Time (g_c+I1), s	10.0	33.2	17.1	41.0	13.2	30.3	13.2	24.4
Green Ext Time (p_c), s	0.1	5.6	0.0	0.0	0.1	8.4	0.1	10.4

Intersection Summary	
HCM 2010 Ctrl Delay	52.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	890	240	330	760	150	70	740	220	200	1860	120
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1863	1863	1863	1863	1863	1863	1788
Adj Flow Rate, veh/h	105	937	253	347	800	158	74	779	232	211	1958	126
Adj No. of Lanes	2	2	0	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	873	235	258	1313	587	2988	6216	1935	273	2076	621
Arrive On Green	0.05	0.32	0.32	0.08	0.37	0.37	0.87	1.00	1.00	0.03	0.13	0.13
Sat Flow, veh/h	3442	2758	743	3442	3539	1583	3442	5085	1583	3442	5085	1520
Grp Volume(v), veh/h	105	600	590	347	800	158	74	779	232	211	1958	126
Grp Sat Flow(s),veh/h/ln	1721	1770	1732	1721	1770	1583	1721	1695	1583	1721	1695	1520
Q Serve(g_s), s	3.6	38.0	38.0	9.0	22.0	8.4	0.3	0.0	0.0	7.3	45.8	20.0
Cycle Q Clear(g_c), s	3.6	38.0	38.0	9.0	22.0	8.4	0.3	0.0	0.0	7.3	45.8	20.0
Prop In Lane	1.00		0.43	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	560	548	258	1313	587	2988	6216	1935	273	2076	621
V/C Ratio(X)	0.67	1.07	1.08	1.34	0.61	0.27	0.02	0.13	0.12	0.77	0.94	0.20
Avail Cap(c_a), veh/h	258	560	548	258	1313	587	2988	6216	1935	488	2076	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.39	0.39	0.39	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84
Uniform Delay (d), s/veh	56.4	41.0	41.0	55.5	30.7	26.4	1.1	0.0	0.0	57.4	50.5	177.0
Incr Delay (d2), s/veh	0.7	45.4	47.0	178.6	0.6	0.1	0.0	0.0	0.1	1.5	8.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	25.6	25.3	10.7	10.9	3.7	0.2	0.0	0.1	3.5	23.2	8.6
LnGrp Delay(d),s/veh	57.1	86.4	88.0	234.1	31.3	26.5	1.1	0.0	0.1	58.8	59.4	177.6
LnGrp LOS	E	F	F	F	C	C	A	A	A	E	E	F
Approach Vol, veh/h		1295			1305			1085			2295	
Approach Delay, s/veh		84.8			84.6			0.1			65.9	
Approach LOS		F			F			A			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	44.0	112.3	55.0	8.5	50.5	12.5	154.8
Change Period (Y+Rc), s	* 6	* 6	* 6	* 6	3.0	* 6	3.0	* 6
Max Green Setting (Gmax), s	* 9	* 38	* 6	* 49	9.0	* 38	17.0	* 38
Max Q Clear Time (g_c+I1), s	11.0	40.0	2.3	47.8	5.6	24.0	9.3	2.0
Green Ext Time (p_c), s	0.0	0.0	0.1	1.0	0.0	3.8	0.2	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	62.1
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

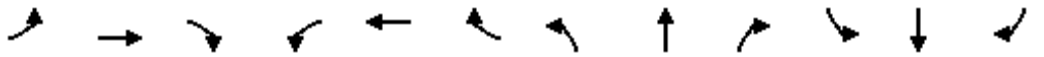
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	430	150	130	430	170	100	930	70	150	1620	130
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	211	453	158	137	453	179	105	979	74	158	1705	137
Adj No. of Lanes	1	2	0	1	2	0	1	3	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	552	191	233	541	212	307	2434	688	185	1822	567
Arrive On Green	0.03	0.07	0.07	0.09	0.22	0.22	0.06	0.14	0.14	0.10	0.36	0.36
Sat Flow, veh/h	1774	2575	890	1774	2479	971	1774	5588	1580	1774	5085	1582
Grp Volume(v), veh/h	211	310	301	137	322	310	105	979	74	158	1705	137
Grp Sat Flow(s),veh/h/ln	1774	1770	1695	1774	1770	1680	1774	1863	1580	1774	1695	1582
Q Serve(g_s), s	11.0	20.7	21.0	3.4	20.9	21.2	6.8	19.1	3.4	10.5	38.8	5.4
Cycle Q Clear(g_c), s	11.0	20.7	21.0	3.4	20.9	21.2	6.8	19.1	3.4	10.5	38.8	5.4
Prop In Lane	1.00		0.53	1.00		0.58	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	379	363	233	386	367	307	2434	688	185	1822	567
V/C Ratio(X)	0.95	0.82	0.83	0.59	0.83	0.84	0.34	0.40	0.11	0.85	0.94	0.24
Avail Cap(c_a), veh/h	223	501	480	241	501	476	307	2434	688	266	1822	567
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68	1.00	1.00	1.00	0.74	0.74	0.74	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	53.4	53.6	50.4	44.8	44.9	50.0	37.2	15.1	52.8	37.2	14.8
Incr Delay (d2), s/veh	35.7	4.1	4.8	2.3	7.3	8.5	0.2	0.4	0.2	12.0	10.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.4	10.6	10.4	4.4	11.0	10.7	3.4	10.0	1.5	5.8	19.9	2.5
LnGrp Delay(d),s/veh	84.5	57.5	58.3	52.7	52.1	53.4	50.2	37.5	15.4	64.9	47.7	15.8
LnGrp LOS	F	E	E	D	D	D	D	D	B	E	D	B
Approach Vol, veh/h		822			769			1158			2000	
Approach Delay, s/veh		64.7			52.7			37.3			46.9	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	30.7	25.8	48.0	15.0	31.2	16.5	57.3
Change Period (Y+Rc), s	5.0	* 5	5.0	* 5	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	11.0	* 34	14.0	* 43	11.0	34.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	5.4	23.0	8.8	40.8	13.0	23.2	12.5	21.1
Green Ext Time (p_c), s	1.4	1.8	0.2	1.6	0.0	2.0	0.1	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	48.6
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



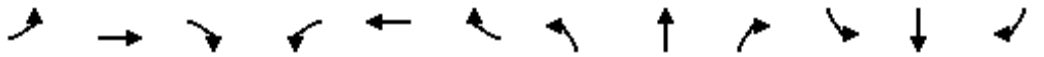
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	950	120	150	630	80	70	370	170	180	850	80
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	1000	126	158	663	84	74	389	179	189	895	84
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	446	1302	164	183	783	99	94	500	227	213	912	86
Arrive On Green	0.25	0.41	0.41	0.10	0.25	0.25	0.05	0.21	0.21	0.12	0.28	0.28
Sat Flow, veh/h	1774	3164	398	1774	3162	400	1774	2368	1075	1774	3271	307
Grp Volume(v), veh/h	95	559	567	158	371	376	74	289	279	189	484	495
Grp Sat Flow(s),veh/h/ln	1774	1770	1792	1774	1770	1792	1774	1770	1673	1774	1770	1809
Q Serve(g_s), s	5.5	35.3	35.4	11.4	25.9	26.0	5.4	20.0	20.5	13.6	35.3	35.3
Cycle Q Clear(g_c), s	5.5	35.3	35.4	11.4	25.9	26.0	5.4	20.0	20.5	13.6	35.3	35.3
Prop In Lane	1.00		0.22	1.00		0.22	1.00		0.64	1.00		0.17
Lane Grp Cap(c), veh/h	446	728	738	183	438	444	94	374	354	213	493	504
V/C Ratio(X)	0.21	0.77	0.77	0.87	0.85	0.85	0.79	0.77	0.79	0.89	0.98	0.98
Avail Cap(c_a), veh/h	446	728	738	246	667	675	177	422	399	246	493	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.38	0.38	0.38	0.76	0.76	0.76	1.00	1.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	38.5	32.9	32.9	57.4	46.6	46.6	60.9	48.3	48.5	56.3	46.5	46.5
Incr Delay (d2), s/veh	0.0	3.0	3.0	13.5	14.3	14.2	5.5	7.8	9.1	21.2	31.3	30.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.7	17.9	18.1	6.3	14.4	14.6	2.8	10.6	10.3	7.9	21.5	21.9
LnGrp Delay(d),s/veh	38.5	35.9	35.9	70.9	60.8	60.8	66.3	56.1	57.6	77.5	77.8	77.4
LnGrp LOS	D	D	D	E	E	E	E	E	E	E	E	E
Approach Vol, veh/h		1221			905			642			1168	
Approach Delay, s/veh		36.1			62.6			57.9			77.6	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	59.5	10.9	42.3	38.7	38.2	19.6	33.5
Change Period (Y+Rc), s	4.0	* 6	4.0	* 6	* 6	* 6	4.0	* 6
Max Green Setting (Gmax), s	18.0	* 43	13.0	* 36	* 12	* 49	18.0	* 31
Max Q Clear Time (g_c+I1), s	13.4	37.4	7.4	37.3	7.5	28.0	15.6	22.5
Green Ext Time (p_c), s	0.0	3.1	0.0	0.0	2.6	4.2	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	58.1
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



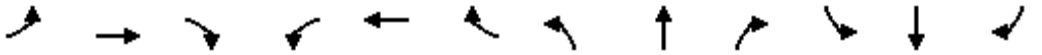
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	920	100	240	900	190	220	580	260	380	930	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	968	105	253	947	200	232	611	274	400	979	116
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1	849	92	234	1248	263	234	773	346	234	1036	123
Arrive On Green	0.00	0.26	0.26	0.13	0.43	0.43	0.13	0.32	0.32	0.13	0.32	0.32
Sat Flow, veh/h	1774	3221	349	1774	2910	614	1774	2378	1066	1774	3188	378
Grp Volume(v), veh/h	0	532	541	253	575	572	232	455	430	400	543	552
Grp Sat Flow(s),veh/h/ln	1774	1770	1801	1774	1770	1754	1774	1770	1675	1774	1770	1796
Q Serve(g_s), s	0.0	39.9	39.9	20.0	41.7	41.8	19.8	35.3	35.4	20.0	45.3	45.3
Cycle Q Clear(g_c), s	0.0	39.9	39.9	20.0	41.7	41.8	19.8	35.3	35.4	20.0	45.3	45.3
Prop In Lane	1.00		0.19	1.00		0.35	1.00		0.64	1.00		0.21
Lane Grp Cap(c), veh/h	1	466	475	234	759	752	234	575	544	234	575	583
V/C Ratio(X)	0.00	1.14	1.14	1.08	0.76	0.76	0.99	0.79	0.79	1.71	0.95	0.95
Avail Cap(c_a), veh/h	234	466	475	234	759	752	234	582	551	234	582	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	55.7	55.7	65.7	36.6	36.6	65.6	46.4	46.4	65.7	49.8	49.8
Incr Delay (d2), s/veh	0.0	85.9	85.8	81.5	4.0	4.1	55.7	6.6	7.0	335.5	24.0	23.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	30.6	31.1	15.1	21.1	21.0	13.3	18.4	17.4	31.6	26.0	26.4
LnGrp Delay(d),s/veh	0.0	141.7	141.5	147.2	40.6	40.7	121.2	53.0	53.4	401.2	73.8	73.7
LnGrp LOS		F	F	F	D	D	F	D	D	F	E	E
Approach Vol, veh/h		1073			1400			1117			1495	
Approach Delay, s/veh		141.6			59.9			67.3			161.3	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	46.0	25.0	55.4	0.0	71.0	25.0	55.4
Change Period (Y+Rc), s	5.0	* 6.1	5.0	* 6.2	5.0	* 6.1	5.0	* 6.2
Max Green Setting (Gmax), s	20.0	* 40	20.0	* 50	20.0	* 40	20.0	* 50
Max Q Clear Time (g_c+I1), s	22.0	41.9	21.8	47.3	0.0	43.8	22.0	37.4
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9	0.0	0.0	0.0	6.6

Intersection Summary	
HCM 2010 Ctrl Delay	108.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



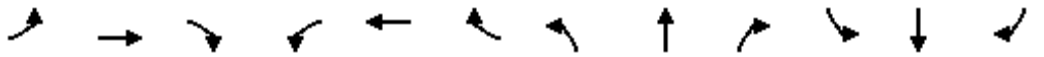
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	570	190	160	420	150	90	930	90	310	1530	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	179	600	200	168	442	158	95	979	95	326	1611	105
Adj No. of Lanes	1	3	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	262	817	266	261	539	191	118	1343	130	350	2030	132
Arrive On Green	0.10	0.22	0.22	0.09	0.22	0.22	0.07	0.30	0.30	0.27	0.57	0.57
Sat Flow, veh/h	1714	3660	1192	1714	2471	875	1714	4552	441	1714	4712	307
Grp Volume(v), veh/h	179	536	264	168	305	295	95	704	370	326	1120	596
Grp Sat Flow(s),veh/h/ln	1714	1638	1576	1714	1710	1636	1714	1638	1717	1714	1638	1743
Q Serve(g_s), s	9.6	18.2	18.8	9.0	20.3	20.7	6.6	23.2	23.2	22.2	32.1	32.2
Cycle Q Clear(g_c), s	9.6	18.2	18.8	9.0	20.3	20.7	6.6	23.2	23.2	22.2	32.1	32.2
Prop In Lane	1.00		0.76	1.00		0.53	1.00		0.26	1.00		0.18
Lane Grp Cap(c), veh/h	262	731	352	261	373	357	118	967	507	350	1411	751
V/C Ratio(X)	0.68	0.73	0.75	0.64	0.82	0.83	0.81	0.73	0.73	0.93	0.79	0.79
Avail Cap(c_a), veh/h	268	756	364	275	395	378	171	967	507	386	1411	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	0.83	0.83	0.83
Uniform Delay (d), s/veh	33.8	43.3	43.5	33.5	44.6	44.7	55.1	38.0	38.0	42.9	21.5	21.5
Incr Delay (d2), s/veh	6.8	3.6	8.3	4.5	11.4	12.9	16.2	4.8	9.0	24.3	3.9	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.0	8.6	9.0	4.5	10.8	10.6	3.6	11.1	12.3	12.9	15.1	16.7
LnGrp Delay(d),s/veh	40.6	46.9	51.8	38.0	56.0	57.6	71.2	42.8	47.0	67.2	25.4	28.6
LnGrp LOS	D	D	D	D	E	E	E	D	D	E	C	C
Approach Vol, veh/h		979			768			1169			2042	
Approach Delay, s/veh		47.0			52.7			46.4			33.0	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.5	41.4	16.0	33.1	13.2	57.7	16.6	32.5
Change Period (Y+Rc), s	5.0	* 6	5.0	* 6.3	5.0	* 6	5.0	* 6.3
Max Green Setting (Gmax), s	27.0	* 31	12.0	* 28	12.0	* 46	12.0	* 28
Max Q Clear Time (g_c+I1), s	24.2	25.2	11.0	20.8	8.6	34.2	11.6	22.7
Green Ext Time (p_c), s	0.3	5.3	0.0	4.3	0.1	10.3	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	42.0
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	490	40	60	410	140	40	410	40	200	760	200
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	137	516	42	63	432	147	42	432	42	211	800	211
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	1321	107	322	1037	349	221	877	745	363	1305	344
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	831	3316	269	848	2601	877	555	1863	1583	916	2772	731
Grp Volume(v), veh/h	137	275	283	63	293	286	42	432	42	211	511	500
Grp Sat Flow(s),veh/h/ln	831	1770	1815	848	1770	1708	555	1863	1583	916	1770	1734
Q Serve(g_s), s	13.1	10.1	10.2	5.2	10.9	11.1	5.6	14.7	1.3	18.9	19.7	19.7
Cycle Q Clear(g_c), s	24.2	10.1	10.2	15.4	10.9	11.1	25.3	14.7	1.3	33.6	19.7	19.7
Prop In Lane	1.00		0.15	1.00		0.51	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	309	705	723	322	705	681	221	877	745	363	833	816
V/C Ratio(X)	0.44	0.39	0.39	0.20	0.41	0.42	0.19	0.49	0.06	0.58	0.61	0.61
Avail Cap(c_a), veh/h	386	869	891	400	869	838	232	914	777	382	869	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	19.6	19.6	25.1	19.9	19.9	27.5	16.7	13.2	28.3	18.1	18.1
Incr Delay (d2), s/veh	1.4	0.5	0.5	0.4	0.6	0.6	0.6	0.6	0.0	2.6	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	5.1	5.2	1.3	5.4	5.4	0.9	7.6	0.6	5.0	9.8	9.6
LnGrp Delay(d),s/veh	30.1	20.1	20.1	25.6	20.4	20.5	28.1	17.3	13.2	30.9	19.5	19.6
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		695			642			516			1222	
Approach Delay, s/veh		22.1			21.0			17.9			21.5	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.1		42.5		49.1		42.5
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		35.6		17.4		27.3		26.2
Green Ext Time (p_c), s		7.6		12.8		12.7		10.4

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	130	0	30	0	830	130	40	2100	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1976	1863	1824	0	1863	1824	1863	1863	0
Adj Flow Rate, veh/h				137	0	32	0	874	137	42	2211	0
Adj No. of Lanes				0	1	0	0	3	0	1	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	2	0	0	2	2	2	2	0
Cap, veh/h				229	0	53	0	2889	451	481	3312	0
Arrive On Green				0.18	0.00	0.18	0.00	1.00	1.00	0.65	0.65	0.00
Sat Flow, veh/h				1255	0	293	0	4604	692	555	5253	0
Grp Volume(v), veh/h				169	0	0	0	667	344	42	2211	0
Grp Sat Flow(s),veh/h/ln				1548	0	0	0	1695	1739	555	1695	0
Q Serve(g_s), s				6.0	0.0	0.0	0.0	0.0	0.0	1.7	16.1	0.0
Cycle Q Clear(g_c), s				6.0	0.0	0.0	0.0	0.0	0.0	1.7	16.1	0.0
Prop In Lane				0.81		0.19	0.00		0.40	1.00		0.00
Lane Grp Cap(c), veh/h				282	0	0	0	2208	1132	481	3312	0
V/C Ratio(X)				0.60	0.00	0.00	0.00	0.30	0.30	0.09	0.67	0.00
Avail Cap(c_a), veh/h				697	0	0	0	2208	1132	481	3312	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.91	0.91	0.17	0.17	0.00
Uniform Delay (d), s/veh				22.5	0.0	0.0	0.0	0.0	0.0	3.9	6.5	0.0
Incr Delay (d2), s/veh				0.8	0.0	0.0	0.0	0.3	0.6	0.1	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln				2.6	0.0	0.0	0.0	0.1	0.2	0.3	7.4	0.0
LnGrp Delay(d),s/veh				23.3	0.0	0.0	0.0	0.3	0.6	4.0	6.6	0.0
LnGrp LOS				C				A	A	A	A	
Approach Vol, veh/h					169			1011			2253	
Approach Delay, s/veh					23.3			0.4			6.6	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		45.1				45.1		14.9
Change Period (Y+Rc), s		* 6				* 6		4.0
Max Green Setting (Gmax), s		* 23				* 23		27.0
Max Q Clear Time (g_c+I1), s		2.0				18.1		8.0
Green Ext Time (p_c), s		20.3				4.8		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	5.6
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

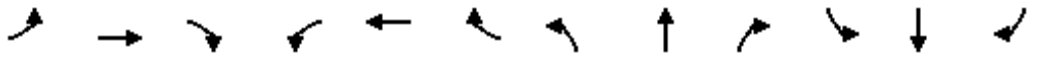
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	30	120	270	20	70	40	840	70	100	2100	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1863	1863	1863	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	32	32	126	284	21	74	42	884	74	105	2211	42
Adj No. of Lanes	0	1	0	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	92	279	351	528	447	100	2153	180	207	2728	52
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.06	0.45	0.45	0.23	1.00	1.00
Sat Flow, veh/h	178	323	986	1222	1863	1578	1774	4783	399	1774	5138	97
Grp Volume(v), veh/h	190	0	0	284	21	74	42	626	332	105	1457	796
Grp Sat Flow(s),veh/h/ln	1487	0	0	1222	1863	1578	1774	1695	1792	1774	1695	1845
Q Serve(g_s), s	2.7	0.0	0.0	21.0	1.0	4.2	2.7	14.9	15.0	6.2	0.0	0.0
Cycle Q Clear(g_c), s	12.1	0.0	0.0	33.1	1.0	4.2	2.7	14.9	15.0	6.2	0.0	0.0
Prop In Lane	0.17		0.66	1.00		1.00	1.00		0.22	1.00		0.05
Lane Grp Cap(c), veh/h	456	0	0	351	528	447	100	1526	807	207	1800	980
V/C Ratio(X)	0.42	0.00	0.00	0.81	0.04	0.17	0.42	0.41	0.41	0.51	0.81	0.81
Avail Cap(c_a), veh/h	456	0	0	351	528	447	251	1526	807	207	1800	980
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75
Uniform Delay (d), s/veh	35.1	0.0	0.0	44.7	31.2	32.3	54.7	22.3	22.3	43.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	14.2	0.1	0.3	1.0	0.8	1.6	0.6	3.1	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.2	0.0	0.0	10.7	0.5	1.9	1.4	7.1	7.7	3.1	0.8	1.5
LnGrp Delay(d),s/veh	35.7	0.0	0.0	58.9	31.2	32.6	55.7	23.1	23.8	43.6	3.1	5.6
LnGrp LOS	D			E	C	C	E	C	C	D	A	A
Approach Vol, veh/h		190			379			1000			2358	
Approach Delay, s/veh		35.7			52.2			24.7			5.7	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		40.0	10.3	69.7		40.0	20.0	60.0
Change Period (Y+Rc), s		* 6	3.5	* 6		* 6	* 6	* 6
Max Green Setting (Gmax), s		* 34	17.0	* 54		* 34	* 14	* 54
Max Q Clear Time (g_c+I1), s		14.1	4.7	2.0		35.1	8.2	17.0
Green Ext Time (p_c), s		3.6	0.0	41.2		0.0	0.2	11.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	650	360	330	610	30	140	20	190	50	40	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1900	1863	1900	1863	1900
Adj Flow Rate, veh/h	11	684	322	347	642	30	147	21	32	53	42	7
Adj No. of Lanes	1	2	0	1	2	0	2	0	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	762	359	377	1831	85	547	0	252	69	55	9
Arrive On Green	0.01	0.33	0.33	0.21	0.53	0.53	0.16	0.16	0.16	0.07	0.07	0.07
Sat Flow, veh/h	1774	2338	1100	1774	3443	161	3442	0	1583	932	739	123
Grp Volume(v), veh/h	11	518	488	347	330	342	147	0	32	102	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1669	1774	1770	1834	1721	0	1583	1794	0	0
Q Serve(g_s), s	0.6	26.2	26.2	18.0	10.1	10.1	3.5	0.0	1.6	5.2	0.0	0.0
Cycle Q Clear(g_c), s	0.6	26.2	26.2	18.0	10.1	10.1	3.5	0.0	1.6	5.2	0.0	0.0
Prop In Lane	1.00		0.66	1.00		0.09	1.00		1.00	0.52		0.07
Lane Grp Cap(c), veh/h	12	577	544	377	941	975	547	0	252	133	0	0
V/C Ratio(X)	0.90	0.90	0.90	0.92	0.35	0.35	0.27	0.00	0.13	0.76	0.00	0.00
Avail Cap(c_a), veh/h	378	667	629	378	941	975	935	0	430	472	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.6	30.1	30.1	36.2	12.6	12.6	34.7	0.0	33.9	42.6	0.0	0.0
Incr Delay (d2), s/veh	50.9	12.6	13.3	26.6	0.1	0.1	0.1	0.0	0.1	3.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.5	14.8	14.1	11.6	4.9	5.1	1.7	0.0	0.7	2.7	0.0	0.0
LnGrp Delay(d),s/veh	97.5	42.8	43.4	62.8	12.7	12.7	34.8	0.0	34.0	46.0	0.0	0.0
LnGrp LOS	F	D	D	E	B	B	C		C	D		
Approach Vol, veh/h		1017			1019			179			102	
Approach Delay, s/veh		43.7			29.8			34.6			46.0	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		20.4	25.0	36.2		12.3	5.6	55.5
Change Period (Y+Rc), s		5.5	5.0	* 5.6		5.3	5.0	* 5.6
Max Green Setting (Gmax), s		25.5	20.0	* 35		24.7	20.0	* 36
Max Q Clear Time (g_c+I1), s		5.5	20.0	28.2		7.2	2.6	12.1
Green Ext Time (p_c), s		0.3	0.0	2.4		0.3	0.0	7.3

Intersection Summary	
HCM 2010 Ctrl Delay	37.0
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

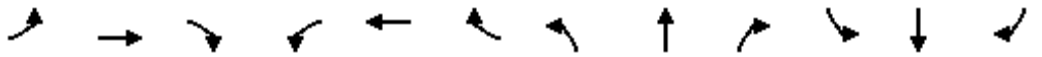
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	60	330	20	60	50	240	360	10	30	450	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	158	63	59	21	63	20	253	379	9	32	474	87
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	383	393	334	389	286	91	319	1470	35	39	772	141
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.18	0.42	0.42	0.02	0.26	0.26
Sat Flow, veh/h	1310	1863	1583	1264	1356	431	1774	3534	84	1774	2990	546
Grp Volume(v), veh/h	158	63	59	21	0	83	253	190	198	32	279	282
Grp Sat Flow(s),veh/h/ln	1310	1863	1583	1264	0	1787	1774	1770	1848	1774	1770	1766
Q Serve(g_s), s	5.2	1.3	1.4	0.6	0.0	1.8	6.3	3.2	3.2	0.8	6.4	6.5
Cycle Q Clear(g_c), s	7.0	1.3	1.4	1.9	0.0	1.8	6.3	3.2	3.2	0.8	6.4	6.5
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.05	1.00		0.31
Lane Grp Cap(c), veh/h	383	393	334	389	0	377	319	736	768	39	457	456
V/C Ratio(X)	0.41	0.16	0.18	0.05	0.00	0.22	0.79	0.26	0.26	0.82	0.61	0.62
Avail Cap(c_a), veh/h	978	1239	1053	968	0	1196	1160	1173	1225	774	1173	1171
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	14.8	14.8	15.5	0.0	15.0	18.0	8.8	8.8	22.3	15.0	15.0
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.0	0.0	0.1	1.7	0.1	0.1	14.7	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.9	0.7	0.6	0.2	0.0	0.9	3.2	1.5	1.6	0.5	3.2	3.2
LnGrp Delay(d),s/veh	18.1	14.8	14.9	15.6	0.0	15.1	19.7	8.8	8.8	37.0	15.5	15.5
LnGrp LOS	B	B	B	B		B	B	A	A	D	B	B
Approach Vol, veh/h		280			104			641			593	
Approach Delay, s/veh		16.7			15.2			13.1			16.7	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	24.7		15.2	13.2	17.4		15.2
Change Period (Y+Rc), s	5.0	* 5.6		5.5	5.0	* 5.6		* 5.5
Max Green Setting (Gmax), s	20.0	* 30		30.5	30.0	* 30		* 31
Max Q Clear Time (g_c+I1), s	2.8	5.2		9.0	8.3	8.5		3.9
Green Ext Time (p_c), s	0.0	3.5		0.8	0.3	3.4		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	80	30	20	80	110	10	390	20	80	770	20
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	84	32	21	84	116	11	411	21	84	811	21
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	224	74	104	140	173	277	960	49	549	988	26
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	222	1134	374	83	710	876	657	1757	90	952	1808	47
Grp Volume(v), veh/h	148	0	0	221	0	0	11	0	432	84	0	832
Grp Sat Flow(s),veh/h/ln	1730	0	0	1669	0	0	657	0	1847	952	0	1854
Q Serve(g_s), s	0.0	0.0	0.0	1.3	0.0	0.0	0.6	0.0	6.2	2.6	0.0	16.6
Cycle Q Clear(g_c), s	3.2	0.0	0.0	5.4	0.0	0.0	17.2	0.0	6.2	8.8	0.0	16.6
Prop In Lane	0.22		0.22	0.10		0.52	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	439	0	0	418	0	0	277	0	1009	549	0	1013
V/C Ratio(X)	0.34	0.00	0.00	0.53	0.00	0.00	0.04	0.00	0.43	0.15	0.00	0.82
Avail Cap(c_a), veh/h	1387	0	0	1388	0	0	429	0	1438	770	0	1444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	0.0	16.6	0.0	0.0	15.5	0.0	6.0	8.6	0.0	8.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	0.0	0.0	2.6	0.0	0.0	0.1	0.0	3.2	0.7	0.0	8.8
LnGrp Delay(d),s/veh	15.9	0.0	0.0	17.0	0.0	0.0	15.5	0.0	6.1	8.7	0.0	10.1
LnGrp LOS	B			B			B		A	A		B
Approach Vol, veh/h		148			221			443			916	
Approach Delay, s/veh		15.9			17.0			6.4			10.0	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.6		14.4		30.6		14.4
Change Period (Y+Rc), s		6.0		5.5		6.0		5.5
Max Green Setting (Gmax), s		35.0		35.5		35.0		35.5
Max Q Clear Time (g_c+I1), s		18.6		5.2		19.2		7.4
Green Ext Time (p_c), s		5.4		1.6		5.3		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	10.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	290	110	140	330	60	60	340	90	140	740	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	305	116	147	347	63	63	358	95	147	779	200
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	397	970	362	390	1152	207	257	1312	344	470	1318	338
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	972	2525	941	962	2998	539	572	2776	728	934	2790	716
Grp Volume(v), veh/h	95	212	209	147	203	207	63	227	226	147	494	485
Grp Sat Flow(s),veh/h/ln	972	1770	1697	962	1770	1768	572	1770	1734	934	1770	1736
Q Serve(g_s), s	5.3	5.8	6.0	8.8	5.6	5.7	6.3	5.4	5.5	7.9	14.3	14.3
Cycle Q Clear(g_c), s	11.0	5.8	6.0	14.9	5.6	5.7	20.6	5.4	5.5	13.4	14.3	14.3
Prop In Lane	1.00		0.55	1.00		0.30	1.00		0.42	1.00		0.41
Lane Grp Cap(c), veh/h	397	680	652	390	680	679	257	836	819	470	836	820
V/C Ratio(X)	0.24	0.31	0.32	0.38	0.30	0.30	0.25	0.27	0.28	0.31	0.59	0.59
Avail Cap(c_a), veh/h	511	888	851	502	888	887	273	888	870	498	888	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	15.0	15.1	20.3	14.9	15.0	21.0	11.1	11.2	15.2	13.5	13.5
Incr Delay (d2), s/veh	0.7	0.6	0.6	1.3	0.5	0.5	1.1	0.4	0.4	0.8	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	2.9	2.9	2.5	2.8	2.9	1.1	2.7	2.7	2.1	7.2	7.1
LnGrp Delay(d),s/veh	19.5	15.6	15.7	21.6	15.5	15.5	22.1	11.5	11.6	16.0	15.1	15.1
LnGrp LOS	B	B	B	C	B	B	C	B	B	B	B	B
Approach Vol, veh/h		516			557			516			1126	
Approach Delay, s/veh		16.3			17.1			12.8			15.2	
Approach LOS		B			B			B			B	

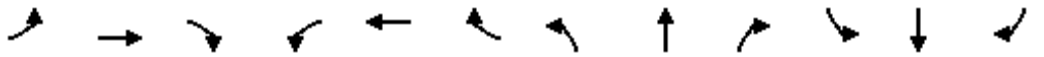
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		38.0		31.8		38.0		31.8
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		35.0		35.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		22.6		13.0		16.3		16.9
Green Ext Time (p_c), s		10.4		11.2		14.8		9.9

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	910	210	380	900	0	240	0	360	0	0	0
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.97		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	958	205	400	947	0	253	0	126	0	0	0
Adj No. of Lanes	1	2	0	1	3	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	402	1697	363	539	3683	0	360	0	348	0	422	0
Arrive On Green	0.00	1.00	1.00	0.11	0.72	0.00	0.23	0.00	0.23	0.00	0.00	0.00
Sat Flow, veh/h	1774	2897	619	1774	5253	0	1374	0	1541	0	1863	0
Grp Volume(v), veh/h	0	585	578	400	947	0	253	0	126	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1747	1774	1695	0	1374	0	1541	0	1863	0
Q Serve(g_s), s	0.0	0.0	0.0	10.2	7.6	0.0	21.0	0.0	8.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	10.2	7.6	0.0	21.0	0.0	8.3	0.0	0.0	0.0
Prop In Lane	1.00		0.35	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	402	1036	1023	539	3683	0	370	0	348	0	422	0
V/C Ratio(X)	0.00	0.56	0.57	0.74	0.26	0.00	0.68	0.00	0.36	0.00	0.00	0.00
Avail Cap(c_a), veh/h	563	1036	1023	662	3683	0	426	0	411	0	498	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.90	0.90	1.00	1.00	0.00	0.92	0.00	0.92	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	6.7	5.6	0.0	44.4	0.0	39.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	2.0	2.6	0.2	0.0	2.4	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.6	0.6	5.3	3.6	0.0	8.1	0.0	3.6	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	2.0	2.0	9.3	5.8	0.0	46.8	0.0	39.4	0.0	0.0	0.0
LnGrp LOS		A	A	A	A		D		D			
Approach Vol, veh/h		1163			1347			379			0	
Approach Delay, s/veh		2.0			6.8			44.4			0.0	
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	89.9		30.1	16.6	73.3		30.1
Change Period (Y+Rc), s	4.0	5.0		4.9	4.0	5.0		4.9
Max Green Setting (Gmax), s	10.0	66.0		30.1	21.0	55.0		30.1
Max Q Clear Time (g_c+I1), s	0.0	9.6		23.0	12.2	2.0		0.0
Green Ext Time (p_c), s	0.0	13.3		0.7	0.4	13.2		0.0

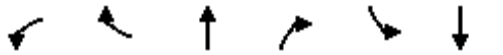
Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	940	30	30	820	320	10	10	40	150	10	50
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	147	989	32	32	863	337	11	11	42	158	11	53
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	466	2619	85	452	2601	1011	59	61	161	275	0	241
Arrive On Green	0.05	0.75	0.74	0.03	0.97	0.95	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1774	3497	113	1774	3585	1394	152	397	1049	1333	0	1565
Grp Volume(v), veh/h	147	500	521	32	816	384	64	0	0	158	0	53
Grp Sat Flow(s),veh/h/ln	1774	1770	1841	1774	1695	1589	1599	0	0	1333	0	1565
Q Serve(g_s), s	2.4	11.9	11.9	0.6	1.5	1.9	0.0	0.0	0.0	8.5	0.0	3.6
Cycle Q Clear(g_c), s	2.4	11.9	11.9	0.6	1.5	1.9	4.1	0.0	0.0	12.6	0.0	3.6
Prop In Lane	1.00		0.06	1.00		0.88	0.17		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	466	1325	1378	452	2460	1153	281	0	0	275	0	241
V/C Ratio(X)	0.32	0.38	0.38	0.07	0.33	0.33	0.23	0.00	0.00	0.57	0.00	0.22
Avail Cap(c_a), veh/h	577	1325	1378	604	2460	1153	457	0	0	426	0	417
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.3	5.3	5.3	4.5	0.6	0.8	45.0	0.0	0.0	48.0	0.0	44.5
Incr Delay (d2), s/veh	0.1	0.8	0.8	0.0	0.4	0.8	0.2	0.0	0.0	0.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	6.0	6.2	0.3	0.7	1.0	1.9	0.0	0.0	5.1	0.0	1.6
LnGrp Delay(d),s/veh	3.5	6.1	6.1	4.5	1.0	1.5	45.1	0.0	0.0	48.7	0.0	44.6
LnGrp LOS	A	A	A	A	A	A	D			D		D
Approach Vol, veh/h		1168			1232			64			211	
Approach Delay, s/veh		5.8			1.2			45.1			47.7	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	90.1		21.4	5.7	92.9		21.4
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	12.0	64.0		30.0	12.0	64.0		30.0
Max Q Clear Time (g_c+I1), s	4.4	3.9		6.1	2.6	13.9		14.6
Green Ext Time (p_c), s	0.1	14.0		0.6	0.0	13.7		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	7.9
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	20	20	2310	30	20	1810
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	21	2432	32	21	1905
Adj No. of Lanes	1	1	3	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	83	74	4208	1305	65	4545
Arrive On Green	0.05	0.05	1.00	1.00	0.07	1.00
Sat Flow, veh/h	1774	1583	5253	1577	1774	5253
Grp Volume(v), veh/h	21	21	2432	32	21	1905
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1577	1774	1695
Q Serve(g_s), s	1.5	1.7	0.0	0.0	1.5	0.0
Cycle Q Clear(g_c), s	1.5	1.7	0.0	0.0	1.5	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	83	74	4208	1305	65	4545
V/C Ratio(X)	0.25	0.28	0.58	0.02	0.32	0.42
Avail Cap(c_a), veh/h	434	387	4208	1305	315	4545
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.80	0.80	0.91	0.91
Uniform Delay (d), s/veh	62.0	62.1	0.0	0.0	61.0	0.0
Incr Delay (d2), s/veh	0.6	0.8	0.5	0.0	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	0.8	0.2	0.0	0.8	0.1
LnGrp Delay(d),s/veh	62.6	62.9	0.5	0.0	61.9	0.3
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	42		2464			1926
Approach Delay, s/veh	62.8		0.5			0.9
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.0	115.7				124.7		10.3
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	64.7				92.7		33.0
Max Q Clear Time (g_c+I1), s	3.5	2.0				2.0		3.7
Green Ext Time (p_c), s	0.0	62.3				90.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.3
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	80	100	1760	160	180	1850
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	84	105	1853	168	189	1947
Adj No. of Lanes	1	1	2	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	144	129	2527	1131	205	4371
Arrive On Green	0.08	0.08	1.00	1.00	0.23	1.00
Sat Flow, veh/h	1774	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	84	105	1853	168	189	1947
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1695
Q Serve(g_s), s	6.2	8.8	0.0	0.0	14.0	0.0
Cycle Q Clear(g_c), s	6.2	8.8	0.0	0.0	14.0	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	144	129	2527	1131	205	4371
V/C Ratio(X)	0.58	0.82	0.73	0.15	0.92	0.45
Avail Cap(c_a), veh/h	394	352	2527	1131	315	4371
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.62	0.62	0.88	0.88
Uniform Delay (d), s/veh	59.8	61.0	0.0	0.0	51.3	0.0
Incr Delay (d2), s/veh	1.4	4.7	1.2	0.2	16.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	4.0	0.4	0.1	7.8	0.1
LnGrp Delay(d),s/veh	61.2	65.7	1.2	0.2	67.5	0.3
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	189		2021			2136
Approach Delay, s/veh	63.7		1.1			6.2
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	19.6	100.4				120.0		15.0
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	67.7				95.7		30.0
Max Q Clear Time (g_c+I1), s	16.0	2.0				2.0		10.8
Green Ext Time (p_c), s	0.1	64.8				92.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	6.4
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	20	20	20	1850	2010	20
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	21	21	1947	2116	21
Adj No. of Lanes	1	1	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	63	56	17	3205	4405	1372
Arrive On Green	0.04	0.04	0.02	1.00	0.87	0.87
Sat Flow, veh/h	1774	1583	1774	3632	5253	1583
Grp Volume(v), veh/h	21	21	21	1947	2116	21
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1695	1583
Q Serve(g_s), s	1.6	1.8	1.3	0.0	12.9	0.2
Cycle Q Clear(g_c), s	1.6	1.8	1.3	0.0	12.9	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	63	56	17	3205	4405	1372
V/C Ratio(X)	0.34	0.38	1.23	0.61	0.48	0.02
Avail Cap(c_a), veh/h	407	364	105	3205	4405	1372
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.61	0.61	0.60	0.60
Uniform Delay (d), s/veh	63.6	63.7	66.2	0.0	2.1	1.2
Incr Delay (d2), s/veh	1.2	1.5	125.9	0.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	19.7	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	1.6	1.2	0.2	6.0	0.1
LnGrp Delay(d),s/veh	64.7	65.2	211.8	0.5	2.3	1.2
LnGrp LOS	E	E	F	A	A	A
Approach Vol, veh/h	42			1968	2137	
Approach Delay, s/veh	65.0			2.8	2.3	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		126.2		8.8	5.3	120.9		
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		
Max Green Setting (Gmax), s		94.7		31.0	8.5	82.7		
Max Q Clear Time (g_c+I1), s		2.0		3.8	3.3	14.9		
Green Ext Time (p_c), s		91.5		0.0	0.0	67.2		

Intersection Summary	
HCM 2010 Ctrl Delay	3.2
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	120	160	2180	200	30	1790
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	168	2295	211	32	1884
Adj No. of Lanes	1	1	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	206	184	3976	1238	45	4193
Arrive On Green	0.12	0.12	0.78	0.78	0.03	1.00
Sat Flow, veh/h	1774	1583	5253	1583	3442	5253
Grp Volume(v), veh/h	126	168	2295	211	32	1884
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1583	1721	1695
Q Serve(g_s), s	9.1	14.2	24.2	4.5	1.2	0.0
Cycle Q Clear(g_c), s	9.1	14.2	24.2	4.5	1.2	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	206	184	3976	1238	45	4193
V/C Ratio(X)	0.61	0.91	0.58	0.17	0.71	0.45
Avail Cap(c_a), veh/h	210	188	3976	1238	204	4193
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.92	0.92
Uniform Delay (d), s/veh	56.8	59.0	5.9	3.7	65.5	0.0
Incr Delay (d2), s/veh	3.5	40.8	0.6	0.3	6.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.7	8.3	11.3	2.0	0.6	0.1
LnGrp Delay(d),s/veh	60.3	99.8	6.5	4.0	72.3	0.3
LnGrp LOS	E	F	A	A	E	A
Approach Vol, veh/h	294		2506			1916
Approach Delay, s/veh	82.9		6.3			1.5
Approach LOS	F		A			A

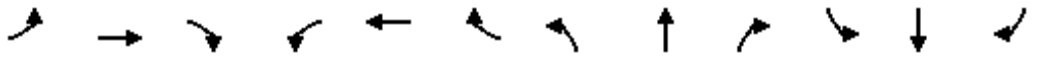
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.8	109.6				115.3		19.7
Change Period (Y+Rc), s	3.5	5.3				5.3		3.5
Max Green Setting (Gmax), s	8.5	97.7				109.7		16.5
Max Q Clear Time (g_c+I1), s	3.2	26.2				2.0		16.2
Green Ext Time (p_c), s	0.0	70.9				106.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.1
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	10	30	2150	20	40	1930
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	11	32	2263	21	42	2032
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	63	56	4263	40	98	4603
Arrive On Green	0.04	0.04	1.00	1.00	0.11	1.00
Sat Flow, veh/h	1774	1583	5364	48	1774	5253
Grp Volume(v), veh/h	11	32	1476	808	42	2032
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1854	1774	1695
Q Serve(g_s), s	0.8	2.7	0.0	0.0	3.0	0.0
Cycle Q Clear(g_c), s	0.8	2.7	0.0	0.0	3.0	0.0
Prop In Lane	1.00	1.00		0.03	1.00	
Lane Grp Cap(c), veh/h	63	56	2782	1521	98	4603
V/C Ratio(X)	0.17	0.57	0.53	0.53	0.43	0.44
Avail Cap(c_a), veh/h	407	364	2782	1521	315	4603
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.82	0.82	0.48	0.48
Uniform Delay (d), s/veh	63.2	64.1	0.0	0.0	58.1	0.0
Incr Delay (d2), s/veh	0.5	3.3	0.6	1.1	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	1.2	0.2	0.5	1.5	0.1
LnGrp Delay(d),s/veh	63.7	67.4	0.6	1.1	58.6	0.1
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	43		2284			2074
Approach Delay, s/veh	66.4		0.8			1.3
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.4	114.8				126.2		8.8
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	66.7				94.7		31.0
Max Q Clear Time (g_c+I1), s	5.0	2.0				2.0		4.7
Green Ext Time (p_c), s	0.0	64.2				91.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.7
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	680	500	70	390	60	610	1530	70	150	1440	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	232	716	273	74	411	11	642	1611	71	158	1516	190
Adj No. of Lanes	1	2	1	1	2	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	878	389	87	667	294	670	2632	116	197	1981	614
Arrive On Green	0.10	0.25	0.25	0.05	0.19	0.19	0.39	1.00	1.00	0.02	0.13	0.13
Sat Flow, veh/h	1774	3539	1568	1774	3539	1563	3442	4993	220	3442	5085	1576
Grp Volume(v), veh/h	232	716	273	74	411	11	642	1094	588	158	1516	190
Grp Sat Flow(s),veh/h/ln	1774	1770	1568	1774	1770	1563	1721	1695	1823	1721	1695	1576
Q Serve(g_s), s	14.0	25.7	21.4	5.6	14.4	0.8	24.5	0.0	0.0	6.2	38.9	14.8
Cycle Q Clear(g_c), s	14.0	25.7	21.4	5.6	14.4	0.8	24.5	0.0	0.0	6.2	38.9	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	184	878	389	87	667	294	670	1787	961	197	1981	614
V/C Ratio(X)	1.26	0.82	0.70	0.85	0.62	0.04	0.96	0.61	0.61	0.80	0.77	0.31
Avail Cap(c_a), veh/h	184	1049	465	145	970	428	765	1787	961	408	1981	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	0.84	0.84	0.84	0.89	0.89	0.89
Uniform Delay (d), s/veh	60.5	47.8	46.2	63.7	50.3	44.8	40.7	0.0	0.0	65.5	52.9	42.3
Incr Delay (d2), s/veh	153.6	3.6	2.6	10.2	0.3	0.0	18.3	1.3	2.4	2.6	2.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	14.7	13.0	9.6	3.0	7.1	0.3	13.2	0.3	0.7	3.0	18.8	6.7
LnGrp Delay(d),s/veh	214.1	51.4	48.8	73.9	50.7	44.8	59.0	1.3	2.4	68.1	55.4	43.5
LnGrp LOS	F	D	D	E	D	D	E	A	A	E	E	D
Approach Vol, veh/h		1221			496			2324			1864	
Approach Delay, s/veh		81.8			54.0			17.5			55.3	
Approach LOS		F			D			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	75.2	10.6	37.5	30.3	56.6	18.0	30.1
Change Period (Y+Rc), s	3.5	5.3	3.5	6.0	3.5	5.3	3.5	* 6
Max Green Setting (Gmax), s	16.5	50.7	11.5	38.0	30.5	36.7	14.5	* 36
Max Q Clear Time (g_c+I1), s	8.2	2.0	7.6	27.7	26.5	40.9	16.0	16.4
Green Ext Time (p_c), s	0.1	27.0	0.0	3.8	0.3	0.0	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	45.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

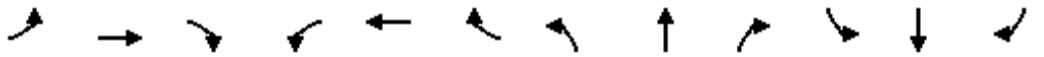
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	880	100	200	910	270	160	790	130	180	490	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1863	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	232	926	94	211	958	80	168	832	126	189	516	126
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	354	1809	183	263	1569	488	212	888	135	242	862	210
Arrive On Green	0.40	0.74	0.74	0.05	0.10	0.10	0.24	0.55	0.55	0.04	0.10	0.10
Sat Flow, veh/h	1774	4882	494	1774	5085	1583	1774	3206	486	1774	2938	714
Grp Volume(v), veh/h	232	668	352	211	958	80	168	478	480	189	322	320
Grp Sat Flow(s),veh/h/ln	1774	1763	1850	1774	1695	1583	1774	1840	1852	1774	1840	1811
Q Serve(g_s), s	13.8	10.3	10.3	15.3	23.5	4.3	11.6	31.3	31.3	13.7	21.8	22.0
Cycle Q Clear(g_c), s	13.8	10.3	10.3	15.3	23.5	4.3	11.6	31.3	31.3	13.7	21.8	22.0
Prop In Lane	1.00		0.27	1.00		1.00	1.00		0.26	1.00		0.39
Lane Grp Cap(c), veh/h	354	1306	685	263	1569	488	212	510	513	242	540	532
V/C Ratio(X)	0.65	0.51	0.51	0.80	0.61	0.16	0.79	0.94	0.94	0.78	0.60	0.60
Avail Cap(c_a), veh/h	354	1306	685	266	1569	488	266	525	528	266	540	532
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	0.94	0.94	0.94	0.93	0.93	0.93	0.93	0.93	0.93	0.91	0.91	0.91
Uniform Delay (d), s/veh	35.4	11.9	11.9	59.9	50.9	21.7	47.9	27.9	27.9	60.2	51.3	51.4
Incr Delay (d2), s/veh	3.2	1.3	2.6	13.7	1.7	0.7	8.8	22.6	22.5	10.3	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.0	5.1	5.6	8.5	11.3	2.0	6.1	18.9	19.0	7.4	11.3	11.2
LnGrp Delay(d),s/veh	38.6	13.3	14.5	73.6	52.6	22.3	56.7	50.5	50.5	70.5	52.5	52.6
LnGrp LOS	D	B	B	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1252			1249			1126			831	
Approach Delay, s/veh		18.3			54.2			51.4			56.6	
Approach LOS		B			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	38.9	20.8	51.1	17.1	41.1	28.9	43.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	17.5	35.1	17.5	43.1	17.5	35.1	22.5	* 38
Max Q Clear Time (g_c+I1), s	15.7	33.3	17.3	12.3	13.6	24.0	15.8	25.5
Green Ext Time (p_c), s	0.0	0.7	0.0	10.0	0.0	4.9	4.1	6.6

Intersection Summary	
HCM 2010 Ctrl Delay	43.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



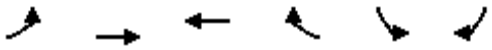
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	340	760	220	270	820	260	260	1340	200	160	1080	260
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1788	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	358	800	191	284	863	126	274	1411	195	168	1137	246
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	464	1192	282	383	1357	406	376	1575	218	554	2304	866
Arrive On Green	0.09	0.19	0.19	0.15	0.36	0.36	0.11	0.35	0.35	0.16	0.41	0.41
Sat Flow, veh/h	3442	4108	973	3442	5085	1520	3442	4519	624	3548	5588	1583
Grp Volume(v), veh/h	358	659	332	284	863	126	274	1058	548	168	1137	246
Grp Sat Flow(s),veh/h/ln	1721	1695	1691	1721	1695	1520	1721	1695	1753	1774	1863	1583
Q Serve(g_s), s	13.2	23.4	23.7	10.3	18.4	5.2	10.0	38.4	38.5	5.5	19.5	10.8
Cycle Q Clear(g_c), s	13.2	23.4	23.7	10.3	18.4	5.2	10.0	38.4	38.5	5.5	19.5	10.8
Prop In Lane	1.00		0.58	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	464	984	491	383	1357	406	376	1181	611	554	2304	866
V/C Ratio(X)	0.77	0.67	0.68	0.74	0.64	0.31	0.73	0.90	0.90	0.30	0.49	0.28
Avail Cap(c_a), veh/h	649	984	491	569	1357	406	516	1181	611	554	2304	866
HCM Platoon Ratio	0.67	0.67	0.67	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.96	0.96	0.96	0.86	0.86	0.86	0.59	0.59	0.59
Uniform Delay (d), s/veh	57.2	46.6	46.7	53.6	36.7	15.0	56.1	40.1	40.1	48.6	28.2	15.8
Incr Delay (d2), s/veh	2.1	3.3	6.7	1.0	2.2	1.9	1.5	9.4	16.2	0.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.4	11.4	12.0	4.9	8.9	2.4	4.8	19.5	21.3	2.7	10.1	4.8
LnGrp Delay(d),s/veh	59.3	49.9	53.4	54.6	38.9	16.9	57.5	49.5	56.4	48.7	28.6	16.3
LnGrp LOS	E	D	D	D	D	B	E	D	E	D	C	B
Approach Vol, veh/h		1349			1273			1880			1551	
Approach Delay, s/veh		53.3			40.2			52.7			28.8	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	57.3	19.0	38.0	24.0	49.0	16.0	41.0
Change Period (Y+Rc), s	3.5	5.7	3.5	5.3	5.7	* 5.7	3.5	5.3
Max Green Setting (Gmax), s	17.5	39.3	22.5	32.7	13.5	* 43	19.5	35.7
Max Q Clear Time (g_c+I1), s	12.0	21.5	15.2	20.4	7.5	40.5	12.3	25.7
Green Ext Time (p_c), s	0.2	11.1	0.3	10.1	0.5	2.5	0.2	8.4

Intersection Summary	
HCM 2010 Ctrl Delay	44.1
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



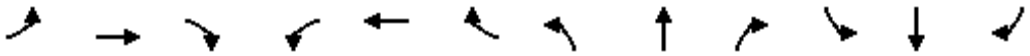
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	40	880	920	70	70	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.2	5.2	5.2	5.5	5.5
Lane Util. Factor	1.00	0.91	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	3539	1583	1770	1559
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	3539	1583	1770	1559
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	42	926	968	74	74	158
RTOR Reduction (vph)	0	0	0	0	0	145
Lane Group Flow (vph)	42	926	968	74	74	13
Confl. Peds. (#/hr)						1
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	6.0	68.3	70.8	70.8	9.5	9.5
Effective Green, g (s)	5.5	69.6	72.1	72.1	9.7	9.7
Actuated g/C Ratio	0.05	0.58	0.60	0.60	0.08	0.08
Clearance Time (s)	3.5	6.5	6.5	6.5	5.7	5.7
Vehicle Extension (s)	1.5	4.3	4.3	4.3	2.0	2.0
Lane Grp Cap (vph)	81	2949	2126	951	143	126
v/s Ratio Prot	c0.02	0.18	c0.27		c0.04	
v/s Ratio Perm				0.05		0.01
v/c Ratio	0.52	0.31	0.46	0.08	0.52	0.10
Uniform Delay, d1	56.0	12.9	13.2	10.0	52.9	51.1
Progression Factor	1.00	1.00	0.52	0.37	1.00	1.00
Incremental Delay, d2	2.3	0.3	0.7	0.2	1.3	0.1
Delay (s)	58.3	13.2	7.5	3.8	54.2	51.2
Level of Service	E	B	A	A	D	D
Approach Delay (s)		15.2	7.2		52.2	
Approach LOS		B	A		D	

Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	840	110	80	870	110	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	6.5	4.0	5.2	5.5	5.5
Lane Util. Factor	0.95	1.00	1.00	0.91	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	5085	1770	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	1770	5085	1770	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	884	116	84	916	116	95
RTOR Reduction (vph)	0	50	0	0	0	85
Lane Group Flow (vph)	884	66	84	916	116	10
Turn Type	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	4		3	8	5	
Permitted Phases		4				5
Actuated Green, G (s)	68.3	68.3	8.5	70.8	12.3	12.3
Effective Green, g (s)	69.6	68.3	8.0	72.1	12.5	12.5
Actuated g/C Ratio	0.58	0.57	0.07	0.60	0.10	0.10
Clearance Time (s)	6.5	6.5	3.5	6.5	5.7	5.7
Vehicle Extension (s)	4.3	4.3	1.5	4.3	2.0	2.0
Lane Grp Cap (vph)	2052	900	118	3055	184	164
v/s Ratio Prot	c0.25		c0.05	0.18	c0.07	
v/s Ratio Perm		0.04				0.01
v/c Ratio	0.43	0.07	0.71	0.30	0.63	0.06
Uniform Delay, d1	14.1	11.6	54.9	11.7	51.5	48.5
Progression Factor	0.34	0.05	1.06	1.14	1.00	1.00
Incremental Delay, d2	0.6	0.2	15.2	0.2	5.1	0.1
Delay (s)	5.5	0.8	73.5	13.5	56.6	48.5
Level of Service	A	A	E	B	E	D
Approach Delay (s)	4.9			18.6	53.0	
Approach LOS	A			B	D	

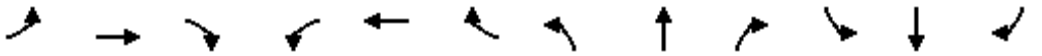
Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	170	900	90	70	1080	130	50	20	40	100	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	11	10	11	11	11	11	11	11
Total Lost time (s)	1.5	3.0		1.5	3.0	3.0		2.6			1.5	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00			1.00	
Frt	1.00	0.99		1.00	1.00	0.85		0.95			0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.96	
Satd. Flow (prot)	3204	5016		1652	4916	1478		1674			1698	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.84			0.69	
Satd. Flow (perm)	3204	5016		1652	4916	1478		1447			1219	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	179	947	95	74	1137	137	53	21	42	105	11	21
RTOR Reduction (vph)	0	6	0	0	0	27	0	22	0	0	7	0
Lane Group Flow (vph)	179	1036	0	74	1137	110	0	94	0	0	130	0
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2 5			1 6	
Permitted Phases						8	2 5			1 6		
Actuated Green, G (s)	11.2	79.9		10.5	79.2	79.2		20.5			25.5	
Effective Green, g (s)	13.2	81.9		12.5	81.2	81.2		24.5			28.5	
Actuated g/C Ratio	0.10	0.63		0.10	0.62	0.62		0.19			0.22	
Clearance Time (s)	3.5	5.0		3.5	5.0	5.0						
Vehicle Extension (s)	1.5	3.9		1.5	3.9	3.9						
Lane Grp Cap (vph)	325	3160		158	3070	923		272			267	
v/s Ratio Prot	c0.06	0.21		0.04	c0.23							
v/s Ratio Perm						0.07		0.07			c0.11	
v/c Ratio	0.55	0.33		0.47	0.37	0.12		0.35			0.49	
Uniform Delay, d1	55.6	11.2		55.6	11.9	9.9		45.8			44.4	
Progression Factor	1.00	1.00		1.22	0.38	0.13		1.00			1.00	
Incremental Delay, d2	1.1	0.3		0.8	0.3	0.2		0.3			0.5	
Delay (s)	56.7	11.5		68.8	4.8	1.5		46.1			44.9	
Level of Service	E	B		E	A	A		D			D	
Approach Delay (s)		18.1			8.0			46.1			44.9	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		

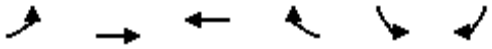
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	930	60	80	1100	40	90	30	120	110	40	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	13	13	10	10	10	10	14	14
Total Lost time (s)	1.5	3.0		1.5	3.0		1.5	2.6		1.5	2.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.88		1.00	0.90	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	4871		1652	5227		1652	1531		1652	1780	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1652	4871		1652	5227		1652	1531		1652	1780	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	979	63	84	1158	42	95	32	126	116	42	95
RTOR Reduction (vph)	0	3	0	0	2	0	0	115	0	0	77	0
Lane Group Flow (vph)	53	1039	0	84	1198	0	95	43	0	116	60	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	11.2	79.9		10.5	79.2		11.4	9.1		13.9	11.6	
Effective Green, g (s)	13.2	81.9		12.5	81.2		13.4	11.1		15.9	13.6	
Actuated g/C Ratio	0.10	0.63		0.10	0.62		0.10	0.09		0.12	0.10	
Clearance Time (s)	3.5	5.0		3.5	5.0		3.5	4.6		3.5	4.6	
Vehicle Extension (s)	1.5	3.9		1.5	3.9		1.5	2.0		1.5	2.0	
Lane Grp Cap (vph)	167	3068		158	3264		170	130		202	186	
v/s Ratio Prot	0.03	0.21		c0.05	c0.23		0.06	0.03		c0.07	c0.03	
v/s Ratio Perm												
v/c Ratio	0.32	0.34		0.53	0.37		0.56	0.33		0.57	0.32	
Uniform Delay, d1	54.2	11.3		56.0	11.9		55.5	55.9		53.9	53.9	
Progression Factor	1.47	0.48		1.11	0.20		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.3		1.4	0.3		2.3	0.5		2.4	0.4	
Delay (s)	80.0	5.8		63.6	2.7		57.7	56.5		56.3	54.3	
Level of Service	E	A		E	A		E	E		E	D	
Approach Delay (s)		9.4			6.7			57.0			55.2	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	40	1300	820	250	80	40
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	42	1368	863	263	63	64
Adj No. of Lanes	1	3	3	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	80	4493	4191	1419	128	117
Arrive On Green	0.09	1.00	1.00	1.00	0.07	0.07
Sat Flow, veh/h	1703	5253	5253	1583	1774	1615
Grp Volume(v), veh/h	42	1368	863	263	63	64
Grp Sat Flow(s),veh/h/ln	1703	1695	1695	1583	1774	1615
Q Serve(g_s), s	2.8	0.0	0.0	0.0	4.1	4.6
Cycle Q Clear(g_c), s	2.8	0.0	0.0	0.0	4.1	4.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	80	4493	4191	1419	128	117
V/C Ratio(X)	0.52	0.30	0.21	0.19	0.49	0.55
Avail Cap(c_a), veh/h	206	4493	4191	1419	503	458
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.89	0.89	1.00	1.00
Uniform Delay (d), s/veh	53.1	0.0	0.0	0.0	53.5	53.8
Incr Delay (d2), s/veh	1.9	0.2	0.1	0.3	1.1	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.1	0.0	0.1	2.1	4.1
LnGrp Delay(d),s/veh	54.9	0.2	0.1	0.3	54.6	55.3
LnGrp LOS	D	A	A	A	D	E
Approach Vol, veh/h		1410	1126		127	
Approach Delay, s/veh		1.8	0.1		54.9	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				109.3		10.7	7.1	102.2
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				78.7		32.0	12.5	62.7
Max Q Clear Time (g_c+I1), s				2.0		6.6	4.8	2.0
Green Ext Time (p_c), s				54.8		0.2	0.0	46.2

Intersection Summary	
HCM 2010 Ctrl Delay	3.6
HCM 2010 LOS	A

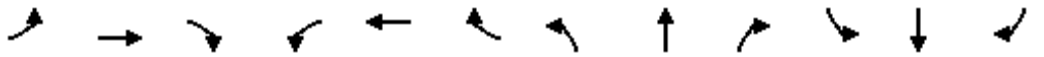
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	910	60	170	420	180	70	650	130	110	570	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1937	1863	1937	1976
Adj Flow Rate, veh/h	137	958	63	179	442	189	74	684	137	116	600	63
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	191	1410	93	237	1602	499	123	1432	666	170	1451	152
Arrive On Green	0.11	0.29	0.29	0.04	0.10	0.10	0.07	0.40	0.40	0.06	0.29	0.29
Sat Flow, veh/h	1774	4876	320	1774	5085	1583	1774	3539	1647	1774	3363	352
Grp Volume(v), veh/h	137	665	356	179	442	189	74	684	137	116	328	335
Grp Sat Flow(s),veh/h/ln	1774	1695	1806	1774	1695	1583	1774	1770	1647	1774	1840	1875
Q Serve(g_s), s	9.0	20.8	20.9	12.0	9.6	13.4	4.9	17.1	6.5	7.7	17.3	17.3
Cycle Q Clear(g_c), s	9.0	20.8	20.9	12.0	9.6	13.4	4.9	17.1	6.5	7.7	17.3	17.3
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	191	980	522	237	1602	499	123	1432	666	170	794	809
V/C Ratio(X)	0.72	0.68	0.68	0.76	0.28	0.38	0.60	0.48	0.21	0.68	0.41	0.41
Avail Cap(c_a), veh/h	333	980	522	333	1602	499	214	1432	666	288	794	809
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	0.97	0.97	0.97
Uniform Delay (d), s/veh	51.8	37.7	37.7	55.4	41.1	42.8	54.3	26.4	23.2	54.3	30.4	30.4
Incr Delay (d2), s/veh	1.9	3.8	7.0	3.4	0.4	2.2	1.8	1.1	0.7	1.7	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	10.2	11.4	6.1	4.6	6.2	2.4	8.6	3.1	3.9	9.1	9.3
LnGrp Delay(d),s/veh	53.7	41.5	44.8	58.8	41.6	45.0	56.0	27.5	23.9	56.1	31.9	31.9
LnGrp LOS	D	D	D	E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		1158			810			895			779	
Approach Delay, s/veh		43.9			46.2			29.3			35.5	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	51.5	17.5	38.0	9.8	54.7	14.4	41.1
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	17.5	32.1	20.5	32.7	12.5	37.1	20.5	32.7
Max Q Clear Time (g_c+I1), s	9.7	19.1	14.0	22.9	6.9	19.3	11.0	15.4
Green Ext Time (p_c), s	0.0	9.2	0.1	7.7	0.0	11.6	0.1	12.3

Intersection Summary	
HCM 2010 Ctrl Delay	39.0
HCM 2010 LOS	D



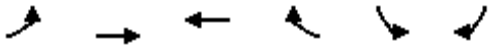
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	1060	160	400	710	520	190	1380	270	150	1280	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1788	1937	1937
Adj Flow Rate, veh/h	211	1116	76	421	747	382	200	1453	259	158	1347	89
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	1420	587	523	1855	577	316	1733	540	280	1880	585
Arrive On Green	0.18	0.56	0.56	0.15	0.36	0.36	0.03	0.11	0.11	0.17	0.71	0.71
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	5085	1583	3304	5289	1647
Grp Volume(v), veh/h	211	1116	76	421	747	382	200	1453	259	158	1347	89
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1583	1652	1763	1647
Q Serve(g_s), s	6.9	20.7	1.5	14.2	13.1	17.0	6.9	33.6	18.4	5.3	18.0	2.1
Cycle Q Clear(g_c), s	6.9	20.7	1.5	14.2	13.1	17.0	6.9	33.6	18.4	5.3	18.0	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	1420	587	523	1855	577	316	1733	540	280	1880	585
V/C Ratio(X)	0.67	0.79	0.13	0.81	0.40	0.66	0.63	0.84	0.48	0.56	0.72	0.15
Avail Cap(c_a), veh/h	473	1420	587	531	1855	577	531	1733	540	427	1880	585
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	0.85	0.85	0.85	0.93	0.93	0.93
Uniform Delay (d), s/veh	47.4	23.7	6.4	49.2	28.4	15.7	56.2	50.0	43.3	47.8	13.8	11.5
Incr Delay (d2), s/veh	0.9	4.3	0.4	8.1	0.7	5.9	0.7	4.3	2.6	0.6	2.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	10.1	0.7	7.3	6.3	8.3	3.3	16.5	8.5	2.4	8.9	1.0
LnGrp Delay(d),s/veh	48.2	28.0	6.8	57.2	29.0	21.6	56.9	54.3	45.9	48.4	16.0	12.0
LnGrp LOS	D	C	A	E	C	C	E	D	D	D	B	B
Approach Vol, veh/h		1403			1550			1912			1594	
Approach Delay, s/veh		29.9			34.9			53.5			19.0	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	45.0	22.7	38.0	12.5	46.8	12.5	48.3
Change Period (Y+Rc), s	6.1	* 6.1	6.5	* 6.5	3.5	6.1	3.5	6.5
Max Green Setting (Gmax), s	13.5	* 39	16.5	* 32	16.5	35.9	14.5	33.5
Max Q Clear Time (g_c+I1), s	7.3	35.6	16.2	22.7	8.9	20.0	8.9	19.0
Green Ext Time (p_c), s	0.5	2.9	0.0	6.0	0.1	11.1	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.4
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	180	780	680	240	230	180
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1863	1788	1863	1937
Adj Flow Rate, veh/h	189	821	716	253	242	189
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	466	2505	2409	1034	360	334
Arrive On Green	0.91	0.91	0.68	0.68	0.20	0.20
Sat Flow, veh/h	578	3778	3632	1520	1774	1647
Grp Volume(v), veh/h	189	821	716	253	242	189
Grp Sat Flow(s),veh/h/ln	578	1840	1770	1520	1774	1647
Q Serve(g_s), s	7.0	1.8	4.9	3.8	7.6	6.2
Cycle Q Clear(g_c), s	11.9	1.8	4.9	3.8	7.6	6.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	466	2505	2409	1034	360	334
V/C Ratio(X)	0.41	0.33	0.30	0.24	0.67	0.57
Avail Cap(c_a), veh/h	466	2505	2409	1034	967	897
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.41	0.41	0.99	0.99
Uniform Delay (d), s/veh	2.3	1.0	3.8	3.7	22.1	21.5
Incr Delay (d2), s/veh	2.4	0.3	0.1	0.2	0.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.9	2.3	1.6	3.8	2.8
LnGrp Delay(d),s/veh	4.7	1.3	4.0	3.9	22.9	22.1
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		1010	969		431	
Approach Delay, s/veh		1.9	3.9		22.5	
Approach LOS		A	A		C	

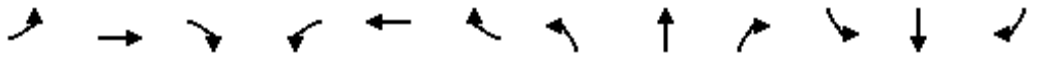
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				44.5		15.5		44.5
Change Period (Y+Rc), s				5.7		5.3		5.7
Max Green Setting (Gmax), s				18.3		30.7		18.3
Max Q Clear Time (g_c+I1), s				13.9		9.6		6.9
Green Ext Time (p_c), s				4.0		0.6		9.9

Intersection Summary	
HCM 2010 Ctrl Delay	6.4
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	970	40	20	1190	20	30	10	30	10	10	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1900	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	42	1021	42	21	1253	21	32	11	32	11	11	42
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	4312	177	53	4181	70	131	38	109	140	30	116
Arrive On Green	0.05	0.83	0.83	0.06	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	1774	5211	214	1774	5151	86	1346	438	1274	1358	353	1347
Grp Volume(v), veh/h	42	690	373	21	825	449	32	0	43	11	0	53
Grp Sat Flow(s),veh/h/ln	1774	1763	1899	1774	1695	1848	1346	0	1712	1358	0	1700
Q Serve(g_s), s	3.0	5.5	5.5	1.5	0.0	0.0	3.0	0.0	3.1	1.0	0.0	3.8
Cycle Q Clear(g_c), s	3.0	5.5	5.5	1.5	0.0	0.0	6.8	0.0	3.1	4.1	0.0	3.8
Prop In Lane	1.00		0.11	1.00		0.05	1.00		0.74	1.00		0.79
Lane Grp Cap(c), veh/h	81	2918	1572	53	2752	1500	131	0	147	140	0	146
V/C Ratio(X)	0.52	0.24	0.24	0.40	0.30	0.30	0.24	0.00	0.29	0.08	0.00	0.36
Avail Cap(c_a), veh/h	198	2918	1572	198	2752	1500	393	0	479	404	0	476
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	0.89	0.89	0.89	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.7	2.4	2.4	60.0	0.0	0.0	59.3	0.0	55.7	57.6	0.0	56.1
Incr Delay (d2), s/veh	1.5	0.1	0.3	1.6	0.2	0.5	0.4	0.0	0.4	0.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	2.6	2.9	0.7	0.1	0.2	1.1	0.0	1.5	0.4	0.0	1.8
LnGrp Delay(d),s/veh	62.1	2.5	2.7	61.6	0.2	0.5	59.6	0.0	56.1	57.7	0.0	56.6
LnGrp LOS	E	A	A	E	A	A	E		E	E		E
Approach Vol, veh/h		1105			1295			75			64	
Approach Delay, s/veh		4.9			1.3			57.6			56.8	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.8	5.4	110.9		13.8	7.4	108.8
Change Period (Y+Rc), s		4.6	3.5	5.3		4.6	3.5	5.3
Max Green Setting (Gmax), s		34.4	12.5	69.7		34.4	12.5	69.7
Max Q Clear Time (g_c+I1), s		8.8	3.5	7.5		6.1	5.0	2.0
Green Ext Time (p_c), s		0.4	0.0	39.9		0.4	0.0	41.9

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	260	700	120	300	760	320	230	1180	110	260	960	120
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	274	737	126	316	800	337	242	1242	116	274	1011	126
Adj No. of Lanes	2	3	0	2	3	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	378	1022	173	425	1311	849	477	1273	119	494	1356	169
Arrive On Green	0.11	0.23	0.23	0.12	0.26	0.26	0.27	0.27	0.27	0.28	0.28	0.28
Sat Flow, veh/h	3442	4380	742	3442	5085	1583	1774	4733	442	1774	4875	606
Grp Volume(v), veh/h	274	569	294	316	800	337	242	890	468	274	772	365
Grp Sat Flow(s),veh/h/ln	1721	1695	1732	1721	1695	1583	1774	1695	1785	1774	1863	1756
Q Serve(g_s), s	9.9	19.9	20.2	11.4	17.9	16.2	14.9	33.5	33.6	17.0	24.3	24.4
Cycle Q Clear(g_c), s	9.9	19.9	20.2	11.4	17.9	16.2	14.9	33.5	33.6	17.0	24.3	24.4
Prop In Lane	1.00		0.43	1.00		1.00	1.00		0.25	1.00		0.35
Lane Grp Cap(c), veh/h	378	791	404	425	1311	849	477	912	480	494	1036	488
V/C Ratio(X)	0.73	0.72	0.73	0.74	0.61	0.40	0.51	0.98	0.98	0.56	0.74	0.75
Avail Cap(c_a), veh/h	494	791	404	494	1311	849	477	912	480	494	1036	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	0.67	0.67	0.67	0.41	0.41	0.41
Uniform Delay (d), s/veh	55.5	45.6	45.7	54.6	42.2	17.6	39.9	46.7	46.7	39.7	42.4	42.4
Incr Delay (d2), s/veh	2.2	5.6	10.9	3.8	2.0	1.3	2.6	19.2	28.2	1.8	2.0	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.8	9.9	10.9	5.7	8.6	11.6	7.7	18.1	20.3	8.6	12.8	12.4
LnGrp Delay(d),s/veh	57.8	51.1	56.6	58.4	44.2	18.9	42.5	65.9	74.9	41.6	44.4	46.7
LnGrp LOS	E	D	E	E	D	B	D	E	E	D	D	D
Approach Vol, veh/h		1137			1453			1600			1411	
Approach Delay, s/veh		54.2			41.4			65.0			44.5	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		39.2	15.7	36.2		38.0	18.8	33.0
Change Period (Y+Rc), s		5.3	3.5	4.9		5.3	4.9	* 4.9
Max Green Setting (Gmax), s		32.7	16.5	28.1		32.7	16.5	* 28
Max Q Clear Time (g_c+I1), s		26.4	11.9	19.9		35.6	13.4	22.2
Green Ext Time (p_c), s		4.7	0.2	5.2		0.0	0.5	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	51.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

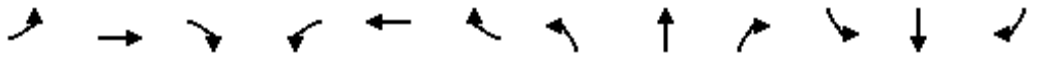
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	1030	70	160	1110	110	90	10	130	100	30	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	126	1084	74	168	1168	116	95	11	137	105	32	105
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	2260	154	393	2831	281	189	32	395	246	69	422
Arrive On Green	0.03	0.15	0.15	0.44	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1774	5057	345	1774	4892	486	1247	119	1482	739	258	1583
Grp Volume(v), veh/h	126	755	403	168	842	442	95	0	148	137	0	105
Grp Sat Flow(s),veh/h/ln	1774	1763	1876	1774	1763	1852	1247	0	1601	997	0	1583
Q Serve(g_s), s	9.1	25.6	25.6	8.5	0.0	0.0	9.6	0.0	9.7	11.0	0.0	6.8
Cycle Q Clear(g_c), s	9.1	25.6	25.6	8.5	0.0	0.0	30.3	0.0	9.7	20.7	0.0	6.8
Prop In Lane	1.00		0.18	1.00		0.26	1.00		0.93	0.77		1.00
Lane Grp Cap(c), veh/h	179	1576	839	393	2040	1072	189	0	427	315	0	422
V/C Ratio(X)	0.70	0.48	0.48	0.43	0.41	0.41	0.50	0.00	0.35	0.44	0.00	0.25
Avail Cap(c_a), veh/h	389	1576	839	393	2040	1072	206	0	448	333	0	443
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.81	0.81	0.81	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.9	41.5	41.6	30.5	0.0	0.0	56.1	0.0	38.5	45.9	0.0	37.4
Incr Delay (d2), s/veh	1.5	0.8	1.6	0.2	0.5	0.9	0.8	0.0	0.2	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	12.7	13.7	4.1	0.1	0.3	3.3	0.0	4.3	4.4	0.0	3.0
LnGrp Delay(d),s/veh	62.4	42.4	43.1	30.7	0.5	0.9	56.8	0.0	38.7	46.3	0.0	37.6
LnGrp LOS	E	D	D	C	A	A	E		D	D		D
Approach Vol, veh/h		1284			1452			243			242	
Approach Delay, s/veh		44.6			4.1			45.8			42.5	
Approach LOS		D			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		37.3	31.7	61.0		37.3	14.6	78.1
Change Period (Y+Rc), s		4.6	4.9	* 4.9		4.6	3.5	4.9
Max Green Setting (Gmax), s		34.4	26.5	* 56		34.4	26.5	56.1
Max Q Clear Time (g_c+I1), s		32.3	10.5	27.6		22.7	11.1	2.0
Green Ext Time (p_c), s		0.4	1.0	11.6		1.3	0.1	16.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	860	130	10	980	100	50	20	10	60	20	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	32	905	137	11	1032	105	53	21	11	63	21	32
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	2639	399	41	2693	274	152	120	63	171	69	106
Arrive On Green	0.10	1.00	1.00	0.02	0.80	0.80	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1774	3207	485	1774	3374	343	1346	1199	628	1372	694	1057
Grp Volume(v), veh/h	32	519	523	11	563	574	53	0	32	63	0	53
Grp Sat Flow(s),veh/h/ln	1774	1840	1852	1774	1840	1877	1346	0	1826	1372	0	1751
Q Serve(g_s), s	2.2	0.0	0.0	0.8	11.6	11.6	4.9	0.0	2.1	5.7	0.0	3.7
Cycle Q Clear(g_c), s	2.2	0.0	0.0	0.8	11.6	11.6	8.6	0.0	2.1	7.8	0.0	3.7
Prop In Lane	1.00		0.26	1.00		0.18	1.00		0.34	1.00		0.60
Lane Grp Cap(c), veh/h	85	1515	1524	41	1469	1498	152	0	183	171	0	175
V/C Ratio(X)	0.38	0.34	0.34	0.27	0.38	0.38	0.35	0.00	0.17	0.37	0.00	0.30
Avail Cap(c_a), veh/h	198	1515	1524	198	1469	1498	332	0	427	354	0	409
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	0.0	0.0	62.4	3.8	3.8	58.3	0.0	53.6	57.2	0.0	54.3
Incr Delay (d2), s/veh	0.1	0.1	0.1	1.3	0.8	0.7	0.5	0.0	0.2	0.5	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	0.0	0.0	0.4	6.1	6.2	1.9	0.0	1.1	2.2	0.0	1.8
LnGrp Delay(d),s/veh	57.1	0.1	0.1	63.7	4.6	4.6	58.8	0.0	53.7	57.6	0.0	54.6
LnGrp LOS	E	A	A	E	A	A	E		D	E		D
Approach Vol, veh/h		1074			1148			85			116	
Approach Delay, s/veh		1.8			5.1			56.9			56.3	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	109.9		15.6	7.7	106.7		15.6
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	12.5	76.1		28.4	12.5	76.1		28.4
Max Q Clear Time (g_c+I1), s	2.8	2.0		9.8	4.2	13.6		10.6
Green Ext Time (p_c), s	0.0	46.1		0.4	0.0	41.5		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	7.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	1130	20	60	710	90	10	10	50	130	30	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1900	1863	1863	1900	1976	1937	1976	1900	1863	1863
Adj Flow Rate, veh/h	53	1189	21	63	747	95	11	11	53	137	32	53
Adj No. of Lanes	1	3	0	1	4	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	2992	53	110	3038	379	34	46	111	152	30	475
Arrive On Green	0.21	1.00	1.00	0.04	0.35	0.35	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1703	5146	91	1774	5815	726	0	154	371	327	100	1583
Grp Volume(v), veh/h	53	783	427	63	615	227	75	0	0	169	0	53
Grp Sat Flow(s),veh/h/ln	1703	1695	1847	1774	1602	1735	525	0	0	427	0	1583
Q Serve(g_s), s	3.1	0.0	0.0	4.2	10.9	11.2	0.0	0.0	0.0	0.0	0.0	2.9
Cycle Q Clear(g_c), s	3.1	0.0	0.0	4.2	10.9	11.2	36.0	0.0	0.0	36.0	0.0	2.9
Prop In Lane	1.00		0.05	1.00		0.42	0.15		0.71	0.81		1.00
Lane Grp Cap(c), veh/h	180	1971	1074	110	2511	906	192	0	0	182	0	475
V/C Ratio(X)	0.29	0.40	0.40	0.57	0.24	0.25	0.39	0.00	0.00	0.93	0.00	0.11
Avail Cap(c_a), veh/h	206	1971	1074	214	2511	906	192	0	0	182	0	475
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.98	0.98	0.98	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.5	0.0	0.0	55.9	22.2	22.3	33.3	0.0	0.0	45.8	0.0	30.4
Incr Delay (d2), s/veh	0.3	0.6	1.1	1.7	0.2	0.7	0.5	0.0	0.0	45.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	0.2	0.3	2.1	4.9	5.5	1.8	0.0	0.0	7.9	0.0	1.3
LnGrp Delay(d),s/veh	43.8	0.6	1.1	57.7	22.4	22.9	33.8	0.0	0.0	91.0	0.0	30.5
LnGrp LOS	D	A	A	E	C	C	C			F		C
Approach Vol, veh/h		1263			905			75			222	
Approach Delay, s/veh		2.6			25.0			33.8			76.5	
Approach LOS		A			C			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.0	8.9	73.1		38.0	16.0	66.0
Change Period (Y+Rc), s		4.0	3.5	5.3		4.0	5.3	* 5.3
Max Green Setting (Gmax), s		34.0	12.5	60.7		34.0	12.5	* 61
Max Q Clear Time (g_c+I1), s		38.0	6.2	2.0		38.0	5.1	13.2
Green Ext Time (p_c), s		0.0	0.0	17.6		0.0	0.5	10.3

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B

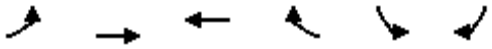
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	850	100	120	980	170	120	540	130	70	340	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	116	895	105	126	1032	179	126	568	137	74	358	95
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	2671	312	176	2560	443	226	840	202	140	824	216
Arrive On Green	0.18	1.00	1.00	0.10	0.56	0.56	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	4803	561	1774	4538	786	934	2945	708	740	2887	757
Grp Volume(v), veh/h	116	656	344	126	801	410	126	354	351	74	227	226
Grp Sat Flow(s),veh/h/ln	1774	1763	1838	1774	1763	1799	934	1840	1812	740	1840	1804
Q Serve(g_s), s	8.0	0.0	0.0	9.0	16.7	16.7	16.6	22.2	22.3	12.8	13.0	13.3
Cycle Q Clear(g_c), s	8.0	0.0	0.0	9.0	16.7	16.7	29.9	22.2	22.3	35.1	13.0	13.3
Prop In Lane	1.00		0.31	1.00		0.44	1.00		0.39	1.00		0.42
Lane Grp Cap(c), veh/h	162	1961	1022	176	1989	1015	226	525	517	140	525	515
V/C Ratio(X)	0.72	0.33	0.34	0.72	0.40	0.40	0.56	0.67	0.68	0.53	0.43	0.44
Avail Cap(c_a), veh/h	198	1961	1022	307	1989	1015	226	525	517	140	525	515
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	0.52	0.52	0.52	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	0.0	0.0	56.8	16.0	16.0	50.2	41.1	41.2	56.7	37.9	38.0
Incr Delay (d2), s/veh	6.3	0.5	0.9	2.0	0.6	1.2	1.0	1.5	1.5	1.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	0.1	0.2	4.5	8.3	8.6	4.3	11.4	11.3	2.7	6.6	6.7
LnGrp Delay(d),s/veh	57.8	0.5	0.9	58.8	16.6	17.2	51.1	42.6	42.7	58.6	38.1	38.2
LnGrp LOS	E	A	A	E	B	B	D	D	D	E	D	D
Approach Vol, veh/h		1116			1337			831			527	
Approach Delay, s/veh		6.5			20.8			43.9			41.0	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.4	75.6		40.0	13.4	76.6		40.0
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	20.5	60.7		35.1	12.5	68.7		35.1
Max Q Clear Time (g_c+I1), s	11.0	2.0		37.1	10.0	18.7		31.9
Green Ext Time (p_c), s	0.1	36.1		0.0	0.0	32.7		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	24.4
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	130	1120	670	50	100	130
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	137	1179	705	53	105	137
Adj No. of Lanes	1	3	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	186	4260	4419	328	210	191
Arrive On Green	0.21	1.00	1.00	1.00	0.12	0.12
Sat Flow, veh/h	1774	5253	6394	455	1774	1615
Grp Volume(v), veh/h	137	1179	550	208	105	137
Grp Sat Flow(s),veh/h/ln	1774	1695	1602	1782	1774	1615
Q Serve(g_s), s	8.7	0.0	0.0	0.0	6.7	9.8
Cycle Q Clear(g_c), s	8.7	0.0	0.0	0.0	6.7	9.8
Prop In Lane	1.00			0.26	1.00	1.00
Lane Grp Cap(c), veh/h	186	4260	3462	1284	210	191
V/C Ratio(X)	0.74	0.28	0.16	0.16	0.50	0.72
Avail Cap(c_a), veh/h	214	4260	3462	1284	517	471
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.99	0.99	1.00	1.00
Uniform Delay (d), s/veh	45.9	0.0	0.0	0.0	49.6	51.0
Incr Delay (d2), s/veh	6.9	0.1	0.1	0.3	0.7	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	0.1	0.0	0.1	3.3	8.7
LnGrp Delay(d),s/veh	52.7	0.1	0.1	0.3	50.3	52.9
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		1316	758		242	
Approach Delay, s/veh		5.6	0.1		51.8	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				103.8		16.2	14.1	89.8
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				77.7		33.0	12.5	61.7
Max Q Clear Time (g_c+I1), s				2.0		11.8	10.7	2.0
Green Ext Time (p_c), s				39.8		0.4	0.0	35.1

Intersection Summary	
HCM 2010 Ctrl Delay	8.6
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	30	120	20	10	10	70	1780	30	20	1330	260
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	116	32	126	21	11	11	74	1874	32	21	1400	274
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	44	174	73	38	23	93	3827	65	30	3021	590
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.11	1.00	1.00	0.02	0.71	0.71
Sat Flow, veh/h	1384	331	1302	212	284	171	1774	5150	88	1774	4271	835
Grp Volume(v), veh/h	116	0	158	43	0	0	74	1233	673	21	1111	563
Grp Sat Flow(s),veh/h/ln	1384	0	1633	667	0	0	1774	1695	1847	1774	1695	1715
Q Serve(g_s), s	1.0	0.0	11.1	0.9	0.0	0.0	4.9	0.0	0.0	1.4	17.1	17.2
Cycle Q Clear(g_c), s	13.0	0.0	11.1	12.0	0.0	0.0	4.9	0.0	0.0	1.4	17.1	17.2
Prop In Lane	1.00		0.80	0.49		0.26	1.00		0.05	1.00		0.49
Lane Grp Cap(c), veh/h	208	0	218	134	0	0	93	2520	1373	30	2398	1213
V/C Ratio(X)	0.56	0.00	0.73	0.32	0.00	0.00	0.79	0.49	0.49	0.71	0.46	0.46
Avail Cap(c_a), veh/h	508	0	572	444	0	0	200	2520	1373	200	2398	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.30	0.30	0.30	0.62	0.62	0.62
Uniform Delay (d), s/veh	50.8	0.0	49.9	48.1	0.0	0.0	53.0	0.0	0.0	58.7	7.6	7.7
Incr Delay (d2), s/veh	0.9	0.0	1.7	0.5	0.0	0.0	1.7	0.2	0.4	6.8	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	0.0	5.2	1.4	0.0	0.0	2.4	0.1	0.1	0.8	8.0	8.2
LnGrp Delay(d),s/veh	51.7	0.0	51.6	48.6	0.0	0.0	54.7	0.2	0.4	65.5	8.0	8.4
LnGrp LOS	D		D	D			D	A	A	E	A	A
Approach Vol, veh/h		274			43			1980			1695	
Approach Delay, s/veh		51.7			48.6			2.3			8.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	90.2		20.0	5.5	94.5		20.0
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	13.5	51.7		42.0	13.5	51.7		42.0
Max Q Clear Time (g_c+I1), s	6.9	19.2		15.0	3.4	2.0		14.0
Green Ext Time (p_c), s	0.0	31.7		1.0	0.0	47.7		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.0
HCM 2010 LOS	A

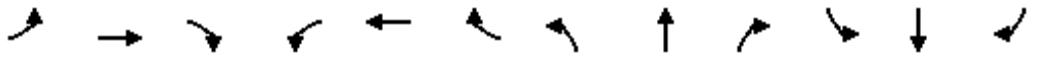
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	10	40	30	10	20	60	1760	30	60	1260	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	11	42	32	11	21	63	1853	32	63	1326	63
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	17	51	112	43	54	80	2690	46	445	3696	176
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.09	1.00	1.00	0.50	1.00	1.00
Sat Flow, veh/h	929	164	483	641	405	511	1774	5148	89	1774	4975	236
Grp Volume(v), veh/h	137	0	0	64	0	0	63	1220	665	63	904	485
Grp Sat Flow(s),veh/h/ln	1576	0	0	1558	0	0	1774	1695	1847	1774	1695	1821
Q Serve(g_s), s	5.6	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	2.3	0.0	0.0
Cycle Q Clear(g_c), s	10.0	0.0	0.0	4.4	0.0	0.0	4.2	0.0	0.0	2.3	0.0	0.0
Prop In Lane	0.61		0.31	0.50		0.33	1.00		0.05	1.00		0.13
Lane Grp Cap(c), veh/h	214	0	0	209	0	0	80	1771	965	445	2518	1353
V/C Ratio(X)	0.64	0.00	0.00	0.31	0.00	0.00	0.79	0.69	0.69	0.14	0.36	0.36
Avail Cap(c_a), veh/h	450	0	0	449	0	0	170	1771	965	445	2518	1353
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.62	0.62	0.62	0.70	0.70	0.70
Uniform Delay (d), s/veh	52.3	0.0	0.0	49.9	0.0	0.0	54.0	0.0	0.0	23.0	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.3	0.0	0.0	3.9	1.4	2.5	0.0	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	0.0	0.0	2.0	0.0	0.0	2.1	0.3	0.7	1.1	0.1	0.2
LnGrp Delay(d),s/veh	53.5	0.0	0.0	50.2	0.0	0.0	57.9	1.4	2.5	23.0	0.3	0.5
LnGrp LOS	D			D			E	A	A	C	A	A
Approach Vol, veh/h		137			64			1948			1452	
Approach Delay, s/veh		53.5			50.2			3.6			1.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	35.4	68.0		16.6	8.9	94.4		16.6
Change Period (Y+Rc), s	5.3	* 5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	* 63		32.0	11.5	63.7		32.0
Max Q Clear Time (g_c+I1), s	4.3	2.0		12.0	6.2	2.0		6.4
Green Ext Time (p_c), s	1.8	35.5		0.7	0.0	21.6		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	5.4
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	510	170	120	590	120	220	1560	170	170	1120	140
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.90	1.00		0.98	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	126	537	179	126	621	126	232	1642	179	179	1179	147
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	572	189	152	640	129	255	2018	219	203	2058	600
Arrive On Green	0.09	0.22	0.22	0.09	0.22	0.22	0.29	0.87	0.87	0.23	0.81	0.81
Sat Flow, veh/h	1774	2569	852	1774	2875	581	1774	4647	505	1774	5085	1481
Grp Volume(v), veh/h	126	369	347	126	382	365	232	1197	624	179	1179	147
Grp Sat Flow(s),veh/h/ln	1774	1770	1651	1774	1770	1687	1774	1695	1762	1774	1695	1481
Q Serve(g_s), s	8.4	24.6	24.8	8.4	25.6	25.8	15.1	18.9	19.2	11.7	9.9	2.8
Cycle Q Clear(g_c), s	8.4	24.6	24.8	8.4	25.6	25.8	15.1	18.9	19.2	11.7	9.9	2.8
Prop In Lane	1.00		0.52	1.00		0.34	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	152	394	367	152	394	375	255	1472	765	203	2058	600
V/C Ratio(X)	0.83	0.94	0.94	0.83	0.97	0.97	0.91	0.81	0.82	0.88	0.57	0.25
Avail Cap(c_a), veh/h	214	394	367	214	394	375	392	1472	765	259	2058	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.91	0.91	0.91	0.89	0.89	0.89	0.83	0.83	0.83	0.88	0.88	0.88
Uniform Delay (d), s/veh	54.0	45.8	45.9	54.0	46.2	46.3	42.0	5.7	5.7	45.5	7.7	7.1
Incr Delay (d2), s/veh	11.1	28.4	31.3	10.9	34.7	36.9	11.4	4.2	7.9	18.8	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	15.1	14.5	4.6	16.3	15.8	8.2	8.8	10.0	6.7	4.5	1.2
LnGrp Delay(d),s/veh	65.2	74.2	77.2	64.9	81.0	83.2	53.4	9.9	13.6	64.3	8.8	7.9
LnGrp LOS	E	E	E	E	F	F	D	A	B	E	A	A
Approach Vol, veh/h		842			873			2053			1505	
Approach Delay, s/veh		74.1			79.6			15.9			15.3	
Approach LOS		E			E			B			B	

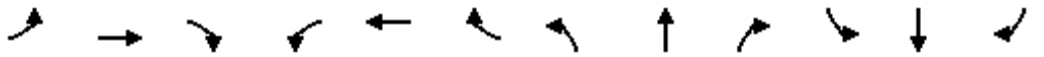
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.8	53.5	13.8	32.0	17.2	57.0	13.8	32.0
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	26.5	35.1	14.5	26.7	17.5	44.1	14.5	26.7
Max Q Clear Time (g_c+I1), s	17.1	11.9	10.4	27.8	13.7	21.2	10.4	26.8
Green Ext Time (p_c), s	0.1	22.2	0.0	0.0	0.1	22.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	90	70	30	120	70	80	820	20	50	520	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	95	74	32	126	74	84	863	21	53	547	84
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	156	103	94	228	122	572	2322	56	453	2023	310
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.66	0.66	0.64	0.66	0.66	0.64
Sat Flow, veh/h	423	712	469	142	1041	554	792	3531	86	625	3077	471
Grp Volume(v), veh/h	253	0	0	232	0	0	84	432	452	53	314	317
Grp Sat Flow(s),veh/h/ln	1605	0	0	1737	0	0	792	1770	1847	625	1770	1778
Q Serve(g_s), s	1.4	0.0	0.0	0.0	0.0	0.0	3.2	7.2	7.2	2.7	4.8	4.9
Cycle Q Clear(g_c), s	9.1	0.0	0.0	7.6	0.0	0.0	8.1	7.2	7.2	9.9	4.8	4.9
Prop In Lane	0.33		0.29	0.14		0.32	1.00		0.05	1.00		0.26
Lane Grp Cap(c), veh/h	426	0	0	444	0	0	572	1164	1215	453	1164	1169
V/C Ratio(X)	0.59	0.00	0.00	0.52	0.00	0.00	0.15	0.37	0.37	0.12	0.27	0.27
Avail Cap(c_a), veh/h	695	0	0	741	0	0	572	1164	1215	453	1164	1169
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.63	0.63	0.63	0.67	0.67	0.67
Uniform Delay (d), s/veh	23.2	0.0	0.0	22.8	0.0	0.0	6.3	5.0	5.1	7.3	4.6	4.7
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	0.3	0.6	0.6	0.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	0.0	0.0	3.8	0.0	0.0	0.8	3.7	3.8	0.5	2.4	2.4
LnGrp Delay(d),s/veh	23.7	0.0	0.0	23.2	0.0	0.0	6.7	5.6	5.6	7.6	5.0	5.1
LnGrp LOS	C			C			A	A	A	A	A	A
Approach Vol, veh/h		253			232			968			684	
Approach Delay, s/veh		23.7			23.2			5.7			5.2	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		46.7		18.3		46.7		18.3
Change Period (Y+Rc), s		4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s		30.1		26.0		30.1		26.0
Max Q Clear Time (g_c+I1), s		10.1		11.1		11.9		9.6
Green Ext Time (p_c), s		5.0		2.0		4.9		2.0

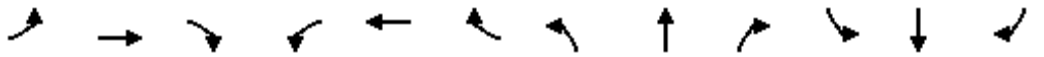
Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	780	110	80	500	110	90	560	120	100	520	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	168	821	116	84	526	116	95	589	126	105	547	126
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	957	135	99	781	171	387	1580	337	454	1557	357
Arrive On Green	0.09	0.31	0.30	0.06	0.27	0.26	1.00	1.00	1.00	0.54	0.54	0.54
Sat Flow, veh/h	1774	3113	440	1774	2884	633	762	2902	619	732	2858	656
Grp Volume(v), veh/h	168	467	470	84	322	320	95	359	356	105	338	335
Grp Sat Flow(s),veh/h/ln	1774	1770	1783	1774	1770	1748	762	1770	1751	732	1770	1745
Q Serve(g_s), s	12.0	32.3	32.3	6.1	21.1	21.3	4.2	0.0	0.0	9.9	14.0	14.1
Cycle Q Clear(g_c), s	12.0	32.3	32.3	6.1	21.1	21.3	18.3	0.0	0.0	9.9	14.0	14.1
Prop In Lane	1.00		0.25	1.00		0.36	1.00		0.35	1.00		0.38
Lane Grp Cap(c), veh/h	164	544	548	99	479	473	387	964	954	454	964	950
V/C Ratio(X)	1.03	0.86	0.86	0.85	0.67	0.68	0.25	0.37	0.37	0.23	0.35	0.35
Avail Cap(c_a), veh/h	164	803	809	177	817	807	387	964	954	454	964	950
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	0.54	0.54	0.54	0.48	0.48	0.48	0.25	0.25	0.25
Uniform Delay (d), s/veh	59.0	42.3	42.5	60.9	42.3	42.5	1.8	0.0	0.0	15.7	16.7	16.8
Incr Delay (d2), s/veh	64.5	2.9	2.9	4.2	0.3	0.3	0.7	0.5	0.5	0.3	0.3	0.3
Initial Q Delay(d3),s/veh	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.8	16.3	16.4	3.1	10.3	10.3	0.9	0.1	0.1	2.0	6.8	6.9
LnGrp Delay(d),s/veh	123.8	45.3	45.4	65.1	42.6	42.8	2.6	0.5	0.5	16.0	16.9	17.1
LnGrp LOS	F	D	D	E	D	D	A	A	A	B	B	B
Approach Vol, veh/h		1105			726			810			778	
Approach Delay, s/veh		57.3			45.3			0.8			16.9	
Approach LOS		E			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		74.8	11.2	44.0		74.8	16.0	39.2
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	13.5	58.1		45.1	12.5	59.1
Max Q Clear Time (g_c+I1), s		20.3	8.1	34.3		16.1	14.0	23.3
Green Ext Time (p_c), s		5.1	0.0	4.8		5.2	0.0	5.0

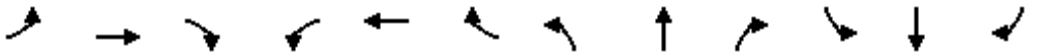
Intersection Summary	
HCM 2010 Ctrl Delay	32.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	540	100	50	680	130	120	760	70	70	430	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	105	568	105	53	716	137	126	800	74	74	453	105
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	1549	286	61	1438	275	296	1159	107	147	1010	232
Arrive On Green	0.07	0.52	0.51	0.03	0.49	0.48	0.35	0.35	0.35	0.71	0.71	0.69
Sat Flow, veh/h	1774	2984	550	1774	2964	567	847	3274	303	632	2855	657
Grp Volume(v), veh/h	105	336	337	53	427	426	126	432	442	74	279	279
Grp Sat Flow(s),veh/h/ln	1774	1770	1765	1774	1770	1761	847	1770	1807	632	1770	1743
Q Serve(g_s), s	7.6	14.7	14.8	3.9	21.3	21.4	16.3	27.2	27.2	14.1	8.8	9.1
Cycle Q Clear(g_c), s	7.6	14.7	14.8	3.9	21.3	21.4	25.3	27.2	27.2	41.3	8.8	9.1
Prop In Lane	1.00		0.31	1.00		0.32	1.00		0.17	1.00		0.38
Lane Grp Cap(c), veh/h	122	919	916	61	859	855	296	626	640	147	626	617
V/C Ratio(X)	0.86	0.37	0.37	0.86	0.50	0.50	0.43	0.69	0.69	0.50	0.45	0.45
Avail Cap(c_a), veh/h	164	919	916	123	859	855	296	626	640	147	626	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.47	0.47	0.47	0.50	0.50	0.50	0.42	0.42	0.42	0.97	0.97	0.97
Uniform Delay (d), s/veh	59.9	18.6	18.7	62.4	22.7	22.8	39.1	35.9	36.0	30.9	13.6	13.8
Incr Delay (d2), s/veh	12.3	0.5	0.5	6.6	1.0	1.0	1.9	2.7	2.6	11.5	2.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	7.3	7.4	2.0	10.7	10.7	4.0	13.7	14.0	2.9	4.6	4.6
LnGrp Delay(d),s/veh	72.3	19.1	19.2	69.0	23.7	23.9	41.0	38.6	38.6	42.4	15.8	16.2
LnGrp LOS	E	B	B	E	C	C	D	D	D	D	B	B
Approach Vol, veh/h		778			906			1000			632	
Approach Delay, s/veh		26.3			26.4			38.9			19.1	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		50.0	8.5	71.5		50.0	12.9	67.1
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	9.5	62.1		45.1	12.5	59.1
Max Q Clear Time (g_c+I1), s		29.2	5.9	16.8		43.3	9.6	23.4
Green Ext Time (p_c), s		4.7	0.0	5.7		1.1	0.0	5.7

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	150	0	90	0	600	120	60	580	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor					1.00	1.00		0.95		1.00	0.95	
Frt					1.00	0.85		0.98		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1770	1583		3451		1770	3539	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1770	1583		3451		1770	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	158	0	95	0	632	126	63	611	0
RTOR Reduction (vph)	0	0	0	0	0	83	0	6	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	158	12	0	752	0	63	611	0
Turn Type				Split	NA	Perm		NA		Prot	NA	
Protected Phases				8	8			2		1	6	
Permitted Phases						8						
Actuated Green, G (s)					14.7	14.7		85.6		7.3	96.4	
Effective Green, g (s)					14.7	14.7		86.5		6.8	97.3	
Actuated g/C Ratio					0.12	0.12		0.72		0.06	0.81	
Clearance Time (s)					4.0	4.0		4.9		3.5	4.9	
Vehicle Extension (s)					1.5	1.5		1.5		1.5	1.5	
Lane Grp Cap (vph)					216	193		2487		100	2869	
v/s Ratio Prot					c0.09			c0.22		c0.04	0.17	
v/s Ratio Perm						0.01						
v/c Ratio					0.73	0.06		0.30		0.63	0.21	
Uniform Delay, d1					50.7	46.5		6.0		55.4	2.6	
Progression Factor					0.84	1.01		0.47		0.81	1.08	
Incremental Delay, d2					9.9	0.0		0.2		7.3	0.1	
Delay (s)					52.4	46.8		3.0		52.4	2.9	
Level of Service					D	D		A		D	A	
Approach Delay (s)		0.0			50.3			3.0			7.6	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	20	60	100	20	140	80	740	150	110	580	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	21	63	105	21	147	84	779	158	116	611	32
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	51	85	185	37	193	98	2167	963	133	2160	113
Arrive On Green	0.06	0.06	0.06	0.12	0.12	0.12	0.11	1.00	1.00	0.15	1.00	1.00
Sat Flow, veh/h	909	909	1532	1490	298	1560	1774	3539	1573	1774	3420	179
Grp Volume(v), veh/h	42	0	63	126	0	147	84	779	158	116	316	327
Grp Sat Flow(s),veh/h/ln	1817	0	1532	1788	0	1560	1774	1770	1573	1774	1770	1830
Q Serve(g_s), s	2.7	0.0	4.9	8.0	0.0	10.9	5.6	0.0	0.0	7.7	0.0	0.0
Cycle Q Clear(g_c), s	2.7	0.0	4.9	8.0	0.0	10.9	5.6	0.0	0.0	7.7	0.0	0.0
Prop In Lane	0.50		1.00	0.83		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	101	0	85	222	0	193	98	2167	963	133	1118	1156
V/C Ratio(X)	0.41	0.00	0.74	0.57	0.00	0.76	0.85	0.36	0.16	0.87	0.28	0.28
Avail Cap(c_a), veh/h	136	0	115	402	0	351	281	2167	963	163	1118	1156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.82	0.82	0.82	0.98	0.98	0.98
Uniform Delay (d), s/veh	54.8	0.0	55.8	49.5	0.0	50.8	52.9	0.0	0.0	50.5	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	9.3	0.9	0.0	2.3	6.4	0.4	0.3	28.7	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.0	2.3	4.0	0.0	4.8	2.9	0.1	0.1	4.8	0.2	0.2
LnGrp Delay(d),s/veh	55.8	0.0	65.1	50.4	0.0	53.2	59.2	0.4	0.3	79.1	0.6	0.6
LnGrp LOS	E		E	D		D	E	A	A	E	A	A
Approach Vol, veh/h		105			273			1021			759	
Approach Delay, s/veh		61.3			51.9			5.2			12.6	
Approach LOS		E			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	77.5		10.7	10.7	79.8		18.9
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	11.5	56.1		9.0	19.5	48.1		27.0
Max Q Clear Time (g_c+I1), s	9.7	2.0		6.9	7.6	2.0		12.9
Green Ext Time (p_c), s	0.0	5.0		0.0	0.0	5.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	30	20	60	20	180	30	800	40	150	600	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	32	10	63	21	9	32	842	40	158	632	50
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	161	50	158	46	185	33	2340	111	178	2533	200
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.04	1.00	1.00	0.10	0.76	0.75
Sat Flow, veh/h	1355	1355	423	886	382	1551	1774	3440	163	1774	3323	263
Grp Volume(v), veh/h	42	0	42	84	0	9	32	433	449	158	336	346
Grp Sat Flow(s),veh/h/ln	1355	0	1778	1268	0	1551	1774	1770	1833	1774	1770	1816
Q Serve(g_s), s	3.6	0.0	2.6	5.8	0.0	0.6	2.2	0.0	0.0	10.6	6.7	6.7
Cycle Q Clear(g_c), s	12.0	0.0	2.6	8.3	0.0	0.6	2.2	0.0	0.0	10.6	6.7	6.7
Prop In Lane	1.00		0.24	0.75		1.00	1.00		0.09	1.00		0.14
Lane Grp Cap(c), veh/h	127	0	212	204	0	185	33	1204	1247	178	1349	1384
V/C Ratio(X)	0.33	0.00	0.20	0.41	0.00	0.05	0.97	0.36	0.36	0.89	0.25	0.25
Avail Cap(c_a), veh/h	226	0	341	308	0	297	118	1204	1247	281	1349	1384
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93	0.66	0.66	0.66
Uniform Delay (d), s/veh	55.9	0.0	47.7	50.8	0.0	46.8	57.7	0.0	0.0	53.3	4.2	4.2
Incr Delay (d2), s/veh	0.6	0.0	0.2	0.5	0.0	0.0	35.9	0.8	0.8	8.7	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.0	1.3	2.7	0.0	0.3	1.4	0.3	0.3	5.6	3.4	3.5
LnGrp Delay(d),s/veh	56.5	0.0	47.9	51.3	0.0	46.9	93.6	0.8	0.8	62.0	4.5	4.5
LnGrp LOS	E		D	D		D	F	A	A	E	A	A
Approach Vol, veh/h		84			93			914			840	
Approach Delay, s/veh		52.2			50.9			4.0			15.3	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.1	85.7		18.3	6.2	95.5		18.3
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	19.5	65.1		23.0	8.5	76.1		23.0
Max Q Clear Time (g_c+I1), s	12.6	2.0		14.0	4.2	8.7		10.3
Green Ext Time (p_c), s	0.1	4.8		0.3	0.0	4.8		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	13.3
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	340	110	430	370	120	400
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863
Adj Flow Rate, veh/h	358	91	453	389	126	181
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1513	380	458	1549	181	564
Arrive On Green	0.54	0.53	0.26	0.83	0.10	0.10
Sat Flow, veh/h	2895	703	1774	1863	1774	1583
Grp Volume(v), veh/h	224	225	453	389	126	181
Grp Sat Flow(s),veh/h/ln	1770	1735	1774	1863	1774	1583
Q Serve(g_s), s	8.0	8.3	30.5	5.3	8.2	10.0
Cycle Q Clear(g_c), s	8.0	8.3	30.5	5.3	8.2	10.0
Prop In Lane		0.41	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	955	937	458	1549	181	564
V/C Ratio(X)	0.23	0.24	0.99	0.25	0.70	0.32
Avail Cap(c_a), veh/h	955	937	458	1549	340	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.92	0.92	0.96	0.96
Uniform Delay (d), s/veh	14.5	14.7	44.3	2.2	52.1	28.1
Incr Delay (d2), s/veh	0.6	0.6	37.2	0.4	1.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.1	4.1	19.7	2.9	4.1	4.4
LnGrp Delay(d),s/veh	15.1	15.4	81.5	2.5	53.9	28.2
LnGrp LOS	B	B	F	A	D	C
Approach Vol, veh/h	449			842	307	
Approach Delay, s/veh	15.2			45.0	38.7	
Approach LOS	B			D	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	35.0	68.8				103.8		16.2
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	31.5	52.7				87.7		23.0
Max Q Clear Time (g_c+I1), s	32.5	10.3				7.3		12.0
Green Ext Time (p_c), s	0.0	9.0				9.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	35.4
HCM 2010 LOS	D

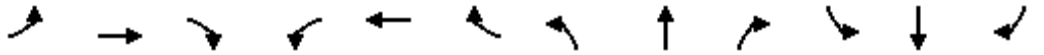
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	760	340	220	550	20	330	10	270	20	20	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	800	306	232	579	19	355	0	80	21	21	0
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	1931	733	252	3370	110	520	0	436	80	84	0
Arrive On Green	0.01	0.53	0.52	0.14	0.67	0.66	0.15	0.00	0.13	0.05	0.05	0.00
Sat Flow, veh/h	1774	3625	1376	1774	5057	165	3548	0	1566	1774	1863	0
Grp Volume(v), veh/h	21	748	358	232	387	211	355	0	80	21	21	0
Grp Sat Flow(s),veh/h/ln	1774	1695	1611	1774	1695	1832	1774	0	1566	1774	1863	0
Q Serve(g_s), s	1.0	15.9	16.3	15.5	5.2	5.2	11.4	0.0	4.7	1.4	1.3	0.0
Cycle Q Clear(g_c), s	1.0	15.9	16.3	15.5	5.2	5.2	11.4	0.0	4.7	1.4	1.3	0.0
Prop In Lane	1.00		0.85	1.00		0.09	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	15	1806	858	252	2259	1221	520	0	436	80	84	0
V/C Ratio(X)	1.39	0.41	0.42	0.92	0.17	0.17	0.68	0.00	0.18	0.26	0.25	0.00
Avail Cap(c_a), veh/h	148	1806	858	296	2259	1221	976	0	637	237	248	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.77	0.92	0.92	0.92	0.95	0.00	0.95	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.5	16.8	17.2	50.8	7.5	7.6	48.6	0.0	33.1	55.4	55.3	0.0
Incr Delay (d2), s/veh	197.6	0.5	1.2	26.5	0.2	0.3	2.1	0.0	0.3	0.6	0.6	0.0
Initial Q Delay(d3),s/veh	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	7.5	7.5	9.5	2.5	2.7	5.7	0.0	2.0	0.7	0.7	0.0
LnGrp Delay(d),s/veh	278.5	17.3	18.4	77.3	7.7	7.9	50.6	0.0	33.3	56.0	55.9	0.0
LnGrp LOS	F	B	B	E	A	A	D		C	E	E	
Approach Vol, veh/h		1127			830			435			42	
Approach Delay, s/veh		22.5			27.2			47.4			55.9	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.0	67.9		9.4	5.0	84.0		21.6
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	20.5	33.7		15.1	10.5	43.7		32.1
Max Q Clear Time (g_c+I1), s	17.5	18.3		3.4	3.0	7.2		13.4
Green Ext Time (p_c), s	0.1	11.9		0.0	0.0	22.2		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	29.2
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	1020	10	20	690	50	10	0	10	40	10	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	63	1074	11	21	726	53	11	0	11	42	11	137
Adj No. of Lanes	1	3	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	428	2467	25	340	2299	167	84	0	84	262	0	231
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.10	0.00	0.10	0.15	0.15	0.15
Sat Flow, veh/h	688	5190	53	517	4836	351	829	0	829	1774	0	1564
Grp Volume(v), veh/h	63	702	383	21	508	271	22	0	0	42	0	137
Grp Sat Flow(s),veh/h/ln	688	1695	1853	517	1695	1796	1658	0	0	1774	0	1564
Q Serve(g_s), s	2.7	6.0	6.0	1.2	4.0	4.1	0.5	0.0	0.0	0.9	0.0	3.6
Cycle Q Clear(g_c), s	6.8	6.0	6.0	7.2	4.0	4.1	0.5	0.0	0.0	0.9	0.0	3.6
Prop In Lane	1.00		0.03	1.00		0.20	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	428	1612	881	340	1612	854	169	0	0	262	0	231
V/C Ratio(X)	0.15	0.44	0.44	0.06	0.32	0.32	0.13	0.00	0.00	0.16	0.00	0.59
Avail Cap(c_a), veh/h	527	2100	1148	415	2100	1113	951	0	0	1018	0	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.2	7.6	7.6	9.9	7.1	7.1	17.8	0.0	0.0	16.2	0.0	17.4
Incr Delay (d2), s/veh	0.2	0.2	0.3	0.1	0.1	0.2	0.3	0.0	0.0	0.3	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.5	2.8	3.1	0.2	1.9	2.0	0.3	0.0	0.0	0.5	0.0	1.7
LnGrp Delay(d),s/veh	9.3	7.7	7.9	10.0	7.2	7.3	18.2	0.0	0.0	16.5	0.0	19.8
LnGrp LOS	A	A	A	B	A	A	B			B		B
Approach Vol, veh/h		1148			800			22			179	
Approach Delay, s/veh		7.9			7.3			18.2			19.0	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		8.4		24.7		10.4		24.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		27.0		25.0		27.0
Max Q Clear Time (g_c+I1), s		2.5		8.8		5.6		9.2
Green Ext Time (p_c), s		0.1		11.7		0.5		11.5

Intersection Summary	
HCM 2010 Ctrl Delay	8.7
HCM 2010 LOS	A

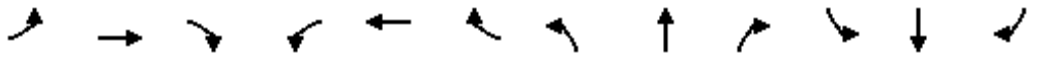
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	340	460	10	10	430	450	10	10	10	650	10	190
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	358	484	9	11	453	153	11	11	0	692	0	78
Adj No. of Lanes	1	3	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	382	3587	67	467	1573	696	30	30	0	566	0	251
Arrive On Green	0.22	0.70	0.69	0.44	0.44	0.44	0.03	0.03	0.00	0.16	0.00	0.16
Sat Flow, veh/h	1774	5140	95	895	3539	1566	909	909	0	3548	0	1574
Grp Volume(v), veh/h	358	319	174	11	453	153	22	0	0	692	0	78
Grp Sat Flow(s),veh/h/ln	1774	1695	1845	895	1770	1566	1817	0	0	1774	0	1574
Q Serve(g_s), s	20.6	3.3	3.3	0.7	8.5	6.3	1.2	0.0	0.0	16.6	0.0	4.6
Cycle Q Clear(g_c), s	20.6	3.3	3.3	0.7	8.5	6.3	1.2	0.0	0.0	16.6	0.0	4.6
Prop In Lane	1.00		0.05	1.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	382	2366	1288	467	1573	696	60	0	0	566	0	251
V/C Ratio(X)	0.94	0.13	0.14	0.02	0.29	0.22	0.37	0.00	0.00	1.22	0.00	0.31
Avail Cap(c_a), veh/h	529	2366	1288	467	1573	696	157	0	0	566	0	251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	0.97	0.97	0.97	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.1	5.2	5.3	16.3	18.4	17.8	49.2	0.0	0.0	43.7	0.0	38.6
Incr Delay (d2), s/veh	17.1	0.1	0.2	0.1	0.4	0.7	1.4	0.0	0.0	115.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	12.0	1.5	1.7	0.2	4.3	2.8	0.6	0.0	0.0	17.2	0.0	2.0
LnGrp Delay(d),s/veh	57.3	5.4	5.5	16.3	18.9	18.5	50.6	0.0	0.0	158.7	0.0	39.3
LnGrp LOS	E	A	A	B	B	B	D			F		D
Approach Vol, veh/h		851			617			22			770	
Approach Delay, s/veh		27.2			18.7			50.6			146.7	
Approach LOS		C			B			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		76.6		20.0	26.4	50.2		7.4
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		4.6
Max Green Setting (Gmax), s		65.7		16.0	31.5	30.7		8.4
Max Q Clear Time (g_c+I1), s		5.3		18.6	22.6	10.5		3.2
Green Ext Time (p_c), s		13.9		0.0	0.2	9.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.8
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.



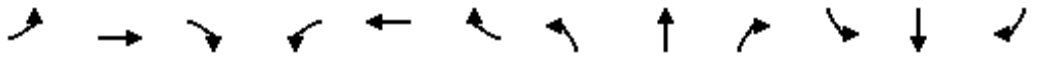
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	80	90	70	60	70	70	1490	80	40	1340	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	32	84	95	74	63	74	74	1568	84	42	1411	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	71	166	166	133	112	111	93	3013	161	53	3008	68
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.11	1.00	1.00	0.01	0.20	0.20
Sat Flow, veh/h	157	716	715	400	484	478	1714	4769	255	1714	4941	112
Grp Volume(v), veh/h	211	0	0	211	0	0	74	1077	575	42	935	508
Grp Sat Flow(s),veh/h/ln	1588	0	0	1362	0	0	1714	1638	1748	1714	1638	1777
Q Serve(g_s), s	0.0	0.0	0.0	3.6	0.0	0.0	5.1	0.0	0.0	2.9	30.2	30.2
Cycle Q Clear(g_c), s	13.7	0.0	0.0	17.3	0.0	0.0	5.1	0.0	0.0	2.9	30.2	30.2
Prop In Lane	0.15		0.45	0.35		0.35	1.00		0.15	1.00		0.06
Lane Grp Cap(c), veh/h	403	0	0	357	0	0	93	2070	1105	53	1994	1082
V/C Ratio(X)	0.52	0.00	0.00	0.59	0.00	0.00	0.80	0.52	0.52	0.79	0.47	0.47
Avail Cap(c_a), veh/h	466	0	0	414	0	0	150	2070	1105	107	1994	1082
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.84	0.84	0.84	0.85	0.85	0.85
Uniform Delay (d), s/veh	40.6	0.0	0.0	41.7	0.0	0.0	52.9	0.0	0.0	59.0	30.8	30.8
Incr Delay (d2), s/veh	1.1	0.0	0.0	1.7	0.0	0.0	12.2	0.8	1.5	19.3	0.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.3	0.0	0.0	6.6	0.0	0.0	2.7	0.2	0.5	1.7	13.9	15.3
LnGrp Delay(d),s/veh	41.7	0.0	0.0	43.4	0.0	0.0	65.1	0.8	1.5	78.3	31.5	32.1
LnGrp LOS	D			D			E	A	A	E	C	C
Approach Vol, veh/h		211			211			1726			1485	
Approach Delay, s/veh		41.7			43.4			3.8			33.0	
Approach LOS		D			D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	80.7		32.1	10.0	78.0		32.1
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	67.1		* 33	10.5	64.1		* 33
Max Q Clear Time (g_c+I1), s	4.9	2.0		15.7	7.1	32.2		19.3
Green Ext Time (p_c), s	0.0	42.2		2.6	0.0	25.3		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Notes

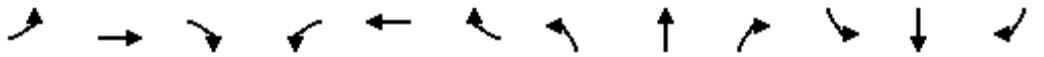
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	10	20	20	10	70	20	1670	20	80	1620	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	32	11	21	21	11	74	21	1758	21	84	1705	53
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	39	48	56	27	108	25	3640	43	105	3789	118
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.03	1.00	1.00	0.06	0.77	0.77
Sat Flow, veh/h	593	391	481	200	267	1080	1714	5005	60	1714	4897	152
Grp Volume(v), veh/h	64	0	0	106	0	0	21	1150	629	84	1140	618
Grp Sat Flow(s),veh/h/ln	1466	0	0	1547	0	0	1714	1638	1789	1714	1638	1773
Q Serve(g_s), s	0.0	0.0	0.0	3.1	0.0	0.0	1.5	0.0	0.0	5.8	14.5	14.5
Cycle Q Clear(g_c), s	4.7	0.0	0.0	7.8	0.0	0.0	1.5	0.0	0.0	5.8	14.5	14.5
Prop In Lane	0.50		0.33	0.20		0.70	1.00		0.03	1.00		0.09
Lane Grp Cap(c), veh/h	191	0	0	191	0	0	25	2382	1301	105	2535	1372
V/C Ratio(X)	0.33	0.00	0.00	0.56	0.00	0.00	0.84	0.48	0.48	0.80	0.45	0.45
Avail Cap(c_a), veh/h	408	0	0	421	0	0	121	2382	1301	121	2535	1372
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.29	0.29	0.29	0.66	0.66	0.66
Uniform Delay (d), s/veh	50.6	0.0	0.0	52.1	0.0	0.0	58.1	0.0	0.0	55.6	4.7	4.7
Incr Delay (d2), s/veh	1.0	0.0	0.0	2.5	0.0	0.0	18.7	0.2	0.4	19.3	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.0	0.0	0.0	3.5	0.0	0.0	0.8	0.1	0.1	3.3	6.6	7.3
LnGrp Delay(d),s/veh	51.6	0.0	0.0	54.6	0.0	0.0	76.9	0.2	0.4	74.9	5.1	5.4
LnGrp LOS	D			D			E	A	A	E	A	A
Approach Vol, veh/h		64			106			1800			1842	
Approach Delay, s/veh		51.6			54.6			1.2			8.4	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	92.6		16.6	5.2	98.2		16.6
Change Period (Y+Rc), s	3.5	5.3		4.6	3.5	5.3		4.6
Max Green Setting (Gmax), s	8.5	67.7		30.4	8.5	67.7		30.4
Max Q Clear Time (g_c+I1), s	7.8	2.0		6.7	3.5	16.5		9.8
Green Ext Time (p_c), s	0.0	51.7		1.0	0.0	42.3		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	40	20	160	50	140	20	1400	150	110	1260	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	63	42	21	168	53	147	21	1474	158	116	1326	42
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	137	87	44	299	71	197	25	1866	200	317	2915	92
Arrive On Green	0.08	0.08	0.08	0.17	0.17	0.17	0.01	0.41	0.41	0.18	0.60	0.60
Sat Flow, veh/h	1714	1091	546	1714	408	1132	1714	4499	482	1714	4890	155
Grp Volume(v), veh/h	63	0	63	168	0	200	21	1073	559	116	888	480
Grp Sat Flow(s),veh/h/ln	1714	0	1637	1714	0	1540	1714	1638	1705	1714	1638	1769
Q Serve(g_s), s	4.5	0.0	4.7	11.5	0.0	15.8	1.6	36.5	36.5	7.6	19.2	19.2
Cycle Q Clear(g_c), s	4.5	0.0	4.7	11.5	0.0	15.8	1.6	36.5	36.5	7.6	19.2	19.2
Prop In Lane	1.00		0.33	1.00		0.74	1.00		0.28	1.00		0.09
Lane Grp Cap(c), veh/h	137	0	131	299	0	268	25	1359	707	317	1953	1054
V/C Ratio(X)	0.46	0.00	0.48	0.56	0.00	0.75	0.83	0.79	0.79	0.37	0.45	0.45
Avail Cap(c_a), veh/h	214	0	205	376	0	338	114	1359	707	317	1953	1054
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.56	0.00	0.56	0.75	0.75	0.75	0.93	0.93	0.93
Uniform Delay (d), s/veh	56.3	0.0	56.4	48.4	0.0	50.2	62.9	32.6	32.6	45.6	14.3	14.3
Incr Delay (d2), s/veh	2.4	0.0	2.7	0.9	0.0	3.8	38.7	3.6	6.7	0.7	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	0.0	2.2	5.5	0.0	7.0	1.0	17.1	18.4	3.6	8.8	9.7
LnGrp Delay(d),s/veh	58.6	0.0	59.1	49.3	0.0	54.0	101.6	36.2	39.3	46.3	15.0	15.6
LnGrp LOS	E		E	D		D	F	D	D	D	B	B
Approach Vol, veh/h		126			368			1653			1484	
Approach Delay, s/veh		58.9			51.9			38.1			17.7	
Approach LOS		E			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	28.6	58.0		14.2	5.4	81.2		27.2
Change Period (Y+Rc), s	4.9	* 4.9		4.0	3.5	4.9		4.9
Max Green Setting (Gmax), s	13.5	* 53		16.0	8.5	58.1		28.1
Max Q Clear Time (g_c+I1), s	9.6	38.5		6.7	3.6	21.2		17.8
Green Ext Time (p_c), s	0.2	8.6		0.3	0.0	10.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	31.9
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	30	30	30	20	60	20	1520	60	40	1330	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.94	0.95		0.94	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	84	32	32	32	21	63	21	1600	63	42	1400	53
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	308	175	175	107	76	173	25	3124	123	53	3209	121
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.01	0.64	0.64	0.06	1.00	1.00
Sat Flow, veh/h	1203	797	797	314	348	786	1714	4850	191	1714	4858	184
Grp Volume(v), veh/h	84	0	64	116	0	0	21	1081	582	42	944	509
Grp Sat Flow(s),veh/h/ln	1203	0	1595	1448	0	0	1714	1638	1765	1714	1638	1766
Q Serve(g_s), s	1.1	0.0	3.9	2.5	0.0	0.0	1.5	21.0	21.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	8.8	0.0	3.9	7.7	0.0	0.0	1.5	21.0	21.0	2.9	0.0	0.0
Prop In Lane	1.00		0.50	0.28		0.54	1.00		0.11	1.00		0.10
Lane Grp Cap(c), veh/h	308	0	351	357	0	0	25	2111	1137	53	2164	1166
V/C Ratio(X)	0.27	0.00	0.18	0.33	0.00	0.00	0.84	0.51	0.51	0.79	0.44	0.44
Avail Cap(c_a), veh/h	352	0	409	409	0	0	107	2111	1137	107	2164	1166
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.74	0.74	0.74	0.80	0.80	0.80
Uniform Delay (d), s/veh	40.0	0.0	38.0	39.4	0.0	0.0	59.0	11.3	11.3	55.9	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.2	0.5	0.0	0.0	39.4	0.7	1.2	18.8	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.4	0.0	1.7	3.3	0.0	0.0	1.0	9.6	10.6	1.7	0.2	0.3
LnGrp Delay(d),s/veh	40.5	0.0	38.3	40.0	0.0	0.0	98.4	12.0	12.6	74.8	0.5	0.9
LnGrp LOS	D		D	D			F	B	B	E	A	A
Approach Vol, veh/h		148			116			1684			1495	
Approach Delay, s/veh		39.6			40.0			13.3			2.7	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	82.2		30.6	5.2	84.2		30.6
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	69.1		* 31	7.5	69.1		* 31
Max Q Clear Time (g_c+I1), s	4.9	23.0		10.8	3.5	2.0		9.7
Green Ext Time (p_c), s	0.0	33.7		1.4	0.0	43.4		1.4

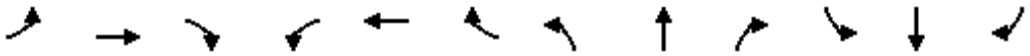
Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	70	90	1300	70	120	1310
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2		4.9		3.5	4.9
Lane Util. Factor	1.00		0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.92		0.99		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1606		4876		1710	4914
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1606		4876		1710	4914
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	74	95	1368	74	126	1379
RTOR Reduction (vph)	45	0	4	0	0	0
Lane Group Flow (vph)	124	0	1438	0	126	1379
Confl. Peds. (#/hr)		9				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Prot		NA		Prot	NA
Protected Phases	4		2 9		1	6
Permitted Phases						
Actuated Green, G (s)	14.4		68.6		14.7	68.1
Effective Green, g (s)	14.4		68.6		14.7	68.1
Actuated g/C Ratio	0.12		0.57		0.12	0.57
Clearance Time (s)	4.2				3.5	4.9
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	192		2787		209	2788
v/s Ratio Prot	c0.08		c0.29		c0.07	0.28
v/s Ratio Perm						
v/c Ratio	0.65		0.52		0.60	0.49
Uniform Delay, d1	50.4		15.6		49.9	15.6
Progression Factor	1.00		0.05		1.00	1.00
Incremental Delay, d2	7.3		0.6		4.8	0.6
Delay (s)	57.6		1.4		54.7	16.2
Level of Service	E		A		D	B
Approach Delay (s)	57.6		1.4			19.5
Approach LOS	E		A			B

Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	0	50	10	10	10	30	1330	10	20	1280	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.93		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1710	1530		1710	1665		1710	4907		1710	4860	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1710	1530		1710	1665		1710	4907		1710	4860	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	0	53	11	11	11	32	1400	11	21	1347	84
RTOR Reduction (vph)	0	50	0	0	10	0	0	1	0	0	4	0
Lane Group Flow (vph)	32	3	0	11	12	0	32	1410	0	21	1428	0
Confl. Peds. (#/hr)							5		7	7		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6 10	
Permitted Phases												
Actuated Green, G (s)	5.9	5.9		14.4	14.4		5.3	57.4		14.7	78.0	
Effective Green, g (s)	5.9	5.9		14.4	14.4		5.3	57.4		14.7	78.0	
Actuated g/C Ratio	0.05	0.05		0.12	0.12		0.04	0.48		0.12	0.65	
Clearance Time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	84	75		205	199		75	2347		209	3159	
v/s Ratio Prot	c0.02	0.00		0.01	c0.01		c0.02	c0.29		0.01	c0.29	
v/s Ratio Perm												
v/c Ratio	0.38	0.03		0.05	0.06		0.43	0.60		0.10	0.45	
Uniform Delay, d1	55.3	54.3		46.8	46.8		55.9	22.9		46.8	10.4	
Progression Factor	1.00	1.00		1.00	1.00		1.43	0.30		1.69	0.07	
Incremental Delay, d2	2.9	0.2		0.1	0.1		3.3	1.0		0.2	0.4	
Delay (s)	58.2	54.5		46.9	46.9		83.1	7.9		79.1	1.1	
Level of Service	E	D		D	D		F	A		E	A	
Approach Delay (s)		55.9			46.9			9.6			2.2	
Approach LOS		E			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	130	60	150	180	90	70	1300	160	90	1230	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	74	137	63	158	189	95	74	1368	168	95	1295	53
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	94	342	149	184	448	215	94	2387	293	117	2672	109
Arrive On Green	0.05	0.15	0.15	0.11	0.20	0.20	0.02	0.18	0.18	0.09	0.73	0.73
Sat Flow, veh/h	1714	2304	1004	1714	2231	1071	1714	4431	544	1714	4841	198
Grp Volume(v), veh/h	74	100	100	158	143	141	74	1011	525	95	876	472
Grp Sat Flow(s),veh/h/ln	1714	1710	1598	1714	1710	1592	1714	1638	1699	1714	1638	1763
Q Serve(g_s), s	5.1	6.3	6.8	10.9	8.7	9.3	5.2	33.9	33.9	6.5	13.2	13.2
Cycle Q Clear(g_c), s	5.1	6.3	6.8	10.9	8.7	9.3	5.2	33.9	33.9	6.5	13.2	13.2
Prop In Lane	1.00		0.63	1.00		0.67	1.00		0.32	1.00		0.11
Lane Grp Cap(c), veh/h	94	254	237	184	344	320	94	1765	915	117	1808	973
V/C Ratio(X)	0.79	0.39	0.42	0.86	0.42	0.44	0.79	0.57	0.57	0.81	0.48	0.48
Avail Cap(c_a), veh/h	207	476	445	207	476	443	121	1765	915	121	1808	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.81	0.81	0.81	0.69	0.69	0.69	0.84	0.84	0.84	0.90	0.90	0.90
Uniform Delay (d), s/veh	56.0	46.2	46.4	52.7	41.8	42.0	58.2	36.7	36.7	53.8	8.9	8.9
Incr Delay (d2), s/veh	11.1	0.8	1.0	19.6	0.6	0.7	19.4	1.1	2.2	29.5	0.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.7	3.0	3.1	6.1	4.2	4.2	3.0	15.7	16.6	4.1	6.1	6.7
LnGrp Delay(d),s/veh	67.1	47.0	47.4	72.3	42.4	42.7	77.7	37.9	38.9	83.4	9.7	10.5
LnGrp LOS	E	D	D	E	D	D	E	D	D	F	A	B
Approach Vol, veh/h		274			442			1610			1443	
Approach Delay, s/veh		52.6			53.2			40.0			14.8	
Approach LOS		D			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	69.5	16.4	22.4	10.1	71.1	10.1	28.7
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	8.5	47.1	14.5	33.4	8.5	47.1	14.5	33.4
Max Q Clear Time (g_c+I1), s	8.5	35.9	12.9	8.8	7.2	15.2	7.1	11.3
Green Ext Time (p_c), s	0.0	9.9	0.1	2.8	0.0	23.8	0.1	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	32.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	70	40	40	50	40	70	1360	50	50	1300	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	232	74	42	42	53	42	74	1432	53	53	1368	168
Adj No. of Lanes	0	1	1	0	1	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	193	45	405	39	44	19	93	2844	105	67	2801	856
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.11	1.00	1.00	0.08	1.00	1.00
Sat Flow, veh/h	511	163	1472	0	160	71	1714	4860	180	1714	4914	1502
Grp Volume(v), veh/h	306	0	42	137	0	0	74	965	520	53	1368	168
Grp Sat Flow(s),veh/h/ln	674	0	1472	230	0	0	1714	1638	1764	1714	1638	1502
Q Serve(g_s), s	0.0	0.0	2.6	0.0	0.0	0.0	5.1	0.0	0.0	3.6	0.0	0.0
Cycle Q Clear(g_c), s	33.0	0.0	2.6	33.0	0.0	0.0	5.1	0.0	0.0	3.6	0.0	0.0
Prop In Lane	0.76		1.00	0.31		0.31	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	405	103	0	0	93	1917	1032	67	2801	856
V/C Ratio(X)	1.28	0.00	0.10	1.34	0.00	0.00	0.80	0.50	0.50	0.79	0.49	0.20
Avail Cap(c_a), veh/h	238	0	405	103	0	0	179	1917	1032	121	2801	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.80	0.80	0.80	0.88	0.88	0.88
Uniform Delay (d), s/veh	47.2	0.0	32.5	41.0	0.0	0.0	52.8	0.0	0.0	54.8	0.0	0.0
Incr Delay (d2), s/veh	156.1	0.0	0.1	203.1	0.0	0.0	11.6	0.8	1.4	16.4	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	18.2	0.0	1.1	9.2	0.0	0.0	2.7	0.2	0.4	2.0	0.1	0.1
LnGrp Delay(d),s/veh	203.3	0.0	32.6	244.1	0.0	0.0	64.5	0.8	1.4	71.3	0.5	0.5
LnGrp LOS	F		C	F			E	A	A	E	A	A
Approach Vol, veh/h		348			137			1559			1589	
Approach Delay, s/veh		182.7			244.1			4.0			2.9	
Approach LOS		F			F			A			A	

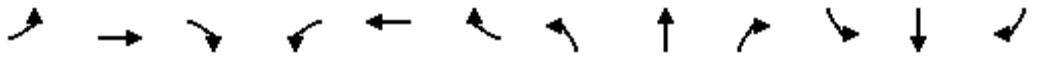
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	74.8		37.0	10.0	73.0		37.0
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	8.5	66.4		33.0	12.5	62.4		33.0
Max Q Clear Time (g_c+I1), s	5.6	2.0		35.0	7.1	2.0		35.0
Green Ext Time (p_c), s	0.0	40.2		0.0	0.1	38.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	270	40	20	360	160	30	380	50	100	340	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	284	0	21	379	168	32	400	53	105	358	53
Adj No. of Lanes	0	2	1	0	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	477	469	50	641	288	33	1683	222	122	1813	266
Arrive On Green	0.30	0.30	0.00	0.30	0.30	0.29	0.02	0.54	0.53	0.07	0.59	0.58
Sat Flow, veh/h	429	1610	1583	60	2167	973	1774	3144	414	1774	3096	455
Grp Volume(v), veh/h	84	284	0	306	0	262	32	224	229	105	203	208
Grp Sat Flow(s),veh/h/ln	429	1610	1583	1683	0	1516	1774	1770	1788	1774	1770	1781
Q Serve(g_s), s	11.1	18.1	0.0	1.8	0.0	17.7	2.2	8.1	8.2	7.0	6.5	6.6
Cycle Q Clear(g_c), s	28.8	18.1	0.0	19.8	0.0	17.7	2.2	8.1	8.2	7.0	6.5	6.6
Prop In Lane	1.00		1.00	0.07		0.64	1.00		0.23	1.00		0.26
Lane Grp Cap(c), veh/h	187	477	469	530	0	449	33	947	957	122	1036	1043
V/C Ratio(X)	0.45	0.60	0.00	0.58	0.00	0.58	0.97	0.24	0.24	0.86	0.20	0.20
Avail Cap(c_a), veh/h	333	751	739	833	0	708	148	947	957	148	1036	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.00	0.86	0.00	0.86	0.95	0.95	0.95	0.81	0.81	0.81
Uniform Delay (d), s/veh	48.2	36.1	0.0	35.8	0.0	36.2	58.8	14.8	14.9	55.3	11.6	11.7
Incr Delay (d2), s/veh	0.5	0.4	0.0	0.3	0.0	0.4	36.0	0.6	0.6	24.6	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.7	8.1	0.0	8.9	0.0	7.4	1.4	4.1	4.2	4.3	3.3	3.3
LnGrp Delay(d),s/veh	48.8	36.5	0.0	36.1	0.0	36.6	94.9	15.4	15.5	79.9	12.0	12.1
LnGrp LOS	D	D		D		D	F	B	B	E	B	B
Approach Vol, veh/h		368			568			485			516	
Approach Delay, s/veh		39.3			36.3			20.7			25.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.3	68.2		39.5	6.2	74.3		39.5
Change Period (Y+Rc), s	3.5	4.9		4.9	3.5	4.9		4.9
Max Green Setting (Gmax), s	10.5	41.1		55.1	10.5	41.1		55.1
Max Q Clear Time (g_c+I1), s	9.0	10.2		30.8	4.2	8.6		21.8
Green Ext Time (p_c), s	0.0	2.3		3.8	0.0	2.3		3.9

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C



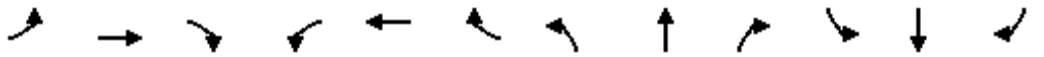
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	40	70	110	70	190	60	1400	90	130	1110	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1824	1863	1863	1863	1863	1863	1863	1863	1824
Adj Flow Rate, veh/h	32	42	41	116	74	43	63	1474	79	137	1168	59
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	56	37	162	87	412	119	1943	868	161	2772	140
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.07	0.55	0.55	0.09	0.56	0.56
Sat Flow, veh/h	40	213	140	448	335	1576	1774	3539	1580	1774	4957	250
Grp Volume(v), veh/h	115	0	0	190	0	43	63	1474	79	137	799	428
Grp Sat Flow(s),veh/h/ln	393	0	0	782	0	1576	1774	1770	1580	1774	1695	1817
Q Serve(g_s), s	3.4	0.0	0.0	0.0	0.0	2.7	4.5	41.8	3.1	9.9	17.7	17.7
Cycle Q Clear(g_c), s	34.0	0.0	0.0	30.6	0.0	2.7	4.5	41.8	3.1	9.9	17.7	17.7
Prop In Lane	0.28		0.36	0.61		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	138	0	0	249	0	412	119	1943	868	161	1896	1016
V/C Ratio(X)	0.83	0.00	0.00	0.76	0.00	0.10	0.53	0.76	0.09	0.85	0.42	0.42
Avail Cap(c_a), veh/h	138	0	0	249	0	412	143	1943	868	198	1896	1016
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.34	0.34	0.34
Uniform Delay (d), s/veh	46.7	0.0	0.0	46.2	0.0	36.4	58.7	22.7	13.9	58.2	16.5	16.5
Incr Delay (d2), s/veh	31.5	0.0	0.0	11.8	0.0	0.0	1.4	2.8	0.2	8.3	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.3	0.0	0.0	7.5	0.0	1.2	2.2	21.0	1.4	5.2	8.3	8.9
LnGrp Delay(d),s/veh	78.2	0.0	0.0	57.9	0.0	36.5	60.0	25.5	14.1	66.5	16.8	17.0
LnGrp LOS	E			E		D	E	C	B	E	B	B
Approach Vol, veh/h		115			233			1616			1364	
Approach Delay, s/veh		78.2			54.0			26.3			21.8	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.3	76.7		38.0	14.0	78.0		38.0
Change Period (Y+Rc), s	3.5	5.3		4.0	5.3	* 5.3		4.0
Max Green Setting (Gmax), s	14.5	68.7		34.0	10.5	* 73		34.0
Max Q Clear Time (g_c+I1), s	11.9	43.8		36.0	6.5	19.7		32.6
Green Ext Time (p_c), s	0.0	16.8		0.0	0.7	17.2		0.2

Intersection Summary		
HCM 2010 Ctrl Delay		28.2
HCM 2010 LOS		C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	540	70	140	630	310	160	1220	130	170	830	140
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1788	1863	1863	1788	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	211	568	15	147	663	67	168	1284	128	179	874	129
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	922	391	169	865	368	391	1845	184	206	1229	181
Arrive On Green	0.11	0.26	0.26	0.19	0.49	0.49	0.22	0.39	0.39	0.04	0.09	0.09
Sat Flow, veh/h	1774	3539	1502	1774	3539	1505	1774	4699	468	1774	4476	658
Grp Volume(v), veh/h	211	568	15	147	663	67	168	926	486	179	661	342
Grp Sat Flow(s),veh/h/ln	1774	1770	1502	1774	1770	1505	1774	1695	1778	1774	1695	1743
Q Serve(g_s), s	14.5	18.4	1.0	10.4	19.9	2.0	10.6	29.7	29.7	13.0	24.6	24.8
Cycle Q Clear(g_c), s	14.5	18.4	1.0	10.4	19.9	2.0	10.6	29.7	29.7	13.0	24.6	24.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		0.38
Lane Grp Cap(c), veh/h	198	922	391	169	865	368	391	1331	698	206	931	479
V/C Ratio(X)	1.07	0.62	0.04	0.87	0.77	0.18	0.43	0.70	0.70	0.87	0.71	0.71
Avail Cap(c_a), veh/h	198	988	420	217	1026	436	391	1331	698	280	931	479
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.09	0.09	0.09	0.51	0.51	0.51	0.93	0.93	0.93	0.58	0.58	0.58
Uniform Delay (d), s/veh	57.8	42.3	35.9	51.8	30.2	9.4	43.7	33.0	33.0	61.5	54.1	54.2
Incr Delay (d2), s/veh	39.7	0.1	0.0	12.0	1.8	0.2	0.3	2.8	5.3	9.7	2.7	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.3	9.0	0.4	5.6	9.8	0.8	5.2	14.4	15.6	7.0	11.9	12.7
LnGrp Delay(d),s/veh	97.5	42.5	35.9	63.8	32.0	9.5	43.9	35.8	38.3	71.2	56.8	59.4
LnGrp LOS	F	D	D	E	C	A	D	D	D	E	E	E
Approach Vol, veh/h		794			877			1580			1182	
Approach Delay, s/veh		57.0			35.6			37.5			59.7	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	56.3	18.0	37.1	33.9	41.0	15.9	39.2
Change Period (Y+Rc), s	3.5	5.3	3.5	5.3	5.3	* 5.3	3.5	5.3
Max Green Setting (Gmax), s	20.5	39.7	14.5	37.7	24.5	* 36	15.9	36.3
Max Q Clear Time (g_c+I1), s	15.0	31.7	16.5	21.9	12.6	26.8	12.4	20.4
Green Ext Time (p_c), s	0.1	6.2	0.0	9.8	5.1	5.2	0.0	9.8

Intersection Summary	
HCM 2010 Ctrl Delay	46.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

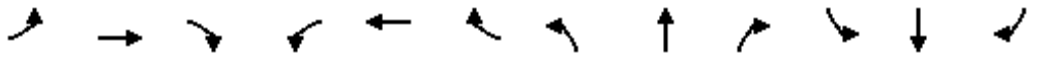
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	450	80	100	570	190	160	1530	130	210	1200	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1824	1863	1863	1824	1863	1863	1824	1863	1863	1863
Adj Flow Rate, veh/h	116	474	84	105	600	200	168	1611	137	221	1263	126
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	806	142	129	656	218	186	1905	162	245	1481	656
Arrive On Green	0.08	0.26	0.26	0.02	0.08	0.08	0.11	0.40	0.40	0.14	0.42	0.42
Sat Flow, veh/h	1774	3127	551	1774	2606	867	1774	4774	406	1774	3539	1567
Grp Volume(v), veh/h	116	278	280	105	407	393	168	1144	604	221	1263	126
Grp Sat Flow(s),veh/h/ln	1774	1840	1838	1774	1770	1704	1774	1695	1789	1774	1770	1567
Q Serve(g_s), s	8.4	17.2	17.4	7.7	29.7	29.8	12.2	39.8	39.9	15.9	41.9	4.9
Cycle Q Clear(g_c), s	8.4	17.2	17.4	7.7	29.7	29.8	12.2	39.8	39.9	15.9	41.9	4.9
Prop In Lane	1.00		0.30	1.00		0.51	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	140	474	474	129	445	429	186	1353	714	245	1481	656
V/C Ratio(X)	0.83	0.59	0.59	0.81	0.91	0.92	0.90	0.85	0.85	0.90	0.85	0.19
Avail Cap(c_a), veh/h	171	504	503	135	449	432	186	1353	714	280	1481	656
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.80	0.80	0.80	0.36	0.36	0.36	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.0	42.2	42.3	62.6	58.2	58.3	57.5	35.4	35.5	55.1	34.2	13.4
Incr Delay (d2), s/veh	18.8	1.4	1.5	22.8	19.6	20.5	18.4	2.5	4.7	25.8	6.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.9	8.9	9.0	4.6	17.0	16.5	6.9	19.1	20.6	9.6	21.7	2.2
LnGrp Delay(d),s/veh	77.8	43.6	43.8	85.4	77.8	78.8	76.0	38.0	40.2	81.0	40.6	14.0
LnGrp LOS	E	D	D	F	E	E	E	D	D	F	D	B
Approach Vol, veh/h		674			905			1916			1610	
Approach Delay, s/veh		49.6			79.1			42.0			44.1	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	57.2	12.9	38.4	19.0	59.7	13.7	37.6
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	5.3	* 5.3	3.5	4.9
Max Green Setting (Gmax), s	20.5	46.8	9.9	35.6	12.9	* 54	12.5	33.0
Max Q Clear Time (g_c+I1), s	17.9	41.9	9.7	19.4	14.2	43.9	10.4	31.8
Green Ext Time (p_c), s	0.1	4.4	0.0	7.4	0.0	7.7	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	50.2
HCM 2010 LOS	D

Notes

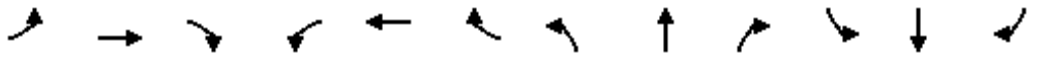
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	620	110	100	620	140	210	1290	140	140	980	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1824	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	105	653	116	105	653	147	221	1358	147	147	1032	158
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	856	152	127	813	183	212	1933	209	172	1744	267
Arrive On Green	0.10	0.38	0.38	0.14	0.57	0.57	0.12	0.41	0.41	0.10	0.39	0.39
Sat Flow, veh/h	1774	3005	533	1774	2862	643	1774	4659	504	1774	4447	680
Grp Volume(v), veh/h	105	384	385	105	403	397	221	988	517	147	786	404
Grp Sat Flow(s),veh/h/ln	1774	1770	1768	1774	1770	1735	1774	1695	1773	1774	1695	1737
Q Serve(g_s), s	7.6	24.7	24.7	7.5	23.5	23.6	15.5	31.3	31.3	10.6	23.9	23.9
Cycle Q Clear(g_c), s	7.6	24.7	24.7	7.5	23.5	23.6	15.5	31.3	31.3	10.6	23.9	23.9
Prop In Lane	1.00		0.30	1.00		0.37	1.00		0.28	1.00		0.39
Lane Grp Cap(c), veh/h	128	504	503	127	503	493	212	1406	735	172	1330	681
V/C Ratio(X)	0.82	0.76	0.76	0.83	0.80	0.80	1.04	0.70	0.70	0.86	0.59	0.59
Avail Cap(c_a), veh/h	225	573	573	184	532	522	212	1406	735	198	1330	681
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	0.84	0.84	0.84	0.55	0.55	0.55	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	36.5	36.6	54.9	25.2	25.2	57.3	31.4	31.4	57.8	31.3	31.3
Incr Delay (d2), s/veh	2.8	3.3	3.4	10.5	7.4	7.7	57.9	1.6	3.1	24.1	1.9	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	12.5	12.5	4.0	12.2	12.1	11.0	14.9	15.8	6.4	11.5	12.2
LnGrp Delay(d),s/veh	60.7	39.9	40.0	65.5	32.6	32.8	115.1	33.0	34.5	82.0	33.2	35.0
LnGrp LOS	E	D	D	E	C	C	F	C	C	F	C	D
Approach Vol, veh/h		874			905			1726			1337	
Approach Delay, s/veh		42.4			36.5			44.0			39.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	59.2	12.8	41.9	19.0	56.3	12.9	41.8
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	3.5	4.9
Max Green Setting (Gmax), s	14.5	42.7	13.5	42.1	15.5	41.7	16.5	39.1
Max Q Clear Time (g_c+I1), s	12.6	33.3	9.5	26.7	17.5	25.9	9.6	25.6
Green Ext Time (p_c), s	0.0	9.0	0.0	10.3	0.0	14.8	0.0	9.3

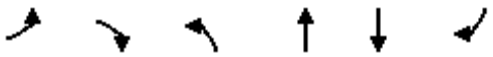
Intersection Summary	
HCM 2010 Ctrl Delay	41.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	730	30	70	650	110	40	590	130	140	400	90
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	53	768	32	74	684	116	42	621	137	147	421	95
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	1284	53	87	1162	197	353	908	765	218	908	765
Arrive On Green	0.03	0.37	0.36	0.05	0.39	0.38	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1774	3460	144	1774	3015	511	881	1863	1570	704	1863	1570
Grp Volume(v), veh/h	53	393	407	74	401	399	42	621	137	147	421	95
Grp Sat Flow(s),veh/h/ln	1774	1770	1834	1774	1770	1756	881	1863	1570	704	1863	1570
Q Serve(g_s), s	3.9	23.3	23.3	5.4	23.4	23.5	4.3	33.3	6.4	26.4	19.5	4.3
Cycle Q Clear(g_c), s	3.9	23.3	23.3	5.4	23.4	23.5	23.8	33.3	6.4	59.7	19.5	4.3
Prop In Lane	1.00		0.08	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	62	657	681	87	682	677	353	908	765	218	908	765
V/C Ratio(X)	0.86	0.60	0.60	0.85	0.59	0.59	0.12	0.68	0.18	0.67	0.46	0.12
Avail Cap(c_a), veh/h	131	657	681	164	682	677	357	917	773	222	917	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.40	0.40	0.40	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	62.4	33.1	33.1	61.3	31.7	31.9	29.9	25.6	18.7	48.5	22.1	18.2
Incr Delay (d2), s/veh	5.4	1.6	1.6	8.3	3.7	3.7	0.1	1.7	0.0	5.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.0	11.6	12.1	2.9	12.2	12.1	1.1	17.5	2.8	5.5	10.0	1.9
LnGrp Delay(d),s/veh	67.8	34.7	34.6	69.6	35.4	35.6	30.0	27.3	18.7	53.9	22.2	18.2
LnGrp LOS	E	C	C	E	D	D	C	C	B	D	C	B
Approach Vol, veh/h		853			874			800			663	
Approach Delay, s/veh		36.7			38.4			26.0			28.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		67.4	8.5	54.1		67.4	10.4	52.2
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		63.1	10.1	43.5		63.1	12.5	41.1
Max Q Clear Time (g_c+I1), s		35.3	5.9	25.5		61.7	7.4	25.3
Green Ext Time (p_c), s		4.6	0.0	5.3		0.8	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.8
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	100	200	120	930	870	120
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	105	28	126	979	916	112
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	200	179	160	2378	1543	189
Arrive On Green	0.11	0.11	0.09	0.67	0.49	0.49
Sat Flow, veh/h	1774	1583	1774	3632	3269	388
Grp Volume(v), veh/h	105	28	126	979	510	518
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1794
Q Serve(g_s), s	2.3	0.7	2.9	5.2	8.7	8.7
Cycle Q Clear(g_c), s	2.3	0.7	2.9	5.2	8.7	8.7
Prop In Lane	1.00	1.00	1.00			0.22
Lane Grp Cap(c), veh/h	200	179	160	2378	860	872
V/C Ratio(X)	0.52	0.16	0.79	0.41	0.59	0.59
Avail Cap(c_a), veh/h	1188	1060	212	2793	1016	1030
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	16.8	18.6	3.1	7.8	7.8
Incr Delay (d2), s/veh	2.1	0.4	13.3	0.1	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	0.6	2.0	2.5	4.3	4.3
LnGrp Delay(d),s/veh	19.6	17.2	31.9	3.2	8.4	8.4
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	133			1105	1028	
Approach Delay, s/veh	19.1			6.5	8.4	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		33.1		8.7	7.8	25.3		
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0		
Max Green Setting (Gmax), s		33.0		28.0	5.0	24.0		
Max Q Clear Time (g_c+I1), s		7.2		4.3	4.9	10.7		
Green Ext Time (p_c), s		15.3		0.4	0.0	9.6		

Intersection Summary	
HCM 2010 Ctrl Delay	8.1
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	30	70	1070	50	100	860
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	32	74	1126	53	105	905
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	41	94	2233	105	120	2773
Arrive On Green	0.08	0.08	0.65	0.63	0.07	0.78
Sat Flow, veh/h	490	1133	3535	162	1774	3632
Grp Volume(v), veh/h	107	0	579	600	105	905
Grp Sat Flow(s),veh/h/ln	1638	0	1770	1834	1774	1770
Q Serve(g_s), s	3.8	0.0	10.2	10.3	3.5	4.5
Cycle Q Clear(g_c), s	3.8	0.0	10.2	10.3	3.5	4.5
Prop In Lane	0.30	0.69		0.09	1.00	
Lane Grp Cap(c), veh/h	136	0	1148	1190	120	2773
V/C Ratio(X)	0.79	0.00	0.50	0.50	0.87	0.33
Avail Cap(c_a), veh/h	464	0	1148	1190	237	2773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.53	0.53	0.72	0.72
Uniform Delay (d), s/veh	27.0	0.0	5.5	5.5	27.7	1.9
Incr Delay (d2), s/veh	3.7	0.0	0.8	0.8	5.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.9	0.0	5.1	5.3	1.9	2.2
LnGrp Delay(d),s/veh	30.7	0.0	6.3	6.3	33.1	2.1
LnGrp LOS	C		A	A	C	A
Approach Vol, veh/h	107		1179			1010
Approach Delay, s/veh	30.7		6.3			5.3
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.1	42.9				51.0		9.0
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	22.1				34.1		17.0
Max Q Clear Time (g_c+I1), s	5.5	12.3				6.5		5.8
Green Ext Time (p_c), s	0.0	5.1				7.9		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	620	100	60	600	130	100	580	80	140	450	100
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	84	653	105	63	632	137	105	611	84	147	474	105
Adj No. of Lanes	1	2	0	1	2	0	0	2	0	0	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	866	139	123	859	186	137	832	120	155	524	122
Arrive On Green	0.06	0.28	0.28	0.07	0.30	0.29	0.10	0.10	0.10	0.15	0.15	0.14
Sat Flow, veh/h	1774	3043	489	1774	2881	623	455	2775	400	696	2350	545
Grp Volume(v), veh/h	84	379	379	63	388	381	424	0	376	386	0	340
Grp Sat Flow(s),veh/h/ln	1774	1770	1762	1774	1770	1735	1840	0	1790	1828	0	1763
Q Serve(g_s), s	6.1	25.4	25.5	4.5	25.6	25.7	29.2	0.0	26.4	27.2	0.0	24.5
Cycle Q Clear(g_c), s	6.1	25.4	25.5	4.5	25.6	25.7	29.2	0.0	26.4	27.2	0.0	24.5
Prop In Lane	1.00		0.28	1.00		0.36	0.25		0.22	0.38		0.31
Lane Grp Cap(c), veh/h	99	504	501	123	528	518	552	0	537	408	0	393
V/C Ratio(X)	0.85	0.75	0.76	0.51	0.73	0.74	0.77	0.00	0.70	0.95	0.00	0.86
Avail Cap(c_a), veh/h	123	504	501	123	528	518	552	0	537	408	0	393
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.67	0.67	0.67
Upstream Filter(I)	0.30	0.30	0.30	0.40	0.40	0.40	0.80	0.00	0.80	0.29	0.00	0.29
Uniform Delay (d), s/veh	60.9	42.3	42.5	58.4	41.0	41.2	54.2	0.0	52.9	54.5	0.0	53.5
Incr Delay (d2), s/veh	11.4	3.2	3.3	5.9	3.6	3.7	8.0	0.0	6.0	13.5	0.0	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	12.9	12.9	2.4	13.0	12.8	16.2	0.0	14.0	15.3	0.0	12.6
LnGrp Delay(d),s/veh	72.3	45.5	45.7	64.3	44.6	44.9	62.2	0.0	58.9	68.0	0.0	59.3
LnGrp LOS	E	D	D	E	D	D	E		E	E		E
Approach Vol, veh/h		842			832			800			726	
Approach Delay, s/veh		48.3			46.2			60.6			63.9	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		43.0	11.2	42.8		33.0	13.0	41.0
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		38.1	9.5	36.1		28.1	9.5	36.1
Max Q Clear Time (g_c+I1), s		31.2	8.1	27.7		29.2	6.5	27.5
Green Ext Time (p_c), s		1.9	0.0	3.6		0.0	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	54.4
HCM 2010 LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	120	60	1280	100	50	1100
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	126	63	1347	105	53	1158
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	160	80	2433	189	61	2819
Arrive On Green	0.14	0.14	0.73	0.72	0.03	0.80
Sat Flow, veh/h	1125	562	3421	259	1774	3632
Grp Volume(v), veh/h	190	0	714	738	53	1158
Grp Sat Flow(s),veh/h/ln	1696	0	1770	1816	1774	1770
Q Serve(g_s), s	14.1	0.0	23.7	24.0	3.9	12.9
Cycle Q Clear(g_c), s	14.1	0.0	23.7	24.0	3.9	12.9
Prop In Lane	0.66	0.33		0.14	1.00	
Lane Grp Cap(c), veh/h	241	0	1294	1328	61	2819
V/C Ratio(X)	0.79	0.00	0.55	0.56	0.86	0.41
Avail Cap(c_a), veh/h	417	0	1294	1328	109	2819
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.40	0.40	0.28	0.28
Uniform Delay (d), s/veh	53.9	0.0	7.9	8.0	62.4	4.0
Incr Delay (d2), s/veh	2.2	0.0	0.7	0.7	3.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.7	0.0	11.8	12.2	2.0	6.2
LnGrp Delay(d),s/veh	56.1	0.0	8.6	8.6	66.4	4.1
LnGrp LOS	E		A	A	E	A
Approach Vol, veh/h	190		1452			1211
Approach Delay, s/veh	56.1		8.6			6.9
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.5	99.0				107.5		22.5
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	77.1				89.1		32.0
Max Q Clear Time (g_c+I1), s	5.9	26.0				14.9		16.1
Green Ext Time (p_c), s	0.0	13.3				13.8		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	11.0
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	30	60	30	20	50	50	1110	50	40	770	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	53	32	63	32	21	53	53	1168	53	42	811	53
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	88	118	160	88	141	64	1653	75	49	1590	104
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.04	0.48	0.48	0.03	0.47	0.47
Sat Flow, veh/h	411	505	679	304	507	812	1774	3448	156	1774	3373	220
Grp Volume(v), veh/h	148	0	0	106	0	0	53	599	622	42	425	439
Grp Sat Flow(s),veh/h/ln	1595	0	0	1624	0	0	1774	1770	1835	1774	1770	1824
Q Serve(g_s), s	1.1	0.0	0.0	0.0	0.0	0.0	1.3	11.7	11.7	1.0	7.3	7.4
Cycle Q Clear(g_c), s	3.5	0.0	0.0	2.4	0.0	0.0	1.3	11.7	11.7	1.0	7.3	7.4
Prop In Lane	0.36		0.43	0.30		0.50	1.00		0.09	1.00		0.12
Lane Grp Cap(c), veh/h	389	0	0	389	0	0	64	849	880	49	834	860
V/C Ratio(X)	0.38	0.00	0.00	0.27	0.00	0.00	0.83	0.71	0.71	0.85	0.51	0.51
Avail Cap(c_a), veh/h	1095	0	0	1097	0	0	202	927	961	202	927	955
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	0.0	0.0	16.0	0.0	0.0	21.0	9.0	9.0	21.3	8.1	8.1
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.4	0.0	0.0	23.0	2.2	2.2	31.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	0.0	0.0	1.2	0.0	0.0	1.0	6.2	6.4	0.9	3.7	3.8
LnGrp Delay(d),s/veh	17.0	0.0	0.0	16.3	0.0	0.0	44.1	11.2	11.2	52.2	8.6	8.6
LnGrp LOS	B			B			D	B	B	D	A	A
Approach Vol, veh/h		148			106			1274			906	
Approach Delay, s/veh		17.0			16.3			12.6			10.6	
Approach LOS		B			B			B			B	

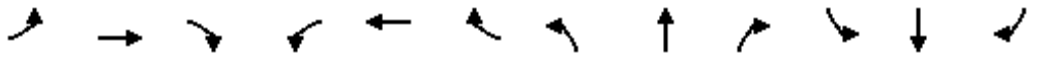
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	26.1		12.6	5.6	25.7		12.6
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	23.0		28.0	5.0	23.0		28.0
Max Q Clear Time (g_c+I1), s	3.0	13.7		5.5	3.3	9.4		4.4
Green Ext Time (p_c), s	0.0	7.3		1.5	0.0	10.1		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	12.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	30	80	70	30	40	130	1120	120	50	750	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	32	84	74	32	42	137	1179	126	53	789	32
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	79	162	217	80	74	177	1664	177	64	1568	64
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.10	0.52	0.52	0.04	0.45	0.45
Sat Flow, veh/h	143	492	1006	658	497	458	1774	3227	344	1774	3467	141
Grp Volume(v), veh/h	137	0	0	148	0	0	137	645	660	53	403	418
Grp Sat Flow(s),veh/h/ln	1641	0	0	1613	0	0	1774	1770	1802	1774	1770	1838
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	3.7	13.5	13.6	1.4	7.9	7.9
Cycle Q Clear(g_c), s	3.6	0.0	0.0	3.7	0.0	0.0	3.7	13.5	13.6	1.4	7.9	7.9
Prop In Lane	0.15		0.61	0.50		0.28	1.00		0.19	1.00		0.08
Lane Grp Cap(c), veh/h	349	0	0	370	0	0	177	913	929	64	800	831
V/C Ratio(X)	0.39	0.00	0.00	0.40	0.00	0.00	0.77	0.71	0.71	0.82	0.50	0.50
Avail Cap(c_a), veh/h	1007	0	0	971	0	0	328	1017	1035	182	872	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	0.0	0.0	18.7	0.0	0.0	21.4	9.0	9.0	23.3	9.5	9.5
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.7	0.0	0.0	7.0	2.0	2.0	22.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	0.0	0.0	1.9	0.0	0.0	2.1	7.0	7.1	1.1	3.9	4.1
LnGrp Delay(d),s/veh	19.4	0.0	0.0	19.4	0.0	0.0	28.4	11.0	11.0	45.3	10.0	9.9
LnGrp LOS	B			B			C	B	B	D	A	A
Approach Vol, veh/h		137			148			1442			874	
Approach Delay, s/veh		19.4			19.4			12.7			12.1	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	30.1		12.8	8.9	27.0		12.8
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	28.0		28.0	9.0	24.0		28.0
Max Q Clear Time (g_c+I1), s	3.4	15.6		5.6	5.7	9.9		5.7
Green Ext Time (p_c), s	0.0	9.5		1.7	0.1	10.6		1.7

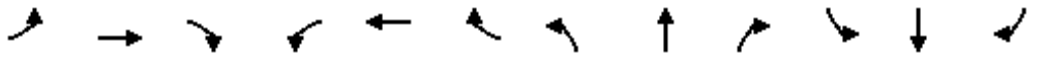
Intersection Summary	
HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	490	10	20	420	70	10	10	50	130	10	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	95	516	11	21	442	74	11	11	53	137	11	137
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	1101	23	270	1100	481	77	53	907	99	4	907
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	875	3542	75	867	3539	1548	0	93	1578	0	7	1578
Grp Volume(v), veh/h	95	258	269	21	442	74	22	0	53	148	0	137
Grp Sat Flow(s),veh/h/ln	875	1770	1847	867	1770	1548	93	0	1578	7	0	1578
Q Serve(g_s), s	6.7	8.2	8.2	1.4	6.9	2.4	0.0	0.0	1.0	0.0	0.0	2.8
Cycle Q Clear(g_c), s	13.6	8.2	8.2	9.6	6.9	2.4	40.2	0.0	1.0	40.2	0.0	2.8
Prop In Lane	1.00		0.04	1.00		1.00	0.50		1.00	0.93		1.00
Lane Grp Cap(c), veh/h	289	550	574	270	1100	481	130	0	907	103	0	907
V/C Ratio(X)	0.33	0.47	0.47	0.08	0.40	0.15	0.17	0.00	0.06	1.43	0.00	0.15
Avail Cap(c_a), veh/h	417	809	845	397	1618	708	130	0	907	103	0	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	0.72	0.72	0.72	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	19.4	19.5	23.3	19.0	17.5	16.8	0.0	6.5	33.3	0.0	6.9
Incr Delay (d2), s/veh	0.5	0.5	0.5	0.1	0.2	0.1	2.8	0.0	0.1	241.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	4.1	4.3	0.3	3.4	1.0	0.3	0.0	0.5	8.9	0.0	1.3
LnGrp Delay(d),s/veh	24.9	19.9	19.9	23.4	19.2	17.6	19.6	0.0	6.7	274.5	0.0	7.3
LnGrp LOS	C	B	B	C	B	B	B		A	F		A
Approach Vol, veh/h		622			537			75			285	
Approach Delay, s/veh		20.7			19.1			10.5			146.1	
Approach LOS		C			B			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.2		25.8		44.2		25.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		30.0		32.0		30.0		32.0
Max Q Clear Time (g_c+I1), s		42.2		15.6		42.2		11.6
Green Ext Time (p_c), s		0.0		6.2		0.0		6.8

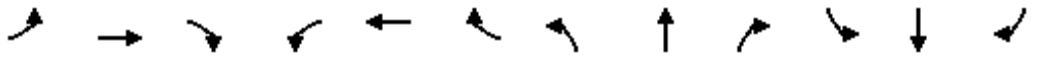
Intersection Summary	
HCM 2010 Ctrl Delay	43.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	310	50	100	340	90	80	490	140	60	440	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	326	53	105	358	95	84	516	147	63	463	105
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	730	117	206	663	174	99	1685	478	74	1736	391
Arrive On Green	0.24	0.24	0.23	0.24	0.24	0.23	0.06	0.62	0.61	0.04	0.60	0.60
Sat Flow, veh/h	931	3049	490	996	2770	725	1774	2722	772	1774	2870	646
Grp Volume(v), veh/h	74	188	191	105	227	226	84	335	328	63	284	284
Grp Sat Flow(s),veh/h/ln	931	1770	1770	996	1770	1726	1774	1770	1724	1774	1770	1746
Q Serve(g_s), s	9.1	10.8	11.1	12.1	13.4	13.8	5.6	10.7	10.8	4.2	9.1	9.2
Cycle Q Clear(g_c), s	22.8	10.8	11.1	23.1	13.4	13.8	5.6	10.7	10.8	4.2	9.1	9.2
Prop In Lane	1.00		0.28	1.00		0.42	1.00		0.45	1.00		0.37
Lane Grp Cap(c), veh/h	176	423	424	206	423	413	99	1096	1067	74	1071	1056
V/C Ratio(X)	0.42	0.44	0.45	0.51	0.54	0.55	0.85	0.31	0.31	0.85	0.27	0.27
Avail Cap(c_a), veh/h	232	531	531	267	531	518	163	1096	1067	163	1071	1056
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	0.91	0.91	0.91	0.73	0.73	0.73	0.61	0.61	0.61
Uniform Delay (d), s/veh	50.0	38.8	39.0	48.8	39.8	40.1	56.2	10.7	10.9	57.1	11.2	11.3
Incr Delay (d2), s/veh	0.5	0.2	0.2	0.7	0.4	0.4	7.5	0.5	0.5	6.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.4	5.3	5.5	3.4	6.6	6.6	3.0	5.4	5.3	2.2	4.5	4.5
LnGrp Delay(d),s/veh	50.5	39.1	39.2	49.5	40.2	40.5	63.6	11.3	11.4	63.5	11.5	11.7
LnGrp LOS	D	D	D	D	D	D	E	B	B	E	B	B
Approach Vol, veh/h		453			558			747			631	
Approach Delay, s/veh		41.0			42.0			17.2			16.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	78.3		32.7	10.7	76.6		32.7
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	11.5	60.1		35.4	11.5	60.1		35.4
Max Q Clear Time (g_c+I1), s	6.2	12.8		24.8	7.6	11.2		25.1
Green Ext Time (p_c), s	0.0	5.1		3.0	0.0	5.1		3.0

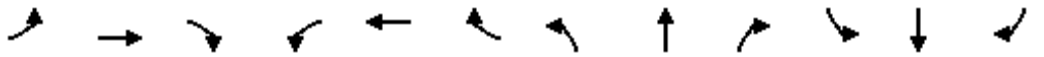
Intersection Summary	
HCM 2010 Ctrl Delay	27.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	900	10	10	960	150	10	10	10	100	10	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	179	947	11	11	1011	158	11	11	11	105	11	168
Adj No. of Lanes	1	2	0	1	3	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	2315	27	6	2741	815	45	31	384	57	3	384
Arrive On Green	0.22	1.00	1.00	0.00	0.54	0.54	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3582	42	1774	5085	1513	0	124	1538	0	13	1538
Grp Volume(v), veh/h	179	468	490	11	1011	158	22	0	11	116	0	168
Grp Sat Flow(s),veh/h/ln	1774	1770	1854	1774	1695	1513	124	0	1538	13	0	1538
Q Serve(g_s), s	11.8	0.0	0.0	0.4	13.7	6.5	0.0	0.0	0.6	0.0	0.0	11.0
Cycle Q Clear(g_c), s	11.8	0.0	0.0	0.4	13.7	6.5	30.0	0.0	0.6	30.0	0.0	11.0
Prop In Lane	1.00		0.02	1.00		1.00	0.50		1.00	0.91		1.00
Lane Grp Cap(c), veh/h	197	1144	1198	6	2741	815	76	0	384	60	0	384
V/C Ratio(X)	0.91	0.41	0.41	1.77	0.37	0.19	0.29	0.00	0.03	1.92	0.00	0.44
Avail Cap(c_a), veh/h	251	1144	1198	148	2741	815	76	0	384	60	0	384
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.45	0.45	0.45	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.1	0.0	0.0	59.8	15.9	14.2	37.4	0.0	34.0	58.4	0.0	37.9
Incr Delay (d2), s/veh	24.2	1.0	0.9	367.9	0.2	0.2	0.8	0.0	0.0	469.0	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	116.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.1	0.3	0.3	0.8	6.4	2.7	0.6	0.0	0.3	9.9	0.0	5.0
LnGrp Delay(d),s/veh	70.3	1.0	0.9	544.2	16.1	14.5	38.2	0.0	34.0	527.4	0.0	41.5
LnGrp LOS	E	A	A	F	B	B	D		C	F		D
Approach Vol, veh/h		1137			1180			33			284	
Approach Delay, s/veh		11.9			20.8			36.8			240.0	
Approach LOS		B			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	4.4	81.6		34.0	17.3	68.7
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	17.5	60.4
Max Q Clear Time (g_c+I1), s		32.0	2.4	2.0		32.0	13.8	15.7
Green Ext Time (p_c), s		0.0	0.0	32.7		0.0	0.1	26.8

Intersection Summary	
HCM 2010 Ctrl Delay	40.8
HCM 2010 LOS	D



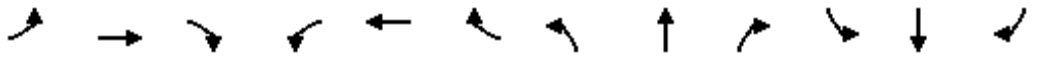
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	770	290	180	800	130	260	450	210	100	400	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	211	811	305	189	842	137	274	474	221	105	421	126
Adj No. of Lanes	1	2	0	1	3	0	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	1031	387	211	1501	243	317	617	285	122	647	191
Arrive On Green	0.06	0.14	0.13	0.04	0.11	0.11	0.09	0.27	0.26	0.07	0.24	0.24
Sat Flow, veh/h	1774	2501	939	1774	4394	710	3442	2312	1069	1774	2658	785
Grp Volume(v), veh/h	211	573	543	189	648	331	274	362	333	105	278	269
Grp Sat Flow(s),veh/h/ln	1774	1770	1671	1774	1695	1714	1721	1770	1611	1774	1770	1673
Q Serve(g_s), s	14.0	37.6	37.7	12.7	21.7	22.0	9.4	22.6	23.0	7.0	17.0	17.4
Cycle Q Clear(g_c), s	14.0	37.6	37.7	12.7	21.7	22.0	9.4	22.6	23.0	7.0	17.0	17.4
Prop In Lane	1.00		0.56	1.00		0.41	1.00		0.66	1.00		0.47
Lane Grp Cap(c), veh/h	315	729	688	211	1158	585	317	472	430	122	431	407
V/C Ratio(X)	0.67	0.79	0.79	0.90	0.56	0.56	0.86	0.77	0.78	0.86	0.65	0.66
Avail Cap(c_a), veh/h	315	729	688	296	1158	585	430	472	430	177	431	407
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.99	0.99	0.99
Uniform Delay (d), s/veh	53.0	46.7	46.9	56.9	44.7	44.8	53.7	40.6	41.0	55.3	40.8	41.1
Incr Delay (d2), s/veh	3.9	7.5	8.0	16.7	1.8	3.6	9.5	10.5	11.9	17.2	7.2	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.2	20.0	19.0	7.2	10.5	11.0	4.9	12.4	11.6	4.0	9.1	9.0
LnGrp Delay(d),s/veh	57.0	54.3	54.9	73.6	46.5	48.5	63.2	51.0	52.9	72.5	48.0	49.1
LnGrp LOS	E	D	D	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1327			1168			969			652	
Approach Delay, s/veh		54.9			51.4			55.1			52.4	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	36.0	18.3	53.4	15.1	33.2	26.7	45.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	12.5	31.1	20.5	39.1	15.5	28.1	19.5	* 40
Max Q Clear Time (g_c+I1), s	9.0	25.0	14.7	39.7	11.4	19.4	16.0	24.0
Green Ext Time (p_c), s	0.0	2.3	0.1	0.0	0.1	2.8	0.4	6.9

Intersection Summary	
HCM 2010 Ctrl Delay	53.6
HCM 2010 LOS	D

Notes

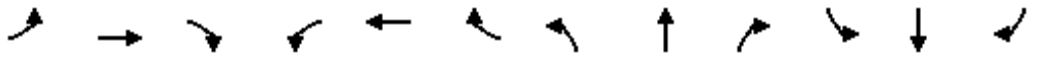
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	600	200	170	680	140	330	1130	170	160	1050	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	211	632	45	179	716	30	347	1189	164	168	1105	143
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	251	974	409	223	945	396	384	2175	300	208	1961	253
Arrive On Green	0.14	0.54	0.54	0.02	0.09	0.09	0.22	0.95	0.93	0.12	0.85	0.83
Sat Flow, veh/h	3510	3610	1514	3510	3610	1511	3510	4588	633	3510	4627	598
Grp Volume(v), veh/h	211	632	45	179	716	30	347	896	457	168	826	422
Grp Sat Flow(s),veh/h/ln	1755	1805	1514	1755	1805	1511	1755	1729	1763	1755	1729	1767
Q Serve(g_s), s	7.0	14.9	1.7	6.1	23.3	2.2	11.5	3.3	3.7	5.6	8.4	8.6
Cycle Q Clear(g_c), s	7.0	14.9	1.7	6.1	23.3	2.2	11.5	3.3	3.7	5.6	8.4	8.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		0.34
Lane Grp Cap(c), veh/h	251	974	409	223	945	396	384	1639	836	208	1466	749
V/C Ratio(X)	0.84	0.65	0.11	0.80	0.76	0.08	0.90	0.55	0.55	0.81	0.56	0.56
Avail Cap(c_a), veh/h	380	993	416	380	993	416	468	1639	836	322	1466	749
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.92	0.92	0.92	0.93	0.93	0.93	0.87	0.87	0.87	0.87	0.87	0.87
Uniform Delay (d), s/veh	50.8	23.6	20.6	58.0	51.1	41.5	46.2	1.7	1.9	52.2	5.9	6.1
Incr Delay (d2), s/veh	5.8	1.0	0.0	2.4	2.6	0.0	14.7	1.1	2.2	3.6	1.4	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	7.5	0.7	3.0	12.0	0.9	6.4	1.5	1.8	2.8	3.9	4.4
LnGrp Delay(d),s/veh	56.6	24.6	20.6	60.4	53.7	41.5	61.0	2.9	4.1	55.9	7.3	8.8
LnGrp LOS	E	C	C	E	D	D	E	A	A	E	A	A
Approach Vol, veh/h		888			925			1700			1416	
Approach Delay, s/veh		32.0			54.6			15.1			13.5	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	60.9	11.6	36.4	17.1	54.9	12.6	35.4
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	11.5	46.1	13.5	32.4	16.5	41.1	13.5	32.4
Max Q Clear Time (g_c+I1), s	7.6	5.7	8.1	16.9	13.5	10.6	9.0	25.3
Green Ext Time (p_c), s	0.0	17.3	0.1	5.8	0.1	15.4	0.1	3.7

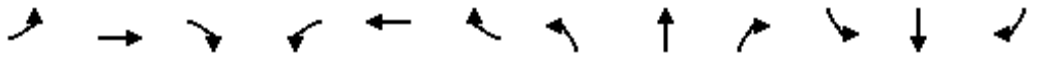
Intersection Summary	
HCM 2010 Ctrl Delay	25.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	780	60	50	840	140	80	410	80	120	420	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	821	63	53	884	147	84	432	84	126	442	116
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	1665	128	61	1377	229	99	738	142	146	766	199
Arrive On Green	0.16	1.00	0.99	0.03	0.45	0.45	0.02	0.08	0.08	0.03	0.09	0.09
Sat Flow, veh/h	1774	3330	255	1774	3034	504	1774	2952	570	1774	2772	721
Grp Volume(v), veh/h	126	436	448	53	516	515	84	258	258	126	281	277
Grp Sat Flow(s),veh/h/ln	1774	1770	1815	1774	1770	1769	1774	1770	1752	1774	1770	1724
Q Serve(g_s), s	8.3	0.0	0.1	3.6	26.9	27.0	5.7	16.8	17.1	8.5	18.3	18.5
Cycle Q Clear(g_c), s	8.3	0.0	0.1	3.6	26.9	27.0	5.7	16.8	17.1	8.5	18.3	18.5
Prop In Lane	1.00		0.14	1.00		0.29	1.00		0.33	1.00		0.42
Lane Grp Cap(c), veh/h	143	885	908	61	803	803	99	442	438	146	489	476
V/C Ratio(X)	0.88	0.49	0.49	0.87	0.64	0.64	0.85	0.58	0.59	0.86	0.57	0.58
Avail Cap(c_a), veh/h	177	885	908	148	803	803	148	442	438	192	489	476
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.94	0.94	0.94	0.56	0.56	0.56	0.98	0.98	0.98	0.94	0.94	0.94
Uniform Delay (d), s/veh	49.7	0.0	0.0	57.7	25.3	25.3	58.4	49.0	49.2	57.7	47.8	47.9
Incr Delay (d2), s/veh	26.9	1.8	1.8	7.8	2.2	2.2	16.4	5.4	5.6	20.4	4.6	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.1	0.5	0.5	1.9	13.7	13.7	3.2	8.9	9.0	5.0	9.6	9.5
LnGrp Delay(d),s/veh	76.6	1.8	1.8	65.5	27.5	27.6	74.8	54.4	54.8	78.1	52.3	52.8
LnGrp LOS	E	A	A	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1010			1084			600			684	
Approach Delay, s/veh		11.2			29.4			57.4			57.3	
Approach LOS		B			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	34.0	8.1	64.0	10.7	37.1	13.7	58.4
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	13.5	29.1	10.5	50.4	10.5	32.1	12.5	48.4
Max Q Clear Time (g_c+I1), s	10.5	19.1	5.6	2.1	7.7	20.5	10.3	29.0
Green Ext Time (p_c), s	0.0	5.5	0.0	24.8	0.0	6.0	0.0	13.9

Intersection Summary	
HCM 2010 Ctrl Delay	34.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	240	720	110	220	880	370	80	1260	140	220	1160	110
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	253	758	116	232	926	389	84	1326	147	232	1221	116
Adj No. of Lanes	1	3	0	1	3	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	1267	192	246	983	412	99	1403	156	250	1825	173
Arrive On Green	0.15	0.28	0.28	0.14	0.28	0.27	0.06	0.30	0.29	0.14	0.39	0.38
Sat Flow, veh/h	1774	4453	676	1774	3498	1467	1774	4646	515	1774	4713	448
Grp Volume(v), veh/h	253	576	298	232	897	418	84	968	505	232	878	459
Grp Sat Flow(s),veh/h/ln	1774	1695	1739	1774	1695	1575	1774	1695	1771	1774	1695	1770
Q Serve(g_s), s	18.3	19.0	19.3	16.9	33.7	33.7	6.1	36.2	36.3	16.8	27.8	27.9
Cycle Q Clear(g_c), s	18.3	19.0	19.3	16.9	33.7	33.7	6.1	36.2	36.3	16.8	27.8	27.9
Prop In Lane	1.00		0.39	1.00		0.93	1.00		0.29	1.00		0.25
Lane Grp Cap(c), veh/h	271	965	495	246	953	443	99	1024	535	250	1313	686
V/C Ratio(X)	0.93	0.60	0.60	0.94	0.94	0.94	0.85	0.95	0.95	0.93	0.67	0.67
Avail Cap(c_a), veh/h	300	965	495	246	953	443	314	1024	535	287	1313	686
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	40.1	40.3	55.5	45.7	46.1	60.8	44.3	44.5	55.2	32.9	33.1
Incr Delay (d2), s/veh	31.9	2.7	5.4	41.8	18.1	30.7	7.4	17.7	27.5	30.6	2.7	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.4	9.2	10.0	11.1	18.1	18.4	3.2	19.4	21.8	10.4	13.5	14.6
LnGrp Delay(d),s/veh	86.3	42.8	45.7	97.3	63.8	76.9	68.2	62.0	72.0	85.7	35.7	38.2
LnGrp LOS	F	D	D	F	E	E	E	E	E	F	D	D
Approach Vol, veh/h		1127			1547			1557			1569	
Approach Delay, s/veh		53.3			72.4			65.6			43.8	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.4	43.2	23.9	40.5	11.3	54.3	23.4	41.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	21.5	36.7	22.5	32.1	23.5	34.7	18.5	* 36
Max Q Clear Time (g_c+I1), s	18.8	38.3	20.3	35.7	8.1	29.9	18.9	21.3
Green Ext Time (p_c), s	0.1	0.0	0.1	0.0	0.0	4.7	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	59.1
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	880	10	20	590	120	0	10	10	90	0	20
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	42	926	11	21	621	126	0	11	11	95	0	21
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	643	2941	35	548	2407	487	0	96	96	171	3	26
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.11	0.11	0.11	0.00	0.11
Sat Flow, veh/h	710	3582	43	595	2932	594	0	853	853	1035	31	236
Grp Volume(v), veh/h	42	457	480	21	374	373	0	0	22	116	0	0
Grp Sat Flow(s),veh/h/ln	710	1770	1855	595	1770	1756	0	0	1707	1301	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	9.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	10.7	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.34	0.00		0.50	0.82		0.18
Lane Grp Cap(c), veh/h	643	1453	1523	548	1453	1442	0	0	192	201	0	0
V/C Ratio(X)	0.07	0.31	0.31	0.04	0.26	0.26	0.00	0.00	0.11	0.58	0.00	0.00
Avail Cap(c_a), veh/h	643	1453	1523	548	1453	1442	0	0	512	465	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.95	0.95	0.95	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.9	52.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.5	0.5	0.1	0.4	0.4	0.0	0.0	0.1	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.0	0.7	3.8	0.0	0.0
LnGrp Delay(d),s/veh	0.2	0.5	0.5	0.1	0.4	0.4	0.0	0.0	48.0	53.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A			D	D		
Approach Vol, veh/h		979			768			22			116	
Approach Delay, s/veh		0.5			0.4			48.0			53.5	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		17.5		102.5		17.5		102.5
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		36.0		74.7		36.0		74.7
Max Q Clear Time (g_c+I1), s		12.7		2.0		3.4		2.0
Green Ext Time (p_c), s		0.5		30.4		0.6		30.4

Intersection Summary	
HCM 2010 Ctrl Delay	4.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	940	100	130	890	100	100	60	90	90	40	50
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.96		0.95	0.97		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	989	105	137	937	105	105	63	95	95	42	53
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	1932	205	136	2094	235	284	150	226	231	168	212
Arrive On Green	0.02	0.60	0.59	0.15	1.00	1.00	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1774	3223	342	1774	3203	359	1243	649	978	1182	726	916
Grp Volume(v), veh/h	32	543	551	137	518	524	105	0	158	95	0	95
Grp Sat Flow(s),veh/h/ln	1774	1770	1795	1774	1770	1792	1243	0	1627	1182	0	1642
Q Serve(g_s), s	2.3	23.0	23.1	10.0	0.0	0.0	9.8	0.0	10.7	9.7	0.0	6.1
Cycle Q Clear(g_c), s	2.3	23.0	23.1	10.0	0.0	0.0	15.9	0.0	10.7	20.4	0.0	6.1
Prop In Lane	1.00		0.19	1.00		0.20	1.00		0.60	1.00		0.56
Lane Grp Cap(c), veh/h	40	1061	1076	136	1157	1172	284	0	376	231	0	380
V/C Ratio(X)	0.80	0.51	0.51	1.00	0.45	0.45	0.37	0.00	0.42	0.41	0.00	0.25
Avail Cap(c_a), veh/h	136	1061	1076	136	1157	1172	312	0	413	258	0	417
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.43	0.43	0.77	0.77	0.77	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.2	15.0	15.1	55.0	0.0	0.0	47.3	0.0	42.5	51.2	0.0	40.8
Incr Delay (d2), s/veh	5.9	0.8	0.8	68.8	1.0	1.0	0.3	0.0	0.3	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	11.4	11.6	7.5	0.3	0.3	3.4	0.0	4.9	3.2	0.0	2.8
LnGrp Delay(d),s/veh	69.2	15.8	15.8	123.8	1.0	1.0	47.6	0.0	42.8	51.7	0.0	40.9
LnGrp LOS	E	B	B	F	A	A	D		D	D		D
Approach Vol, veh/h		1126			1179			263			190	
Approach Delay, s/veh		17.3			15.2			44.7			46.3	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	81.9		34.1	6.9	89.0		34.1
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	10.5	74.4		33.0	10.5	74.4		33.0
Max Q Clear Time (g_c+I1), s	12.0	25.1		22.4	4.3	2.0		17.9
Green Ext Time (p_c), s	0.0	32.1		1.2	0.0	40.0		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	870	130	180	740	220	170	680	170	150	630	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.87	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	916	137	189	779	232	179	716	179	158	663	116
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	1409	567	208	1434	578	199	711	178	177	698	122
Arrive On Green	0.22	0.80	0.78	0.12	0.41	0.40	0.11	0.26	0.26	0.10	0.24	0.23
Sat Flow, veh/h	1774	3539	1450	1774	3539	1452	1774	2714	678	1774	2929	511
Grp Volume(v), veh/h	179	916	137	189	779	232	179	467	428	158	400	379
Grp Sat Flow(s),veh/h/ln	1774	1770	1450	1774	1770	1452	1774	1770	1622	1774	1770	1670
Q Serve(g_s), s	12.8	14.2	2.3	13.7	21.8	14.9	12.9	34.1	34.1	11.4	28.9	29.1
Cycle Q Clear(g_c), s	12.8	14.2	2.3	13.7	21.8	14.9	12.9	34.1	34.1	11.4	28.9	29.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		0.31
Lane Grp Cap(c), veh/h	195	1409	567	208	1434	578	199	464	425	177	422	398
V/C Ratio(X)	0.92	0.65	0.24	0.91	0.54	0.40	0.90	1.01	1.01	0.89	0.95	0.95
Avail Cap(c_a), veh/h	205	1409	567	246	1434	578	246	464	425	232	422	398
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	0.91	0.91	0.91	0.85	0.85	0.85
Uniform Delay (d), s/veh	50.1	9.4	4.2	56.7	29.5	28.0	57.0	48.0	48.2	57.9	48.7	48.9
Incr Delay (d2), s/veh	34.8	2.0	0.9	29.3	1.5	2.1	23.7	41.4	43.4	20.9	27.3	29.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.2	7.0	1.0	8.4	10.9	6.3	7.7	22.0	20.4	6.6	17.3	16.6
LnGrp Delay(d),s/veh	85.0	11.4	5.1	86.1	31.0	30.1	80.6	89.4	91.6	78.8	76.0	78.1
LnGrp LOS	F	B	A	F	C	C	F	F	F	E	E	E
Approach Vol, veh/h		1232			1200			1074			937	
Approach Delay, s/veh		21.4			39.5			88.8			77.3	
Approach LOS		C			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	38.1	19.2	55.8	20.0	35.0	18.3	56.7
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	4.9	* 4.9	3.5	4.9
Max Green Setting (Gmax), s	17.5	31.1	18.5	46.1	18.5	* 30	15.5	49.1
Max Q Clear Time (g_c+I1), s	13.4	36.1	15.7	16.2	14.9	31.1	14.8	23.8
Green Ext Time (p_c), s	0.0	0.0	0.0	21.1	0.2	0.0	0.0	18.7

Intersection Summary	
HCM 2010 Ctrl Delay	54.4
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	800	50	90	910	50	40	70	60	50	60	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.97		0.95	0.96		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	32	842	53	95	958	53	42	74	63	53	63	42
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	2085	131	110	2236	124	142	232	332	120	137	78
Arrive On Green	0.02	0.62	0.61	0.12	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3380	213	1774	3409	189	456	1050	1502	360	619	354
Grp Volume(v), veh/h	32	441	454	95	497	514	116	0	63	158	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1823	1774	1770	1828	1506	0	1502	1333	0	0
Q Serve(g_s), s	2.2	15.3	15.3	6.3	0.0	0.0	0.0	0.0	4.1	6.8	0.0	0.0
Cycle Q Clear(g_c), s	2.2	15.3	15.3	6.3	0.0	0.0	7.5	0.0	4.1	14.2	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.10	0.36		1.00	0.34		0.27
Lane Grp Cap(c), veh/h	41	1092	1125	110	1161	1199	374	0	332	335	0	0
V/C Ratio(X)	0.78	0.40	0.40	0.86	0.43	0.43	0.31	0.00	0.19	0.47	0.00	0.00
Avail Cap(c_a), veh/h	148	1092	1125	148	1161	1199	420	0	375	378	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	0.67	0.67	0.67	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.3	11.7	11.8	52.0	0.0	0.0	39.0	0.0	38.0	42.1	0.0	0.0
Incr Delay (d2), s/veh	7.5	0.7	0.7	18.1	0.8	0.8	0.2	0.0	0.1	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	7.6	7.8	3.6	0.3	0.3	3.2	0.0	1.7	4.7	0.0	0.0
LnGrp Delay(d),s/veh	65.8	12.5	12.5	70.1	0.8	0.8	39.2	0.0	38.1	42.5	0.0	0.0
LnGrp LOS	E	B	B	E	A	A	D		D	D		
Approach Vol, veh/h		927			1106			179			158	
Approach Delay, s/veh		14.3			6.7			38.8			42.5	
Approach LOS		B			A			D			D	

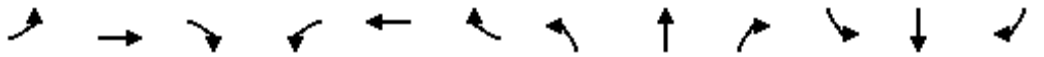
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.5	11.5	78.0		30.5	6.8	82.7
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	10.5	67.4
Max Q Clear Time (g_c+I1), s		9.5	8.3	17.3		16.2	4.2	2.0
Green Ext Time (p_c), s		1.2	0.0	24.8		1.1	0.0	27.6

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	990	40	150	630	100	40	20	260	90	20	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	1042	42	158	663	105	42	21	274	95	21	11
Adj No. of Lanes	1	2	1	2	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	0	0	0	0	0
Cap, veh/h	21	1982	884	223	1878	297	349	165	567	300	64	30
Arrive On Green	0.02	1.00	1.00	0.13	1.00	1.00	0.30	0.30	0.29	0.30	0.30	0.29
Sat Flow, veh/h	1774	3539	1578	3442	3062	484	997	551	1603	825	214	99
Grp Volume(v), veh/h	11	1042	42	158	383	385	63	0	274	127	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1578	1721	1770	1777	1549	0	1603	1138	0	0
Q Serve(g_s), s	0.7	0.0	0.0	5.3	0.0	0.0	0.0	0.0	16.0	9.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	5.3	0.0	0.0	3.3	0.0	16.0	12.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.27	0.67		1.00	0.75		0.09
Lane Grp Cap(c), veh/h	21	1982	884	223	1085	1089	515	0	567	394	0	0
V/C Ratio(X)	0.52	0.53	0.05	0.71	0.35	0.35	0.12	0.00	0.48	0.32	0.00	0.00
Avail Cap(c_a), veh/h	163	1982	884	315	1085	1089	515	0	567	394	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.84	0.84	0.84	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.2	0.0	0.0	51.1	0.0	0.0	30.5	0.0	30.3	34.5	0.0	0.0
Incr Delay (d2), s/veh	6.8	0.9	0.1	1.3	0.8	0.8	0.5	0.0	2.9	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	0.3	0.0	2.5	0.2	0.2	1.6	0.0	7.5	3.6	0.0	0.0
LnGrp Delay(d),s/veh	65.0	0.9	0.1	52.4	0.8	0.8	31.0	0.0	33.2	36.6	0.0	0.0
LnGrp LOS	E	A	A	D	A	A	C		C	D		
Approach Vol, veh/h		1095			926			337			127	
Approach Delay, s/veh		1.5			9.6			32.8			36.6	
Approach LOS		A			A			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		39.0	10.8	70.2		39.0	4.4	76.6
Change Period (Y+Rc), s		4.9	3.5	5.3		4.9	3.5	5.3
Max Green Setting (Gmax), s		34.1	10.5	61.7		34.1	10.5	61.7
Max Q Clear Time (g_c+I1), s		18.0	7.3	2.0		14.3	2.7	2.0
Green Ext Time (p_c), s		0.9	0.1	30.1		1.0	0.0	30.1

Intersection Summary	
HCM 2010 Ctrl Delay	10.6
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	210	1080	140	190	690	430	180	650	630	290	770	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	221	1137	133	200	726	287	189	794	379	305	811	79
Adj No. of Lanes	2	3	0	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	1821	213	243	1298	576	296	1120	471	347	1125	499
Arrive On Green	0.17	0.79	0.77	0.07	0.37	0.37	0.08	0.30	0.30	0.10	0.32	0.32
Sat Flow, veh/h	3442	4614	539	3442	3539	1570	3548	3725	1568	3442	3539	1568
Grp Volume(v), veh/h	221	835	435	200	726	287	189	794	379	305	811	79
Grp Sat Flow(s),veh/h/ln	1721	1695	1763	1721	1770	1570	1774	1863	1568	1721	1770	1568
Q Serve(g_s), s	7.3	12.3	12.5	6.9	19.6	12.1	6.2	22.7	26.8	10.5	24.3	3.2
Cycle Q Clear(g_c), s	7.3	12.3	12.5	6.9	19.6	12.1	6.2	22.7	26.8	10.5	24.3	3.2
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	300	1338	696	243	1298	576	296	1120	471	347	1125	499
V/C Ratio(X)	0.74	0.62	0.62	0.82	0.56	0.50	0.64	0.71	0.80	0.88	0.72	0.16
Avail Cap(c_a), veh/h	300	1338	696	402	1298	576	296	1120	471	402	1180	523
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89	0.89
Uniform Delay (d), s/veh	48.3	8.9	9.2	55.0	30.3	14.9	53.3	37.3	38.7	53.2	36.2	15.5
Incr Delay (d2), s/veh	7.0	1.9	3.6	2.6	1.7	3.1	10.2	3.8	13.6	14.8	2.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	5.9	6.5	3.4	9.9	5.7	3.5	12.3	13.4	5.7	12.2	1.4
LnGrp Delay(d),s/veh	55.2	10.8	12.7	57.7	32.0	18.0	63.4	41.1	52.3	68.0	38.3	15.7
LnGrp LOS	E	B	B	E	C	B	E	D	D	E	D	B
Approach Vol, veh/h		1491			1213			1362			1195	
Approach Delay, s/veh		18.0			32.9			47.3			44.4	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	40.1	12.5	51.4	14.0	42.2	15.8	48.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	14.5	34.7	14.5	39.1	10.5	38.7	10.5	* 43
Max Q Clear Time (g_c+I1), s	12.5	28.8	8.9	14.5	8.2	26.3	9.3	21.6
Green Ext Time (p_c), s	0.1	5.4	0.1	11.9	0.1	10.5	0.1	8.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	840	20	40	480	100	20	0	40	70	0	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	32	884	21	42	505	105	21	0	42	74	0	21
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	617	2440	58	424	2016	417	65	0	384	65	0	384
Arrive On Green	0.69	0.69	0.68	1.00	1.00	1.00	0.24	0.00	0.24	0.24	0.00	0.24
Sat Flow, veh/h	806	3533	84	613	2919	604	21	0	1581	21	0	1581
Grp Volume(v), veh/h	32	443	462	42	305	305	21	0	42	74	0	21
Grp Sat Flow(s),veh/h/ln	806	1770	1847	613	1770	1753	21	0	1581	21	0	1581
Q Serve(g_s), s	1.5	12.4	12.4	1.3	0.0	0.0	0.4	0.0	2.5	0.4	0.0	1.2
Cycle Q Clear(g_c), s	1.5	12.4	12.4	13.0	0.0	0.0	29.1	0.0	2.5	29.1	0.0	1.2
Prop In Lane	1.00		0.05	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	617	1222	1276	424	1222	1211	65	0	384	65	0	384
V/C Ratio(X)	0.05	0.36	0.36	0.10	0.25	0.25	0.32	0.00	0.11	1.14	0.00	0.05
Avail Cap(c_a), veh/h	617	1222	1276	424	1222	1211	144	0	474	143	0	474
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.59	0.59	0.59	0.96	0.96	0.96	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.0	7.7	7.7	0.9	0.0	0.0	59.9	0.0	35.3	60.0	0.0	34.9
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.4	0.5	0.5	1.0	0.0	0.0	81.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	6.2	6.5	0.3	0.2	0.2	0.7	0.0	1.1	3.6	0.0	0.5
LnGrp Delay(d),s/veh	6.1	8.2	8.1	1.4	0.5	0.5	61.0	0.0	35.4	141.9	0.0	34.9
LnGrp LOS	A	A	A	A	A	A	E		D	F		C
Approach Vol, veh/h		937			652			63			95	
Approach Delay, s/veh		8.1			0.5			43.9			118.2	
Approach LOS		A			A			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		33.5		86.5		33.5		86.5
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		36.0		74.7		36.0		74.7
Max Q Clear Time (g_c+I1), s		31.1		14.4		31.1		15.0
Green Ext Time (p_c), s		0.1		24.4		0.1		24.4

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	890	30	40	980	100	30	10	20	110	10	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	147	937	32	42	1032	105	32	11	21	116	11	126
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	2035	70	132	2682	272	157	58	83	345	29	336
Arrive On Green	0.09	0.58	0.58	0.15	1.00	1.00	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1774	3489	119	1774	4681	475	480	249	356	1344	126	1439
Grp Volume(v), veh/h	147	475	494	42	747	390	64	0	0	116	0	137
Grp Sat Flow(s),veh/h/ln	1774	1770	1838	1774	1695	1766	1084	0	0	1344	0	1564
Q Serve(g_s), s	9.8	18.4	18.4	2.5	0.0	0.0	2.2	0.0	0.0	0.4	0.0	8.8
Cycle Q Clear(g_c), s	9.8	18.4	18.4	2.5	0.0	0.0	11.0	0.0	0.0	11.5	0.0	8.8
Prop In Lane	1.00		0.06	1.00		0.27	0.50		0.33	1.00		0.92
Lane Grp Cap(c), veh/h	166	1032	1072	132	1942	1012	298	0	0	345	0	365
V/C Ratio(X)	0.88	0.46	0.46	0.32	0.38	0.39	0.21	0.00	0.00	0.34	0.00	0.38
Avail Cap(c_a), veh/h	177	1032	1072	148	1942	1012	298	0	0	345	0	365
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.44	0.44	0.44	0.94	0.94	0.94	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	14.2	14.3	48.4	0.0	0.0	39.2	0.0	0.0	39.7	0.0	38.7
Incr Delay (d2), s/veh	18.5	0.7	0.6	0.5	0.5	1.0	0.1	0.0	0.0	2.6	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.7	9.0	9.5	1.3	0.1	0.3	1.8	0.0	0.0	3.6	0.0	4.1
LnGrp Delay(d),s/veh	72.2	14.9	14.9	48.9	0.5	1.0	39.4	0.0	0.0	42.3	0.0	41.6
LnGrp LOS	E	B	B	D	A	A	D			D		D
Approach Vol, veh/h		1116			1179			64			253	
Approach Delay, s/veh		22.4			2.4			39.4			41.9	
Approach LOS		C			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.0	14.0	74.0		32.0	15.2	72.8
Change Period (Y+Rc), s		4.0	4.6	* 4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		28.0	10.5	* 69		28.0	12.5	67.4
Max Q Clear Time (g_c+I1), s		13.0	4.5	20.4		13.5	11.8	2.0
Green Ext Time (p_c), s		0.9	3.9	9.8		0.9	0.0	13.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.7
HCM 2010 LOS	B

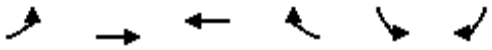
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1190	50	60	1140	80	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1541	1770	3539	1770	1514
Flt Permitted	1.00	1.00	0.12	1.00	0.95	1.00
Satd. Flow (perm)	3539	1541	222	3539	1770	1514
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1253	53	63	1200	84	42
RTOR Reduction (vph)	0	10	0	0	0	38
Lane Group Flow (vph)	1253	43	63	1200	84	4
Confl. Peds. (#/hr)		2	2			10
Turn Type	NA	Perm	D.P+P	NA	Prot	Perm
Protected Phases	1		2 4	1 2 4	3	
Permitted Phases		1	1			3
Actuated Green, G (s)	61.8	61.8	90.6	100.4	10.4	10.4
Effective Green, g (s)	62.7	62.7	93.3	101.3	11.0	11.0
Actuated g/C Ratio	0.52	0.52	0.78	0.84	0.09	0.09
Clearance Time (s)	4.9	4.9			4.6	4.6
Vehicle Extension (s)	1.5	1.5			2.5	2.5
Lane Grp Cap (vph)	1849	805	567	2987	162	138
v/s Ratio Prot	c0.35		0.03	c0.34	c0.05	
v/s Ratio Perm		0.03	0.06			0.00
v/c Ratio	0.68	0.05	0.11	0.40	0.52	0.03
Uniform Delay, d1	21.2	14.1	7.2	2.2	52.0	49.6
Progression Factor	1.00	1.00	1.14	0.02	1.00	1.00
Incremental Delay, d2	2.0	0.1	0.0	0.1	2.1	0.1
Delay (s)	23.2	14.2	8.3	0.1	54.1	49.7
Level of Service	C	B	A	A	D	D
Approach Delay (s)	22.8			0.5	52.6	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

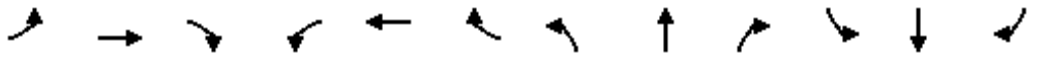
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	110	1120	1130	80	80	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.93	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1770	3539	3539	1541	1690	
Flt Permitted	0.14	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	255	3539	3539	1541	1690	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	116	1179	1189	84	84	95
RTOR Reduction (vph)	0	0	0	26	37	0
Lane Group Flow (vph)	116	1179	1189	58	142	0
Confl. Peds. (#/hr)	2			2	10	
Turn Type	D.P+P	NA	NA	Perm	Prot	
Protected Phases	2 3	1 2 3	1		4	
Permitted Phases	1			1		
Actuated Green, G (s)	85.9	90.8	61.8	61.8	19.7	
Effective Green, g (s)	84.0	88.0	62.7	62.7	20.3	
Actuated g/C Ratio	0.70	0.73	0.52	0.52	0.17	
Clearance Time (s)			4.9	4.9	4.6	
Vehicle Extension (s)			1.5	1.5	2.5	
Lane Grp Cap (vph)	447	2595	1849	805	285	
v/s Ratio Prot	0.05	c0.33	c0.34		c0.08	
v/s Ratio Perm	0.14			0.04		
v/c Ratio	0.26	0.45	0.64	0.07	0.50	
Uniform Delay, d1	9.8	6.4	20.6	14.2	45.2	
Progression Factor	2.87	0.10	0.41	0.53	1.00	
Incremental Delay, d2	0.2	0.1	1.5	0.1	1.0	
Delay (s)	28.2	0.7	9.8	7.7	46.2	
Level of Service	C	A	A	A	D	
Approach Delay (s)		3.2	9.7		46.2	
Approach LOS		A	A		D	

Intersection Summary			
HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	570	290	210	520	220	330	2620	30	190	2220	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	189	600	131	221	547	70	347	2758	31	200	2337	200
Adj No. of Lanes	1	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	685	306	215	628	281	413	2939	33	295	2433	207
Arrive On Green	0.13	0.19	0.19	0.12	0.18	0.18	0.16	0.59	0.59	0.03	0.13	0.13
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	6582	74	3442	6061	517
Grp Volume(v), veh/h	189	600	131	221	547	70	347	2013	776	200	1851	686
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	1602	1850	1721	1602	1772
Q Serve(g_s), s	14.6	23.0	7.6	17.0	21.1	4.3	13.7	53.8	53.9	8.1	53.6	53.9
Cycle Q Clear(g_c), s	14.6	23.0	7.6	17.0	21.1	4.3	13.7	53.8	53.9	8.1	53.6	53.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		0.29
Lane Grp Cap(c), veh/h	228	685	306	215	628	281	413	2146	826	295	1929	711
V/C Ratio(X)	0.83	0.88	0.43	1.03	0.87	0.25	0.84	0.94	0.94	0.68	0.96	0.96
Avail Cap(c_a), veh/h	228	751	336	215	726	325	413	2146	826	295	1929	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	0.33	0.33	0.33
Upstream Filter(I)	0.93	0.93	0.93	0.09	0.09	0.09	0.09	0.09	0.09	0.57	0.57	0.57
Uniform Delay (d), s/veh	59.5	54.8	27.5	61.5	56.0	32.0	57.5	26.7	26.7	66.1	59.6	59.7
Incr Delay (d2), s/veh	20.8	10.1	0.9	25.4	1.1	0.0	1.5	1.1	2.8	3.6	8.6	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.5	12.2	3.4	9.8	10.4	1.9	6.6	23.8	27.9	4.0	25.4	30.1
LnGrp Delay(d),s/veh	80.3	64.9	28.4	87.0	57.1	32.1	59.0	27.8	29.4	69.7	68.2	78.0
LnGrp LOS	F	E	C	F	E	C	E	C	C	E	E	E
Approach Vol, veh/h		920			838			3136			2737	
Approach Delay, s/veh		62.9			62.9			31.6			70.8	
Approach LOS		E			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	68.3	22.0	33.4	22.6	62.0	24.3	31.1
Change Period (Y+Rc), s	* 4.3	5.8	5.0	6.3	5.8	* 5.8	6.3	* 6.3
Max Green Setting (Gmax), s	* 12	59.9	17.0	29.7	15.7	* 56	18.0	* 29
Max Q Clear Time (g_c+I1), s	10.1	55.9	19.0	25.0	15.7	55.9	16.6	23.1
Green Ext Time (p_c), s	0.1	3.8	0.0	2.0	0.0	0.3	0.7	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	52.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	350	920	0	2680	2280	860
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	368	712	0	2821	2400	0
Adj No. of Lanes	2	3	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	361	379	0	5218	5218	1289
Arrive On Green	0.10	0.10	0.00	1.00	1.00	0.00
Sat Flow, veh/h	3442	3610	0	6929	6669	1583
Grp Volume(v), veh/h	368	712	0	2821	2400	0
Grp Sat Flow(s),veh/h/ln	1721	1203	0	1602	1602	1583
Q Serve(g_s), s	14.7	14.7	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	14.7	14.7	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	361	379	0	5218	5218	1289
V/C Ratio(X)	1.02	1.88	0.00	0.54	0.46	0.00
Avail Cap(c_a), veh/h	361	379	0	5218	5218	1289
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	0.45	0.33	0.00
Uniform Delay (d), s/veh	62.7	62.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	52.1	405.2	0.0	0.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.6	23.5	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	114.8	467.8	0.0	0.2	0.1	0.0
LnGrp LOS	F	F		A	A	
Approach Vol, veh/h	1080			2821	2400	
Approach Delay, s/veh	347.5			0.2	0.1	
Approach LOS	F			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		120.0		20.0		120.0		
Change Period (Y+Rc), s		6.0		* 5.3		6.0		
Max Green Setting (Gmax), s		114.0		* 15		63.0		
Max Q Clear Time (g_c+I1), s		2.0		16.7		2.0		
Green Ext Time (p_c), s		70.6		0.0		37.1		

Intersection Summary	
HCM 2010 Ctrl Delay	59.7
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	360	790	280	170	560	190	400	2040	380	290	2250	700
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	379	832	222	179	589	35	421	2147	252	305	2368	683
Adj No. of Lanes	2	4	0	2	2	1	2	4	1	2	4	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	401	1132	294	319	693	310	531	2709	669	339	2343	1344
Arrive On Green	0.12	0.22	0.22	0.09	0.20	0.20	0.31	0.85	0.85	0.20	0.73	0.73
Sat Flow, veh/h	3442	5106	1328	3442	3539	1583	3442	6408	1583	3442	6408	2787
Grp Volume(v), veh/h	379	782	272	179	589	35	421	2147	252	305	2368	683
Grp Sat Flow(s),veh/h/ln	1721	1602	1628	1721	1770	1583	1721	1602	1583	1721	1602	1393
Q Serve(g_s), s	15.3	21.2	21.9	7.0	22.5	2.0	15.7	22.0	5.1	12.1	51.2	0.0
Cycle Q Clear(g_c), s	15.3	21.2	21.9	7.0	22.5	2.0	15.7	22.0	5.1	12.1	51.2	0.0
Prop In Lane	1.00		0.82	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	401	1065	361	319	693	310	531	2709	669	339	2343	1344
V/C Ratio(X)	0.95	0.73	0.75	0.56	0.85	0.11	0.79	0.79	0.38	0.90	1.01	0.51
Avail Cap(c_a), veh/h	401	1287	436	347	910	407	531	2709	669	339	2343	1344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.40	0.40	0.40	0.54	0.54	0.54
Uniform Delay (d), s/veh	61.4	50.6	50.9	60.8	54.3	28.0	46.4	7.9	6.6	55.5	18.8	8.9
Incr Delay (d2), s/veh	31.4	1.8	6.0	1.7	6.0	0.2	3.4	1.0	0.7	15.8	16.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.0	9.5	10.4	3.4	11.5	0.9	7.6	9.1	2.2	6.5	24.5	3.3
LnGrp Delay(d),s/veh	92.8	52.4	56.9	62.5	60.3	28.2	49.8	9.0	7.3	71.4	35.1	9.6
LnGrp LOS	F	D	E	E	E	C	D	A	A	E	F	A
Approach Vol, veh/h		1433			803			2820			3356	
Approach Delay, s/veh		63.9			59.4			14.9			33.2	
Approach LOS		E			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	65.0	18.3	37.3	27.4	57.0	22.6	33.0
Change Period (Y+Rc), s	* 5.6	5.8	* 5.3	* 6.3	5.8	* 5.8	* 6.3	* 5.6
Max Green Setting (Gmax), s	* 14	51.6	* 14	* 38	14.2	* 51	* 16	* 36
Max Q Clear Time (g_c+I1), s	14.1	24.0	9.0	23.9	17.7	53.2	17.3	24.5
Green Ext Time (p_c), s	0.0	21.6	0.2	6.8	0.0	0.0	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	34.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

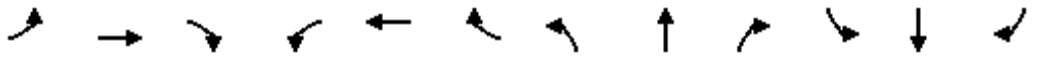
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	470	330	260	540	260	210	2460	390	200	1960	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	242	495	170	274	568	100	221	2589	371	211	2063	100
Adj No. of Lanes	1	2	1	1	2	1	1	4	1	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	231	621	278	251	687	307	205	2807	905	205	2764	134
Arrive On Green	0.13	0.18	0.18	0.14	0.19	0.19	0.23	0.88	0.86	0.12	0.44	0.43
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6408	1583	1774	6309	306
Grp Volume(v), veh/h	242	495	170	274	568	100	221	2589	371	211	1571	592
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1583	1774	1602	1809
Q Serve(g_s), s	18.2	18.8	10.6	19.8	21.6	7.6	16.2	36.5	2.2	16.2	38.2	38.3
Cycle Q Clear(g_c), s	18.2	18.8	10.6	19.8	21.6	7.6	16.2	36.5	2.2	16.2	38.2	38.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	231	621	278	251	687	307	205	2807	905	205	2105	792
V/C Ratio(X)	1.05	0.80	0.61	1.09	0.83	0.33	1.08	0.92	0.41	1.03	0.75	0.75
Avail Cap(c_a), veh/h	231	733	328	251	758	339	205	2807	905	205	2105	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	1.00	1.00	1.00	0.68	0.68	0.68	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.9	55.3	31.4	60.1	54.2	48.5	53.8	7.1	1.2	61.9	32.8	33.0
Incr Delay (d2), s/veh	66.7	4.8	2.7	83.4	7.4	0.9	73.5	4.6	0.9	70.3	2.5	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile BackOfQ(0%),veh/ln	13.2	9.6	4.9	15.5	11.3	3.4	12.1	15.6	1.0	11.9	17.4	20.5
LnGrp Delay(d),s/veh	127.6	60.1	34.1	143.5	61.6	49.4	127.3	11.7	2.1	132.3	35.3	39.3
LnGrp LOS	F	E	C	F	E	D	F	B	A	F	D	D
Approach Vol, veh/h		907			942			3181			2374	
Approach Delay, s/veh		73.3			84.1			18.6			44.9	
Approach LOS		E			F			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.6	65.3	25.2	28.9	20.6	65.3	22.3	31.8
Change Period (Y+Rc), s	* 4.6	5.3	* 5.6	* 5.3	* 4.6	5.3	* 4.3	* 5.6
Max Green Setting (Gmax), s	* 16	57.2	* 19	* 28	* 16	57.2	* 18	* 29
Max Q Clear Time (g_c+I1), s	18.2	38.5	21.8	20.8	18.2	40.3	20.2	23.6
Green Ext Time (p_c), s	0.0	18.6	0.0	2.8	0.0	16.9	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	42.1
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	280	90	90	310	180	100	2850	110	160	2460	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	42	295	95	95	326	189	105	3000	116	168	2589	63
Adj No. of Lanes	1	2	1	1	2	1	1	4	0	1	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	505	226	136	548	245	162	3306	127	189	3433	848
Arrive On Green	0.07	0.14	0.14	0.08	0.15	0.15	0.18	1.00	1.00	0.21	1.00	1.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6380	245	1774	6408	1583
Grp Volume(v), veh/h	42	295	95	95	326	189	105	2255	861	168	2589	63
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1819	1774	1602	1583
Q Serve(g_s), s	3.2	10.9	7.7	7.3	12.0	16.0	7.7	0.0	0.0	12.9	0.0	0.0
Cycle Q Clear(g_c), s	3.2	10.9	7.7	7.3	12.0	16.0	7.7	0.0	0.0	12.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	122	505	226	136	548	245	162	2491	943	189	3433	848
V/C Ratio(X)	0.34	0.58	0.42	0.70	0.60	0.77	0.65	0.91	0.91	0.89	0.75	0.07
Avail Cap(c_a), veh/h	152	715	320	153	733	328	165	2491	943	215	3433	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.43	0.43	0.43	0.78	0.78	0.78	0.21	0.21	0.21	0.77	0.77	0.77
Uniform Delay (d), s/veh	62.1	56.1	54.7	63.1	55.1	56.8	55.1	0.0	0.0	54.3	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.5	0.5	9.0	0.8	6.1	1.9	1.4	3.9	25.2	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	5.4	3.4	3.9	5.9	7.4	3.8	0.3	1.0	7.6	0.3	0.0
LnGrp Delay(d),s/veh	62.9	56.6	55.3	72.1	55.9	62.9	57.0	1.4	3.9	79.5	1.2	0.1
LnGrp LOS	E	E	E	E	E	E	E	A	A	E	A	A
Approach Vol, veh/h		432			610			3221			2820	
Approach Delay, s/veh		56.9			60.6			3.9			5.9	
Approach LOS		E			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	78.9	15.6	26.0	17.1	81.3	14.0	27.7
Change Period (Y+Rc), s	* 4.6	6.3	4.9	6.0	* 4.3	6.3	* 4.3	6.0
Max Green Setting (Gmax), s	* 17	60.8	12.1	28.3	* 13	65.1	* 12	29.0
Max Q Clear Time (g_c+I1), s	14.9	2.0	9.3	12.9	9.7	2.0	5.2	18.0
Green Ext Time (p_c), s	0.1	58.4	0.0	4.3	0.1	62.6	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

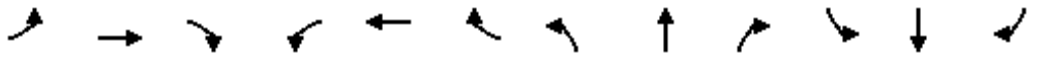
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	270	250	30	330	140	190	2290	40	200	2090	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	242	284	263	32	347	147	200	2411	42	211	2200	189
Adj No. of Lanes	1	2	0	1	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	453	406	99	373	317	177	2623	46	250	2695	231
Arrive On Green	0.11	0.26	0.26	0.06	0.20	0.20	0.10	0.40	0.40	0.28	0.89	0.89
Sat Flow, veh/h	1774	1770	1583	1774	1863	1583	1774	6535	114	1774	6058	519
Grp Volume(v), veh/h	242	284	263	32	347	147	200	1773	680	211	1744	645
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1863	1583	1774	1602	1843	1774	1602	1771
Q Serve(g_s), s	16.0	19.9	20.7	2.4	25.6	11.5	14.0	49.0	49.0	15.7	20.4	20.6
Cycle Q Clear(g_c), s	16.0	19.9	20.7	2.4	25.6	11.5	14.0	49.0	49.0	15.7	20.4	20.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.06	1.00		0.29
Lane Grp Cap(c), veh/h	203	453	406	99	373	317	177	1929	740	250	2138	788
V/C Ratio(X)	1.19	0.63	0.65	0.32	0.93	0.46	1.13	0.92	0.92	0.85	0.82	0.82
Avail Cap(c_a), veh/h	203	453	406	139	386	328	177	1929	740	253	2138	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.75	0.75	0.75	1.00	1.00	1.00	0.70	0.70	0.70
Uniform Delay (d), s/veh	62.0	46.1	46.4	63.5	55.1	49.4	63.0	39.7	39.8	48.9	5.4	5.4
Incr Delay (d2), s/veh	125.2	2.7	3.6	1.4	23.5	0.8	105.9	8.6	18.4	16.4	2.5	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	14.9	10.0	9.5	1.2	15.6	5.1	12.1	23.2	28.7	8.8	8.5	10.4
LnGrp Delay(d),s/veh	187.2	48.8	50.0	64.9	78.6	50.2	168.9	48.3	58.2	65.3	7.9	12.0
LnGrp LOS	F	D	D	E	E	D	F	D	E	E	A	B
Approach Vol, veh/h		789			526			2653			2600	
Approach Delay, s/veh		91.7			69.8			59.9			13.6	
Approach LOS		F			E			E			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	61.5	12.7	40.8	18.9	67.6	20.9	32.6
Change Period (Y+Rc), s	5.3	* 5.3	4.9	* 4.9	4.9	5.3	4.9	* 4.6
Max Green Setting (Gmax), s	20.0	* 56	11.0	* 33	14.0	61.9	16.0	* 29
Max Q Clear Time (g_c+I1), s	17.7	51.0	4.4	22.7	16.0	22.6	18.0	27.6
Green Ext Time (p_c), s	1.6	4.7	0.0	2.9	0.0	26.8	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	46.2
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	10	30	290	10	180	60	2460	100	320	2230	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	11	32	368	0	130	63	2589	105	337	2347	21
Adj No. of Lanes	1	1	0	2	0	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	34	99	329	0	147	127	2678	108	908	4077	36
Arrive On Green	0.08	0.08	0.08	0.09	0.00	0.09	0.14	0.84	0.84	0.53	1.00	1.00
Sat Flow, veh/h	1774	421	1225	3548	0	1583	1774	6366	257	3442	6599	59
Grp Volume(v), veh/h	32	0	43	368	0	130	63	1953	741	337	1709	659
Grp Sat Flow(s),veh/h/ln	1774	0	1647	1774	0	1583	1774	1602	1817	1721	1602	1852
Q Serve(g_s), s	2.4	0.0	3.4	13.0	0.0	11.4	4.6	48.2	49.1	8.0	0.0	0.0
Cycle Q Clear(g_c), s	2.4	0.0	3.4	13.0	0.0	11.4	4.6	48.2	49.1	8.0	0.0	0.0
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.14	1.00		0.03
Lane Grp Cap(c), veh/h	144	0	133	329	0	147	127	2022	765	908	2969	1144
V/C Ratio(X)	0.22	0.00	0.32	1.12	0.00	0.88	0.49	0.97	0.97	0.37	0.58	0.58
Avail Cap(c_a), veh/h	380	0	353	329	0	147	139	2022	765	908	2969	1144
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.23	0.23	0.23	0.59	0.59	0.59
Uniform Delay (d), s/veh	60.2	0.0	60.7	63.5	0.0	62.8	57.6	10.2	10.3	26.2	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	1.4	85.0	0.0	42.3	0.7	4.5	9.9	0.1	0.5	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	0.0	1.6	10.2	0.0	6.7	2.3	20.4	24.8	3.8	0.1	0.4
LnGrp Delay(d),s/veh	61.0	0.0	62.1	148.5	0.0	105.0	58.3	14.7	20.3	26.4	0.5	1.2
LnGrp LOS	E		E	F		F	E	B	C	C	A	A
Approach Vol, veh/h		75			498			2757			2705	
Approach Delay, s/veh		61.6			137.1			17.2			3.9	
Approach LOS		E			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	42.2	64.2		16.0	14.7	91.8		17.6
Change Period (Y+Rc), s	5.3	* 5.3		* 4.6	* 4.6	5.3		4.6
Max Green Setting (Gmax), s	19.0	* 59		* 30	* 11	66.9		13.0
Max Q Clear Time (g_c+I1), s	10.0	51.1		5.4	6.6	2.0		15.0
Green Ext Time (p_c), s	7.4	7.2		0.3	0.0	37.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	21.7
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

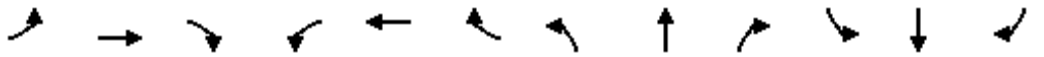
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	410	500	180	350	450	150	230	2480	340	190	2050	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	432	526	189	368	474	158	242	2611	358	200	2158	337
Adj No. of Lanes	2	2	0	2	2	0	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	477	548	196	413	519	172	290	2570	346	258	2493	387
Arrive On Green	0.14	0.21	0.21	0.12	0.20	0.20	0.03	0.15	0.15	0.08	0.44	0.44
Sat Flow, veh/h	3442	2556	915	3442	2614	865	3442	5756	776	3442	5639	876
Grp Volume(v), veh/h	432	363	352	368	320	312	242	2173	796	200	1838	657
Grp Sat Flow(s),veh/h/ln	1721	1770	1701	1721	1770	1710	1721	1602	1726	1721	1602	1708
Q Serve(g_s), s	17.3	28.4	28.7	14.8	24.8	25.1	9.8	62.5	62.5	8.0	48.3	48.9
Cycle Q Clear(g_c), s	17.3	28.4	28.7	14.8	24.8	25.1	9.8	62.5	62.5	8.0	48.3	48.9
Prop In Lane	1.00		0.54	1.00		0.51	1.00		0.45	1.00		0.51
Lane Grp Cap(c), veh/h	477	379	365	413	351	339	290	2145	770	258	2125	755
V/C Ratio(X)	0.91	0.96	0.96	0.89	0.91	0.92	0.83	1.01	1.03	0.77	0.86	0.87
Avail Cap(c_a), veh/h	477	379	365	418	367	354	295	2145	770	270	2125	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	0.56	0.56	0.56	0.77	0.77	0.77	0.22	0.22	0.22
Uniform Delay (d), s/veh	59.4	54.4	54.5	60.7	54.9	55.0	67.1	59.7	59.7	63.6	35.3	35.4
Incr Delay (d2), s/veh	13.2	24.6	26.5	12.9	16.6	18.4	14.4	20.3	37.5	3.1	1.2	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.1	16.5	16.2	7.7	13.7	13.6	5.3	31.8	37.9	3.9	21.5	23.7
LnGrp Delay(d),s/veh	72.6	79.0	81.0	73.6	71.5	73.4	81.5	80.0	97.2	66.6	36.5	38.8
LnGrp LOS	E	E	F	E	E	E	F	F	F	E	D	D
Approach Vol, veh/h		1147			1000			3211			2695	
Approach Delay, s/veh		77.2			72.9			84.3			39.3	
Approach LOS		E			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	67.8	21.8	34.6	16.4	67.2	24.0	32.4
Change Period (Y+Rc), s	5.3	* 5.3	5.0	4.6	* 4.6	5.3	4.6	* 4.6
Max Green Setting (Gmax), s	11.0	* 63	17.0	30.0	* 12	61.5	18.7	* 29
Max Q Clear Time (g_c+I1), s	10.0	64.5	16.8	30.7	11.8	50.9	19.3	27.1
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.0	9.5	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	66.8
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.



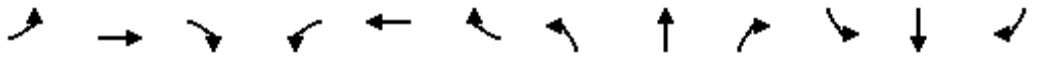
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	20	40	150	60	210	130	2510	90	330	2270	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	21	4	158	63	32	137	2642	92	347	2389	21
Adj No. of Lanes	1	1	0	1	1	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	119	23	184	208	177	127	3818	133	270	3966	35
Arrive On Green	0.07	0.08	0.08	0.10	0.11	0.11	0.14	1.00	1.00	0.16	1.00	1.00
Sat Flow, veh/h	1774	1522	290	1774	1863	1583	1774	6407	223	3442	6600	58
Grp Volume(v), veh/h	42	0	25	158	63	32	137	1980	754	347	1739	671
Grp Sat Flow(s),veh/h/ln	1774	0	1812	1774	1863	1583	1774	1602	1823	1721	1602	1853
Q Serve(g_s), s	3.1	0.0	1.8	12.3	4.4	2.6	10.0	0.0	0.0	11.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	1.8	12.3	4.4	2.6	10.0	0.0	0.0	11.0	0.0	0.0
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.12	1.00		0.03
Lane Grp Cap(c), veh/h	133	0	142	184	208	177	127	2864	1087	270	2888	1113
V/C Ratio(X)	0.32	0.00	0.18	0.86	0.30	0.18	1.08	0.69	0.69	1.28	0.60	0.60
Avail Cap(c_a), veh/h	165	0	401	219	464	395	127	2864	1087	270	2888	1113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.40	0.40	0.40	0.25	0.25	0.25
Uniform Delay (d), s/veh	61.4	0.0	60.3	61.8	57.2	56.4	60.0	0.0	0.0	59.0	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.6	24.4	0.8	0.5	74.2	0.6	1.5	134.6	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	0.0	0.9	7.3	2.3	1.1	7.5	0.2	0.5	10.2	0.1	0.2
LnGrp Delay(d),s/veh	62.7	0.0	60.9	86.2	58.0	56.9	134.2	0.6	1.5	193.6	0.2	0.6
LnGrp LOS	E		E	F	E	E	F	A	A	F	A	A
Approach Vol, veh/h		67			253			2871			2757	
Approach Delay, s/veh		62.0			75.5			7.2			24.7	
Approach LOS		E			E			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	88.7	19.8	15.9	14.9	89.4	14.8	20.9
Change Period (Y+Rc), s	* 4.6	5.3	5.3	* 4.9	4.9	5.3	* 4.3	* 5.3
Max Green Setting (Gmax), s	* 11	61.6	17.3	* 31	10.0	62.3	* 13	* 35
Max Q Clear Time (g_c+I1), s	13.0	2.0	14.3	3.8	12.0	2.0	5.1	6.4
Green Ext Time (p_c), s	0.0	58.2	0.3	0.1	0.0	58.8	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



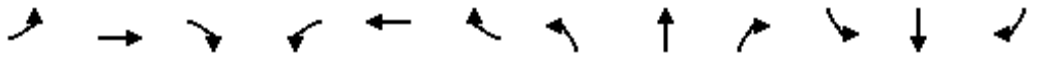
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	310	260	120	150	240	100	170	2500	140	130	2310	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	326	274	126	158	253	105	179	2632	147	137	2432	158
Adj No. of Lanes	2	2	0	1	2	0	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	397	334	150	181	314	127	408	3139	175	161	2213	143
Arrive On Green	0.19	0.23	0.23	0.10	0.13	0.13	0.23	0.50	0.50	0.03	0.12	0.12
Sat Flow, veh/h	3442	2379	1065	1774	2463	994	1774	6259	348	1774	6197	401
Grp Volume(v), veh/h	326	202	198	158	180	178	179	2018	761	137	1884	706
Grp Sat Flow(s),veh/h/ln	1721	1770	1675	1774	1770	1687	1774	1602	1801	1774	1602	1792
Q Serve(g_s), s	12.7	15.1	15.8	12.3	13.8	14.4	12.1	50.5	51.0	10.8	50.0	50.0
Cycle Q Clear(g_c), s	12.7	15.1	15.8	12.3	13.8	14.4	12.1	50.5	51.0	10.8	50.0	50.0
Prop In Lane	1.00		0.64	1.00		0.59	1.00		0.19	1.00		0.22
Lane Grp Cap(c), veh/h	397	249	235	181	225	215	408	2410	903	161	1716	640
V/C Ratio(X)	0.82	0.81	0.84	0.87	0.80	0.83	0.44	0.84	0.84	0.85	1.10	1.10
Avail Cap(c_a), veh/h	397	341	323	196	341	325	408	2410	903	167	1716	640
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.80	0.80	0.80	0.95	0.95	0.95	0.24	0.24	0.24	0.80	0.80	0.80
Uniform Delay (d), s/veh	55.1	51.8	52.1	61.9	59.3	59.6	46.1	30.0	30.1	67.0	61.8	61.8
Incr Delay (d2), s/veh	10.6	8.2	11.1	29.5	7.2	10.0	0.2	0.9	2.4	26.1	52.0	63.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.6	8.0	8.0	7.5	7.2	7.3	5.9	22.4	26.0	6.5	30.5	36.1
LnGrp Delay(d),s/veh	65.8	60.1	63.2	91.5	66.5	69.6	46.3	30.9	32.5	93.0	113.7	125.3
LnGrp LOS	E	E	E	F	E	E	D	C	C	F	F	F
Approach Vol, veh/h		726			516			2958			2727	
Approach Delay, s/veh		63.5			75.2			32.2			115.7	
Approach LOS		E			E			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	76.5	19.9	25.3	38.5	56.3	21.7	23.4
Change Period (Y+Rc), s	* 5.6	6.3	* 5.6	* 5.6	6.3	* 6.3	5.6	* 5.6
Max Green Setting (Gmax), s	* 13	61.2	* 16	* 27	25.0	* 50	15.5	* 27
Max Q Clear Time (g_c+I1), s	12.8	53.0	14.3	17.8	14.1	52.0	14.7	16.4
Green Ext Time (p_c), s	0.0	7.6	0.0	1.9	9.2	0.0	0.3	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	71.6
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	240	650	130	200	580	190	310	2470	100	220	2250	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	253	684	137	211	611	200	326	2600	105	232	2368	179
Adj No. of Lanes	2	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	750	335	190	835	374	379	2729	110	289	2500	188
Arrive On Green	0.09	0.21	0.21	0.11	0.24	0.24	0.04	0.14	0.14	0.11	0.54	0.54
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	6367	256	3442	6126	462
Grp Volume(v), veh/h	253	684	137	211	611	200	326	1961	744	232	1856	691
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1602	1817	1721	1602	1781
Q Serve(g_s), s	10.1	26.4	8.0	15.0	22.3	12.1	13.2	56.7	56.9	9.2	50.8	51.3
Cycle Q Clear(g_c), s	10.1	26.4	8.0	15.0	22.3	12.1	13.2	56.7	56.9	9.2	50.8	51.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.26
Lane Grp Cap(c), veh/h	320	750	335	190	835	374	379	2060	779	289	1961	727
V/C Ratio(X)	0.79	0.91	0.41	1.11	0.73	0.54	0.86	0.95	0.96	0.80	0.95	0.95
Avail Cap(c_a), veh/h	320	784	351	190	835	374	418	2060	779	320	1961	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.81	0.81	0.81	0.91	0.91	0.91	0.56	0.56	0.56	0.09	0.09	0.09
Uniform Delay (d), s/veh	62.2	53.9	27.5	62.5	49.4	28.4	66.4	58.7	58.8	61.1	30.6	30.7
Incr Delay (d2), s/veh	10.5	12.4	0.6	94.8	3.0	1.4	9.4	7.3	15.7	1.3	1.4	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.3	14.2	3.5	12.3	11.3	5.4	6.8	26.6	32.1	4.4	22.5	25.8
LnGrp Delay(d),s/veh	72.7	66.3	28.2	157.3	52.4	29.8	75.8	66.0	74.4	62.3	31.9	34.3
LnGrp LOS	E	E	C	F	D	C	E	E	E	E	C	C
Approach Vol, veh/h		1074			1022			3031			2779	
Approach Delay, s/veh		62.9			69.6			69.1			35.1	
Approach LOS		E			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	65.8	21.0	35.6	20.4	62.9	17.6	39.0
Change Period (Y+Rc), s	5.8	* 5.8	6.0	* 6	* 5	5.8	* 4.6	6.0
Max Green Setting (Gmax), s	13.0	* 60	15.0	* 31	* 17	55.6	* 13	33.0
Max Q Clear Time (g_c+I1), s	11.2	58.9	17.0	28.4	15.2	53.3	12.1	24.3
Green Ext Time (p_c), s	0.1	1.1	0.0	1.2	0.2	2.2	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	56.4
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	40	20	190	60	240	30	2800	130	50	2350	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	42	21	200	63	253	32	2947	137	53	2474	21
Adj No. of Lanes	1	1	0	0	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	273	136	267	70	368	90	3759	173	111	4014	34
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.10	1.00	1.00	0.04	0.41	0.41
Sat Flow, veh/h	1059	1173	586	955	301	1583	1774	6325	292	1774	6603	56
Grp Volume(v), veh/h	11	0	63	263	0	253	32	2234	850	53	1801	694
Grp Sat Flow(s),veh/h/ln	1059	0	1759	1256	0	1583	1774	1602	1811	1774	1602	1853
Q Serve(g_s), s	1.4	0.0	4.0	25.1	0.0	20.4	2.4	0.0	0.0	4.1	41.5	41.5
Cycle Q Clear(g_c), s	30.5	0.0	4.0	29.1	0.0	20.4	2.4	0.0	0.0	4.1	41.5	41.5
Prop In Lane	1.00		0.33	0.76		1.00	1.00		0.16	1.00		0.03
Lane Grp Cap(c), veh/h	78	0	409	337	0	368	90	2856	1076	111	2922	1126
V/C Ratio(X)	0.14	0.00	0.15	0.78	0.00	0.69	0.35	0.78	0.79	0.48	0.62	0.62
Avail Cap(c_a), veh/h	79	0	411	339	0	370	129	2856	1076	141	2922	1126
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.21	0.21	0.21	0.15	0.15	0.15
Uniform Delay (d), s/veh	67.2	0.0	42.7	54.3	0.0	49.1	60.7	0.0	0.0	64.9	28.6	28.6
Incr Delay (d2), s/veh	0.8	0.0	0.2	11.0	0.0	5.2	0.5	0.5	1.3	0.5	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	0.0	2.0	11.0	0.0	9.5	1.2	0.1	0.4	2.0	18.5	21.4
LnGrp Delay(d),s/veh	68.1	0.0	42.9	65.3	0.0	54.3	61.2	0.5	1.3	65.4	28.7	29.0
LnGrp LOS	E		D	E		D	E	A	A	E	C	C
Approach Vol, veh/h		74			516			3116			2548	
Approach Delay, s/veh		46.7			59.9			1.3			29.6	
Approach LOS		D			E			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.6	88.5		37.9	11.7	90.4		37.9
Change Period (Y+Rc), s	4.9	5.3		* 5.3	* 4.6	5.3		* 5.3
Max Green Setting (Gmax), s	11.1	80.7		* 33	* 10	81.9		* 33
Max Q Clear Time (g_c+I1), s	6.1	2.0		32.5	4.4	43.5		31.1
Green Ext Time (p_c), s	0.0	77.4		0.1	0.0	38.1		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.2
HCM 2010 LOS	B

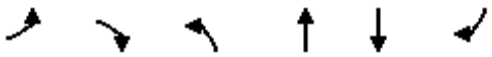
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	1050	690	2360	0	0	2440
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863
Adj Flow Rate, veh/h	1105	726	2484	0	0	2568
Adj No. of Lanes	2	2	4	0	0	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	0	2
Cap, veh/h	971	786	4060	0	0	4060
Arrive On Green	0.28	0.28	1.00	0.00	0.00	1.00
Sat Flow, veh/h	3442	2787	6929	0	0	6929
Grp Volume(v), veh/h	1105	726	2484	0	0	2568
Grp Sat Flow(s),veh/h/ln	1721	1393	1602	0	0	1602
Q Serve(g_s), s	39.5	35.4	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	39.5	35.4	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	0.00	
Lane Grp Cap(c), veh/h	971	786	4060	0	0	4060
V/C Ratio(X)	1.14	0.92	0.61	0.00	0.00	0.63
Avail Cap(c_a), veh/h	971	786	4060	0	0	4060
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	2.00
Upstream Filter(I)	1.00	1.00	0.87	0.00	0.00	0.46
Uniform Delay (d), s/veh	50.3	48.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	74.8	16.4	0.6	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	28.8	15.4	0.2	0.0	0.0	0.1
LnGrp Delay(d),s/veh	125.0	65.2	0.6	0.0	0.0	0.3
LnGrp LOS	F	E	A			A
Approach Vol, veh/h	1831		2484			2568
Approach Delay, s/veh	101.3		0.6			0.3
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		95.0				95.0		45.0
Change Period (Y+Rc), s		6.3				6.3		5.5
Max Green Setting (Gmax), s		88.7				88.7		39.5
Max Q Clear Time (g_c+I1), s		2.0				2.0		41.5
Green Ext Time (p_c), s		86.2				86.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	340	240	0	2060	2670	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0
Adj Flow Rate, veh/h	358	253	0	2168	2811	0
Adj No. of Lanes	2	2	0	4	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	451	365	0	5028	5028	0
Arrive On Green	0.13	0.13	0.00	0.53	1.00	0.00
Sat Flow, veh/h	3442	2787	0	6929	6929	0
Grp Volume(v), veh/h	358	253	0	2168	2811	0
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1602	1602	0
Q Serve(g_s), s	14.1	12.1	0.0	29.0	0.0	0.0
Cycle Q Clear(g_c), s	14.1	12.1	0.0	29.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	451	365	0	5028	5028	0
V/C Ratio(X)	0.79	0.69	0.00	0.43	0.56	0.00
Avail Cap(c_a), veh/h	946	766	0	5028	5028	0
HCM Platoon Ratio	1.00	1.00	1.00	0.67	2.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.29	0.52	0.00
Uniform Delay (d), s/veh	59.0	58.1	0.0	14.0	0.0	0.0
Incr Delay (d2), s/veh	3.2	2.4	0.0	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.9	4.8	0.0	12.9	0.1	0.0
LnGrp Delay(d),s/veh	62.2	60.5	0.0	14.1	0.2	0.0
LnGrp LOS	E	E		B	A	
Approach Vol, veh/h	611			2168	2811	
Approach Delay, s/veh	61.5			14.1	0.2	
Approach LOS	E			B	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		116.2		23.8		116.2		
Change Period (Y+Rc), s		6.3		5.5		6.3		
Max Green Setting (Gmax), s		89.7		38.5		89.7		
Max Q Clear Time (g_c+I1), s		31.0		16.1		2.0		
Green Ext Time (p_c), s		57.6		2.2		85.5		

Intersection Summary	
HCM 2010 Ctrl Delay	12.3
HCM 2010 LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	190	1210	1250	660	540	2020
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	200	1274	1316	327	568	2126
Adj No. of Lanes	2	2	3	1	2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	840	1220	2137	665	667	2325
Arrive On Green	0.24	0.24	0.42	0.42	0.19	0.66
Sat Flow, veh/h	3442	2787	5253	1583	3442	3632
Grp Volume(v), veh/h	200	1274	1316	327	568	2126
Grp Sat Flow(s),veh/h/ln	1721	1393	1695	1583	1721	1770
Q Serve(g_s), s	4.7	24.4	20.2	15.1	15.9	51.6
Cycle Q Clear(g_c), s	4.7	24.4	20.2	15.1	15.9	51.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	840	1220	2137	665	667	2325
V/C Ratio(X)	0.24	1.04	0.62	0.49	0.85	0.91
Avail Cap(c_a), veh/h	840	1220	2137	665	1277	2325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.55	0.55	0.78	0.78	1.00	1.00
Uniform Delay (d), s/veh	30.3	28.1	22.7	21.2	38.9	14.7
Incr Delay (d2), s/veh	0.0	32.0	1.1	2.0	2.4	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	22.1	9.6	6.9	7.8	27.1
LnGrp Delay(d),s/veh	30.4	60.1	23.7	23.2	41.3	21.7
LnGrp LOS	C	F	C	C	D	C
Approach Vol, veh/h	1474		1643			2694
Approach Delay, s/veh	56.1		23.6			25.9
Approach LOS	E		C			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	23.7	47.3				71.0		29.0
Change Period (Y+Rc), s	* 4.3	5.3				5.3		4.6
Max Green Setting (Gmax), s	* 37	24.3				65.7		24.4
Max Q Clear Time (g_c+I1), s	17.9	22.2				53.6		26.4
Green Ext Time (p_c), s	1.4	2.1				12.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.9
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	300	610	210	490	620	530	70	720	620	410	750	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	316	642	93	390	830	517	74	758	600	432	789	145
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	337	708	296	356	748	668	93	748	650	393	1135	209
Arrive On Green	0.39	0.39	0.39	0.21	0.21	0.21	0.05	0.22	0.22	0.23	0.39	0.39
Sat Flow, veh/h	1714	3600	1504	1714	3600	1528	1714	3420	1520	1714	2884	530
Grp Volume(v), veh/h	316	642	93	390	830	517	74	758	600	432	468	466
Grp Sat Flow(s),veh/h/ln	1714	1800	1504	1714	1800	1528	1714	1710	1520	1714	1710	1705
Q Serve(g_s), s	23.0	21.9	5.6	27.0	27.0	27.0	5.5	28.4	28.4	29.8	29.7	29.7
Cycle Q Clear(g_c), s	23.0	21.9	5.6	27.0	27.0	27.0	5.5	28.4	28.4	29.8	29.7	29.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	337	708	296	356	748	668	93	748	650	393	673	671
V/C Ratio(X)	0.94	0.91	0.31	1.10	1.11	0.77	0.79	1.01	0.92	1.10	0.70	0.70
Avail Cap(c_a), veh/h	343	720	301	356	748	668	195	748	650	393	673	671
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.73	0.73	0.73	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	38.3	33.4	51.5	51.5	31.1	60.7	50.8	29.5	50.1	32.9	32.9
Incr Delay (d2), s/veh	29.9	13.7	0.5	69.1	63.3	4.2	11.9	33.7	18.4	74.9	5.9	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	13.5	12.0	2.3	19.6	20.0	16.5	2.9	16.9	24.8	22.3	15.1	15.1
LnGrp Delay(d),s/veh	68.6	51.9	33.9	120.6	114.8	35.3	72.6	84.5	47.9	125.0	38.8	38.8
LnGrp LOS	E	D	C	F	F	D	E	F	D	F	D	D
Approach Vol, veh/h		1051			1737			1432			1366	
Approach Delay, s/veh		55.3			92.5			68.6			66.1	
Approach LOS		E			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	34.0	33.4		30.6	11.3	56.1		32.0
Change Period (Y+Rc), s	* 4.2	5.0		5.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s	* 30	28.0		26.0	* 15	43.0		27.0
Max Q Clear Time (g_c+I1), s	31.8	30.4		25.0	7.5	31.7		29.0
Green Ext Time (p_c), s	0.0	0.0		0.6	0.1	8.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	72.9
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

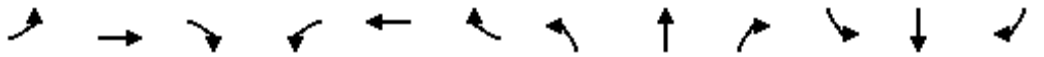
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	950	220	0	0	380	90	770	110	60	120	0	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	1000	232	0	0	400	0	811	116	58	126	0	29
Adj No. of Lanes	2	1	0	0	2	1	2	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	1118	1046	0	0	566	253	979	334	167	0	0	0
Arrive On Green	0.32	0.56	0.00	0.00	0.16	0.00	0.28	0.28	0.28	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	3632	1583	3442	1173	586		0	
Grp Volume(v), veh/h	1000	232	0	0	400	0	811	0	174		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1583	1721	0	1759			
Q Serve(g_s), s	16.9	3.8	0.0	0.0	6.5	0.0	13.5	0.0	4.8			
Cycle Q Clear(g_c), s	16.9	3.8	0.0	0.0	6.5	0.0	13.5	0.0	4.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.33			
Lane Grp Cap(c), veh/h	1118	1046	0	0	566	253	979	0	501			
V/C Ratio(X)	0.89	0.22	0.00	0.00	0.71	0.00	0.83	0.00	0.35			
Avail Cap(c_a), veh/h	1424	1380	0	0	886	396	2775	0	1419			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.6	6.7	0.0	0.0	24.3	0.0	20.5	0.0	17.4			
Incr Delay (d2), s/veh	5.5	0.0	0.0	0.0	0.6	0.0	0.7	0.0	0.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(0%),veh/ln	8.8	1.9	0.0	0.0	3.2	0.0	6.4	0.0	2.3			
LnGrp Delay(d),s/veh	25.2	6.7	0.0	0.0	24.9	0.0	21.2	0.0	17.5			
LnGrp LOS	C	A			C		C		B			
Approach Vol, veh/h		1232			400			985				
Approach Delay, s/veh		21.7			24.9			20.5				
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		22.1		39.0			24.6	14.5
Change Period (Y+Rc), s		* 4.7		* 4.7			* 4.7	* 4.7
Max Green Setting (Gmax), s		* 49		* 45			* 25	* 15
Max Q Clear Time (g_c+I1), s		15.5		5.8			18.9	8.5
Green Ext Time (p_c), s		1.9		2.0			1.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	21.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



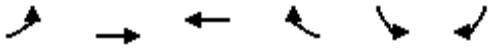
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	560	0	0	610	20	940	20	220	40	0	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	0	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	42	589	0	0	642	17	989	21	89	42	0	1
Adj No. of Lanes	1	3	0	0	3	0	2	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	68	2436	0	0	1959	52	924	500	425	55	0	49
Arrive On Green	0.04	0.50	0.00	0.00	0.40	0.40	0.28	0.28	0.28	0.03	0.00	0.03
Sat Flow, veh/h	1714	5076	0	0	5085	130	3326	1800	1530	1714	0	1530
Grp Volume(v), veh/h	42	589	0	0	427	232	989	21	89	42	0	1
Grp Sat Flow(s),veh/h/ln	1714	1638	0	0	1638	1777	1663	1800	1530	1714	0	1530
Q Serve(g_s), s	1.7	4.9	0.0	0.0	6.5	6.5	20.0	0.6	3.2	1.8	0.0	0.0
Cycle Q Clear(g_c), s	1.7	4.9	0.0	0.0	6.5	6.5	20.0	0.6	3.2	1.8	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	68	2436	0	0	1304	707	924	500	425	55	0	49
V/C Ratio(X)	0.62	0.24	0.00	0.00	0.33	0.33	1.07	0.04	0.21	0.76	0.00	0.02
Avail Cap(c_a), veh/h	186	2436	0	0	1304	707	924	500	425	381	0	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.94	0.94	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.0	10.4	0.0	0.0	15.0	15.0	26.0	19.0	19.9	34.6	0.0	33.8
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.6	1.2	50.4	0.0	0.2	19.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	2.2	0.0	0.0	3.0	3.4	15.6	0.3	1.4	1.1	0.0	0.0
LnGrp Delay(d),s/veh	34.9	10.4	0.0	0.0	15.6	16.2	76.4	19.0	20.2	54.0	0.0	33.9
LnGrp LOS	C	B			B	B	F	B	C	D		C
Approach Vol, veh/h		631			659			1099			43	
Approach Delay, s/veh		12.1			15.8			70.7			53.5	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		40.7		6.3	7.0	33.7		25.0
Change Period (Y+Rc), s		5.0		4.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s		22.0		16.0	* 7.8	10.0		20.0
Max Q Clear Time (g_c+I1), s		6.9		3.8	3.7	8.5		22.0
Green Ext Time (p_c), s		6.6		0.1	0.0	1.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.3
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	730	820	0	410	30
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1800	1800
Adj Flow Rate, veh/h	0	768	863	0	462	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2290	2290	0	611	273
Arrive On Green	0.00	0.67	0.67	0.00	0.18	0.00
Sat Flow, veh/h	0	3600	3600	0	3429	1530
Grp Volume(v), veh/h	0	768	863	0	462	0
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1714	1530
Q Serve(g_s), s	0.0	6.2	7.2	0.0	8.3	0.0
Cycle Q Clear(g_c), s	0.0	6.2	7.2	0.0	8.3	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2290	2290	0	611	273
V/C Ratio(X)	0.00	0.34	0.38	0.00	0.76	0.00
Avail Cap(c_a), veh/h	0	2290	2290	0	1076	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.93	0.09	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.6	4.7	0.0	25.4	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.0	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	3.0	3.4	0.0	4.1	0.0
LnGrp Delay(d),s/veh	0.0	4.9	4.8	0.0	27.3	0.0
LnGrp LOS		A	A		C	
Approach Vol, veh/h		768	863		462	
Approach Delay, s/veh		4.9	4.8		27.3	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		48.8		16.2		48.8		
Change Period (Y+Rc), s		5.3		4.6		5.3		
Max Green Setting (Gmax), s		34.7		20.4		34.7		
Max Q Clear Time (g_c+I1), s		8.2		10.3		9.2		
Green Ext Time (p_c), s		12.2		1.3		12.0		

Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

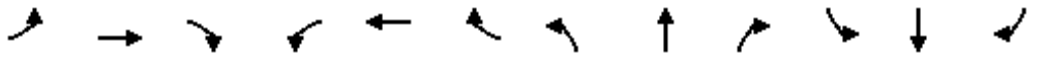
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	240	580	0	2060	940	550
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	244	490	0	2168	989	0
Adj No. of Lanes	1	2	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	372	664	0	3837	3837	948
Arrive On Green	0.22	0.22	0.00	1.00	0.62	0.00
Sat Flow, veh/h	1714	3060	0	6696	6444	1530
Grp Volume(v), veh/h	244	490	0	2168	989	0
Grp Sat Flow(s),veh/h/ln	1714	1530	0	1548	1548	1530
Q Serve(g_s), s	7.8	9.0	0.0	0.0	4.3	0.0
Cycle Q Clear(g_c), s	7.8	9.0	0.0	0.0	4.3	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	372	664	0	3837	3837	948
V/C Ratio(X)	0.66	0.74	0.00	0.56	0.26	0.00
Avail Cap(c_a), veh/h	577	1030	0	3837	3837	948
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.00	0.48	0.87	0.00
Uniform Delay (d), s/veh	21.4	21.9	0.0	0.0	5.2	0.0
Incr Delay (d2), s/veh	1.8	1.5	0.0	0.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	3.9	0.0	0.1	1.9	0.0
LnGrp Delay(d),s/veh	23.3	23.4	0.0	0.3	5.3	0.0
LnGrp LOS	C	C		A	A	
Approach Vol, veh/h	734			2168	989	
Approach Delay, s/veh	23.4			0.3	5.3	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		42.2		17.8		42.2		
Change Period (Y+Rc), s		5.0		* 4.8		5.0		
Max Green Setting (Gmax), s		30.0		* 20		30.0		
Max Q Clear Time (g_c+I1), s		2.0		11.0		6.3		
Green Ext Time (p_c), s		24.1		2.1		20.8		

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



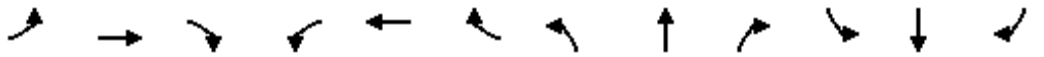
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	190	270	20	30	230	370	0	0	0	560	90	130
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800				1800	1800	1800
Adj Flow Rate, veh/h	200	284	9	32	242	145				657	0	46
Adj No. of Lanes	1	2	0	0	2	1				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	589	1465	46	222	1305	660				1029	0	459
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43				0.30	0.00	0.30
Sat Flow, veh/h	957	3384	107	198	3014	1525				3429	0	1528
Grp Volume(v), veh/h	200	143	150	146	128	145				657	0	46
Grp Sat Flow(s),veh/h/ln	957	1710	1781	1656	1556	1525				1714	0	1528
Q Serve(g_s), s	5.3	1.7	1.7	0.0	1.6	1.9				5.3	0.0	0.7
Cycle Q Clear(g_c), s	6.9	1.7	1.7	1.6	1.6	1.9				5.3	0.0	0.7
Prop In Lane	1.00		0.06	0.22		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	589	741	771	853	674	660				1029	0	459
V/C Ratio(X)	0.34	0.19	0.19	0.17	0.19	0.22				0.64	0.00	0.10
Avail Cap(c_a), veh/h	1086	1628	1695	1659	1482	1452				2201	0	981
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	7.8	5.7	5.7	5.6	5.6	5.7				9.8	0.0	8.1
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.1	0.1	0.2				0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.8	0.8	0.8	0.7	0.8				2.6	0.0	0.3
LnGrp Delay(d),s/veh	8.1	5.8	5.8	5.7	5.8	5.9				10.4	0.0	8.2
LnGrp LOS	A	A	A	A	A	A				B		A
Approach Vol, veh/h		493			419						703	
Approach Delay, s/veh		6.7			5.8						10.3	
Approach LOS		A			A						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		18.3		14.0		18.3		
Change Period (Y+Rc), s		* 4.3		* 4.3		* 4.3		
Max Green Setting (Gmax), s		* 31		* 21		* 31		
Max Q Clear Time (g_c+I1), s		8.9		7.3		3.9		
Green Ext Time (p_c), s		5.1		2.3		5.3		

Intersection Summary	
HCM 2010 Ctrl Delay	8.0
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	1330	250	130	1340	330	220	1040	150	220	950	170
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1937	1863	1863	1937	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	168	1400	192	137	1411	130	232	1095	149	232	1000	167
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	1222	547	182	1171	545	266	1027	140	266	996	166
Arrive On Green	0.10	0.33	0.33	0.21	0.66	0.66	0.15	0.32	0.32	0.15	0.32	0.32
Sat Flow, veh/h	1774	3681	1647	1774	3539	1647	1774	3257	442	1774	3158	527
Grp Volume(v), veh/h	168	1400	192	137	1411	130	232	618	626	232	582	585
Grp Sat Flow(s),veh/h/ln	1774	1840	1647	1774	1770	1647	1774	1840	1859	1774	1840	1844
Q Serve(g_s), s	12.2	43.1	11.5	9.4	43.0	4.1	16.6	41.0	41.0	16.6	41.0	41.0
Cycle Q Clear(g_c), s	12.2	43.1	11.5	9.4	43.0	4.1	16.6	41.0	41.0	16.6	41.0	41.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		0.29
Lane Grp Cap(c), veh/h	184	1222	547	182	1171	545	266	580	586	266	580	582
V/C Ratio(X)	0.91	1.15	0.35	0.75	1.21	0.24	0.87	1.06	1.07	0.87	1.00	1.01
Avail Cap(c_a), veh/h	184	1222	547	184	1171	545	266	580	586	266	580	582
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.49	0.49	0.49	0.94	0.94	0.94	0.56	0.56	0.56	0.84	0.84	0.84
Uniform Delay (d), s/veh	57.7	43.4	32.8	50.1	22.0	15.4	54.0	44.5	44.5	54.0	44.5	44.5
Incr Delay (d2), s/veh	25.5	71.0	0.9	13.3	100.2	1.0	15.5	46.8	47.8	21.6	35.1	35.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.3	33.9	5.4	5.2	36.8	2.0	9.3	28.3	28.8	9.7	26.5	26.6
LnGrp Delay(d),s/veh	83.2	114.4	33.7	63.4	122.2	16.4	69.6	91.3	92.3	75.6	79.6	80.1
LnGrp LOS	F	F	C	E	F	B	E	F	F	E	F	F
Approach Vol, veh/h		1760			1678			1476			1399	
Approach Delay, s/veh		102.6			109.2			88.3			79.1	
Approach LOS		F			F			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	47.1	22.0	45.0	16.0	47.0	22.0	45.0
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0
Max Green Setting (Gmax), s	11.5	41.0	17.5	39.0	11.5	41.0	17.5	39.0
Max Q Clear Time (g_c+I1), s	11.4	45.1	18.6	43.0	14.2	45.0	18.6	43.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	95.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	630	110	390	820	210	210	1400	340	130	1030	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1863	1863	1863	1863	1863	1863	1788
Adj Flow Rate, veh/h	211	663	102	411	863	100	221	1474	185	137	1084	37
Adj No. of Lanes	2	2	0	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	741	114	465	1142	511	278	1695	528	312	1872	560
Arrive On Green	0.08	0.24	0.24	0.14	0.32	0.32	0.08	0.33	0.33	0.18	0.74	0.74
Sat Flow, veh/h	3442	3076	473	3442	3539	1583	3442	5085	1583	3442	5085	1520
Grp Volume(v), veh/h	211	381	384	411	863	100	221	1474	185	137	1084	37
Grp Sat Flow(s),veh/h/ln	1721	1770	1779	1721	1770	1583	1721	1695	1583	1721	1695	1520
Q Serve(g_s), s	7.2	25.0	25.1	14.1	26.2	3.9	7.6	32.7	10.6	4.3	11.8	0.8
Cycle Q Clear(g_c), s	7.2	25.0	25.1	14.1	26.2	3.9	7.6	32.7	10.6	4.3	11.8	0.8
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	426	429	465	1142	511	278	1695	528	312	1872	560
V/C Ratio(X)	0.78	0.89	0.90	0.88	0.76	0.20	0.80	0.87	0.35	0.44	0.58	0.07
Avail Cap(c_a), veh/h	459	516	519	488	1142	511	373	1695	528	312	1872	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	54.3	44.1	44.1	51.0	36.4	15.2	54.2	37.6	30.2	46.4	11.6	10.1
Incr Delay (d2), s/veh	1.6	12.2	12.3	15.9	2.6	0.1	5.9	6.4	1.8	0.3	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.5	13.6	13.7	7.7	13.2	1.7	3.8	16.3	4.9	2.0	5.4	0.4
LnGrp Delay(d),s/veh	55.8	56.2	56.4	66.9	39.0	15.2	60.1	43.9	32.0	46.8	12.8	10.3
LnGrp LOS	E	E	E	E	D	B	E	D	C	D	B	B
Approach Vol, veh/h		976			1374			1880			1258	
Approach Delay, s/veh		56.2			45.6			44.7			16.4	
Approach LOS		E			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	34.9	12.7	50.2	12.4	44.7	16.9	46.0
Change Period (Y+Rc), s	* 6	* 6	3.0	* 6	3.0	* 6	* 6	* 6
Max Green Setting (Gmax), s	* 17	* 35	13.0	* 37	16.0	* 36	* 10	* 40
Max Q Clear Time (g_c+I1), s	16.1	27.1	9.6	13.8	9.2	28.2	6.3	34.7
Green Ext Time (p_c), s	0.2	1.8	0.1	5.2	0.2	3.1	0.2	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	40.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

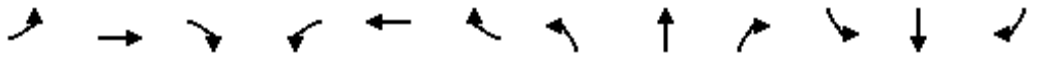
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	430	80	80	670	110	190	1500	90	160	1330	160
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	158	453	84	84	705	116	200	1579	95	168	1400	168
Adj No. of Lanes	1	2	0	1	2	0	1	3	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	904	167	324	835	137	207	1964	555	236	1869	581
Arrive On Green	0.09	0.30	0.30	0.06	0.27	0.27	0.12	0.35	0.35	0.13	0.37	0.37
Sat Flow, veh/h	1774	2982	549	1774	3040	500	1774	5588	1578	1774	5085	1579
Grp Volume(v), veh/h	158	268	269	84	410	411	200	1579	95	168	1400	168
Grp Sat Flow(s),veh/h/ln	1774	1770	1761	1774	1770	1770	1774	1863	1578	1774	1695	1579
Q Serve(g_s), s	7.3	14.9	15.1	4.0	26.3	26.3	13.5	30.7	5.0	10.9	28.8	9.0
Cycle Q Clear(g_c), s	7.3	14.9	15.1	4.0	26.3	26.3	13.5	30.7	5.0	10.9	28.8	9.0
Prop In Lane	1.00		0.31	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	536	534	324	486	486	207	1964	555	236	1869	581
V/C Ratio(X)	0.61	0.50	0.50	0.26	0.84	0.85	0.97	0.80	0.17	0.71	0.75	0.29
Avail Cap(c_a), veh/h	259	536	534	375	501	502	207	1964	555	266	1869	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.54	0.54	0.54	1.00	1.00	1.00	0.43	0.43	0.43	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	34.3	34.4	28.3	41.1	41.1	52.8	35.2	26.9	49.8	33.1	26.9
Incr Delay (d2), s/veh	1.6	0.1	0.2	0.2	11.5	11.6	32.2	1.6	0.3	5.8	2.8	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	7.3	7.4	1.9	14.4	14.5	8.5	16.1	2.2	5.7	14.0	4.1
LnGrp Delay(d),s/veh	31.3	34.5	34.6	28.5	52.6	52.7	85.0	36.8	27.1	55.7	35.9	28.1
LnGrp LOS	C	C	C	C	D	D	F	D	C	E	D	C
Approach Vol, veh/h		695			905			1874			1736	
Approach Delay, s/veh		33.8			50.4			41.4			37.1	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	41.4	18.0	49.1	14.9	37.9	19.9	47.2
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	11.0	34.0	14.0	43.0	11.0	34.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	6.0	17.1	15.5	30.8	9.3	28.3	12.9	32.7
Green Ext Time (p_c), s	0.0	4.9	0.0	9.9	0.0	1.7	0.1	5.6

Intersection Summary	
HCM 2010 Ctrl Delay	40.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



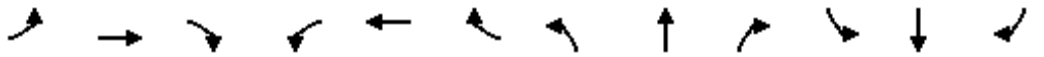
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	660	70	90	920	180	80	640	80	100	390	80
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	137	695	74	95	968	189	84	674	84	105	411	84
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	1496	159	117	1296	253	105	774	96	128	754	153
Arrive On Green	0.09	0.46	0.46	0.07	0.44	0.44	0.06	0.24	0.24	0.07	0.26	0.26
Sat Flow, veh/h	1774	3228	343	1774	2954	576	1774	3168	394	1774	2933	595
Grp Volume(v), veh/h	137	381	388	95	579	578	84	376	382	105	247	248
Grp Sat Flow(s),veh/h/ln	1774	1770	1802	1774	1770	1761	1774	1770	1793	1774	1770	1758
Q Serve(g_s), s	9.9	19.1	19.2	6.9	35.5	35.6	6.1	26.5	26.6	7.6	15.6	15.9
Cycle Q Clear(g_c), s	9.9	19.1	19.2	6.9	35.5	35.6	6.1	26.5	26.6	7.6	15.6	15.9
Prop In Lane	1.00		0.19	1.00		0.33	1.00		0.22	1.00		0.34
Lane Grp Cap(c), veh/h	161	820	835	117	776	773	105	432	438	128	455	452
V/C Ratio(X)	0.85	0.46	0.46	0.81	0.75	0.75	0.80	0.87	0.87	0.82	0.54	0.55
Avail Cap(c_a), veh/h	191	820	835	218	776	773	246	490	497	191	455	452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.61	0.61	0.61	1.00	1.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	58.2	23.8	23.8	59.9	30.4	30.5	60.4	47.1	47.2	59.5	41.7	41.8
Incr Delay (d2), s/veh	16.2	1.3	1.2	3.1	4.0	4.1	5.1	14.3	14.3	8.7	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.6	9.6	9.8	3.5	18.2	18.2	3.1	14.7	14.9	4.0	7.8	7.9
LnGrp Delay(d),s/veh	74.4	25.1	25.1	63.0	34.5	34.5	65.5	61.4	61.4	68.2	42.8	43.0
LnGrp LOS	E	C	C	E	C	C	E	E	E	E	D	D
Approach Vol, veh/h		906			1252			842			600	
Approach Delay, s/veh		32.5			36.7			61.8			47.3	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	66.3	11.7	39.4	15.8	63.0	13.4	37.8
Change Period (Y+Rc), s	4.0	* 6	4.0	* 6	4.0	* 6	4.0	* 6
Max Green Setting (Gmax), s	16.0	* 44	18.0	* 32	14.0	* 46	14.0	* 36
Max Q Clear Time (g_c+I1), s	8.9	21.2	8.1	17.9	11.9	37.6	9.6	28.6
Green Ext Time (p_c), s	0.0	14.2	0.0	6.2	0.0	6.6	0.0	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	43.3
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1130	190	300	1230	310	200	1000	270	10	820	180
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	1189	200	316	1295	326	211	1053	284	11	863	189
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1	816	136	239	1230	304	232	1212	325	13	911	200
Arrive On Green	0.00	0.27	0.27	0.13	0.44	0.44	0.13	0.44	0.44	0.01	0.32	0.32
Sat Flow, veh/h	1774	3035	508	1774	2814	695	1774	2762	740	1774	2888	632
Grp Volume(v), veh/h	0	691	698	316	805	816	211	672	665	11	529	523
Grp Sat Flow(s),veh/h/ln	1774	1770	1773	1774	1770	1740	1774	1770	1732	1774	1770	1751
Q Serve(g_s), s	0.0	39.9	39.9	20.0	64.9	64.9	17.4	51.0	51.9	0.9	43.3	43.3
Cycle Q Clear(g_c), s	0.0	39.9	39.9	20.0	64.9	64.9	17.4	51.0	51.9	0.9	43.3	43.3
Prop In Lane	1.00		0.29	1.00		0.40	1.00		0.43	1.00		0.36
Lane Grp Cap(c), veh/h	1	476	476	239	774	761	232	777	760	13	558	552
V/C Ratio(X)	0.00	1.45	1.47	1.32	1.04	1.07	0.91	0.87	0.87	0.84	0.95	0.95
Avail Cap(c_a), veh/h	239	476	476	239	774	761	239	777	760	239	594	587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	54.3	54.3	64.2	41.8	41.8	63.6	37.7	37.9	73.6	49.6	49.6
Incr Delay (d2), s/veh	0.0	215.1	220.7	171.2	43.5	53.8	33.4	9.7	10.6	38.2	23.3	23.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	47.8	48.7	21.1	40.9	42.4	10.7	26.9	27.0	0.6	24.8	24.5
LnGrp Delay(d),s/veh	0.0	269.4	275.0	235.5	85.3	95.6	97.0	47.4	48.5	111.8	72.9	73.1
LnGrp LOS		F	F	F	F	F	F	D	D	F	E	E
Approach Vol, veh/h		1389			1937			1548			1063	
Approach Delay, s/veh		272.2			114.1			54.6			73.4	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	46.0	24.4	53.0	0.0	71.0	6.1	71.4
Change Period (Y+Rc), s	5.0	* 6.1	5.0	* 6.2	5.0	* 6.1	5.0	* 6.2
Max Green Setting (Gmax), s	20.0	* 40	20.0	* 50	20.0	* 40	20.0	* 50
Max Q Clear Time (g_c+I1), s	22.0	41.9	19.4	45.3	0.0	66.9	2.9	53.9
Green Ext Time (p_c), s	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	128.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

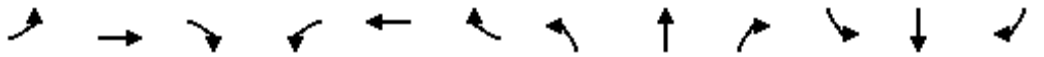
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	470	160	200	510	310	150	1320	100	210	1400	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	147	495	168	211	537	326	158	1389	105	221	1474	95
Adj No. of Lanes	1	3	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	189	871	285	273	485	294	184	1659	125	246	1851	119
Arrive On Green	0.08	0.24	0.24	0.08	0.24	0.24	0.11	0.36	0.36	0.29	0.79	0.79
Sat Flow, veh/h	1714	3642	1191	1714	2029	1230	1714	4656	352	1714	4714	304
Grp Volume(v), veh/h	147	443	220	211	452	411	158	977	517	221	1024	545
Grp Sat Flow(s),veh/h/ln	1714	1638	1557	1714	1710	1549	1714	1638	1732	1714	1638	1741
Q Serve(g_s), s	7.7	14.3	15.0	9.0	28.7	28.7	10.9	32.8	32.8	14.9	21.5	21.5
Cycle Q Clear(g_c), s	7.7	14.3	15.0	9.0	28.7	28.7	10.9	32.8	32.8	14.9	21.5	21.5
Prop In Lane	1.00		0.77	1.00		0.79	1.00		0.20	1.00		0.17
Lane Grp Cap(c), veh/h	189	784	372	273	409	371	184	1167	617	246	1286	684
V/C Ratio(X)	0.78	0.57	0.59	0.77	1.11	1.11	0.86	0.84	0.84	0.90	0.80	0.80
Avail Cap(c_a), veh/h	189	784	372	273	409	371	214	1167	617	371	1286	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.75	0.75	0.75	1.00	1.00	1.00	0.89	0.89	0.89
Uniform Delay (d), s/veh	34.3	40.2	40.4	37.0	45.7	45.7	52.7	35.4	35.4	41.9	10.1	10.1
Incr Delay (d2), s/veh	18.6	1.0	2.4	9.9	71.0	73.5	25.0	7.2	12.8	15.6	4.7	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	6.6	6.7	6.0	21.6	19.8	6.4	16.0	17.8	8.1	9.9	11.3
LnGrp Delay(d),s/veh	52.9	41.1	42.9	47.0	116.7	119.2	77.7	42.6	48.2	57.5	14.8	18.6
LnGrp LOS	D	D	D	D	F	F	E	D	D	E	B	B
Approach Vol, veh/h		810			1074			1652			1790	
Approach Delay, s/veh		43.7			103.9			47.7			21.2	
Approach LOS		D			F			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	48.8	14.0	35.0	17.9	53.1	14.0	35.0
Change Period (Y+Rc), s	5.0	* 6	5.0	* 6.3	5.0	* 6	5.0	* 6.3
Max Green Setting (Gmax), s	26.0	* 34	9.0	* 29	15.0	* 45	9.0	* 29
Max Q Clear Time (g_c+I1), s	16.9	34.8	11.0	17.0	12.9	23.5	9.7	30.7
Green Ext Time (p_c), s	0.4	0.0	0.0	6.8	0.1	18.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	49.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	450	30	50	480	230	60	700	50	110	560	100
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	137	474	32	53	505	242	63	737	53	116	589	105
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	1432	96	367	990	472	312	845	718	138	1363	242
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	711	3366	227	889	2326	1110	747	1863	1583	683	3004	534
Grp Volume(v), veh/h	137	249	257	53	384	363	63	737	53	116	346	348
Grp Sat Flow(s),veh/h/ln	711	1770	1823	889	1770	1667	747	1863	1583	683	1770	1768
Q Serve(g_s), s	17.4	9.3	9.4	4.2	15.8	15.9	6.2	35.5	1.9	9.5	13.2	13.3
Cycle Q Clear(g_c), s	33.3	9.3	9.4	13.6	15.8	15.9	19.5	35.5	1.9	45.0	13.2	13.3
Prop In Lane	1.00		0.12	1.00		0.67	1.00		1.00	1.00		0.30
Lane Grp Cap(c), veh/h	261	753	775	367	753	709	312	845	718	138	803	802
V/C Ratio(X)	0.52	0.33	0.33	0.14	0.51	0.51	0.20	0.87	0.07	0.84	0.43	0.43
Avail Cap(c_a), veh/h	281	803	827	392	803	756	312	845	718	138	803	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	19.1	19.1	23.6	20.9	20.9	25.1	24.5	15.3	46.9	18.4	18.4
Incr Delay (d2), s/veh	2.3	0.4	0.4	0.3	0.8	0.8	0.5	10.2	0.1	35.6	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	4.6	4.8	1.1	7.8	7.4	1.3	20.6	0.8	4.5	6.6	6.6
LnGrp Delay(d),s/veh	35.5	19.4	19.4	23.9	21.7	21.8	25.5	34.7	15.4	82.6	18.9	19.0
LnGrp LOS	D	B	B	C	C	C	C	C	B	F	B	B
Approach Vol, veh/h		643			800			853			810	
Approach Delay, s/veh		22.8			21.9			32.8			28.1	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		51.0		48.2		51.0		48.2
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		47.0		17.9		37.5		35.3
Green Ext Time (p_c), s		0.0		14.2		6.2		6.9

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	10	0	20	0	1500	30	30	1060	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1976	1863	1824	0	1863	1824	1863	1863	0
Adj Flow Rate, veh/h				11	0	21	0	1579	32	32	1116	0
Adj No. of Lanes				0	1	0	0	3	0	1	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	2	0	0	2	2	2	2	0
Cap, veh/h				15	0	28	0	3936	80	355	3901	0
Arrive On Green				0.03	0.00	0.03	0.00	0.77	0.77	0.77	0.77	0.00
Sat Flow, veh/h				509	0	971	0	5298	104	313	5253	0
Grp Volume(v), veh/h				32	0	0	0	1043	568	32	1116	0
Grp Sat Flow(s),veh/h/ln				1480	0	0	0	1695	1844	313	1695	0
Q Serve(g_s), s				1.1	0.0	0.0	0.0	5.1	5.1	1.9	3.2	0.0
Cycle Q Clear(g_c), s				1.1	0.0	0.0	0.0	5.1	5.1	7.0	3.2	0.0
Prop In Lane				0.34		0.66	0.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h				43	0	0	0	2601	1415	355	3901	0
V/C Ratio(X)				0.75	0.00	0.00	0.00	0.40	0.40	0.09	0.29	0.00
Avail Cap(c_a), veh/h				483	0	0	0	2601	1415	355	3901	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.77	0.77	0.72	0.72	0.00
Uniform Delay (d), s/veh				23.6	0.0	0.0	0.0	1.9	1.9	3.1	1.7	0.0
Incr Delay (d2), s/veh				22.8	0.0	0.0	0.0	0.4	0.7	0.4	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln				0.7	0.0	0.0	0.0	2.4	2.8	0.2	1.5	0.0
LnGrp Delay(d),s/veh				46.4	0.0	0.0	0.0	2.3	2.6	3.5	1.8	0.0
LnGrp LOS				D				A	A	A	A	
Approach Vol, veh/h					32			1611			1148	
Approach Delay, s/veh					46.4			2.4			1.9	
Approach LOS					D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		43.6				43.6		5.4
Change Period (Y+Rc), s		* 6				* 6		4.0
Max Green Setting (Gmax), s		* 23				* 23		16.0
Max Q Clear Time (g_c+I1), s		7.1				9.0		3.1
Green Ext Time (p_c), s		14.9				13.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	2.7
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	20	70	160	50	120	90	1390	230	70	960	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1863	1863	1863	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	32	21	74	168	53	126	95	1463	242	74	1011	32
Adj No. of Lanes	0	1	0	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	62	153	266	338	287	127	2162	357	314	3128	99
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.07	0.49	0.49	0.18	0.62	0.62
Sat Flow, veh/h	261	343	844	1294	1863	1581	1774	4398	726	1774	5064	160
Grp Volume(v), veh/h	127	0	0	168	53	126	95	1127	578	74	677	366
Grp Sat Flow(s),veh/h/ln	1448	0	0	1294	1863	1581	1774	1695	1735	1774	1695	1834
Q Serve(g_s), s	3.3	0.0	0.0	8.7	2.9	8.5	6.3	30.4	30.5	4.3	11.4	11.5
Cycle Q Clear(g_c), s	9.0	0.0	0.0	17.7	2.9	8.5	6.3	30.4	30.5	4.3	11.4	11.5
Prop In Lane	0.25		0.58	1.00		1.00	1.00		0.42	1.00		0.09
Lane Grp Cap(c), veh/h	300	0	0	266	338	287	127	1667	853	314	2094	1133
V/C Ratio(X)	0.42	0.00	0.00	0.63	0.16	0.44	0.75	0.68	0.68	0.24	0.32	0.32
Avail Cap(c_a), veh/h	385	0	0	344	450	382	251	1667	853	314	2094	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	43.8	0.0	0.0	48.2	41.4	43.7	54.6	23.2	23.2	42.4	11.0	11.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	4.2	0.4	1.8	3.2	2.2	4.3	0.1	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.9	0.0	0.0	5.7	1.5	3.9	3.2	14.6	15.5	2.1	5.5	6.0
LnGrp Delay(d),s/veh	44.7	0.0	0.0	52.4	41.8	45.5	57.8	25.4	27.6	42.5	11.4	11.7
LnGrp LOS	D			D	D	D	E	C	C	D	B	B
Approach Vol, veh/h		127			347			1800			1117	
Approach Delay, s/veh		44.7			48.3			27.8			13.5	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.8	12.1	80.1		27.8	27.2	65.0
Change Period (Y+Rc), s		* 6	3.5	* 6		* 6	* 6	* 6
Max Green Setting (Gmax), s		* 29	17.0	* 59		* 29	* 14	* 59
Max Q Clear Time (g_c+I1), s		11.0	8.3	13.5		19.7	6.3	32.5
Green Ext Time (p_c), s		2.8	0.0	13.7		2.0	0.6	19.2

Intersection Summary	
HCM 2010 Ctrl Delay	25.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	560	270	250	680	40	440	20	420	40	30	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1900	1863	1900	1863	1900
Adj Flow Rate, veh/h	11	589	233	263	716	40	463	21	60	42	32	10
Adj No. of Lanes	1	2	0	1	2	0	2	0	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	804	317	308	1673	93	580	0	267	56	43	13
Arrive On Green	0.01	0.32	0.32	0.17	0.49	0.49	0.17	0.17	0.17	0.06	0.06	0.06
Sat Flow, veh/h	1774	2480	979	1774	3408	190	3442	0	1583	890	678	212
Grp Volume(v), veh/h	11	420	402	263	372	384	463	0	60	84	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1690	1774	1770	1829	1721	0	1583	1781	0	0
Q Serve(g_s), s	0.5	15.4	15.5	10.6	9.9	9.9	9.5	0.0	2.4	3.4	0.0	0.0
Cycle Q Clear(g_c), s	0.5	15.4	15.5	10.6	9.9	9.9	9.5	0.0	2.4	3.4	0.0	0.0
Prop In Lane	1.00		0.58	1.00		0.10	1.00		1.00	0.50		0.12
Lane Grp Cap(c), veh/h	12	573	548	308	869	898	580	0	267	112	0	0
V/C Ratio(X)	0.92	0.73	0.73	0.85	0.43	0.43	0.80	0.00	0.23	0.75	0.00	0.00
Avail Cap(c_a), veh/h	483	853	815	483	869	898	750	0	345	599	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.4	22.0	22.0	29.4	12.0	12.0	29.3	0.0	26.4	33.8	0.0	0.0
Incr Delay (d2), s/veh	55.3	0.7	0.7	5.1	0.1	0.1	4.7	0.0	0.4	3.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	7.6	7.3	5.6	4.9	5.0	4.9	0.0	1.1	1.8	0.0	0.0
LnGrp Delay(d),s/veh	91.8	22.7	22.7	34.6	12.2	12.2	34.0	0.0	26.8	37.6	0.0	0.0
LnGrp LOS	F	C	C	C	B	B	C		C	D		
Approach Vol, veh/h		833			1019			523			84	
Approach Delay, s/veh		23.6			17.9			33.2			37.6	
Approach LOS		C			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.4	17.7	29.4		9.9	5.5	41.6
Change Period (Y+Rc), s		4.0	5.0	* 5.6		5.3	5.0	* 5.6
Max Green Setting (Gmax), s		16.0	20.0	* 35		24.7	20.0	* 36
Max Q Clear Time (g_c+I1), s		11.5	12.6	17.5		5.4	2.5	11.9
Green Ext Time (p_c), s		0.9	0.2	6.3		0.2	0.0	7.5

Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	60	240	20	80	50	350	500	20	40	370	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	63	47	21	84	29	368	526	19	42	389	88
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	368	442	376	401	314	109	430	1534	55	51	650	146
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.44	0.44	0.03	0.23	0.23
Sat Flow, veh/h	1275	1863	1583	1278	1325	457	1774	3484	126	1774	2875	644
Grp Volume(v), veh/h	179	63	47	21	0	113	368	267	278	42	238	239
Grp Sat Flow(s),veh/h/ln	1275	1863	1583	1278	0	1782	1774	1770	1841	1774	1770	1749
Q Serve(g_s), s	7.3	1.5	1.3	0.7	0.0	2.8	10.9	5.4	5.5	1.3	6.6	6.7
Cycle Q Clear(g_c), s	10.1	1.5	1.3	2.2	0.0	2.8	10.9	5.4	5.5	1.3	6.6	6.7
Prop In Lane	1.00		1.00	1.00		0.26	1.00		0.07	1.00		0.37
Lane Grp Cap(c), veh/h	368	442	376	401	0	423	430	779	810	51	400	396
V/C Ratio(X)	0.49	0.14	0.13	0.05	0.00	0.27	0.86	0.34	0.34	0.83	0.59	0.60
Avail Cap(c_a), veh/h	775	1037	881	813	0	999	971	1305	1357	648	982	971
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	16.5	16.4	17.4	0.0	17.0	19.8	10.1	10.1	26.5	18.9	19.0
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.0	0.0	0.1	1.9	0.1	0.1	11.9	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.6	0.8	0.6	0.3	0.0	1.4	5.5	2.6	2.7	0.8	3.2	3.2
LnGrp Delay(d),s/veh	21.5	16.5	16.5	17.4	0.0	17.1	21.8	10.2	10.2	38.3	19.5	19.6
LnGrp LOS	C	B	B	B		B	C	B	B	D	B	B
Approach Vol, veh/h		289			134			913			519	
Approach Delay, s/veh		19.6			17.2			14.9			21.0	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	29.7		18.5	18.3	18.0		18.5
Change Period (Y+Rc), s	5.0	* 5.6		5.5	5.0	* 5.6		* 5.5
Max Green Setting (Gmax), s	20.0	* 40		30.5	30.0	* 30		* 31
Max Q Clear Time (g_c+I1), s	3.3	7.5		12.1	12.9	8.7		4.8
Green Ext Time (p_c), s	0.0	3.9		0.9	0.5	3.7		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	17.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	30	30	20	20	40	20	690	20	30	600	20
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	32	32	21	21	42	21	726	21	32	632	21
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	67	59	163	53	89	462	1023	30	401	1018	34
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	483	629	556	337	501	837	776	1801	52	711	1793	60
Grp Volume(v), veh/h	96	0	0	84	0	0	21	0	747	32	0	653
Grp Sat Flow(s),veh/h/ln	1667	0	0	1675	0	0	776	0	1854	711	0	1852
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	0.0	0.7	0.0	10.3	1.2	0.0	8.3
Cycle Q Clear(g_c), s	1.8	0.0	0.0	1.6	0.0	0.0	8.9	0.0	10.3	11.5	0.0	8.3
Prop In Lane	0.33		0.33	0.25		0.50	1.00		0.03	1.00		0.03
Lane Grp Cap(c), veh/h	313	0	0	305	0	0	462	0	1053	401	0	1052
V/C Ratio(X)	0.31	0.00	0.00	0.28	0.00	0.00	0.05	0.00	0.71	0.08	0.00	0.62
Avail Cap(c_a), veh/h	1723	0	0	1719	0	0	793	0	1841	703	0	1840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	0.0	14.8	0.0	0.0	8.1	0.0	5.5	9.7	0.0	5.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.9	0.0	0.0	0.8	0.0	0.0	0.1	0.0	5.1	0.2	0.0	4.2
LnGrp Delay(d),s/veh	15.1	0.0	0.0	15.0	0.0	0.0	8.1	0.0	5.8	9.7	0.0	5.3
LnGrp LOS	B			B			A		A	A		A
Approach Vol, veh/h		96			84			768			685	
Approach Delay, s/veh		15.1			15.0			5.9			5.5	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		26.0		9.2		26.0		9.2
Change Period (Y+Rc), s		6.0		5.5		6.0		5.5
Max Green Setting (Gmax), s		35.0		35.5		35.0		35.5
Max Q Clear Time (g_c+I1), s		13.5		3.8		12.3		3.6
Green Ext Time (p_c), s		6.5		0.7		6.6		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	330	100	230	300	120	100	740	140	50	520	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	147	347	105	242	316	126	105	779	147	53	547	126
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	767	229	400	1296	507	247	1105	208	167	1063	244
Arrive On Green	0.29	0.29	0.29	0.18	0.52	0.52	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	944	2689	802	1774	2488	973	762	2972	561	602	2860	656
Grp Volume(v), veh/h	147	227	225	242	223	219	105	464	462	53	338	335
Grp Sat Flow(s),veh/h/ln	944	1770	1721	1774	1770	1691	762	1770	1764	602	1770	1747
Q Serve(g_s), s	13.5	9.8	10.0	13.4	6.4	6.6	11.6	20.8	20.8	7.7	13.8	13.9
Cycle Q Clear(g_c), s	20.2	9.8	10.0	13.4	6.4	6.6	25.5	20.8	20.8	28.5	13.8	13.9
Prop In Lane	1.00		0.47	1.00		0.58	1.00		0.32	1.00		0.38
Lane Grp Cap(c), veh/h	279	505	491	0	922	881	247	658	655	167	658	649
V/C Ratio(X)	0.53	0.45	0.46	0.00	0.24	0.25	0.43	0.71	0.71	0.32	0.51	0.52
Avail Cap(c_a), veh/h	364	665	647	0	922	881	250	665	663	169	665	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	27.3	27.4	0.0	12.2	12.3	32.7	24.9	24.9	37.0	22.7	22.8
Incr Delay (d2), s/veh	3.3	1.3	1.4	0.0	0.3	0.3	2.5	4.3	4.3	2.3	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	5.0	5.0	0.0	3.2	3.2	2.6	11.0	10.9	1.4	7.0	7.0
LnGrp Delay(d),s/veh	37.3	28.6	28.8	0.0	12.5	12.6	35.2	29.2	29.2	39.4	24.1	24.2
LnGrp LOS	D	C	C		B	B	D	C	C	D	C	C
Approach Vol, veh/h		599			684			1031			726	
Approach Delay, s/veh		30.8			8.1			29.8			25.2	
Approach LOS		C			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		39.6	22.0	31.6		39.6		53.5
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s		35.0	35.0	35.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		27.5	15.4	22.2		30.5		8.6
Green Ext Time (p_c), s		6.7	1.5	4.4		4.2		12.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

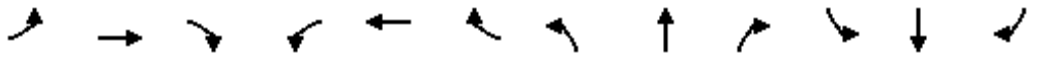
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	950	220	360	1100	0	380	0	520	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.98		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1000	215	379	1158	0	400	0	311	0	0	0
Adj No. of Lanes	1	2	0	1	3	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	323	1587	340	514	3513	0	406	0	400	0	483	0
Arrive On Green	0.00	1.00	1.00	0.12	0.69	0.00	0.26	0.00	0.26	0.00	0.00	0.00
Sat Flow, veh/h	1774	2891	620	1774	5253	0	1379	0	1547	0	1863	0
Grp Volume(v), veh/h	0	611	604	379	1158	0	400	0	311	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1742	1774	1695	0	1379	0	1547	0	1863	0
Q Serve(g_s), s	0.0	0.0	0.0	10.6	10.9	0.0	31.0	0.0	22.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	10.6	10.9	0.0	31.0	0.0	22.4	0.0	0.0	0.0
Prop In Lane	1.00		0.36	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	323	972	956	514	3513	0	416	0	400	0	483	0
V/C Ratio(X)	0.00	0.63	0.63	0.74	0.33	0.00	0.96	0.00	0.78	0.00	0.00	0.00
Avail Cap(c_a), veh/h	484	972	956	632	3513	0	416	0	400	0	483	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.86	0.86	1.00	1.00	0.00	0.84	0.00	0.84	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	8.2	7.4	0.0	46.5	0.0	41.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.7	2.7	2.5	0.3	0.0	30.4	0.0	7.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.7	0.7	5.5	5.1	0.0	16.6	0.0	10.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	2.7	2.7	10.7	7.7	0.0	76.9	0.0	48.6	0.0	0.0	0.0
LnGrp LOS		A	A	B	A		E		D			
Approach Vol, veh/h		1215			1537			711			0	
Approach Delay, s/veh		2.7			8.4			64.6			0.0	
Approach LOS		A			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	85.9		34.1	17.0	68.9		34.1
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		* 5
Max Green Setting (Gmax), s	10.0	67.0		29.0	21.0	56.0		* 29
Max Q Clear Time (g_c+I1), s	0.0	12.9		0.0	12.6	2.0		33.0
Green Ext Time (p_c), s	0.0	16.5		0.0	0.4	16.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.9
HCM 2010 LOS	B

Notes

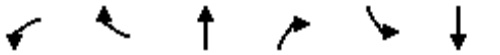
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	960	40	60	1280	160	40	10	40	180	10	70
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	116	1011	42	63	1347	168	42	11	42	189	11	74
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	2452	102	426	3188	398	148	48	121	302	0	289
Arrive On Green	0.04	0.71	0.70	0.06	1.00	1.00	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1774	3460	144	1774	4570	570	571	259	658	1335	0	1568
Grp Volume(v), veh/h	116	517	536	63	999	516	95	0	0	189	0	74
Grp Sat Flow(s),veh/h/ln	1774	1770	1834	1774	1695	1750	1489	0	0	1335	0	1568
Q Serve(g_s), s	2.2	14.4	14.5	1.2	0.0	0.0	3.8	0.0	0.0	10.1	0.0	4.8
Cycle Q Clear(g_c), s	2.2	14.4	14.5	1.2	0.0	0.0	6.4	0.0	0.0	16.5	0.0	4.8
Prop In Lane	1.00		0.08	1.00		0.33	0.44		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	373	1254	1300	426	2365	1221	317	0	0	302	0	289
V/C Ratio(X)	0.31	0.41	0.41	0.15	0.42	0.42	0.30	0.00	0.00	0.63	0.00	0.26
Avail Cap(c_a), veh/h	488	1254	1300	561	2365	1221	426	0	0	401	0	405
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.5	7.2	7.2	5.5	0.0	0.0	42.6	0.0	0.0	46.8	0.0	41.9
Incr Delay (d2), s/veh	0.2	1.0	1.0	0.1	0.5	1.0	0.2	0.0	0.0	0.8	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.0	7.4	7.7	0.6	0.2	0.3	2.8	0.0	0.0	6.1	0.0	2.1
LnGrp Delay(d),s/veh	4.7	8.2	8.2	5.5	0.5	1.0	42.8	0.0	0.0	47.6	0.0	42.1
LnGrp LOS	A	A	A	A	A	A	D			D		D
Approach Vol, veh/h		1169			1578			95			263	
Approach Delay, s/veh		7.8			0.9			42.8			46.0	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	86.7		25.1	6.9	88.0		25.1
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	12.0	65.0		29.0	12.0	65.0		29.0
Max Q Clear Time (g_c+I1), s	4.2	2.0		8.4	3.2	16.5		18.5
Green Ext Time (p_c), s	0.1	18.5		0.8	0.0	17.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	8.6
HCM 2010 LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	20	20	1630	10	10	2940
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	21	1716	11	11	3095
Adj No. of Lanes	1	1	3	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	89	80	4212	1308	38	4491
Arrive On Green	0.05	0.05	1.00	1.00	0.04	1.00
Sat Flow, veh/h	1774	1583	5253	1580	1774	5253
Grp Volume(v), veh/h	21	21	1716	11	11	3095
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1580	1774	1695
Q Serve(g_s), s	1.4	1.5	0.0	0.0	0.7	0.0
Cycle Q Clear(g_c), s	1.4	1.5	0.0	0.0	0.7	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	89	80	4212	1308	38	4491
V/C Ratio(X)	0.24	0.26	0.41	0.01	0.29	0.69
Avail Cap(c_a), veh/h	473	422	4212	1308	355	4491
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.89	0.89	0.72	0.72
Uniform Delay (d), s/veh	54.8	54.9	0.0	0.0	56.5	0.0
Incr Delay (d2), s/veh	0.5	0.6	0.3	0.0	1.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.7	0.1	0.0	0.4	0.3
LnGrp Delay(d),s/veh	55.3	55.5	0.3	0.0	57.6	0.6
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	42		1727			3106
Approach Delay, s/veh	55.4		0.3			0.8
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.6	103.4				110.0		10.0
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	50.7				78.7		32.0
Max Q Clear Time (g_c+I1), s	2.7	2.0				2.0		3.5
Green Ext Time (p_c), s	0.0	48.5				76.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.1
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	40	210	1550	70	70	2310
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	42	4	1632	61	74	2432
Adj No. of Lanes	1	1	2	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	70	62	2791	1247	128	4547
Arrive On Green	0.04	0.04	1.00	1.00	0.14	1.00
Sat Flow, veh/h	1774	1583	3632	1581	1774	5253
Grp Volume(v), veh/h	42	4	1632	61	74	2432
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1581	1774	1695
Q Serve(g_s), s	2.8	0.3	0.0	0.0	4.7	0.0
Cycle Q Clear(g_c), s	2.8	0.3	0.0	0.0	4.7	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	70	62	2791	1247	128	4547
V/C Ratio(X)	0.60	0.06	0.58	0.05	0.58	0.53
Avail Cap(c_a), veh/h	444	396	2791	1247	355	4547
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.70	0.70	0.83	0.83
Uniform Delay (d), s/veh	56.7	55.5	0.0	0.0	49.6	0.0
Incr Delay (d2), s/veh	3.1	0.2	0.6	0.1	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.1	0.2	0.0	2.3	0.2
LnGrp Delay(d),s/veh	59.8	55.7	0.6	0.1	50.9	0.4
LnGrp LOS	E	E	A	A	D	A
Approach Vol, veh/h	46		1693			2506
Approach Delay, s/veh	59.5		0.6			1.9
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.7	98.6				111.3		8.7
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	52.7				80.7		30.0
Max Q Clear Time (g_c+I1), s	6.7	2.0				2.0		4.8
Green Ext Time (p_c), s	0.0	50.4				77.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	2.0
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	20	10	10	1750	2380	20
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	11	11	1842	2505	21
Adj No. of Lanes	1	1	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	58	52	6	3187	4392	1368
Arrive On Green	0.03	0.03	0.01	1.00	0.86	0.86
Sat Flow, veh/h	1774	1583	1774	3632	5253	1583
Grp Volume(v), veh/h	21	11	11	1842	2505	21
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1695	1583
Q Serve(g_s), s	1.4	0.8	0.4	0.0	15.9	0.2
Cycle Q Clear(g_c), s	1.4	0.8	0.4	0.0	15.9	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	58	52	6	3187	4392	1368
V/C Ratio(X)	0.36	0.21	1.77	0.58	0.57	0.02
Avail Cap(c_a), veh/h	458	409	118	3187	4392	1368
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.76	0.76	0.64	0.64
Uniform Delay (d), s/veh	56.8	56.5	59.6	0.0	2.2	1.1
Incr Delay (d2), s/veh	1.4	0.7	382.0	0.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	116.5	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	0.7	0.9	0.3	7.3	0.1
LnGrp Delay(d),s/veh	58.2	57.3	558.0	0.6	2.5	1.1
LnGrp LOS	E	E	F	A	A	A
Approach Vol, veh/h	32			1853	2526	
Approach Delay, s/veh	57.9			3.9	2.5	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		112.1		7.9	4.4	107.6		
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		
Max Green Setting (Gmax), s		79.7		31.0	8.5	67.7		
Max Q Clear Time (g_c+I1), s		2.0		3.4	2.4	17.9		
Green Ext Time (p_c), s		77.3		0.0	0.0	49.6		

Intersection Summary	
HCM 2010 Ctrl Delay	3.5
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	140	40	1580	130	190	2750
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	147	42	1663	137	200	2895
Adj No. of Lanes	1	1	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	175	156	3718	1158	242	4246
Arrive On Green	0.10	0.10	0.73	0.73	0.14	1.00
Sat Flow, veh/h	1774	1583	5253	1583	3442	5253
Grp Volume(v), veh/h	147	42	1663	137	200	2895
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1583	1721	1695
Q Serve(g_s), s	9.8	2.9	15.7	3.1	6.8	0.0
Cycle Q Clear(g_c), s	9.8	2.9	15.7	3.1	6.8	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	175	156	3718	1158	242	4246
V/C Ratio(X)	0.84	0.27	0.45	0.12	0.83	0.68
Avail Cap(c_a), veh/h	237	211	3718	1158	602	4246
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.70	0.70
Uniform Delay (d), s/veh	53.2	50.1	6.4	4.7	50.8	0.0
Incr Delay (d2), s/veh	13.9	0.3	0.4	0.2	1.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.5	1.3	7.4	1.4	3.3	0.3
LnGrp Delay(d),s/veh	67.1	50.4	6.8	5.0	52.8	0.6
LnGrp LOS	E	D	A	A	D	A
Approach Vol, veh/h	189		1800			3095
Approach Delay, s/veh	63.4		6.7			4.0
Approach LOS	E		A			A

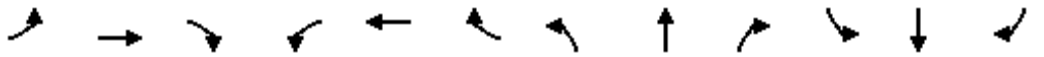
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.4	91.7				104.2		15.8
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	21.5	69.7				94.7		16.0
Max Q Clear Time (g_c+I1), s	8.8	17.7				2.0		11.8
Green Ext Time (p_c), s	0.2	51.8				92.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	7.2
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	20	80	1690	10	20	2830
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	21	84	1779	11	21	2979
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	120	107	4144	26	67	4403
Arrive On Green	0.07	0.07	1.00	1.00	0.08	1.00
Sat Flow, veh/h	1774	1583	5383	32	1774	5253
Grp Volume(v), veh/h	21	84	1156	634	21	2979
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1857	1774	1695
Q Serve(g_s), s	1.3	6.3	0.0	0.0	1.3	0.0
Cycle Q Clear(g_c), s	1.3	6.3	0.0	0.0	1.3	0.0
Prop In Lane	1.00	1.00		0.02	1.00	
Lane Grp Cap(c), veh/h	120	107	2694	1476	67	4403
V/C Ratio(X)	0.18	0.79	0.43	0.43	0.31	0.68
Avail Cap(c_a), veh/h	458	409	2694	1476	355	4403
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.09	0.09
Uniform Delay (d), s/veh	52.8	55.1	0.0	0.0	54.0	0.0
Incr Delay (d2), s/veh	0.3	4.7	0.5	0.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	2.9	0.2	0.4	0.7	0.0
LnGrp Delay(d),s/veh	53.0	59.8	0.5	0.9	54.1	0.1
LnGrp LOS	D	E	A	A	D	A
Approach Vol, veh/h	105		1790			3000
Approach Delay, s/veh	58.4		0.6			0.5
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.5	99.4				107.9		12.1
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	51.7				79.7		31.0
Max Q Clear Time (g_c+I1), s	3.3	2.0				2.0		8.3
Green Ext Time (p_c), s	0.0	49.5				77.3		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	1.8
HCM 2010 LOS	A



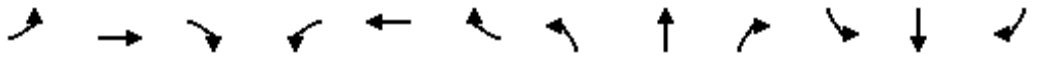
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	390	620	110	540	80	400	1300	50	90	2120	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	189	411	470	116	568	20	421	1368	50	95	2232	60
Adj No. of Lanes	1	2	1	1	2	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	708	313	137	740	327	454	2699	99	132	2249	697
Arrive On Green	0.08	0.20	0.20	0.05	0.14	0.14	0.26	1.00	1.00	0.03	0.30	0.30
Sat Flow, veh/h	1774	3539	1564	1774	3539	1565	3442	5036	184	3442	5085	1577
Grp Volume(v), veh/h	189	411	470	116	568	20	421	921	497	95	2232	60
Grp Sat Flow(s),veh/h/ln	1774	1770	1564	1774	1770	1565	1721	1695	1830	1721	1695	1577
Q Serve(g_s), s	10.0	12.6	17.1	7.8	18.6	1.3	14.3	0.0	0.0	3.3	52.5	3.3
Cycle Q Clear(g_c), s	10.0	12.6	17.1	7.8	18.6	1.3	14.3	0.0	0.0	3.3	52.5	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	148	708	313	137	740	327	454	1817	980	132	2249	697
V/C Ratio(X)	1.28	0.58	1.50	0.84	0.77	0.06	0.93	0.51	0.51	0.72	0.99	0.09
Avail Cap(c_a), veh/h	148	973	430	148	973	430	459	1817	980	287	2249	697
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	0.91	0.91	0.91	0.82	0.82	0.82
Uniform Delay (d), s/veh	55.0	43.4	24.2	56.2	48.8	41.4	43.6	0.0	0.0	57.8	42.0	24.7
Incr Delay (d2), s/veh	167.2	0.3	241.7	26.7	1.6	0.0	23.1	0.9	1.7	2.3	15.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.8	6.2	28.3	4.8	9.3	0.6	8.2	0.2	0.5	1.6	27.9	1.5
LnGrp Delay(d),s/veh	222.2	43.7	265.9	82.9	50.4	41.4	66.7	0.9	1.7	60.1	57.5	24.9
LnGrp LOS	F	D	F	F	D	D	E	A	A	E	E	C
Approach Vol, veh/h		1070			704			1839			2387	
Approach Delay, s/veh		172.8			55.5			16.2			56.8	
Approach LOS		F			E			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	68.3	15.1	28.0	19.8	57.1	14.0	29.1
Change Period (Y+Rc), s	3.5	5.3	5.3	* 6	3.5	5.3	3.5	5.3
Max Green Setting (Gmax), s	10.5	49.7	10.5	* 31	16.5	43.7	10.5	31.7
Max Q Clear Time (g_c+I1), s	5.3	2.0	9.8	19.1	16.3	54.5	12.0	20.6
Green Ext Time (p_c), s	0.0	32.6	0.2	1.9	0.0	0.0	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	64.9
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	680	150	140	690	140	110	460	110	200	850	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1863	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	116	716	158	147	726	147	116	484	116	211	895	211
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1712	374	195	1742	542	171	821	196	256	964	227
Arrive On Green	0.30	0.79	0.79	0.22	0.69	0.69	0.03	0.09	0.09	0.29	0.65	0.65
Sat Flow, veh/h	1774	4347	948	1774	5085	1583	1774	2951	703	1774	2958	697
Grp Volume(v), veh/h	116	579	295	147	726	147	116	301	299	211	557	549
Grp Sat Flow(s),veh/h/ln	1774	1763	1770	1774	1695	1583	1774	1840	1813	1774	1840	1814
Q Serve(g_s), s	6.3	6.2	6.4	9.3	7.6	2.9	7.8	18.8	19.0	13.3	32.0	32.1
Cycle Q Clear(g_c), s	6.3	6.2	6.4	9.3	7.6	2.9	7.8	18.8	19.0	13.3	32.0	32.1
Prop In Lane	1.00		0.54	1.00		1.00	1.00		0.39	1.00		0.38
Lane Grp Cap(c), veh/h	266	1389	697	195	1742	542	171	512	504	256	600	592
V/C Ratio(X)	0.44	0.42	0.42	0.75	0.42	0.27	0.68	0.59	0.59	0.82	0.93	0.93
Avail Cap(c_a), veh/h	266	1389	697	214	1742	542	214	569	561	273	630	621
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.96	0.96	0.96	0.98	0.98	0.98	0.98	0.98	0.98	0.89	0.89	0.89
Uniform Delay (d), s/veh	37.9	8.4	8.4	45.2	13.6	6.0	56.2	47.9	48.0	41.2	19.6	19.6
Incr Delay (d2), s/veh	0.4	0.9	1.8	10.5	0.7	1.2	3.3	0.7	0.7	14.3	17.5	17.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	3.1	3.3	5.1	3.6	1.4	4.0	9.7	9.7	7.5	18.7	18.5
LnGrp Delay(d),s/veh	38.3	9.3	10.2	55.8	14.3	7.2	59.5	48.5	48.7	55.6	37.1	37.5
LnGrp LOS	D	A	B	E	B	A	E	D	D	E	D	D
Approach Vol, veh/h		990			1020			716			1317	
Approach Delay, s/veh		12.9			19.3			50.4			40.2	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	36.3	14.7	50.2	13.1	42.0	20.9	44.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	16.5	35.1	12.5	39.1	12.5	39.1	12.5	* 39
Max Q Clear Time (g_c+I1), s	15.3	21.0	11.3	8.4	9.8	34.1	8.3	9.6
Green Ext Time (p_c), s	0.0	6.1	0.0	8.4	0.0	3.1	1.8	8.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

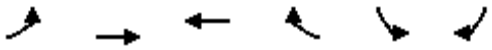
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	610	190	330	670	160	130	940	270	290	1700	170
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1788	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	126	642	200	347	705	168	137	989	284	305	1789	179
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	1117	342	441	1771	529	242	1519	436	399	2396	789
Arrive On Green	0.02	0.10	0.10	0.26	0.70	0.70	0.14	0.77	0.77	0.15	0.57	0.57
Sat Flow, veh/h	3442	3862	1182	3442	5085	1520	3442	3928	1126	3548	5588	1583
Grp Volume(v), veh/h	126	562	280	347	705	168	137	853	420	305	1789	179
Grp Sat Flow(s),veh/h/ln	1721	1695	1654	1721	1695	1520	1721	1695	1664	1774	1863	1583
Q Serve(g_s), s	4.3	19.0	19.5	11.3	7.0	5.2	4.5	13.8	13.8	9.9	28.7	6.0
Cycle Q Clear(g_c), s	4.3	19.0	19.5	11.3	7.0	5.2	4.5	13.8	13.8	9.9	28.7	6.0
Prop In Lane	1.00		0.71	1.00		1.00	1.00		0.68	1.00		1.00
Lane Grp Cap(c), veh/h	238	980	478	441	1771	529	242	1311	644	399	2396	789
V/C Ratio(X)	0.53	0.57	0.59	0.79	0.40	0.32	0.57	0.65	0.65	0.76	0.75	0.23
Avail Cap(c_a), veh/h	387	980	478	502	1771	529	387	1311	644	399	2396	789
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	0.97	0.97	0.97	0.97	0.97	0.97	0.83	0.83	0.83	0.55	0.55	0.55
Uniform Delay (d), s/veh	56.7	47.2	47.4	43.1	12.9	12.7	49.8	9.9	9.9	49.5	20.9	12.5
Incr Delay (d2), s/veh	0.7	2.4	5.0	5.9	0.7	1.5	0.6	2.1	4.3	4.4	1.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.1	9.3	9.6	5.7	3.2	2.3	2.1	6.5	6.8	5.1	14.9	2.7
LnGrp Delay(d),s/veh	57.4	49.6	52.4	49.0	13.6	14.2	50.5	12.0	14.2	53.8	22.1	12.9
LnGrp LOS	E	D	D	D	B	B	D	B	B	D	C	B
Approach Vol, veh/h		968			1220			1410			2273	
Approach Delay, s/veh		51.4			23.7			16.4			25.6	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	55.2	9.8	45.1	15.0	50.1	16.9	38.0
Change Period (Y+Rc), s	3.5	5.7	3.5	5.3	3.5	5.7	3.5	5.3
Max Green Setting (Gmax), s	11.5	42.3	11.5	36.7	11.5	42.3	15.5	32.7
Max Q Clear Time (g_c+I1), s	6.5	30.7	6.3	9.0	11.9	15.8	13.3	21.5
Green Ext Time (p_c), s	0.1	11.3	0.1	16.6	0.0	25.4	0.1	8.5

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	80	990	860	100	90	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.2	5.2	5.2	5.5	5.5
Lane Util. Factor	1.00	0.91	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	3539	1583	1770	1559
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	3539	1583	1770	1559
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	1042	905	105	95	189
RTOR Reduction (vph)	0	0	0	0	0	172
Lane Group Flow (vph)	84	1042	905	105	95	17
Confl. Peds. (#/hr)					1	1
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	8.9	79.3	74.8	74.8	10.8	10.8
Effective Green, g (s)	8.4	80.6	76.1	76.1	11.0	11.0
Actuated g/C Ratio	0.07	0.67	0.63	0.63	0.09	0.09
Clearance Time (s)	3.5	6.5	6.5	6.5	5.7	5.7
Vehicle Extension (s)	2.0	4.3	4.3	4.3	2.0	2.0
Lane Grp Cap (vph)	123	3415	2244	1003	162	142
v/s Ratio Prot	c0.05	0.20	c0.26		c0.05	
v/s Ratio Perm				0.07		0.01
v/c Ratio	0.68	0.31	0.40	0.10	0.59	0.12
Uniform Delay, d1	54.5	8.1	10.8	8.6	52.3	50.1
Progression Factor	1.00	1.00	0.15	0.05	1.00	1.00
Incremental Delay, d2	11.8	0.2	0.5	0.2	3.5	0.1
Delay (s)	66.3	8.4	2.1	0.7	55.8	50.2
Level of Service	E	A	A	A	E	D
Approach Delay (s)		12.7	1.9		52.1	
Approach LOS		B	A		D	

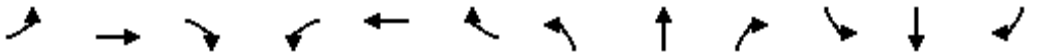
Intersection Summary			
HCM 2000 Control Delay	12.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1000	80	30	940	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	6.5	4.0	5.2	5.5	5.5
Lane Util. Factor	0.95	1.00	1.00	0.91	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	5085	1770	1563
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	1770	5085	1770	1563
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1053	84	32	989	21	21
RTOR Reduction (vph)	0	24	0	0	0	20
Lane Group Flow (vph)	1053	60	32	989	21	1
Confl. Peds. (#/hr)					4	1
Turn Type	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	4		3	8	5	
Permitted Phases		4				5
Actuated Green, G (s)	79.3	79.3	4.4	74.8	4.1	4.1
Effective Green, g (s)	80.6	79.3	3.9	76.1	4.3	4.3
Actuated g/C Ratio	0.67	0.66	0.03	0.63	0.04	0.04
Clearance Time (s)	6.5	6.5	3.5	6.5	5.7	5.7
Vehicle Extension (s)	4.3	4.3	1.5	4.3	2.0	2.0
Lane Grp Cap (vph)	2377	1046	57	3224	63	56
v/s Ratio Prot	c0.30		c0.02	0.19	c0.01	
v/s Ratio Perm		0.04				0.00
v/c Ratio	0.44	0.06	0.56	0.31	0.33	0.01
Uniform Delay, d1	9.2	7.2	57.2	10.0	56.5	55.8
Progression Factor	0.46	0.09	1.05	1.21	1.00	1.00
Incremental Delay, d2	0.6	0.1	6.9	0.2	1.1	0.0
Delay (s)	4.8	0.8	66.9	12.3	57.6	55.8
Level of Service	A	A	E	B	E	E
Approach Delay (s)	4.5			14.0	56.7	
Approach LOS	A			B	E	

Intersection Summary			
HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

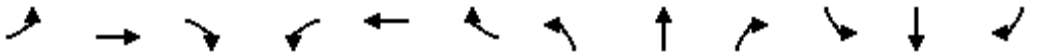
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	900	60	60	830	80	20	10	10	30	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	11	10	11	11	11	11	11	11
Total Lost time (s)	1.5	3.0		1.5	3.0	3.0		2.6			1.5	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00			1.00	
Frt	1.00	0.99		1.00	1.00	0.85		0.97			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.98	
Satd. Flow (prot)	3204	5038		1652	4916	1478		1697			1679	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.88			0.86	
Satd. Flow (perm)	3204	5038		1652	4916	1478		1536			1484	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	947	63	63	874	84	21	11	11	32	11	21
RTOR Reduction (vph)	0	4	0	0	0	24	0	9	0	0	18	0
Lane Group Flow (vph)	95	1006	0	63	874	60	0	34	0	0	46	0
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2 5			1 6	
Permitted Phases						8	2 5			1 6		
Actuated Green, G (s)	8.0	75.1		13.6	80.7	80.7		15.3			14.1	
Effective Green, g (s)	10.0	77.1		15.6	82.7	82.7		19.3			18.1	
Actuated g/C Ratio	0.08	0.64		0.13	0.69	0.69		0.16			0.15	
Clearance Time (s)	3.5	5.0		3.5	5.0	5.0						
Vehicle Extension (s)	1.5	3.9		1.5	3.9	3.9						
Lane Grp Cap (vph)	267	3236		214	3387	1018		247			223	
v/s Ratio Prot	c0.03	c0.20		c0.04	0.18							
v/s Ratio Perm						0.04		c0.02			c0.03	
v/c Ratio	0.36	0.31		0.29	0.26	0.06		0.14			0.21	
Uniform Delay, d1	52.0	9.6		47.2	7.1	6.0		43.2			44.7	
Progression Factor	1.00	1.00		0.69	0.35	0.05		1.00			1.00	
Incremental Delay, d2	0.3	0.3		0.3	0.2	0.1		0.1			0.2	
Delay (s)	52.3	9.8		32.9	2.7	0.4		43.3			44.8	
Level of Service	D	A		C	A	A		D			D	
Approach Delay (s)		13.5			4.3			43.3			44.8	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	37.1%	ICU Level of Service	A
Analysis Period (min)	15		

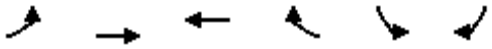
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	800	90	90	870	40	50	30	70	40	20	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	13	13	10	10	10	10	14	14
Total Lost time (s)	1.5	3.0		1.5	3.0		1.5	2.6		1.5	2.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.90		1.00	0.89	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	4841		1652	5220		1652	1557		1652	1773	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1652	4841		1652	5220		1652	1557		1652	1773	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	842	95	95	916	42	53	32	74	42	21	53
RTOR Reduction (vph)	0	6	0	0	2	0	0	68	0	0	49	0
Lane Group Flow (vph)	53	931	0	95	956	0	53	38	0	42	25	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	8.0	75.1		13.6	80.7		6.9	8.4		6.3	7.8	
Effective Green, g (s)	10.0	77.1		15.6	82.7		8.9	10.4		8.3	9.8	
Actuated g/C Ratio	0.08	0.64		0.13	0.69		0.07	0.09		0.07	0.08	
Clearance Time (s)	3.5	5.0		3.5	5.0		3.5	4.6		3.5	4.6	
Vehicle Extension (s)	1.5	3.9		1.5	3.9		1.5	2.0		1.5	2.0	
Lane Grp Cap (vph)	137	3110		214	3597		122	134		114	144	
v/s Ratio Prot	c0.03	c0.19		c0.06	0.18		c0.03	c0.02		0.03	0.01	
v/s Ratio Perm												
v/c Ratio	0.39	0.30		0.44	0.27		0.43	0.29		0.37	0.18	
Uniform Delay, d1	52.1	9.5		48.2	7.1		53.1	51.3		53.3	51.3	
Progression Factor	1.23	0.22		0.69	0.26		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	0.2		0.5	0.2		0.9	0.4		0.7	0.2	
Delay (s)	64.5	2.3		33.6	2.0		54.0	51.8		54.1	51.6	
Level of Service	E	A		C	A		D	D		D	D	
Approach Delay (s)		5.6			4.9			52.5			52.5	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	41.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



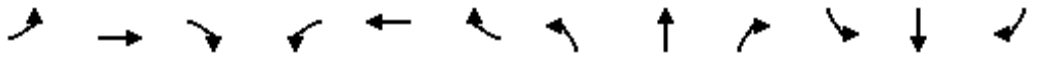
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	10	870	1330	60	20	30
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	11	916	1400	63	21	32
Adj No. of Lanes	1	3	3	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	41	4565	4378	1455	103	94
Arrive On Green	0.05	1.00	1.00	1.00	0.06	0.06
Sat Flow, veh/h	1703	5253	5253	1583	1774	1615
Grp Volume(v), veh/h	11	916	1400	63	21	32
Grp Sat Flow(s),veh/h/ln	1703	1695	1695	1583	1774	1615
Q Serve(g_s), s	0.7	0.0	0.0	0.0	1.4	2.3
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.0	1.4	2.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	41	4565	4378	1455	103	94
V/C Ratio(X)	0.27	0.20	0.32	0.04	0.20	0.34
Avail Cap(c_a), veh/h	263	4565	4378	1455	532	484
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.74	0.74	1.00	1.00
Uniform Delay (d), s/veh	56.0	0.0	0.0	0.0	53.9	54.3
Incr Delay (d2), s/veh	1.2	0.1	0.1	0.0	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	0.0	0.1	0.0	0.7	2.1
LnGrp Delay(d),s/veh	57.3	0.1	0.1	0.0	54.2	55.1
LnGrp LOS	E	A	A	A	D	E
Approach Vol, veh/h		927	1463		53	
Approach Delay, s/veh		0.8	0.1		54.8	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				111.0		9.0	4.4	106.6
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				76.7		34.0	16.5	56.7
Max Q Clear Time (g_c+I1), s				2.0		4.3	2.7	2.0
Green Ext Time (p_c), s				52.6		0.1	0.0	41.9

Intersection Summary	
HCM 2010 Ctrl Delay	1.6
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	390	70	140	940	240	110	550	190	260	870	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1937	1863	1937	1976
Adj Flow Rate, veh/h	53	411	52	147	989	65	116	579	99	274	916	80
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	97	954	118	202	1361	424	169	1483	690	323	1732	151
Arrive On Green	0.05	0.21	0.21	0.08	0.18	0.18	0.10	0.42	0.42	0.24	0.67	0.67
Sat Flow, veh/h	1774	4583	569	1774	5085	1583	1774	3539	1647	1774	3426	299
Grp Volume(v), veh/h	53	302	161	147	989	65	116	579	99	274	492	504
Grp Sat Flow(s),veh/h/ln	1774	1695	1762	1774	1695	1583	1774	1770	1647	1774	1840	1884
Q Serve(g_s), s	3.5	9.3	9.6	9.7	22.0	4.2	7.6	13.6	4.5	17.7	16.3	16.3
Cycle Q Clear(g_c), s	3.5	9.3	9.6	9.7	22.0	4.2	7.6	13.6	4.5	17.7	16.3	16.3
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	97	706	367	202	1361	424	169	1483	690	323	931	953
V/C Ratio(X)	0.55	0.43	0.44	0.73	0.73	0.15	0.69	0.39	0.14	0.85	0.53	0.53
Avail Cap(c_a), veh/h	200	754	392	303	1428	445	362	1483	690	436	931	953
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	1.00	1.00	1.00	0.73	0.73	0.73
Uniform Delay (d), s/veh	55.3	41.3	41.4	53.6	45.1	37.8	52.5	24.2	21.5	43.9	12.4	12.4
Incr Delay (d2), s/veh	1.8	0.7	1.3	1.8	2.0	0.3	1.8	0.8	0.4	6.6	1.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	4.4	4.8	4.9	10.6	1.9	3.8	6.8	2.1	9.2	8.6	8.8
LnGrp Delay(d),s/veh	57.0	42.0	42.7	55.4	47.1	38.0	54.4	25.0	22.0	50.5	14.0	13.9
LnGrp LOS	E	D	D	E	D	D	D	C	C	D	B	B
Approach Vol, veh/h		516			1201			794			1270	
Approach Delay, s/veh		43.7			47.6			28.9			21.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.3	53.2	15.2	28.3	13.0	63.6	8.1	35.4
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	27.5	32.1	18.5	24.7	22.5	37.1	11.5	31.7
Max Q Clear Time (g_c+I1), s	19.7	15.6	11.7	11.6	9.6	18.3	5.5	24.0
Green Ext Time (p_c), s	0.2	12.2	0.1	9.6	0.1	13.5	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	34.5
HCM 2010 LOS	C

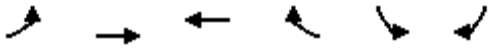
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	630	140	460	1120	450	70	1000	180	190	1400	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1788	1937	1937
Adj Flow Rate, veh/h	158	663	59	484	1179	271	74	1053	167	200	1474	99
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1123	430	599	1741	542	174	1997	622	300	2290	713
Arrive On Green	0.10	0.29	0.29	0.17	0.34	0.34	0.10	0.79	0.79	0.18	0.87	0.87
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	5085	1583	3304	5289	1647
Grp Volume(v), veh/h	158	663	59	484	1179	271	74	1053	167	200	1474	99
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1583	1652	1763	1647
Q Serve(g_s), s	5.3	13.4	1.9	16.2	23.8	16.3	2.4	9.1	1.9	6.8	10.1	1.1
Cycle Q Clear(g_c), s	5.3	13.4	1.9	16.2	23.8	16.3	2.4	9.1	1.9	6.8	10.1	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1123	430	599	1741	542	174	1997	622	300	2290	713
V/C Ratio(X)	0.59	0.59	0.14	0.81	0.68	0.50	0.42	0.53	0.27	0.67	0.64	0.14
Avail Cap(c_a), veh/h	387	1123	430	731	1741	542	387	1997	622	537	2290	713
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	1.00	0.95	0.95	0.95	0.91	0.91	0.91
Uniform Delay (d), s/veh	52.0	37.7	13.6	47.6	33.8	31.3	52.3	8.8	2.4	47.4	5.2	4.6
Incr Delay (d2), s/veh	0.8	2.3	0.7	4.6	2.1	3.3	0.6	1.0	1.0	0.9	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.5	6.5	0.9	8.1	11.5	7.6	1.2	4.3	0.9	3.1	4.6	0.5
LnGrp Delay(d),s/veh	52.8	40.0	14.2	52.2	35.9	34.6	52.9	9.7	3.4	48.3	6.5	5.0
LnGrp LOS	D	D	B	D	D	C	D	A	A	D	A	A
Approach Vol, veh/h		880			1934			1294			1773	
Approach Delay, s/veh		40.6			39.8			11.4			11.2	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	51.2	25.4	31.0	7.6	56.1	10.8	45.6
Change Period (Y+Rc), s	3.5	6.1	6.5	* 6.5	3.5	6.1	3.5	6.5
Max Green Setting (Gmax), s	17.5	34.9	23.5	* 25	11.5	40.9	11.5	36.5
Max Q Clear Time (g_c+I1), s	8.8	11.1	18.2	15.4	4.4	12.1	7.3	25.8
Green Ext Time (p_c), s	0.1	22.0	0.7	4.1	0.0	26.2	0.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	25.0
HCM 2010 LOS	C

Notes

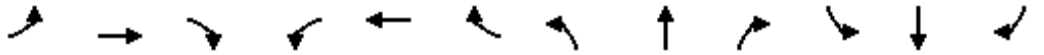
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	100	850	730	160	440	250
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1863	1788	1863	1937
Adj Flow Rate, veh/h	105	895	768	168	463	263
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	381	2062	1983	851	573	532
Arrive On Green	0.75	0.75	0.56	0.56	0.32	0.32
Sat Flow, veh/h	596	3778	3632	1520	1774	1647
Grp Volume(v), veh/h	105	895	768	168	463	263
Grp Sat Flow(s),veh/h/ln	596	1840	1770	1520	1774	1647
Q Serve(g_s), s	5.8	5.5	7.3	3.3	14.3	7.7
Cycle Q Clear(g_c), s	13.1	5.5	7.3	3.3	14.3	7.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	381	2062	1983	851	573	532
V/C Ratio(X)	0.28	0.43	0.39	0.20	0.81	0.49
Avail Cap(c_a), veh/h	381	2062	1983	851	967	897
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.62	0.62	0.95	0.95
Uniform Delay (d), s/veh	7.0	4.1	7.4	6.5	18.6	16.4
Incr Delay (d2), s/veh	1.6	0.6	0.4	0.3	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	2.8	3.6	1.4	7.1	3.5
LnGrp Delay(d),s/veh	8.7	4.7	7.8	6.8	19.6	16.6
LnGrp LOS	A	A	A	A	B	B
Approach Vol, veh/h		1000	936		726	
Approach Delay, s/veh		5.1	7.6		18.5	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				37.3		22.7		37.3
Change Period (Y+Rc), s				5.7		5.3		5.7
Max Green Setting (Gmax), s				18.3		30.7		18.3
Max Q Clear Time (g_c+I1), s				15.1		16.3		9.3
Green Ext Time (p_c), s				3.0		1.0		7.9

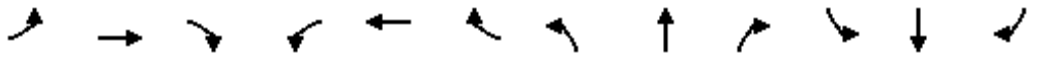
Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	1070	20	20	1020	10	30	10	10	30	10	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1900	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	32	1126	21	21	1074	11	32	11	11	32	11	116
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	4131	77	55	3969	41	140	120	120	231	19	205
Arrive On Green	0.04	0.77	0.77	0.01	0.25	0.25	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1774	5346	100	1774	5190	53	1258	890	890	1384	145	1524
Grp Volume(v), veh/h	32	743	404	21	701	384	32	0	22	32	0	127
Grp Sat Flow(s),veh/h/ln	1774	1763	1920	1774	1695	1853	1258	0	1780	1384	0	1668
Q Serve(g_s), s	2.1	7.3	7.3	1.4	19.9	19.9	2.9	0.0	1.3	2.5	0.0	8.6
Cycle Q Clear(g_c), s	2.1	7.3	7.3	1.4	19.9	19.9	11.5	0.0	1.3	3.8	0.0	8.6
Prop In Lane	1.00		0.05	1.00		0.03	1.00		0.50	1.00		0.91
Lane Grp Cap(c), veh/h	70	2725	1484	55	2592	1417	140	0	239	231	0	224
V/C Ratio(X)	0.46	0.27	0.27	0.38	0.27	0.27	0.23	0.00	0.09	0.14	0.00	0.57
Avail Cap(c_a), veh/h	214	2725	1484	214	2592	1417	341	0	525	453	0	492
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.73	0.92	0.92	0.92	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	56.4	3.9	3.9	58.2	18.0	18.0	54.0	0.0	45.5	47.2	0.0	48.6
Incr Delay (d2), s/veh	1.3	0.2	0.3	1.5	0.2	0.4	0.3	0.0	0.1	0.1	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	3.6	4.0	0.7	9.5	10.4	1.0	0.0	0.6	1.0	0.0	4.0
LnGrp Delay(d),s/veh	57.7	4.1	4.3	59.7	18.2	18.4	54.3	0.0	45.6	47.3	0.0	49.5
LnGrp LOS	E	A	A	E	B	B	D		D	D		D
Approach Vol, veh/h		1179			1106			54			159	
Approach Delay, s/veh		5.6			19.1			50.8			49.0	
Approach LOS		A			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		18.7	5.2	96.0		18.7	6.2	95.1
Change Period (Y+Rc), s		4.6	3.5	5.3		4.6	3.5	5.3
Max Green Setting (Gmax), s		33.4	12.5	60.7		33.4	12.5	60.7
Max Q Clear Time (g_c+I1), s		13.5	3.4	9.3		10.6	4.1	21.9
Green Ext Time (p_c), s		0.7	0.0	33.3		0.7	0.0	27.5

Intersection Summary	
HCM 2010 Ctrl Delay	15.3
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	720	290	190	520	150	140	860	80	310	1340	80
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	211	758	305	200	547	158	147	905	84	326	1411	84
Adj No. of Lanes	2	3	0	2	3	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	839	335	304	1177	870	564	1505	139	487	1434	85
Arrive On Green	0.09	0.23	0.23	0.09	0.23	0.23	0.10	0.10	0.10	0.55	0.55	0.55
Sat Flow, veh/h	3442	3576	1425	3442	5085	1583	1774	4737	438	1774	5222	311
Grp Volume(v), veh/h	211	718	345	200	547	158	147	647	342	326	1007	488
Grp Sat Flow(s),veh/h/ln	1721	1695	1611	1721	1695	1583	1774	1695	1785	1774	1863	1808
Q Serve(g_s), s	7.7	26.7	27.1	7.3	12.0	6.5	9.9	23.7	23.8	17.0	34.4	34.4
Cycle Q Clear(g_c), s	7.7	26.7	27.1	7.3	12.0	6.5	9.9	23.7	23.8	17.0	34.4	34.4
Prop In Lane	1.00		0.88	1.00		1.00	1.00		0.25	1.00		0.17
Lane Grp Cap(c), veh/h	315	796	378	304	1177	870	564	1077	567	487	1023	496
V/C Ratio(X)	0.67	0.90	0.91	0.66	0.46	0.18	0.26	0.60	0.60	0.67	0.98	0.98
Avail Cap(c_a), veh/h	463	796	378	463	1177	870	564	1077	567	487	1023	496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	0.88	0.88	0.88	0.24	0.24	0.24
Uniform Delay (d), s/veh	57.2	48.3	48.4	57.4	43.0	14.7	44.1	50.3	50.4	25.1	29.0	29.0
Incr Delay (d2), s/veh	0.9	15.5	28.6	0.9	1.3	0.4	1.0	2.2	4.2	1.0	10.2	15.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	14.2	15.1	3.5	5.8	4.9	5.0	11.5	12.4	8.3	18.8	19.0
LnGrp Delay(d),s/veh	58.1	63.8	77.0	58.2	44.3	15.1	45.1	52.5	54.5	26.1	39.3	44.9
LnGrp LOS	E	E	E	E	D	B	D	D	D	C	D	D
Approach Vol, veh/h		1274			905			1136			1821	
Approach Delay, s/veh		66.4			42.3			52.1			38.4	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.6	13.4	33.0		39.0	13.0	33.4
Change Period (Y+Rc), s		5.3	3.5	4.9		5.3	3.5	4.9
Max Green Setting (Gmax), s		33.7	15.5	28.1		33.7	15.5	28.1
Max Q Clear Time (g_c+I1), s		25.8	9.7	14.0		36.4	9.3	29.1
Green Ext Time (p_c), s		5.0	0.2	10.9		0.0	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	49.1
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

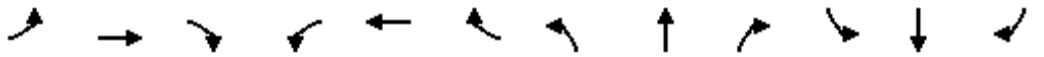
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	900	60	160	810	110	30	10	40	40	10	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	84	947	63	168	853	116	32	11	42	42	11	42
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	522	3535	235	223	2439	330	141	40	153	155	35	188
Arrive On Green	0.59	1.00	1.00	0.08	0.35	0.35	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1774	5067	336	1774	4713	638	1346	339	1295	853	292	1583
Grp Volume(v), veh/h	84	658	352	168	637	332	32	0	53	53	0	42
Grp Sat Flow(s),veh/h/ln	1774	1763	1878	1774	1763	1825	1346	0	1634	1144	0	1583
Q Serve(g_s), s	2.6	0.0	0.0	11.1	16.1	16.2	2.7	0.0	3.5	3.5	0.0	2.9
Cycle Q Clear(g_c), s	2.6	0.0	0.0	11.1	16.1	16.2	9.7	0.0	3.5	7.0	0.0	2.9
Prop In Lane	1.00		0.18	1.00		0.35	1.00		0.79	0.79		1.00
Lane Grp Cap(c), veh/h	522	2459	1310	223	1825	944	141	0	194	189	0	188
V/C Ratio(X)	0.16	0.27	0.27	0.75	0.35	0.35	0.23	0.00	0.27	0.28	0.00	0.22
Avail Cap(c_a), veh/h	522	2459	1310	229	1825	944	379	0	482	441	0	467
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.84	0.84	0.84	0.93	0.93	0.93	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	0.0	53.1	24.2	24.2	54.3	0.0	48.2	50.6	0.0	47.9
Incr Delay (d2), s/veh	0.0	0.2	0.4	10.7	0.5	1.0	0.3	0.0	0.3	0.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	0.1	0.2	6.1	8.0	8.4	1.0	0.0	1.6	1.7	0.0	1.3
LnGrp Delay(d),s/veh	18.0	0.2	0.4	63.8	24.7	25.2	54.6	0.0	48.5	50.9	0.0	48.1
LnGrp LOS	B	A	A	E	C	C	D		D	D		D
Approach Vol, veh/h		1094			1137			85			95	
Approach Delay, s/veh		1.7			30.6			50.8			49.7	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.8	16.6	86.6		16.8	38.2	65.0
Change Period (Y+Rc), s		4.6	3.5	4.9		4.6	4.9	* 4.9
Max Green Setting (Gmax), s		33.4	13.5	60.1		33.4	13.5	* 60
Max Q Clear Time (g_c+I1), s		11.7	13.1	2.0		9.0	4.6	18.2
Green Ext Time (p_c), s		0.5	0.0	11.4		0.5	5.0	10.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.9
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	1080	60	10	660	80	50	20	20	120	30	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	32	1137	63	11	695	84	53	21	21	126	32	74
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	2752	152	41	2485	300	173	131	131	227	77	177
Arrive On Green	0.10	1.00	1.00	0.02	0.75	0.75	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1774	3547	196	1774	3308	399	1283	890	890	1359	521	1204
Grp Volume(v), veh/h	32	590	610	11	386	393	53	0	42	126	0	106
Grp Sat Flow(s),veh/h/ln	1774	1840	1903	1774	1840	1867	1283	0	1780	1359	0	1725
Q Serve(g_s), s	2.2	0.0	0.0	0.8	8.6	8.6	5.1	0.0	2.7	11.6	0.0	7.3
Cycle Q Clear(g_c), s	2.2	0.0	0.0	0.8	8.6	8.6	12.4	0.0	2.7	14.3	0.0	7.3
Prop In Lane	1.00		0.10	1.00		0.21	1.00		0.50	1.00		0.70
Lane Grp Cap(c), veh/h	85	1428	1476	41	1382	1402	173	0	262	227	0	254
V/C Ratio(X)	0.38	0.41	0.41	0.27	0.28	0.28	0.31	0.00	0.16	0.55	0.00	0.42
Avail Cap(c_a), veh/h	252	1428	1476	252	1382	1402	402	0	581	471	0	563
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.51	0.51	0.51	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	0.0	0.0	62.4	5.1	5.1	56.0	0.0	48.4	54.7	0.0	50.4
Incr Delay (d2), s/veh	0.5	0.4	0.4	1.3	0.5	0.5	0.4	0.0	0.1	0.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	0.2	0.2	0.4	4.5	4.6	1.8	0.0	1.3	4.4	0.0	3.5
LnGrp Delay(d),s/veh	57.5	0.4	0.4	63.7	5.6	5.6	56.4	0.0	48.5	55.4	0.0	50.8
LnGrp LOS	E	A	A	E	A	A	E		D	E		D
Approach Vol, veh/h		1232			790			95			232	
Approach Delay, s/veh		1.9			6.4			52.9			53.3	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	103.8		21.7	7.7	100.6		21.7
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	16.5	60.1		40.4	16.5	60.1		40.4
Max Q Clear Time (g_c+I1), s	2.8	2.0		16.3	4.2	10.6		14.4
Green Ext Time (p_c), s	0.0	34.9		0.9	0.0	31.7		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	10.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	800	20	50	1310	30	20	10	70	20	10	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1900	1863	1863	1900	1976	1937	1976	1900	1863	1863
Adj Flow Rate, veh/h	11	842	21	53	1379	32	21	11	74	21	11	21
Adj No. of Lanes	1	3	0	1	4	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	537	4033	100	96	3338	77	60	25	114	131	59	157
Arrive On Green	0.63	1.00	1.00	0.11	1.00	1.00	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1703	5103	127	1774	6492	151	241	256	1150	825	596	1583
Grp Volume(v), veh/h	11	559	304	53	1021	390	106	0	0	32	0	21
Grp Sat Flow(s),veh/h/ln	1703	1695	1840	1774	1602	1836	1648	0	0	1422	0	1583
Q Serve(g_s), s	0.3	0.0	0.0	3.4	0.0	0.0	4.4	0.0	0.0	0.0	0.0	1.5
Cycle Q Clear(g_c), s	0.3	0.0	0.0	3.4	0.0	0.0	7.4	0.0	0.0	2.2	0.0	1.5
Prop In Lane	1.00		0.07	1.00		0.08	0.20		0.70	0.66		1.00
Lane Grp Cap(c), veh/h	537	2679	1454	96	2471	944	199	0	0	190	0	157
V/C Ratio(X)	0.02	0.21	0.21	0.55	0.41	0.41	0.53	0.00	0.00	0.17	0.00	0.13
Avail Cap(c_a), veh/h	537	2679	1454	273	2471	944	525	0	0	483	0	475
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	0.96	0.96	0.96	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.2	0.0	0.0	52.1	0.0	0.0	52.0	0.0	0.0	49.6	0.0	49.4
Incr Delay (d2), s/veh	0.0	0.2	0.3	1.8	0.5	1.3	0.8	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	0.1	0.1	1.7	0.1	0.3	3.4	0.0	0.0	1.0	0.0	0.6
LnGrp Delay(d),s/veh	15.2	0.2	0.3	53.9	0.5	1.3	52.8	0.0	0.0	49.8	0.0	49.5
LnGrp LOS	B	A	A	D	A	A	D			D		D
Approach Vol, veh/h		874			1464			106			53	
Approach Delay, s/veh		0.4			2.6			52.8			49.7	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.9	8.0	98.1		13.9	41.1	65.0
Change Period (Y+Rc), s		4.0	3.5	5.3		4.0	5.3	* 5.3
Max Green Setting (Gmax), s		34.0	16.5	56.7		34.0	13.5	* 60
Max Q Clear Time (g_c+I1), s		9.4	5.4	2.0		4.2	2.3	2.0
Green Ext Time (p_c), s		0.6	0.0	10.6		0.6	2.8	22.2

Intersection Summary	
HCM 2010 Ctrl Delay	5.0
HCM 2010 LOS	A

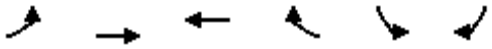
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	890	170	140	860	150	90	320	200	120	470	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	53	937	179	147	905	158	95	337	211	126	495	116
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	2302	438	201	2602	452	195	673	413	212	910	212
Arrive On Green	0.02	0.17	0.17	0.11	0.57	0.57	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1774	4463	850	1774	4535	789	807	2194	1346	856	2965	691
Grp Volume(v), veh/h	53	740	376	147	703	360	95	282	266	126	306	305
Grp Sat Flow(s),veh/h/ln	1774	1763	1787	1774	1763	1798	807	1840	1700	856	1840	1815
Q Serve(g_s), s	3.6	22.4	22.5	9.6	12.7	12.8	13.3	15.0	15.5	17.0	16.6	16.8
Cycle Q Clear(g_c), s	3.6	22.4	22.5	9.6	12.7	12.8	30.1	15.0	15.5	32.5	16.6	16.8
Prop In Lane	1.00		0.48	1.00		0.44	1.00		0.79	1.00		0.38
Lane Grp Cap(c), veh/h	98	1818	922	201	2023	1032	195	565	522	212	565	557
V/C Ratio(X)	0.54	0.41	0.41	0.73	0.35	0.35	0.49	0.50	0.51	0.59	0.54	0.55
Avail Cap(c_a), veh/h	214	1818	922	273	2023	1032	197	569	525	214	569	561
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	0.78	0.78	0.78	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	33.4	33.5	51.5	13.6	13.6	47.2	34.0	34.2	47.5	34.6	34.6
Incr Delay (d2), s/veh	1.7	0.7	1.3	3.6	0.5	0.9	0.5	0.2	0.3	2.9	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	11.1	11.5	4.9	6.3	6.6	3.0	7.7	7.3	4.2	8.5	8.5
LnGrp Delay(d),s/veh	59.1	34.1	34.8	55.0	14.1	14.6	47.7	34.2	34.4	50.5	35.1	35.2
LnGrp LOS	E	C	C	E	B	B	D	C	C	D	D	D
Approach Vol, veh/h		1169			1210			643			737	
Approach Delay, s/veh		35.4			19.2			36.3			37.8	
Approach LOS		D			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.1	65.2		39.7	8.1	72.1		39.7
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	16.5	54.7		35.1	12.5	58.7		35.1
Max Q Clear Time (g_c+I1), s	11.6	24.5		34.5	5.6	14.8		32.1
Green Ext Time (p_c), s	0.0	22.6		0.4	0.0	29.5		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	30.8
HCM 2010 LOS	C



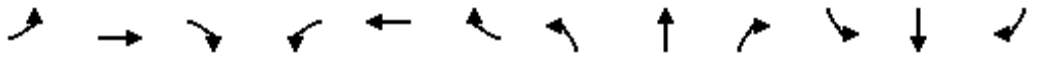
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	30	790	1310	30	30	20
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	32	832	1379	32	26	27
Adj No. of Lanes	1	3	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	69	4565	5494	127	103	94
Arrive On Green	0.08	1.00	1.00	1.00	0.06	0.06
Sat Flow, veh/h	1774	5253	6752	151	1774	1615
Grp Volume(v), veh/h	32	832	1021	390	26	27
Grp Sat Flow(s),veh/h/ln	1774	1695	1602	1836	1774	1615
Q Serve(g_s), s	2.1	0.0	0.0	0.0	1.7	1.9
Cycle Q Clear(g_c), s	2.1	0.0	0.0	0.0	1.7	1.9
Prop In Lane	1.00			0.08	1.00	1.00
Lane Grp Cap(c), veh/h	69	4565	4067	1554	103	94
V/C Ratio(X)	0.46	0.18	0.25	0.25	0.25	0.29
Avail Cap(c_a), veh/h	214	4565	4067	1554	517	471
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	54.1	0.0	0.0	0.0	54.0	54.1
Incr Delay (d2), s/veh	1.5	0.1	0.1	0.4	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.0	0.0	0.1	0.2	0.8	1.8
LnGrp Delay(d),s/veh	55.7	0.1	0.1	0.4	54.5	54.8
LnGrp LOS	E	A	A	A	D	D
Approach Vol, veh/h		864	1411		53	
Approach Delay, s/veh		2.1	0.2		54.6	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				111.0		9.0	6.2	104.9
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				77.7		33.0	12.5	61.7
Max Q Clear Time (g_c+I1), s				2.0		3.9	4.1	2.0
Green Ext Time (p_c), s				48.4		0.1	0.0	41.5

Intersection Summary	
HCM 2010 Ctrl Delay	2.2
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	380	10	240	40	20	20	100	1040	20	10	2030	440
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	400	11	253	42	21	21	105	1095	21	11	2137	463
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	422	21	484	167	83	68	128	2910	56	18	2130	443
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.14	1.00	1.00	0.02	1.00	1.00
Sat Flow, veh/h	1359	66	1527	385	263	216	1774	5137	98	1774	4221	877
Grp Volume(v), veh/h	400	0	264	84	0	0	105	723	393	11	1699	901
Grp Sat Flow(s),veh/h/ln	1359	0	1593	864	0	0	1774	1695	1845	1774	1695	1708
Q Serve(g_s), s	18.0	0.0	16.3	3.7	0.0	0.0	6.9	0.0	0.0	0.7	0.0	58.6
Cycle Q Clear(g_c), s	38.0	0.0	16.3	20.0	0.0	0.0	6.9	0.0	0.0	0.7	0.0	58.6
Prop In Lane	1.00		0.96	0.50		0.25	1.00		0.05	1.00		0.51
Lane Grp Cap(c), veh/h	422	0	505	319	0	0	128	1920	1045	18	1711	862
V/C Ratio(X)	0.95	0.00	0.52	0.26	0.00	0.00	0.82	0.38	0.38	0.61	0.99	1.05
Avail Cap(c_a), veh/h	422	0	505	319	0	0	185	1920	1045	185	1711	862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.79	0.79	0.79	0.18	0.18	0.18
Uniform Delay (d), s/veh	44.3	0.0	33.6	35.7	0.0	0.0	50.6	0.0	0.0	58.5	0.0	0.0
Incr Delay (d2), s/veh	30.2	0.0	0.5	0.2	0.0	0.0	9.4	0.4	0.8	2.2	7.8	27.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	16.8	0.0	7.3	2.4	0.0	0.0	3.7	0.1	0.2	0.4	1.8	6.5
LnGrp Delay(d),s/veh	74.5	0.0	34.1	35.9	0.0	0.0	60.0	0.4	0.8	60.7	7.8	27.2
LnGrp LOS	E		C	D			E	A	A	E	A	F
Approach Vol, veh/h		664			84			1221			2611	
Approach Delay, s/veh		58.4			35.9			5.7			14.7	
Approach LOS		E			D			A			B	

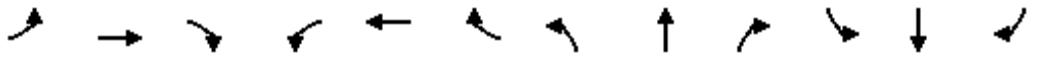
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.1	65.9		42.0	4.7	73.3		42.0
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	56.7		38.0	12.5	56.7		38.0
Max Q Clear Time (g_c+I1), s	8.9	60.6		40.0	2.7	2.0		22.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	53.2		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	20	40	50	20	60	20	1010	40	30	1930	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	63	21	42	53	21	63	21	1063	42	32	2032	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	37	53	98	37	80	25	3804	150	40	3951	62
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.00	0.25	0.25	0.05	1.00	1.00
Sat Flow, veh/h	608	327	467	497	331	705	1774	5020	198	1774	5157	81
Grp Volume(v), veh/h	126	0	0	137	0	0	21	718	387	32	1335	729
Grp Sat Flow(s),veh/h/ln	1402	0	0	1534	0	0	1774	1695	1828	1774	1695	1848
Q Serve(g_s), s	0.3	0.0	0.0	0.0	0.0	0.0	1.4	20.5	20.5	2.1	0.0	0.0
Cycle Q Clear(g_c), s	10.7	0.0	0.0	10.4	0.0	0.0	1.4	20.5	20.5	2.1	0.0	0.0
Prop In Lane	0.50		0.33	0.39		0.46	1.00		0.11	1.00		0.04
Lane Grp Cap(c), veh/h	203	0	0	215	0	0	25	2569	1385	40	2597	1416
V/C Ratio(X)	0.62	0.00	0.00	0.64	0.00	0.00	0.82	0.28	0.28	0.80	0.51	0.51
Avail Cap(c_a), veh/h	465	0	0	484	0	0	185	2569	1385	185	2597	1416
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.92	0.92	0.92	0.23	0.23	0.23
Uniform Delay (d), s/veh	51.8	0.0	0.0	51.7	0.0	0.0	59.6	18.6	18.6	57.0	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	1.2	0.0	0.0	19.6	0.2	0.5	3.2	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	0.0	0.0	4.5	0.0	0.0	0.8	9.7	10.6	1.1	0.1	0.1
LnGrp Delay(d),s/veh	52.9	0.0	0.0	52.9	0.0	0.0	79.1	18.8	19.0	60.2	0.2	0.3
LnGrp LOS	D			D			E	B	B	E	A	A
Approach Vol, veh/h		126			137			1126			2096	
Approach Delay, s/veh		52.9			52.9			20.0			1.1	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	96.2		17.5	5.2	97.2		17.5
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	59.7		35.0	12.5	59.7		35.0
Max Q Clear Time (g_c+I1), s	4.1	22.5		12.7	3.4	2.0		12.4
Green Ext Time (p_c), s	0.0	35.0		1.1	0.0	52.7		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	600	220	130	730	140	160	810	110	220	1870	120
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.90	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	105	632	232	137	768	147	168	853	116	232	1968	126
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	126	623	229	164	791	151	185	1663	225	255	2081	619
Arrive On Green	0.02	0.08	0.08	0.03	0.09	0.09	0.21	0.74	0.74	0.29	0.82	0.82
Sat Flow, veh/h	1774	2485	911	1774	2903	555	1774	4500	608	1774	5085	1513
Grp Volume(v), veh/h	105	450	414	137	468	447	168	641	328	232	1968	126
Grp Sat Flow(s),veh/h/ln	1774	1770	1626	1774	1770	1688	1774	1695	1718	1774	1695	1513
Q Serve(g_s), s	7.1	30.1	30.1	9.2	31.7	31.7	11.1	9.5	9.7	15.1	37.3	2.2
Cycle Q Clear(g_c), s	7.1	30.1	30.1	9.2	31.7	31.7	11.1	9.5	9.7	15.1	37.3	2.2
Prop In Lane	1.00		0.56	1.00		0.33	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	126	444	408	164	482	460	185	1253	635	255	2081	619
V/C Ratio(X)	0.84	1.01	1.02	0.83	0.97	0.97	0.91	0.51	0.52	0.91	0.95	0.20
Avail Cap(c_a), veh/h	126	444	408	170	482	460	185	1253	635	377	2081	619
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.57	0.57	0.57	0.81	0.81	0.81	0.97	0.97	0.97	0.09	0.09	0.09
Uniform Delay (d), s/veh	57.9	55.0	55.0	57.3	54.1	54.1	46.9	11.1	11.1	42.0	9.8	6.6
Incr Delay (d2), s/veh	22.3	35.8	37.6	22.1	29.5	30.5	39.8	1.4	2.9	1.8	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.3	19.2	17.8	5.5	19.5	18.7	7.5	4.5	4.9	7.5	16.3	0.8
LnGrp Delay(d),s/veh	80.2	90.8	92.7	79.3	83.7	84.6	86.7	12.6	14.0	43.8	11.1	6.7
LnGrp LOS	F	F	F	E	F	F	F	B	B	D	B	A
Approach Vol, veh/h		969			1052			1137			2326	
Approach Delay, s/veh		90.5			83.5			23.9			14.1	
Approach LOS		F			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	54.0	12.0	38.0	20.8	49.2	14.6	35.4
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	12.5	49.1	8.5	32.7	25.5	36.1	11.5	29.7
Max Q Clear Time (g_c+I1), s	13.1	39.3	9.1	33.7	17.1	11.7	11.2	32.1
Green Ext Time (p_c), s	0.0	9.5	0.0	0.0	0.1	23.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	43.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	100	60	30	70	60	90	570	40	140	1030	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.88		0.82	0.90		0.82	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	53	105	63	32	74	63	95	600	42	147	1084	53
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	167	90	76	159	118	355	2430	170	515	2488	122
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.24	0.24	0.24	0.73	0.73	0.72
Sat Flow, veh/h	280	806	433	192	764	568	492	3348	234	784	3429	168
Grp Volume(v), veh/h	221	0	0	169	0	0	95	317	325	147	559	578
Grp Sat Flow(s),veh/h/ln	1519	0	0	1525	0	0	492	1770	1813	784	1770	1827
Q Serve(g_s), s	4.3	0.0	0.0	0.0	0.0	0.0	19.8	17.4	17.4	11.6	15.2	15.3
Cycle Q Clear(g_c), s	15.6	0.0	0.0	11.3	0.0	0.0	35.1	17.4	17.4	29.0	15.2	15.3
Prop In Lane	0.24		0.29	0.19		0.37	1.00		0.13	1.00		0.09
Lane Grp Cap(c), veh/h	353	0	0	352	0	0	355	1284	1316	515	1284	1326
V/C Ratio(X)	0.63	0.00	0.00	0.48	0.00	0.00	0.27	0.25	0.25	0.29	0.44	0.44
Avail Cap(c_a), veh/h	366	0	0	365	0	0	355	1284	1316	515	1284	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.93	0.93	0.93	0.33	0.33	0.33
Uniform Delay (d), s/veh	43.7	0.0	0.0	42.1	0.0	0.0	32.4	19.1	19.1	13.0	6.6	6.6
Incr Delay (d2), s/veh	2.3	0.0	0.0	0.4	0.0	0.0	1.7	0.4	0.4	0.5	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.0	0.0	0.0	5.0	0.0	0.0	2.9	8.7	8.9	2.6	7.4	7.7
LnGrp Delay(d),s/veh	46.0	0.0	0.0	42.5	0.0	0.0	34.1	19.5	19.6	13.4	7.0	7.0
LnGrp LOS	D			D			C	B	B	B	A	A
Approach Vol, veh/h		221			169			737			1284	
Approach Delay, s/veh		46.0			42.5			21.4			7.7	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		91.1		28.9		91.1		28.9
Change Period (Y+Rc), s		4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s		85.1		26.0		85.1		26.0
Max Q Clear Time (g_c+I1), s		37.1		17.6		31.0		13.3
Green Ext Time (p_c), s		8.3		1.2		8.3		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	450	150	90	550	80	140	420	130	90	580	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	474	158	95	579	84	147	442	137	95	611	242
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	630	209	111	689	100	329	1591	489	518	1478	585
Arrive On Green	0.08	0.24	0.23	0.12	0.44	0.43	0.79	0.79	0.78	0.40	0.40	0.39
Sat Flow, veh/h	1774	2611	864	1774	3102	449	644	2667	820	831	2478	980
Grp Volume(v), veh/h	126	320	312	95	330	333	147	292	287	95	436	417
Grp Sat Flow(s),veh/h/ln	1774	1770	1706	1774	1770	1781	644	1770	1717	831	1770	1689
Q Serve(g_s), s	8.4	20.1	20.4	6.3	19.8	20.0	17.4	5.2	5.4	9.4	21.3	21.4
Cycle Q Clear(g_c), s	8.4	20.1	20.4	6.3	19.8	20.0	38.8	5.2	5.4	14.8	21.3	21.4
Prop In Lane	1.00		0.51	1.00		0.25	1.00		0.48	1.00		0.58
Lane Grp Cap(c), veh/h	144	427	412	111	393	396	329	1055	1024	518	1055	1007
V/C Ratio(X)	0.87	0.75	0.76	0.86	0.84	0.84	0.45	0.28	0.28	0.18	0.41	0.41
Avail Cap(c_a), veh/h	148	678	654	237	767	772	329	1055	1024	518	1055	1007
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33	0.67	0.67	0.67
Upstream Filter(I)	0.44	0.44	0.44	0.67	0.67	0.67	0.85	0.85	0.85	0.31	0.31	0.31
Uniform Delay (d), s/veh	54.5	42.2	42.5	52.0	31.4	31.7	15.8	5.5	5.7	20.8	20.9	21.1
Incr Delay (d2), s/veh	20.3	0.4	0.5	4.9	1.3	1.3	3.7	0.6	0.6	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.9	9.8	9.7	3.2	9.7	9.8	3.4	2.7	2.7	2.2	10.5	10.1
LnGrp Delay(d),s/veh	74.8	42.6	43.0	56.9	32.7	33.0	19.5	6.1	6.3	21.1	21.3	21.5
LnGrp LOS	E	D	D	E	C	C	B	A	A	C	C	C
Approach Vol, veh/h		758			758			726			948	
Approach Delay, s/veh		48.1			35.9			8.9			21.3	
Approach LOS		D			D			A			C	

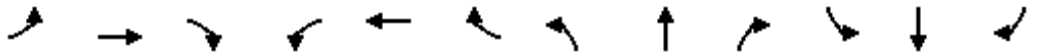
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		75.6	11.5	32.9		75.6	13.8	30.7
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	16.5	45.1		45.1	10.5	51.1
Max Q Clear Time (g_c+I1), s		40.8	8.3	22.4		23.4	10.4	22.0
Green Ext Time (p_c), s		2.4	0.0	3.7		5.6	0.0	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	660	160	120	610	200	70	410	100	120	800	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	105	695	168	126	642	211	74	432	105	126	842	116
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	851	206	143	819	269	219	1463	353	431	1617	223
Arrive On Green	0.07	0.30	0.29	0.16	0.63	0.61	0.52	0.52	0.51	0.17	0.17	0.17
Sat Flow, veh/h	1774	2824	682	1774	2615	859	584	2826	681	863	3123	430
Grp Volume(v), veh/h	105	435	428	126	434	419	74	269	268	126	477	481
Grp Sat Flow(s),veh/h/ln	1774	1770	1737	1774	1770	1704	584	1770	1737	863	1770	1783
Q Serve(g_s), s	7.0	27.4	27.4	8.3	21.6	21.8	12.7	10.4	10.6	15.8	29.4	29.5
Cycle Q Clear(g_c), s	7.0	27.4	27.4	8.3	21.6	21.8	42.1	10.4	10.6	26.4	29.4	29.5
Prop In Lane	1.00		0.39	1.00		0.50	1.00		0.39	1.00		0.24
Lane Grp Cap(c), veh/h	122	533	523	143	555	534	219	916	899	431	916	923
V/C Ratio(X)	0.86	0.82	0.82	0.88	0.78	0.78	0.34	0.29	0.30	0.29	0.52	0.52
Avail Cap(c_a), veh/h	133	782	767	177	826	795	219	916	899	431	916	923
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.35	0.35	0.35	0.34	0.34	0.34	0.75	0.75	0.75	0.91	0.91	0.91
Uniform Delay (d), s/veh	55.3	38.8	39.0	49.7	19.4	19.8	36.4	16.5	16.6	39.7	36.2	36.2
Incr Delay (d2), s/veh	15.4	0.9	1.0	11.8	0.5	0.5	3.1	0.6	0.6	1.6	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.0	13.4	13.3	4.5	10.5	10.1	2.2	5.2	5.2	4.0	15.0	15.1
LnGrp Delay(d),s/veh	70.7	39.8	40.0	61.6	19.9	20.4	39.5	17.1	17.2	41.3	38.1	38.1
LnGrp LOS	E	D	D	E	B	C	D	B	B	D	D	D
Approach Vol, veh/h		968			979			611			1084	
Approach Delay, s/veh		43.2			25.5			19.9			38.5	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		66.1	13.7	40.2		66.1	12.3	41.6
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		42.1	12.5	52.1		42.1	9.5	55.1
Max Q Clear Time (g_c+I1), s		44.1	10.3	29.4		31.5	9.0	23.8
Green Ext Time (p_c), s		0.0	0.0	5.9		4.2	0.0	6.2

Intersection Summary	
HCM 2010 Ctrl Delay	33.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	300	0	80	0	420	180	60	620	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor					1.00	1.00		0.95		1.00	0.95	
Frt					1.00	0.85		0.96		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1770	1583		3380		1770	3539	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1770	1583		3380		1770	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	316	0	84	0	442	189	63	653	0
RTOR Reduction (vph)	0	0	0	0	0	66	0	22	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	316	18	0	609	0	63	653	0
Turn Type				Split	NA	Perm		NA		Prot	NA	
Protected Phases				8	8			2		1	6	
Permitted Phases						8						
Actuated Green, G (s)					25.4	25.4		74.9		7.3	85.7	
Effective Green, g (s)					25.4	25.4		75.8		6.8	86.6	
Actuated g/C Ratio					0.21	0.21		0.63		0.06	0.72	
Clearance Time (s)					4.0	4.0		4.9		3.5	4.9	
Vehicle Extension (s)					1.5	1.5		1.5		1.5	1.5	
Lane Grp Cap (vph)					374	335		2135		100	2553	
v/s Ratio Prot					c0.18			c0.18		c0.04	0.18	
v/s Ratio Perm						0.01						
v/c Ratio					0.84	0.05		0.29		0.63	0.26	
Uniform Delay, d1					45.4	37.7		9.9		55.4	5.7	
Progression Factor					0.64	0.66		0.47		1.20	0.51	
Incremental Delay, d2					14.3	0.0		0.3		8.6	0.2	
Delay (s)					43.4	24.9		4.9		75.2	3.1	
Level of Service					D	C		A		E	A	
Approach Delay (s)		0.0			39.5			4.9			9.5	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	80	340	30	50	20	250	560	40	60	860	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	84	84	358	32	53	21	263	589	42	63	905	53
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	212	367	52	86	117	237	1828	815	73	1442	84
Arrive On Green	0.23	0.23	0.23	0.08	0.08	0.08	0.27	1.00	1.00	0.08	0.85	0.83
Sat Flow, veh/h	909	909	1573	688	1140	1552	1774	3539	1579	1774	3397	199
Grp Volume(v), veh/h	168	0	358	85	0	21	263	589	42	63	471	487
Grp Sat Flow(s),veh/h/ln	1817	0	1573	1828	0	1552	1774	1770	1579	1774	1770	1827
Q Serve(g_s), s	9.4	0.0	27.1	5.4	0.0	1.5	16.0	0.0	0.0	4.2	10.3	10.4
Cycle Q Clear(g_c), s	9.4	0.0	27.1	5.4	0.0	1.5	16.0	0.0	0.0	4.2	10.3	10.4
Prop In Lane	0.50		1.00	0.38		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	424	0	367	138	0	117	237	1828	815	73	751	776
V/C Ratio(X)	0.40	0.00	0.98	0.62	0.00	0.18	1.11	0.32	0.05	0.86	0.63	0.63
Avail Cap(c_a), veh/h	424	0	367	411	0	349	237	1828	815	145	751	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.89	0.89	0.89	0.84	0.84	0.84
Uniform Delay (d), s/veh	38.9	0.0	45.7	53.8	0.0	52.0	44.0	0.0	0.0	54.7	6.0	6.1
Incr Delay (d2), s/veh	0.2	0.0	40.1	1.7	0.0	0.3	88.7	0.4	0.1	8.8	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.7	0.0	15.8	2.8	0.0	0.7	13.6	0.1	0.0	2.2	5.4	5.6
LnGrp Delay(d),s/veh	39.1	0.0	85.8	55.4	0.0	52.3	132.7	0.4	0.1	63.5	9.3	9.3
LnGrp LOS	D		F	E		D	F	A	A	E	A	A
Approach Vol, veh/h		526			106			894			1021	
Approach Delay, s/veh		70.9			54.8			39.3			12.6	
Approach LOS		E			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	66.0		32.0	20.0	54.9		13.1
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	10.3	38.3		28.0	16.5	32.1		27.0
Max Q Clear Time (g_c+I1), s	6.2	2.0		29.1	18.0	12.4		7.4
Green Ext Time (p_c), s	0.0	5.3		0.0	0.0	4.9		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	90	60	20	100	30	40	530	10	60	890	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	211	95	63	21	105	32	42	558	11	63	937	274
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	196	200	132	67	294	301	46	2367	47	74	1842	537
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.05	1.00	1.00	0.04	0.68	0.67
Sat Flow, veh/h	1239	1042	691	165	1533	1568	1774	3550	70	1774	2700	787
Grp Volume(v), veh/h	211	0	158	126	0	32	42	278	291	63	613	598
Grp Sat Flow(s),veh/h/ln	1239	0	1733	1698	0	1568	1774	1770	1850	1774	1770	1718
Q Serve(g_s), s	13.2	0.0	9.7	0.1	0.0	2.0	2.8	0.0	0.0	4.2	20.2	20.5
Cycle Q Clear(g_c), s	23.0	0.0	9.7	9.8	0.0	2.0	2.8	0.0	0.0	4.2	20.2	20.5
Prop In Lane	1.00		0.40	0.17		1.00	1.00		0.04	1.00		0.46
Lane Grp Cap(c), veh/h	196	0	332	360	0	301	46	1180	1234	74	1207	1172
V/C Ratio(X)	1.08	0.00	0.48	0.35	0.00	0.11	0.90	0.24	0.24	0.86	0.51	0.51
Avail Cap(c_a), veh/h	196	0	332	360	0	301	118	1180	1234	118	1207	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.97	0.97	0.97	0.61	0.61	0.61
Uniform Delay (d), s/veh	55.4	0.0	43.1	42.1	0.0	40.0	56.7	0.0	0.0	57.2	9.3	9.4
Incr Delay (d2), s/veh	85.6	0.0	0.4	0.2	0.0	0.1	19.7	0.5	0.4	10.8	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.2	0.0	4.7	3.6	0.0	0.9	1.6	0.1	0.2	2.3	10.0	10.0
LnGrp Delay(d),s/veh	141.0	0.0	43.5	42.3	0.0	40.1	76.4	0.5	0.4	67.9	10.2	10.4
LnGrp LOS	F		D	D		D	E	A	A	E	B	B
Approach Vol, veh/h		369			158			611			1274	
Approach Delay, s/veh		99.3			41.8			5.7			13.2	
Approach LOS		F			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	84.0		27.0	7.1	85.9		27.0
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	8.5	76.1		23.0	8.5	76.1		23.0
Max Q Clear Time (g_c+I1), s	6.2	2.0		25.0	4.8	22.5		11.8
Green Ext Time (p_c), s	0.0	6.2		0.0	0.0	6.2		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	370	150	360	330	80	330
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863
Adj Flow Rate, veh/h	389	158	379	347	84	347
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1208	484	396	1391	331	642
Arrive On Green	0.49	0.48	0.37	1.00	0.19	0.18
Sat Flow, veh/h	2558	988	1774	1863	1774	1583
Grp Volume(v), veh/h	278	269	379	347	84	347
Grp Sat Flow(s),veh/h/ln	1770	1684	1774	1863	1774	1583
Q Serve(g_s), s	11.4	11.8	25.0	0.0	4.9	20.0
Cycle Q Clear(g_c), s	11.4	11.8	25.0	0.0	4.9	20.0
Prop In Lane		0.59	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	867	825	396	1391	331	642
V/C Ratio(X)	0.32	0.33	0.96	0.25	0.25	0.54
Avail Cap(c_a), veh/h	867	825	621	1391	473	769
HCM Platoon Ratio	1.00	1.00	1.67	1.67	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.94	0.94	0.97	0.97
Uniform Delay (d), s/veh	18.5	18.8	37.1	0.0	41.7	27.1
Incr Delay (d2), s/veh	1.0	1.1	15.2	0.4	0.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.8	5.7	13.8	0.2	2.4	8.8
LnGrp Delay(d),s/veh	19.5	19.9	52.2	0.4	41.8	27.4
LnGrp LOS	B	B	D	A	D	C
Approach Vol, veh/h	547			726	431	
Approach Delay, s/veh	19.7			27.5	30.2	
Approach LOS	B			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	30.8	62.8				93.6		26.4
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	42.5	32.7				78.7		32.0
Max Q Clear Time (g_c+I1), s	27.0	13.8				2.0		22.0
Green Ext Time (p_c), s	0.3	7.4				10.4		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	25.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	690	370	300	520	50	180	10	170	20	10	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	726	389	316	547	53	197	0	179	21	11	11
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	1817	845	231	3104	297	524	0	418	83	39	39
Arrive On Green	0.01	0.54	0.52	0.13	0.66	0.65	0.15	0.00	0.14	0.05	0.05	0.04
Sat Flow, veh/h	1774	3390	1576	1774	4718	452	3548	0	1562	1774	840	840
Grp Volume(v), veh/h	21	726	389	316	391	209	197	0	179	21	0	22
Grp Sat Flow(s),veh/h/ln	1774	1695	1576	1774	1695	1780	1774	0	1562	1774	0	1679
Q Serve(g_s), s	1.0	14.5	17.8	15.0	5.1	5.3	5.8	0.0	10.9	1.3	0.0	1.5
Cycle Q Clear(g_c), s	1.0	14.5	17.8	15.0	5.1	5.3	5.8	0.0	10.9	1.3	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.25	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	15	1817	845	231	2231	1171	524	0	418	83	0	79
V/C Ratio(X)	1.41	0.40	0.46	1.37	0.18	0.18	0.38	0.00	0.43	0.25	0.00	0.28
Avail Cap(c_a), veh/h	123	1817	845	231	2231	1171	956	0	609	123	0	117
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.78	0.78	0.92	0.92	0.92	0.98	0.00	0.98	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	15.8	16.9	50.0	7.6	7.7	44.2	0.0	35.0	52.9	0.0	53.2
Incr Delay (d2), s/veh	207.1	0.5	1.4	187.9	0.2	0.3	0.6	0.0	0.9	0.6	0.0	0.7
Initial Q Delay(d3),s/veh	20.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	6.9	8.0	19.4	2.4	2.7	2.9	0.0	4.8	0.7	0.0	0.7
LnGrp Delay(d),s/veh	284.2	16.3	18.3	237.9	7.8	8.0	44.8	0.0	35.9	53.5	0.0	53.9
LnGrp LOS	F	B	B	F	A	A	D		D	D		D
Approach Vol, veh/h		1136			916			376			43	
Approach Delay, s/veh		21.9			87.2			40.6			53.7	
Approach LOS		C			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.0	65.6		9.4	5.0	79.7		21.0
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	15.5	43.7		7.1	8.5	50.7		30.1
Max Q Clear Time (g_c+I1), s	17.0	19.8		3.5	3.0	7.3		12.9
Green Ext Time (p_c), s	0.0	16.9		0.0	0.0	25.0		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	49.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	850	10	10	700	20	10	0	10	80	0	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	21	895	11	11	737	21	11	0	11	84	0	295
Adj No. of Lanes	1	3	0	1	3	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	2472	30	446	2425	69	305	50	189	610	0	435
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.28	0.00	0.28	0.28	0.00	0.28
Sat Flow, veh/h	696	5175	64	607	5077	144	504	183	686	1406	0	1578
Grp Volume(v), veh/h	21	586	320	11	491	267	22	0	0	84	0	295
Grp Sat Flow(s),veh/h/ln	696	1695	1849	607	1695	1831	1372	0	0	1406	0	1578
Q Serve(g_s), s	0.6	3.5	3.5	0.4	2.9	2.9	0.0	0.0	0.0	1.1	0.0	5.4
Cycle Q Clear(g_c), s	3.5	3.5	3.5	3.9	2.9	2.9	0.3	0.0	0.0	1.4	0.0	5.4
Prop In Lane	1.00		0.03	1.00		0.08	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	493	1619	883	446	1619	875	545	0	0	610	0	435
V/C Ratio(X)	0.04	0.36	0.36	0.02	0.30	0.30	0.04	0.00	0.00	0.14	0.00	0.68
Avail Cap(c_a), veh/h	632	2300	1255	568	2300	1242	982	0	0	1085	0	974
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.2	5.3	5.3	6.6	5.2	5.2	8.6	0.0	0.0	9.0	0.0	10.5
Incr Delay (d2), s/veh	0.0	0.1	0.3	0.0	0.1	0.2	0.0	0.0	0.0	0.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.1	1.7	1.8	0.1	1.3	1.5	0.1	0.0	0.0	0.6	0.0	2.5
LnGrp Delay(d),s/veh	6.3	5.5	5.6	6.6	5.3	5.4	8.6	0.0	0.0	9.1	0.0	12.3
LnGrp LOS	A	A	A	A	A	A	A			A		B
Approach Vol, veh/h		927			769			22			379	
Approach Delay, s/veh		5.5			5.3			8.6			11.6	
Approach LOS		A			A			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		12.9		19.5		12.9		19.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		22.0		20.0		22.0
Max Q Clear Time (g_c+I1), s		2.3		5.5		7.4		5.9
Green Ext Time (p_c), s		1.5		9.5		1.3		9.4

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A

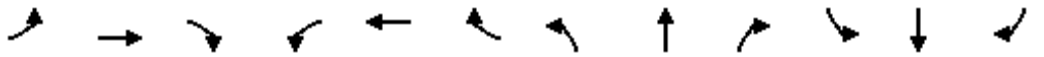
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	290	430	10	10	360	390	10	10	10	640	10	210
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	305	453	8	11	379	137	11	11	0	682	0	76
Adj No. of Lanes	1	3	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	3502	62	492	1605	713	31	31	0	601	0	268
Arrive On Green	0.19	0.68	0.67	0.45	0.45	0.45	0.03	0.03	0.00	0.17	0.00	0.17
Sat Flow, veh/h	1774	5146	91	923	3539	1571	909	909	0	3548	0	1581
Grp Volume(v), veh/h	305	298	163	11	379	137	22	0	0	682	0	76
Grp Sat Flow(s),veh/h/ln	1774	1695	1846	923	1770	1571	1817	0	0	1774	0	1581
Q Serve(g_s), s	16.6	3.0	3.0	0.6	6.4	5.1	1.2	0.0	0.0	16.6	0.0	4.1
Cycle Q Clear(g_c), s	16.6	3.0	3.0	0.6	6.4	5.1	1.2	0.0	0.0	16.6	0.0	4.1
Prop In Lane	1.00		0.05	1.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	2307	1256	492	1605	713	61	0	0	601	0	268
V/C Ratio(X)	0.92	0.13	0.13	0.02	0.24	0.19	0.36	0.00	0.00	1.13	0.00	0.28
Avail Cap(c_a), veh/h	489	2307	1256	492	1605	713	148	0	0	601	0	268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.99	0.99	0.99	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	39.2	5.5	5.5	14.8	16.4	16.0	46.3	0.0	0.0	40.7	0.0	35.5
Incr Delay (d2), s/veh	14.0	0.1	0.2	0.1	0.3	0.6	1.3	0.0	0.0	79.8	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.4	1.4	1.6	0.2	3.2	2.3	0.6	0.0	0.0	14.8	0.0	1.8
LnGrp Delay(d),s/veh	53.2	5.6	5.7	14.9	16.7	16.6	47.6	0.0	0.0	120.5	0.0	36.1
LnGrp LOS	D	A	A	B	B	B	D			F		D
Approach Vol, veh/h		766			527			22			758	
Approach Delay, s/veh		24.6			16.7			47.6			112.0	
Approach LOS		C			B			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		70.7		20.0	22.2	48.5		7.3
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		4.6
Max Green Setting (Gmax), s		60.7		16.0	27.5	29.7		7.4
Max Q Clear Time (g_c+I1), s		5.0		18.6	18.6	8.4		3.2
Green Ext Time (p_c), s		11.6		0.0	0.2	8.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	54.8
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



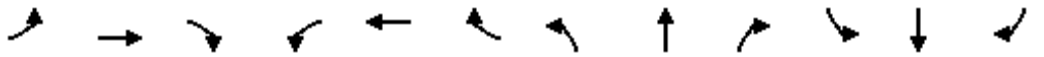
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	80	130	70	110	110	40	1040	40	20	1600	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	42	84	137	74	116	116	42	1095	42	21	1684	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	77	144	202	109	156	139	439	2972	114	25	1782	34
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.51	1.00	1.00	0.00	0.12	0.12
Sat Flow, veh/h	159	536	755	268	581	518	1714	4854	186	1714	4963	94
Grp Volume(v), veh/h	263	0	0	306	0	0	42	739	398	21	1112	604
Grp Sat Flow(s),veh/h/ln	1450	0	0	1367	0	0	1714	1638	1764	1714	1638	1781
Q Serve(g_s), s	0.0	0.0	0.0	6.8	0.0	0.0	1.5	0.0	0.0	1.5	40.4	40.4
Cycle Q Clear(g_c), s	19.0	0.0	0.0	25.8	0.0	0.0	1.5	0.0	0.0	1.5	40.4	40.4
Prop In Lane	0.16		0.52	0.24		0.38	1.00		0.11	1.00		0.05
Lane Grp Cap(c), veh/h	424	0	0	404	0	0	439	2006	1080	25	1177	640
V/C Ratio(X)	0.62	0.00	0.00	0.76	0.00	0.00	0.10	0.37	0.37	0.84	0.94	0.95
Avail Cap(c_a), veh/h	701	0	0	677	0	0	439	2006	1080	250	1177	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.97	0.97	0.97	0.71	0.71	0.71
Uniform Delay (d), s/veh	38.7	0.0	0.0	41.4	0.0	0.0	22.1	0.0	0.0	59.6	51.7	51.7
Incr Delay (d2), s/veh	1.5	0.0	0.0	2.9	0.0	0.0	0.1	0.5	0.9	37.5	12.4	19.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.9	0.0	0.0	9.9	0.0	0.0	0.7	0.1	0.3	1.0	20.4	23.4
LnGrp Delay(d),s/veh	40.2	0.0	0.0	44.3	0.0	0.0	22.2	0.5	0.9	97.1	64.1	71.0
LnGrp LOS	D			D			C	A	A	F	E	E
Approach Vol, veh/h		263			306			1179			1737	
Approach Delay, s/veh		40.2			44.3			1.4			66.9	
Approach LOS		D			D			A			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	78.4		36.4	35.6	48.0		36.4
Change Period (Y+Rc), s	3.5	4.9		* 4.2	4.9	* 4.9		* 4.2
Max Green Setting (Gmax), s	17.5	35.1		* 55	9.5	* 43		* 55
Max Q Clear Time (g_c+I1), s	3.5	2.0		21.0	3.5	42.4		27.8
Green Ext Time (p_c), s	0.0	8.7		4.5	0.1	0.6		4.3

Intersection Summary	
HCM 2010 Ctrl Delay	40.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	10	30	20	10	60	10	1150	10	40	1960	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	53	11	32	21	11	63	11	1211	11	42	2063	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	115	27	48	60	30	104	13	3819	35	53	3907	61
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.02	1.00	1.00	0.06	1.00	1.00
Sat Flow, veh/h	704	282	493	239	304	1070	1714	5022	46	1714	4985	77
Grp Volume(v), veh/h	96	0	0	95	0	0	11	790	432	42	1355	740
Grp Sat Flow(s),veh/h/ln	1479	0	0	1614	0	0	1714	1638	1792	1714	1638	1786
Q Serve(g_s), s	0.7	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	7.3	0.0	0.0	6.5	0.0	0.0	0.8	0.0	0.0	2.9	0.0	0.0
Prop In Lane	0.55		0.33	0.22		0.66	1.00		0.03	1.00		0.04
Lane Grp Cap(c), veh/h	190	0	0	193	0	0	13	2491	1363	53	2567	1400
V/C Ratio(X)	0.51	0.00	0.00	0.49	0.00	0.00	0.84	0.32	0.32	0.79	0.53	0.53
Avail Cap(c_a), veh/h	408	0	0	427	0	0	121	2491	1363	121	2567	1400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.58	0.58	0.58	0.69	0.69	0.69
Uniform Delay (d), s/veh	52.1	0.0	0.0	51.9	0.0	0.0	59.0	0.0	0.0	55.9	0.0	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.0	1.9	0.0	0.0	51.4	0.2	0.4	16.6	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.2	0.0	0.0	3.1	0.0	0.0	0.5	0.1	0.1	1.6	0.2	0.4
LnGrp Delay(d),s/veh	54.2	0.0	0.0	53.9	0.0	0.0	110.4	0.2	0.4	72.5	0.5	1.0
LnGrp LOS	D			D			F	A	A	E	A	A
Approach Vol, veh/h		96			95			1233			2137	
Approach Delay, s/veh		54.2			53.9			1.2			2.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	96.6		16.2	4.4	99.3		16.2
Change Period (Y+Rc), s	3.5	5.3		4.6	3.5	5.3		4.6
Max Green Setting (Gmax), s	8.5	67.7		30.4	8.5	67.7		30.4
Max Q Clear Time (g_c+I1), s	4.9	2.0		9.3	2.8	2.0		8.5
Green Ext Time (p_c), s	0.0	48.6		1.1	0.0	48.6		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	4.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	110	50	190	160	70	70	840	140	140	1430	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.92		0.80	0.89		0.80	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	137	116	53	200	168	74	74	884	147	147	1505	168
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	122	201	92	175	204	90	94	2119	350	261	2746	306
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.06	0.50	0.50	0.15	0.61	0.61
Sat Flow, veh/h	1002	1078	493	1036	1094	482	1714	4229	699	1714	4466	498
Grp Volume(v), veh/h	137	0	169	200	0	242	74	684	347	147	1104	569
Grp Sat Flow(s),veh/h/ln	1002	0	1571	1036	0	1576	1714	1638	1652	1714	1638	1688
Q Serve(g_s), s	3.3	0.0	8.4	7.6	0.0	12.7	3.7	11.3	11.4	6.8	16.8	16.9
Cycle Q Clear(g_c), s	16.0	0.0	8.4	16.0	0.0	12.7	3.7	11.3	11.4	6.8	16.8	16.9
Prop In Lane	1.00		0.31	1.00		0.31	1.00		0.42	1.00		0.30
Lane Grp Cap(c), veh/h	122	0	292	175	0	293	94	1642	828	261	2014	1038
V/C Ratio(X)	1.12	0.00	0.58	1.14	0.00	0.83	0.78	0.42	0.42	0.56	0.55	0.55
Avail Cap(c_a), veh/h	122	0	292	175	0	293	189	1642	828	289	2014	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.44	0.00	0.44	0.89	0.89	0.89	0.69	0.69	0.69
Uniform Delay (d), s/veh	42.5	0.0	31.9	41.0	0.0	33.7	40.1	13.5	13.5	33.8	9.6	9.6
Incr Delay (d2), s/veh	117.6	0.0	2.8	90.3	0.0	8.3	11.9	0.7	1.4	1.4	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.9	0.0	3.9	8.5	0.0	6.2	2.0	5.2	5.5	3.3	7.7	8.2
LnGrp Delay(d),s/veh	160.1	0.0	34.7	131.3	0.0	42.0	52.1	14.2	14.9	35.2	10.4	11.1
LnGrp LOS	F		C	F		D	D	B	B	D	B	B
Approach Vol, veh/h		306			442			1105			1820	
Approach Delay, s/veh		90.9			82.4			17.0			12.6	
Approach LOS		F			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.0	48.0		20.0	8.2	57.8		20.0
Change Period (Y+Rc), s	4.9	* 4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	14.5	* 43		16.0	9.5	48.1		16.0
Max Q Clear Time (g_c+I1), s	8.8	13.4		18.0	5.7	18.9		18.0
Green Ext Time (p_c), s	0.3	7.4		0.0	0.0	14.7		0.0

Intersection Summary			
HCM 2010 Ctrl Delay		28.8	
HCM 2010 LOS		C	

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	30	10	60	40	130	120	940	40	60	1620	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.68	0.71		0.70	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	53	32	11	63	42	137	126	989	42	63	1705	189
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	210	282	97	96	65	161	107	2892	123	79	2610	288
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.06	0.60	0.60	0.09	1.00	1.00
Sat Flow, veh/h	1048	1128	388	233	260	644	1714	4830	205	1714	4481	495
Grp Volume(v), veh/h	53	0	43	242	0	0	126	670	361	63	1245	649
Grp Sat Flow(s),veh/h/ln	1048	0	1516	1138	0	0	1714	1638	1759	1714	1638	1700
Q Serve(g_s), s	0.0	0.0	2.6	18.5	0.0	0.0	7.5	12.4	12.4	4.3	0.0	0.0
Cycle Q Clear(g_c), s	11.0	0.0	2.6	24.1	0.0	0.0	7.5	12.4	12.4	4.3	0.0	0.0
Prop In Lane	1.00		0.26	0.26		0.57	1.00		0.12	1.00		0.29
Lane Grp Cap(c), veh/h	210	0	379	322	0	0	107	1961	1053	79	1908	990
V/C Ratio(X)	0.25	0.00	0.11	0.75	0.00	0.00	1.18	0.34	0.34	0.79	0.65	0.66
Avail Cap(c_a), veh/h	217	0	389	330	0	0	107	1961	1053	107	1908	990
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.83	0.83	0.83	0.67	0.67	0.67
Uniform Delay (d), s/veh	37.9	0.0	34.7	42.4	0.0	0.0	56.3	12.1	12.2	53.9	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.1	9.1	0.0	0.0	134.3	0.4	0.7	17.4	1.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	0.0	1.1	8.4	0.0	0.0	7.5	5.7	6.2	2.4	0.3	0.6
LnGrp Delay(d),s/veh	38.5	0.0	34.9	51.5	0.0	0.0	190.5	12.5	12.9	71.3	1.2	2.3
LnGrp LOS	D		C	D			F	B	B	E	A	A
Approach Vol, veh/h		96			242			1157			1957	
Approach Delay, s/veh		36.9			51.5			32.0			3.8	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	76.7		34.2	11.0	74.8		34.2
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	69.1		* 31	7.5	69.1		* 31
Max Q Clear Time (g_c+I1), s	6.3	14.4		13.0	9.5	2.0		26.1
Green Ext Time (p_c), s	0.0	38.0		2.4	0.0	43.5		1.0

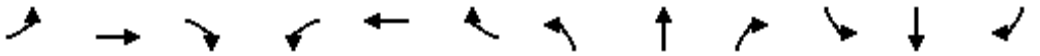
Intersection Summary	
HCM 2010 Ctrl Delay	17.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	100	100	1090	60	100	1390
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2		4.9		3.5	4.9
Lane Util. Factor	1.00		0.91		1.00	0.91
Frpb, ped/bikes	0.98		1.00		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.93		0.99		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1600		4876		1710	4914
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1600		4876		1710	4914
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	105	105	1147	63	105	1463
RTOR Reduction (vph)	33	0	4	0	0	0
Lane Group Flow (vph)	177	0	1206	0	105	1463
Confl. Peds. (#/hr)		27				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Prot		NA		Prot	NA
Protected Phases	4		2 9		1	6
Permitted Phases						
Actuated Green, G (s)	18.4		60.5		13.5	54.8
Effective Green, g (s)	18.4		60.5		13.5	54.8
Actuated g/C Ratio	0.15		0.50		0.11	0.46
Clearance Time (s)	4.2				3.5	4.9
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	245		2458		192	2244
v/s Ratio Prot	c0.11		c0.25		c0.06	c0.30
v/s Ratio Perm						
v/c Ratio	0.72		0.49		0.55	0.65
Uniform Delay, d1	48.4		19.6		50.4	25.2
Progression Factor	1.00		0.17		0.93	0.80
Incremental Delay, d2	10.0		0.6		2.5	1.2
Delay (s)	58.4		3.8		49.2	21.3
Level of Service	E		A		D	C
Approach Delay (s)	58.4		3.8			23.1
Approach LOS	E		A			C

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	0	130	20	10	10	70	1060	10	10	1330	150
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.93		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1710	1530		1710	1665		1710	4903		1710	4808	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1710	1530		1710	1665		1710	4903		1710	4808	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	84	0	137	21	11	11	74	1116	11	11	1400	158
RTOR Reduction (vph)	0	124	0	0	9	0	0	1	0	0	9	0
Lane Group Flow (vph)	84	13	0	21	13	0	74	1126	0	11	1549	0
Confl. Peds. (#/hr)							12		17	17		12
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6 10	
Permitted Phases												
Actuated Green, G (s)	11.2	11.2		18.4	18.4		9.3	49.9		13.5	64.7	
Effective Green, g (s)	11.2	11.2		18.4	18.4		9.3	49.9		13.5	64.7	
Actuated g/C Ratio	0.09	0.09		0.15	0.15		0.08	0.42		0.11	0.54	
Clearance Time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	159	142		262	255		132	2038		192	2592	
v/s Ratio Prot	c0.05	0.01		c0.01	0.01		c0.04	0.23		0.01	c0.32	
v/s Ratio Perm												
v/c Ratio	0.53	0.09		0.08	0.05		0.56	0.55		0.06	0.60	
Uniform Delay, d1	51.9	49.7		43.5	43.3		53.4	26.6		47.6	18.8	
Progression Factor	1.00	1.00		1.00	1.00		1.40	0.29		1.75	0.10	
Incremental Delay, d2	3.1	0.3		0.1	0.1		4.8	1.0		0.1	0.8	
Delay (s)	55.0	50.0		43.7	43.4		79.7	8.7		83.5	2.7	
Level of Service	E	D		D	D		E	A		F	A	
Approach Delay (s)		51.9			43.5			13.1			3.3	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

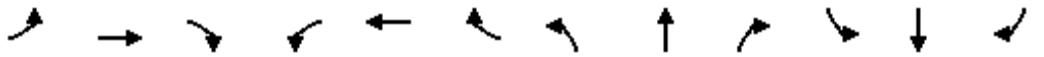
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	220	90	150	240	100	80	930	180	90	1420	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	126	232	95	158	253	105	84	979	189	95	1495	53
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	157	478	189	179	484	194	106	1517	292	304	2412	86
Arrive On Green	0.09	0.20	0.20	0.10	0.21	0.21	0.02	0.12	0.12	0.36	0.99	0.99
Sat Flow, veh/h	1714	2372	937	1714	2360	948	1714	4128	795	1714	4871	173
Grp Volume(v), veh/h	126	165	162	158	181	177	84	776	392	95	1005	543
Grp Sat Flow(s),veh/h/ln	1714	1710	1599	1714	1710	1597	1714	1638	1647	1714	1638	1768
Q Serve(g_s), s	8.6	10.2	10.8	10.9	11.3	11.9	5.9	27.1	27.2	4.8	0.9	0.9
Cycle Q Clear(g_c), s	8.6	10.2	10.8	10.9	11.3	11.9	5.9	27.1	27.2	4.8	0.9	0.9
Prop In Lane	1.00		0.59	1.00		0.59	1.00		0.48	1.00		0.10
Lane Grp Cap(c), veh/h	157	345	322	179	351	328	106	1204	605	304	1622	875
V/C Ratio(X)	0.80	0.48	0.50	0.88	0.52	0.54	0.80	0.64	0.65	0.31	0.62	0.62
Avail Cap(c_a), veh/h	179	504	472	179	504	471	121	1204	605	304	1622	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.81	0.81	0.81	0.85	0.85	0.85	0.94	0.94	0.94	0.78	0.78	0.78
Uniform Delay (d), s/veh	53.5	42.3	42.6	53.0	42.4	42.6	58.0	45.3	45.3	33.4	0.3	0.3
Incr Delay (d2), s/veh	17.2	0.8	1.0	33.1	1.0	1.2	25.3	2.5	5.0	0.5	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.8	4.9	4.9	6.8	5.4	5.4	3.5	12.7	13.3	2.3	0.5	0.8
LnGrp Delay(d),s/veh	70.7	43.2	43.5	86.1	43.4	43.8	83.4	47.8	50.3	33.8	1.7	2.9
LnGrp LOS	E	D	D	F	D	D	F	D	D	C	A	A
Approach Vol, veh/h		453			516			1252			1643	
Approach Delay, s/veh		51.0			56.6			50.9			3.9	
Approach LOS		D			E			D			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.2	49.0	16.0	28.8	10.9	64.3	15.6	29.2
Change Period (Y+Rc), s	4.9	* 4.9	3.5	4.6	3.5	4.9	4.6	* 4.6
Max Green Setting (Gmax), s	11.5	* 44	12.5	35.4	8.5	47.1	12.5	* 35
Max Q Clear Time (g_c+I1), s	6.8	29.2	12.9	12.8	7.9	2.9	10.6	13.9
Green Ext Time (p_c), s	2.6	6.5	0.0	2.2	0.0	14.9	0.4	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	31.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	10	30	20	30	50	20	1020	30	30	1700	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	42	11	32	21	32	53	21	1074	32	32	1789	105
Adj No. of Lanes	0	1	1	0	1	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	168	38	182	59	72	95	25	3695	110	40	3748	1134
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.03	1.00	1.00	0.05	1.00	1.00
Sat Flow, veh/h	935	309	1496	192	591	783	1714	4899	146	1714	4914	1487
Grp Volume(v), veh/h	53	0	32	106	0	0	21	718	388	32	1789	105
Grp Sat Flow(s),veh/h/ln	1245	0	1496	1565	0	0	1714	1638	1769	1714	1638	1487
Q Serve(g_s), s	0.0	0.0	2.3	2.1	0.0	0.0	1.5	0.0	0.0	2.2	0.0	0.0
Cycle Q Clear(g_c), s	4.9	0.0	2.3	7.5	0.0	0.0	1.5	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.79		1.00	0.20		0.50	1.00		0.08	1.00		1.00
Lane Grp Cap(c), veh/h	206	0	182	227	0	0	25	2471	1334	40	3748	1134
V/C Ratio(X)	0.26	0.00	0.18	0.47	0.00	0.00	0.84	0.29	0.29	0.81	0.48	0.09
Avail Cap(c_a), veh/h	498	0	511	562	0	0	121	2471	1334	121	3748	1134
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.89	0.89	0.89	0.78	0.78	0.78
Uniform Delay (d), s/veh	48.3	0.0	47.3	49.5	0.0	0.0	58.1	0.0	0.0	57.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.5	1.5	0.0	0.0	45.0	0.3	0.5	24.8	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	0.0	1.0	3.4	0.0	0.0	1.0	0.1	0.2	1.3	0.1	0.0
LnGrp Delay(d),s/veh	49.0	0.0	47.7	51.0	0.0	0.0	103.1	0.3	0.5	81.8	0.3	0.1
LnGrp LOS	D		D	D			F	A	A	F	A	A
Approach Vol, veh/h		85			106			1127			1926	
Approach Delay, s/veh		48.5			51.0			2.3			1.7	
Approach LOS		D			D			A			A	

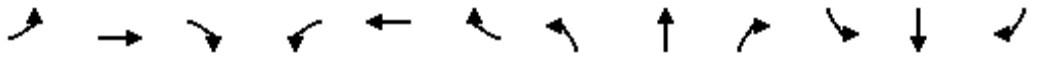
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.3	95.1		18.6	5.2	96.1		18.6
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	8.5	58.4		41.0	8.5	58.4		41.0
Max Q Clear Time (g_c+I1), s	4.2	2.0		6.9	3.5	2.0		9.5
Green Ext Time (p_c), s	0.0	40.1		1.1	0.0	40.1		1.1

Intersection Summary	
HCM 2010 Ctrl Delay	4.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	330	90	80	470	200	30	180	40	120	570	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	347	0	84	495	211	32	189	42	126	600	74
Adj No. of Lanes	0	2	1	0	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	949	560	121	640	300	33	1342	292	145	1673	206
Arrive On Green	0.35	0.35	0.00	0.35	0.35	0.35	0.02	0.46	0.46	0.08	0.53	0.52
Sat Flow, veh/h	81	2682	1583	238	1807	847	1774	2891	629	1774	3172	390
Grp Volume(v), veh/h	158	210	0	407	0	383	32	114	117	126	334	340
Grp Sat Flow(s),veh/h/ln	1153	1610	1583	1357	0	1536	1774	1770	1750	1774	1770	1793
Q Serve(g_s), s	1.5	11.6	0.0	23.5	0.0	25.8	2.2	4.4	4.6	8.4	13.2	13.3
Cycle Q Clear(g_c), s	27.3	11.6	0.0	35.1	0.0	25.8	2.2	4.4	4.6	8.4	13.2	13.3
Prop In Lane	0.13		1.00	0.21		0.55	1.00		0.36	1.00		0.22
Lane Grp Cap(c), veh/h	442	570	560	517	0	544	33	821	812	145	933	946
V/C Ratio(X)	0.36	0.37	0.00	0.79	0.00	0.70	0.97	0.14	0.14	0.87	0.36	0.36
Avail Cap(c_a), veh/h	617	751	739	696	0	717	133	821	812	310	933	946
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.00	0.83	0.00	0.83	0.97	0.97	0.97	0.71	0.71	0.71
Uniform Delay (d), s/veh	28.2	28.8	0.0	38.2	0.0	33.6	58.8	18.4	18.6	54.4	16.5	16.6
Incr Delay (d2), s/veh	0.2	0.1	0.0	2.5	0.0	0.9	36.6	0.3	0.4	4.3	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	5.2	0.0	13.0	0.0	11.1	1.4	2.2	2.3	4.3	6.6	6.7
LnGrp Delay(d),s/veh	28.3	28.9	0.0	40.7	0.0	34.5	95.4	18.8	18.9	58.7	17.3	17.4
LnGrp LOS	C	C		D		C	F	B	B	E	B	B
Approach Vol, veh/h		368			790			263			800	
Approach Delay, s/veh		28.7			37.7			28.2			23.8	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	59.7		46.5	6.2	67.3		46.5
Change Period (Y+Rc), s	3.5	4.9		4.9	3.5	4.9		4.9
Max Green Setting (Gmax), s	21.5	30.1		55.1	9.5	42.1		55.1
Max Q Clear Time (g_c+I1), s	10.4	6.6		29.3	4.2	15.3		37.1
Green Ext Time (p_c), s	0.1	2.4		4.9	0.0	2.4		4.5

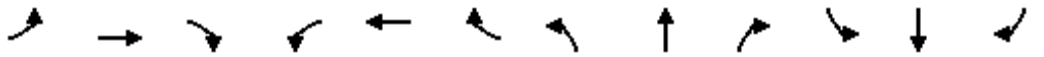
Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	70	100	70	30	130	40	1020	90	90	1760	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1824	1863	1863	1863	1863	1863	1863	1863	1824
Adj Flow Rate, veh/h	53	74	105	74	32	137	42	1074	95	95	1853	32
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	74	101	117	167	64	405	89	2069	921	112	3076	53
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.05	0.58	0.58	0.06	0.60	0.59
Sat Flow, veh/h	155	389	450	463	248	1556	1774	3539	1577	1774	5148	89
Grp Volume(v), veh/h	232	0	0	106	0	137	42	1074	95	95	1220	665
Grp Sat Flow(s),veh/h/ln	994	0	0	711	0	1556	1774	1770	1577	1774	1695	1846
Q Serve(g_s), s	13.1	0.0	0.0	0.0	0.0	9.3	3.0	23.5	3.5	6.9	29.4	29.5
Cycle Q Clear(g_c), s	30.9	0.0	0.0	17.8	0.0	9.3	3.0	23.5	3.5	6.9	29.4	29.5
Prop In Lane	0.23		0.45	0.70		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	293	0	0	232	0	405	89	2069	921	112	2025	1103
V/C Ratio(X)	0.79	0.00	0.00	0.46	0.00	0.34	0.47	0.52	0.10	0.85	0.60	0.60
Avail Cap(c_a), veh/h	339	0	0	275	0	455	150	2069	921	218	2025	1103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	48.3	0.0	0.0	41.5	0.0	39.0	60.1	16.1	11.9	60.3	16.5	16.5
Incr Delay (d2), s/veh	9.0	0.0	0.0	0.5	0.0	0.2	1.4	0.9	0.2	0.6	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.9	0.0	0.0	3.4	0.0	4.0	1.5	11.8	1.6	3.4	13.8	15.0
LnGrp Delay(d),s/veh	57.3	0.0	0.0	42.0	0.0	39.2	61.5	17.0	12.2	60.9	16.6	16.7
LnGrp LOS	E			D		D	E	B	B	E	B	B
Approach Vol, veh/h		232			243			1211			1980	
Approach Delay, s/veh		57.3			40.4			18.2			18.7	
Approach LOS		E			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	80.0		37.8	10.5	81.7		37.8
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	16.5	62.7		38.0	11.5	67.7		38.0
Max Q Clear Time (g_c+I1), s	8.9	25.5		32.9	5.0	31.5		19.8
Green Ext Time (p_c), s	0.0	34.6		0.9	0.0	33.7		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C



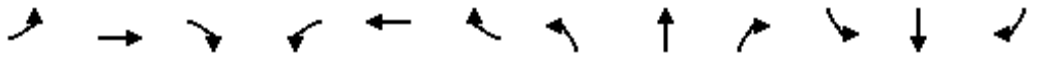
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	630	190	140	490	170	130	750	100	400	1830	100
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1788	1863	1863	1788	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	126	663	101	147	516	37	137	789	91	421	1926	100
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	123	862	369	139	895	381	258	1464	168	423	1957	101
Arrive On Green	0.07	0.24	0.24	0.16	0.51	0.51	0.15	0.32	0.31	0.32	0.53	0.51
Sat Flow, veh/h	1774	3539	1514	1774	3539	1507	1774	4626	530	1774	4950	256
Grp Volume(v), veh/h	126	663	101	147	516	37	137	577	303	421	1318	708
Grp Sat Flow(s),veh/h/ln	1774	1770	1514	1774	1770	1507	1774	1695	1767	1774	1695	1816
Q Serve(g_s), s	9.0	22.7	7.0	10.2	13.2	1.1	9.3	18.2	18.4	30.8	49.6	50.0
Cycle Q Clear(g_c), s	9.0	22.7	7.0	10.2	13.2	1.1	9.3	18.2	18.4	30.8	49.6	50.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.30	1.00		0.14
Lane Grp Cap(c), veh/h	123	862	369	139	895	381	258	1073	559	423	1340	718
V/C Ratio(X)	1.03	0.77	0.27	1.06	0.58	0.10	0.53	0.54	0.54	1.00	0.98	0.99
Avail Cap(c_a), veh/h	123	909	389	139	942	401	259	1073	559	423	1340	718
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	0.09	0.09	0.09	0.61	0.61	0.61	0.97	0.97	0.97	0.09	0.09	0.09
Uniform Delay (d), s/veh	60.5	45.8	39.9	54.8	27.3	11.2	51.4	36.6	36.8	44.3	30.4	30.6
Incr Delay (d2), s/veh	31.2	0.4	0.1	75.0	0.7	0.1	1.0	1.9	3.6	12.0	4.4	7.5
Initial Q Delay(d3),s/veh	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.5	11.1	2.9	7.8	6.5	0.5	4.6	8.8	9.6	16.5	23.9	26.3
LnGrp Delay(d),s/veh	92.0	46.2	39.9	129.9	28.0	11.3	52.4	38.5	40.5	56.3	34.8	38.1
LnGrp LOS	F	D	D	F	C	B	D	D	D	E	C	D
Approach Vol, veh/h		890			700			1017			2447	
Approach Delay, s/veh		52.0			48.5			40.9			39.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	35.0	45.1	13.0	36.9	24.7	55.4	14.2	35.7
Change Period (Y+Rc), s	3.5	5.3	3.5	5.3	5.3	* 5.3	3.5	5.3
Max Green Setting (Gmax), s	31.5	38.1	9.5	33.3	19.5	* 50	10.7	32.1
Max Q Clear Time (g_c+I1), s	32.8	20.4	11.0	15.2	11.3	52.0	12.2	24.7
Green Ext Time (p_c), s	0.0	7.3	0.0	10.6	4.4	0.0	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	43.2
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



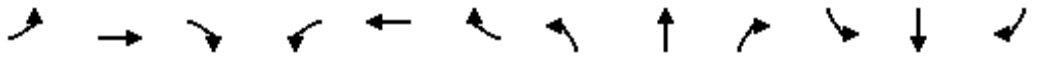
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	520	150	90	400	140	110	940	90	200	1500	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1824	1863	1863	1824	1863	1863	1824	1863	1863	1863
Adj Flow Rate, veh/h	126	547	158	95	421	147	116	989	95	211	1579	126
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	702	202	112	596	206	179	2050	196	230	1590	706
Arrive On Green	0.08	0.25	0.24	0.06	0.23	0.22	0.03	0.14	0.14	0.13	0.45	0.45
Sat Flow, veh/h	1774	2813	809	1774	2573	889	1774	4717	452	1774	3539	1572
Grp Volume(v), veh/h	126	357	348	95	288	280	116	710	374	211	1579	126
Grp Sat Flow(s),veh/h/ln	1774	1840	1782	1774	1770	1692	1774	1695	1779	1774	1770	1572
Q Serve(g_s), s	9.1	23.5	23.7	6.9	19.4	19.8	8.4	25.1	25.2	15.3	57.7	4.4
Cycle Q Clear(g_c), s	9.1	23.5	23.7	6.9	19.4	19.8	8.4	25.1	25.2	15.3	57.7	4.4
Prop In Lane	1.00		0.45	1.00		0.53	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	144	459	445	112	410	392	179	1473	773	230	1590	706
V/C Ratio(X)	0.88	0.78	0.78	0.85	0.70	0.71	0.65	0.48	0.48	0.92	0.99	0.18
Avail Cap(c_a), veh/h	153	501	485	139	468	448	179	1473	773	322	1590	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.61	0.61	0.61	0.71	0.71	0.71	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.1	45.4	45.7	60.3	45.8	46.2	60.5	42.2	42.3	55.9	35.6	10.7
Incr Delay (d2), s/veh	33.2	6.2	6.6	17.9	2.5	2.8	4.4	0.8	1.5	20.4	21.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.8	12.7	12.5	3.9	9.8	9.6	4.4	12.0	12.8	8.8	32.7	2.0
LnGrp Delay(d),s/veh	92.3	51.6	52.3	78.2	48.3	49.0	65.0	43.0	43.8	76.3	56.6	11.2
LnGrp LOS	F	D	D	E	D	D	E	D	D	E	E	B
Approach Vol, veh/h		831			663			1200			1916	
Approach Delay, s/veh		58.1			52.9			45.4			55.8	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	60.5	12.2	36.4	18.9	62.4	14.5	34.1
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	5.3	* 5.3	3.5	4.9
Max Green Setting (Gmax), s	24.1	43.5	10.7	34.5	10.5	* 57	11.7	33.5
Max Q Clear Time (g_c+I1), s	17.3	27.2	8.9	25.7	10.4	59.7	11.1	21.8
Green Ext Time (p_c), s	0.1	8.6	0.0	4.7	0.0	0.0	0.0	5.7

Intersection Summary	
HCM 2010 Ctrl Delay	53.1
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



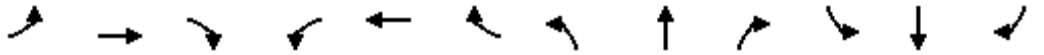
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	560	380	120	540	140	140	870	90	130	1750	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1824	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	95	589	400	126	568	147	147	916	95	137	1842	95
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	250	664	451	144	718	185	123	1790	185	150	1970	101
Arrive On Green	0.14	0.33	0.33	0.08	0.26	0.26	0.02	0.13	0.12	0.08	0.40	0.39
Sat Flow, veh/h	1774	2018	1371	1774	2784	718	1774	4681	484	1774	4952	255
Grp Volume(v), veh/h	95	516	473	126	360	355	147	663	348	137	1260	677
Grp Sat Flow(s),veh/h/ln	1774	1770	1619	1774	1770	1732	1774	1695	1775	1774	1695	1817
Q Serve(g_s), s	6.3	36.0	35.9	9.1	24.7	24.8	9.0	23.7	23.9	10.0	46.3	46.5
Cycle Q Clear(g_c), s	6.3	36.0	35.9	9.1	24.7	24.8	9.0	23.7	23.9	10.0	46.3	46.5
Prop In Lane	1.00		0.85	1.00		0.41	1.00		0.27	1.00		0.14
Lane Grp Cap(c), veh/h	250	582	532	144	457	447	123	1297	679	150	1349	723
V/C Ratio(X)	0.38	0.89	0.89	0.88	0.79	0.79	1.20	0.51	0.51	0.91	0.93	0.94
Avail Cap(c_a), veh/h	250	626	573	177	667	653	123	1297	679	150	1349	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.61	0.61	0.61	0.75	0.75	0.75	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.7	41.4	41.2	59.1	44.9	44.9	63.5	45.4	45.5	59.0	37.5	37.7
Incr Delay (d2), s/veh	0.3	11.8	12.7	18.8	3.1	3.2	133.0	1.1	2.1	47.6	13.1	21.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	19.4	17.9	5.2	12.4	12.3	9.0	11.3	12.2	6.9	24.2	27.6
LnGrp Delay(d),s/veh	51.0	53.1	53.9	77.9	48.0	48.2	196.6	46.5	47.6	106.6	50.6	58.8
LnGrp LOS	D	D	D	E	D	D	F	D	D	F	D	E
Approach Vol, veh/h		1084			841			1158			2074	
Approach Delay, s/veh		53.3			52.5			65.9			57.0	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	53.7	14.5	46.7	13.0	55.7	23.7	37.5
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	11.5	42.7	13.5	45.1	9.5	44.7	10.5	* 48
Max Q Clear Time (g_c+I1), s	12.0	25.9	11.1	38.0	11.0	48.5	8.3	26.8
Green Ext Time (p_c), s	0.0	16.1	0.0	3.9	0.0	0.0	1.5	5.8

Intersection Summary	
HCM 2010 Ctrl Delay	57.5
HCM 2010 LOS	E

Notes

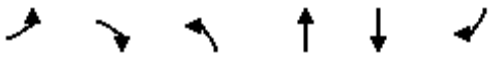
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	490	180	160	470	80	160	380	90	110	530	170
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.85	1.00		0.85	0.97		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	137	516	189	168	495	84	168	400	95	116	558	179
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	768	279	188	970	163	247	899	647	357	899	656
Arrive On Green	0.09	0.31	0.30	0.11	0.33	0.32	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1774	2465	896	1774	2945	495	718	1863	1340	872	1863	1360
Grp Volume(v), veh/h	137	369	336	168	295	284	168	400	95	116	558	179
Grp Sat Flow(s),veh/h/ln	1774	1770	1591	1774	1770	1670	718	1863	1340	872	1863	1360
Q Serve(g_s), s	9.2	21.8	22.2	11.2	16.1	16.5	27.1	17.0	4.7	12.1	26.6	9.4
Cycle Q Clear(g_c), s	9.2	21.8	22.2	11.2	16.1	16.5	53.7	17.0	4.7	29.1	26.6	9.4
Prop In Lane	1.00		0.56	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	551	496	188	583	550	247	899	647	357	899	656
V/C Ratio(X)	0.88	0.67	0.68	0.89	0.51	0.52	0.68	0.45	0.15	0.32	0.62	0.27
Avail Cap(c_a), veh/h	234	551	496	237	583	550	254	916	659	365	916	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.18	0.18	0.18	1.00	1.00	1.00	1.00	1.00	1.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	54.1	35.9	36.3	53.0	32.4	32.6	42.8	20.5	17.3	30.1	23.0	18.5
Incr Delay (d2), s/veh	3.4	1.2	1.4	24.7	3.1	3.4	5.6	0.1	0.0	0.1	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	10.9	9.9	6.8	8.4	8.1	5.8	8.7	1.8	2.9	13.8	3.5
LnGrp Delay(d),s/veh	57.4	37.1	37.7	77.7	35.5	36.0	48.4	20.6	17.3	30.2	23.6	18.6
LnGrp LOS	E	D	D	E	D	D	D	C	B	C	C	B
Approach Vol, veh/h		842			747			663			853	
Approach Delay, s/veh		40.7			45.2			27.2			23.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		61.9	14.6	43.5		61.9	16.7	41.4
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		58.1	16.3	32.3		58.1	16.5	32.1
Max Q Clear Time (g_c+I1), s		55.7	11.2	18.5		31.1	13.2	24.2
Green Ext Time (p_c), s		1.3	0.0	3.6		4.8	0.0	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	34.1
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	130	210	110	540	990	120
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	137	47	116	568	1042	114
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	224	200	147	2331	1545	169
Arrive On Green	0.13	0.13	0.08	0.66	0.48	0.48
Sat Flow, veh/h	1774	1583	1774	3632	3312	352
Grp Volume(v), veh/h	137	47	116	568	573	583
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1801
Q Serve(g_s), s	3.1	1.1	2.7	2.7	10.4	10.4
Cycle Q Clear(g_c), s	3.1	1.1	2.7	2.7	10.4	10.4
Prop In Lane	1.00	1.00	1.00			0.20
Lane Grp Cap(c), veh/h	224	200	147	2331	850	865
V/C Ratio(X)	0.61	0.23	0.79	0.24	0.67	0.67
Avail Cap(c_a), veh/h	1186	1058	212	2788	1014	1032
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	16.5	18.8	2.9	8.4	8.4
Incr Delay (d2), s/veh	2.7	0.6	11.7	0.1	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	1.0	1.8	1.3	5.3	5.4
LnGrp Delay(d),s/veh	20.0	17.1	30.6	3.0	9.7	9.7
LnGrp LOS	C	B	C	A	A	A
Approach Vol, veh/h	184			684	1156	
Approach Delay, s/veh	19.3			7.6	9.7	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		32.6		9.3	7.5	25.1		
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0		
Max Green Setting (Gmax), s		33.0		28.0	5.0	24.0		
Max Q Clear Time (g_c+I1), s		4.7		5.1	4.7	12.4		
Green Ext Time (p_c), s		13.4		0.5	0.0	7.7		

Intersection Summary	
HCM 2010 Ctrl Delay	9.9
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	120	90	650	100	80	1030
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	126	95	684	105	84	1084
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	154	116	1807	277	93	2500
Arrive On Green	0.16	0.16	0.59	0.57	0.05	0.71
Sat Flow, veh/h	958	722	3170	472	1774	3632
Grp Volume(v), veh/h	222	0	393	396	84	1084
Grp Sat Flow(s),veh/h/ln	1687	0	1770	1779	1774	1770
Q Serve(g_s), s	7.6	0.0	7.1	7.1	2.8	7.8
Cycle Q Clear(g_c), s	7.6	0.0	7.1	7.1	2.8	7.8
Prop In Lane	0.57	0.43		0.27	1.00	
Lane Grp Cap(c), veh/h	271	0	1039	1045	93	2500
V/C Ratio(X)	0.82	0.00	0.38	0.38	0.90	0.43
Avail Cap(c_a), veh/h	534	0	1039	1045	237	2500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.85	0.85	0.67	0.67
Uniform Delay (d), s/veh	24.4	0.0	6.6	6.7	28.3	3.7
Incr Delay (d2), s/veh	2.4	0.0	0.9	0.9	8.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	0.0	3.6	3.7	1.6	3.9
LnGrp Delay(d),s/veh	26.7	0.0	7.5	7.5	36.4	4.1
LnGrp LOS	C		A	A	D	A
Approach Vol, veh/h	222		789			1168
Approach Delay, s/veh	26.7		7.5			6.4
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.1	39.2				46.4		13.6
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	20.1				32.1		19.0
Max Q Clear Time (g_c+I1), s	4.8	9.1				9.8		9.6
Green Ext Time (p_c), s	0.0	5.0				6.7		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	8.9
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	480	110	60	660	60	120	300	60	130	540	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	63	505	116	63	695	63	126	316	63	137	568	137
Adj No. of Lanes	1	2	0	1	2	0	0	2	0	0	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	981	224	136	1059	96	165	436	90	148	639	162
Arrive On Green	0.09	0.34	0.34	0.08	0.32	0.32	0.06	0.06	0.06	0.53	0.53	0.51
Sat Flow, veh/h	1774	2857	653	1774	3279	297	860	2269	470	558	2417	613
Grp Volume(v), veh/h	63	312	309	63	375	383	267	0	238	450	0	392
Grp Sat Flow(s),veh/h/ln	1774	1770	1740	1774	1770	1807	1820	0	1779	1835	0	1754
Q Serve(g_s), s	4.4	18.3	18.5	4.4	23.6	23.7	18.7	0.0	17.1	29.5	0.0	24.8
Cycle Q Clear(g_c), s	4.4	18.3	18.5	4.4	23.6	23.7	18.7	0.0	17.1	29.5	0.0	24.8
Prop In Lane	1.00		0.38	1.00		0.16	0.47		0.26	0.30		0.35
Lane Grp Cap(c), veh/h	153	608	597	136	572	584	350	0	342	485	0	464
V/C Ratio(X)	0.41	0.51	0.52	0.46	0.66	0.66	0.76	0.00	0.70	0.93	0.00	0.85
Avail Cap(c_a), veh/h	153	608	597	136	572	584	350	0	342	550	0	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.39	0.39	0.39	0.49	0.49	0.49	0.93	0.00	0.93	0.23	0.00	0.23
Uniform Delay (d), s/veh	56.2	34.0	34.2	57.4	37.8	37.9	57.9	0.0	57.2	29.5	0.0	28.7
Incr Delay (d2), s/veh	0.3	1.2	1.3	5.4	2.9	2.8	13.5	0.0	10.4	6.2	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	9.1	9.1	2.4	12.0	12.3	10.8	0.0	9.4	15.6	0.0	12.1
LnGrp Delay(d),s/veh	56.5	35.2	35.5	62.8	40.7	40.7	71.5	0.0	67.6	35.7	0.0	31.2
LnGrp LOS	E	D	D	E	D	D	E		E	D		C
Approach Vol, veh/h		684			821			505			842	
Approach Delay, s/veh		37.3			42.4			69.7			33.6	
Approach LOS		D			D			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	14.0	48.6		38.4	16.6	46.0
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	4.9	* 4.9
Max Green Setting (Gmax), s		24.1	10.5	39.1		38.1	8.5	* 41
Max Q Clear Time (g_c+I1), s		20.7	6.4	20.5		31.5	6.4	25.7
Green Ext Time (p_c), s		0.7	0.0	1.6		1.9	0.5	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	43.4
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

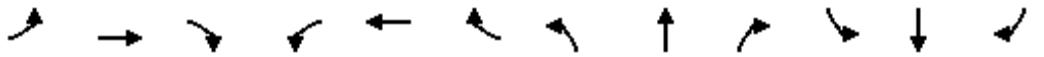
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	90	250	710	150	20	1160
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.84		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	95	263	747	158	21	1221
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	93	257	1868	395	29	2450
Arrive On Green	0.25	0.25	0.64	0.64	0.02	0.69
Sat Flow, veh/h	377	1043	2989	612	1774	3632
Grp Volume(v), veh/h	359	0	456	449	21	1221
Grp Sat Flow(s),veh/h/ln	1424	0	1770	1739	1774	1770
Q Serve(g_s), s	32.0	0.0	16.0	16.1	1.5	21.1
Cycle Q Clear(g_c), s	32.0	0.0	16.0	16.1	1.5	21.1
Prop In Lane	0.26	0.73		0.35	1.00	
Lane Grp Cap(c), veh/h	351	0	1141	1121	29	2450
V/C Ratio(X)	1.02	0.00	0.40	0.40	0.71	0.50
Avail Cap(c_a), veh/h	351	0	1141	1121	109	2450
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.52	0.52	0.41	0.41
Uniform Delay (d), s/veh	49.0	0.0	11.0	11.1	63.6	9.4
Incr Delay (d2), s/veh	54.3	0.0	0.5	0.6	4.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	17.9	0.0	7.9	7.9	0.8	10.3
LnGrp Delay(d),s/veh	103.3	0.0	11.6	11.7	68.4	9.7
LnGrp LOS	F		B	B	E	A
Approach Vol, veh/h	359		905			1242
Approach Delay, s/veh	103.3		11.6			10.7
Approach LOS	F		B			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	6.2	87.8				94.0		36.0
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	77.1				89.1		32.0
Max Q Clear Time (g_c+I1), s	3.5	18.1				23.1		34.0
Green Ext Time (p_c), s	0.0	9.4				9.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	120	80	50	120	50	90	570	20	40	870	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	126	84	53	126	53	95	600	21	42	916	137
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	235	197	113	153	301	110	121	1500	52	50	1205	180
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.07	0.43	0.43	0.03	0.39	0.39
Sat Flow, veh/h	507	702	403	251	1072	392	1774	3489	122	1774	3089	462
Grp Volume(v), veh/h	336	0	0	232	0	0	95	304	317	42	525	528
Grp Sat Flow(s),veh/h/ln	1612	0	0	1716	0	0	1774	1770	1841	1774	1770	1781
Q Serve(g_s), s	3.9	0.0	0.0	0.0	0.0	0.0	2.8	6.3	6.4	1.3	13.8	13.8
Cycle Q Clear(g_c), s	9.6	0.0	0.0	5.7	0.0	0.0	2.8	6.3	6.4	1.3	13.8	13.8
Prop In Lane	0.37		0.25	0.23		0.23	1.00		0.07	1.00		0.26
Lane Grp Cap(c), veh/h	544	0	0	564	0	0	121	761	792	50	691	695
V/C Ratio(X)	0.62	0.00	0.00	0.41	0.00	0.00	0.79	0.40	0.40	0.83	0.76	0.76
Avail Cap(c_a), veh/h	905	0	0	947	0	0	166	761	792	166	759	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	0.0	15.9	0.0	0.0	24.6	10.5	10.5	25.9	14.2	14.2
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.5	0.0	0.0	15.6	0.3	0.3	28.3	4.1	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	0.0	0.0	2.9	0.0	0.0	1.9	3.1	3.2	1.0	7.5	7.5
LnGrp Delay(d),s/veh	18.3	0.0	0.0	16.4	0.0	0.0	40.1	10.9	10.8	54.2	18.3	18.2
LnGrp LOS	B			B			D	B	B	D	B	B
Approach Vol, veh/h		336			232			716			1095	
Approach Delay, s/veh		18.3			16.4			14.7			19.6	
Approach LOS		B			B			B			B	

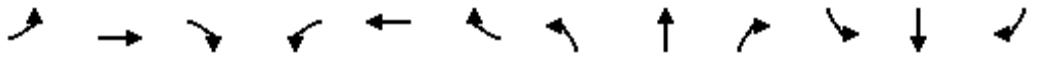
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	28.0		20.0	7.7	25.9		20.0
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	23.0		28.0	5.0	23.0		28.0
Max Q Clear Time (g_c+I1), s	3.3	8.4		11.6	4.8	15.8		7.7
Green Ext Time (p_c), s	0.0	8.8		3.4	0.0	5.1		3.7

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	50	150	170	50	30	90	570	130	30	920	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	53	158	179	53	32	95	600	137	32	968	21
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	121	300	333	92	43	121	1322	301	37	1467	32
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.07	0.46	0.46	0.02	0.41	0.41
Sat Flow, veh/h	73	460	1138	847	347	165	1774	2865	653	1774	3542	77
Grp Volume(v), veh/h	232	0	0	264	0	0	95	370	367	32	484	505
Grp Sat Flow(s),veh/h/ln	1670	0	0	1358	0	0	1774	1770	1748	1774	1770	1849
Q Serve(g_s), s	0.0	0.0	0.0	3.0	0.0	0.0	2.9	7.9	7.9	1.0	12.2	12.2
Cycle Q Clear(g_c), s	6.6	0.0	0.0	9.6	0.0	0.0	2.9	7.9	7.9	1.0	12.2	12.2
Prop In Lane	0.09		0.68	0.68		0.12	1.00		0.37	1.00		0.04
Lane Grp Cap(c), veh/h	512	0	0	468	0	0	121	816	806	37	733	766
V/C Ratio(X)	0.45	0.00	0.00	0.56	0.00	0.00	0.78	0.45	0.45	0.86	0.66	0.66
Avail Cap(c_a), veh/h	904	0	0	786	0	0	161	898	887	161	898	939
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	0.0	0.0	18.3	0.0	0.0	25.3	10.1	10.1	26.9	13.0	13.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.1	0.0	0.0	16.6	0.4	0.4	38.7	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	0.0	0.0	3.8	0.0	0.0	2.0	3.9	3.9	0.9	6.2	6.4
LnGrp Delay(d),s/veh	18.0	0.0	0.0	19.4	0.0	0.0	41.9	10.5	10.5	65.6	14.3	14.3
LnGrp LOS	B			B			D	B	B	E	B	B
Approach Vol, veh/h		232			264			832			1021	
Approach Delay, s/veh		18.0			19.4			14.1			15.9	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	30.5		19.6	7.8	27.9		19.6
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	28.0		28.0	5.0	28.0		28.0
Max Q Clear Time (g_c+I1), s	3.0	9.9		8.6	4.9	14.2		11.6
Green Ext Time (p_c), s	0.0	10.4		3.2	0.0	8.7		3.0

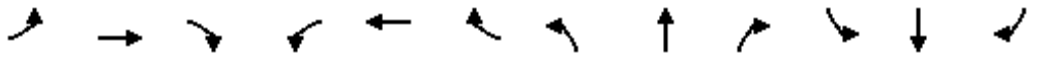
Intersection Summary	
HCM 2010 Ctrl Delay	15.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	470	10	10	450	30	20	10	60	60	10	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	63	495	11	11	474	32	21	11	63	63	11	63
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	506	1407	31	502	1407	624	278	107	537	336	42	537
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	886	3539	79	886	3539	1569	244	313	1571	347	123	1571
Grp Volume(v), veh/h	63	247	259	11	474	32	32	0	63	74	0	63
Grp Sat Flow(s),veh/h/ln	886	1770	1848	886	1770	1569	557	0	1571	470	0	1571
Q Serve(g_s), s	1.6	3.0	3.0	0.3	2.9	0.4	0.2	0.0	0.8	1.1	0.0	0.8
Cycle Q Clear(g_c), s	4.4	3.0	3.0	3.2	2.9	0.4	8.0	0.0	0.8	8.4	0.0	0.8
Prop In Lane	1.00		0.04	1.00		1.00	0.66		1.00	0.85		1.00
Lane Grp Cap(c), veh/h	506	703	735	502	1407	624	385	0	537	378	0	537
V/C Ratio(X)	0.12	0.35	0.35	0.02	0.34	0.05	0.08	0.00	0.12	0.20	0.00	0.12
Avail Cap(c_a), veh/h	789	1269	1325	785	2537	1125	838	0	1024	804	0	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.0	6.5	6.5	7.6	6.4	5.7	7.5	0.0	6.9	10.7	0.0	6.9
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.0	0.1	0.0	0.1	0.0	0.1	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	1.5	1.6	0.1	1.4	0.2	0.2	0.0	0.4	0.6	0.0	0.4
LnGrp Delay(d),s/veh	8.1	6.8	6.8	7.6	6.6	5.7	7.6	0.0	7.0	10.9	0.0	7.0
LnGrp LOS	A	A	A	A	A	A	A		A	B		A
Approach Vol, veh/h		569			517			95			137	
Approach Delay, s/veh		6.9			6.5			7.2			9.1	
Approach LOS		A			A			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		15.0		16.3		15.0		16.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		22.0		20.0		22.0
Max Q Clear Time (g_c+I1), s		10.0		6.4		10.4		5.2
Green Ext Time (p_c), s		0.7		5.7		0.6		5.9

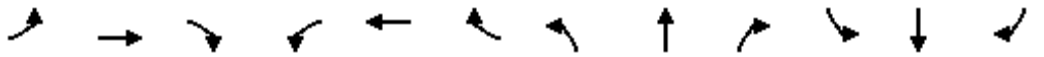
Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	360	90	150	360	60	80	250	80	60	600	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	379	95	158	379	63	84	263	84	63	632	137
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	885	219	249	959	158	99	1440	450	74	1529	331
Arrive On Green	0.32	0.32	0.31	0.32	0.32	0.31	0.06	0.54	0.53	0.04	0.53	0.52
Sat Flow, veh/h	939	2802	694	912	3034	500	1774	2655	829	1774	2894	626
Grp Volume(v), veh/h	84	238	236	158	220	222	84	173	174	63	386	383
Grp Sat Flow(s),veh/h/ln	939	1770	1726	912	1770	1764	1774	1770	1715	1774	1770	1751
Q Serve(g_s), s	9.2	12.7	13.0	19.9	11.6	11.9	5.6	6.0	6.2	4.2	15.8	15.9
Cycle Q Clear(g_c), s	21.1	12.7	13.0	33.0	11.6	11.9	5.6	6.0	6.2	4.2	15.8	15.9
Prop In Lane	1.00		0.40	1.00		0.28	1.00		0.48	1.00		0.36
Lane Grp Cap(c), veh/h	264	559	545	249	559	557	99	960	930	74	935	925
V/C Ratio(X)	0.32	0.43	0.43	0.63	0.39	0.40	0.85	0.18	0.19	0.85	0.41	0.41
Avail Cap(c_a), veh/h	288	605	590	272	605	603	163	960	930	310	935	925
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.96	0.96	0.96	0.92	0.92	0.92	0.78	0.78	0.78
Uniform Delay (d), s/veh	40.4	32.4	32.6	45.6	32.1	32.2	56.2	13.9	14.1	57.1	17.1	17.2
Incr Delay (d2), s/veh	0.2	0.2	0.2	2.7	0.2	0.2	9.2	0.4	0.4	7.8	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.4	6.2	6.2	5.2	5.7	5.8	3.0	3.0	3.1	2.2	8.0	8.0
LnGrp Delay(d),s/veh	40.6	32.6	32.8	48.3	32.2	32.4	65.4	14.3	14.5	64.9	18.1	18.3
LnGrp LOS	D	C	C	D	C	C	E	B	B	E	B	B
Approach Vol, veh/h		558			600			431			832	
Approach Delay, s/veh		33.9			36.5			24.3			21.7	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	69.1		41.9	10.7	67.4		41.9
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	21.5	45.1		40.4	11.5	55.1		40.4
Max Q Clear Time (g_c+I1), s	6.2	8.2		23.1	7.6	17.9		35.0
Green Ext Time (p_c), s	0.0	4.5		4.3	0.0	4.5		2.3

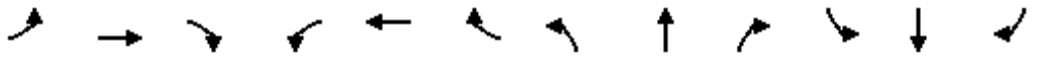
Intersection Summary	
HCM 2010 Ctrl Delay	28.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	980	10	20	890	70	10	10	20	30	10	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	84	1032	11	21	937	74	11	11	21	32	11	84
Adj No. of Lanes	1	2	0	1	3	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	2300	25	15	3020	902	90	76	384	126	36	384
Arrive On Green	0.02	0.21	0.21	0.01	0.59	0.59	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3586	38	1774	5085	1519	179	303	1538	294	144	1538
Grp Volume(v), veh/h	84	509	534	21	937	74	22	0	21	43	0	84
Grp Sat Flow(s),veh/h/ln	1774	1770	1854	1774	1695	1519	482	0	1538	438	0	1538
Q Serve(g_s), s	5.7	30.1	30.1	1.0	11.0	2.5	0.3	0.0	1.2	2.5	0.0	5.2
Cycle Q Clear(g_c), s	5.7	30.1	30.1	1.0	11.0	2.5	23.2	0.0	1.2	24.3	0.0	5.2
Prop In Lane	1.00		0.02	1.00		1.00	0.50		1.00	0.74		1.00
Lane Grp Cap(c), veh/h	99	1135	1189	15	3020	902	165	0	384	162	0	384
V/C Ratio(X)	0.84	0.45	0.45	1.39	0.31	0.08	0.13	0.00	0.05	0.27	0.00	0.22
Avail Cap(c_a), veh/h	237	1135	1189	148	3020	902	165	0	384	162	0	384
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.66	0.66	0.66	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.4	28.8	28.8	59.5	12.1	10.4	36.0	0.0	34.2	47.6	0.0	35.7
Incr Delay (d2), s/veh	6.6	1.2	1.1	194.5	0.2	0.1	0.1	0.0	0.0	4.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.0	15.2	15.9	1.3	5.2	1.1	0.6	0.0	0.5	1.5	0.0	2.4
LnGrp Delay(d),s/veh	65.0	30.0	29.9	275.4	12.3	10.5	36.1	0.0	34.2	51.6	0.0	37.0
LnGrp LOS	E	C	C	F	B	B	D		C	D		D
Approach Vol, veh/h		1127			1032			43			127	
Approach Delay, s/veh		32.6			17.5			35.2			41.9	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	5.0	81.0		34.0	10.7	75.3
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	16.5	61.4
Max Q Clear Time (g_c+I1), s		25.2	3.0	32.1		26.3	7.7	13.0
Green Ext Time (p_c), s		0.2	0.0	22.7		0.1	0.0	27.4

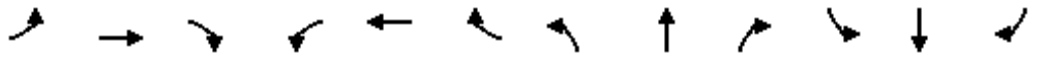
Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	690	380	180	740	90	230	370	170	190	500	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	116	726	400	189	779	95	242	389	179	200	526	147
Adj No. of Lanes	1	2	0	1	3	0	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	802	441	207	1869	226	285	602	272	221	813	226
Arrive On Green	0.03	0.12	0.12	0.23	0.82	0.80	0.08	0.26	0.25	0.04	0.10	0.10
Sat Flow, veh/h	1774	2183	1200	1774	4584	555	3442	2330	1053	1774	2708	753
Grp Volume(v), veh/h	116	588	538	189	575	299	242	294	274	200	343	330
Grp Sat Flow(s),veh/h/ln	1774	1770	1614	1774	1695	1749	1721	1770	1613	1774	1770	1691
Q Serve(g_s), s	7.8	39.4	39.5	12.5	5.7	5.9	8.3	17.7	18.3	13.5	22.4	22.6
Cycle Q Clear(g_c), s	7.8	39.4	39.5	12.5	5.7	5.9	8.3	17.7	18.3	13.5	22.4	22.6
Prop In Lane	1.00		0.74	1.00		0.32	1.00		0.65	1.00		0.44
Lane Grp Cap(c), veh/h	135	650	593	207	1382	713	285	457	417	221	531	508
V/C Ratio(X)	0.86	0.90	0.91	0.92	0.42	0.42	0.85	0.64	0.66	0.90	0.64	0.65
Avail Cap(c_a), veh/h	163	650	593	237	1382	713	373	457	417	222	531	508
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.88	0.88	0.88	0.94	0.94	0.94	0.90	0.90	0.90	0.98	0.98	0.98
Uniform Delay (d), s/veh	57.9	50.7	50.8	45.5	7.1	7.3	54.3	39.6	40.0	56.8	47.9	48.1
Incr Delay (d2), s/veh	24.5	16.7	18.3	30.8	0.9	1.7	10.0	6.1	7.1	34.3	5.8	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.8	22.4	20.7	7.9	2.7	3.0	4.4	9.4	9.0	8.7	11.8	11.5
LnGrp Delay(d),s/veh	82.4	67.3	69.1	76.2	8.0	9.0	64.3	45.7	47.2	91.2	53.7	54.3
LnGrp LOS	F	E	E	E	A	A	E	D	D	F	D	D
Approach Vol, veh/h		1242			1063			810			873	
Approach Delay, s/veh		69.5			20.4			51.8			62.5	
Approach LOS		E			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	35.0	18.0	48.1	13.9	40.0	13.1	52.9
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	3.5	4.9
Max Green Setting (Gmax), s	15.5	30.1	16.5	41.1	13.5	32.1	11.5	46.1
Max Q Clear Time (g_c+I1), s	15.5	20.3	14.5	41.5	10.3	24.6	9.8	7.9
Green Ext Time (p_c), s	0.0	2.9	0.0	0.0	0.1	2.6	0.0	24.5

Intersection Summary	
HCM 2010 Ctrl Delay	51.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	640	230	250	570	80	210	800	160	170	1340	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.93	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	189	674	65	263	600	18	221	842	144	179	1411	195
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	233	846	360	322	970	415	261	1801	305	391	2088	288
Arrive On Green	0.02	0.08	0.08	0.03	0.09	0.09	0.15	0.82	0.80	0.22	0.91	0.90
Sat Flow, veh/h	3510	3610	1534	3510	3610	1545	3510	4411	748	3510	4566	631
Grp Volume(v), veh/h	189	674	65	263	600	18	221	658	328	179	1068	538
Grp Sat Flow(s),veh/h/ln	1755	1805	1534	1755	1805	1545	1755	1729	1701	1755	1729	1739
Q Serve(g_s), s	6.4	22.0	3.8	8.9	19.2	0.9	7.4	6.8	7.1	5.3	8.3	8.8
Cycle Q Clear(g_c), s	6.4	22.0	3.8	8.9	19.2	0.9	7.4	6.8	7.1	5.3	8.3	8.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		0.36
Lane Grp Cap(c), veh/h	233	846	360	322	970	415	261	1412	695	391	1581	795
V/C Ratio(X)	0.81	0.80	0.18	0.82	0.62	0.04	0.85	0.47	0.47	0.46	0.68	0.68
Avail Cap(c_a), veh/h	351	993	422	351	993	425	351	1412	695	391	1581	795
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.89	0.89	0.89	0.94	0.94	0.94	0.95	0.95	0.95	0.89	0.89	0.89
Uniform Delay (d), s/veh	57.9	52.5	28.7	57.2	48.7	21.4	50.4	7.1	7.4	43.5	3.1	3.4
Incr Delay (d2), s/veh	4.2	3.0	0.1	11.1	0.8	0.0	10.2	1.1	2.2	0.3	2.1	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	11.4	1.6	4.9	9.7	0.4	3.9	3.3	3.6	2.5	3.7	4.6
LnGrp Delay(d),s/veh	62.2	55.5	28.8	68.3	49.5	21.4	60.6	8.2	9.6	43.8	5.2	7.5
LnGrp LOS	E	E	C	E	D	C	E	A	A	D	A	A
Approach Vol, veh/h		928			881			1207			1785	
Approach Delay, s/veh		55.0			54.5			18.2			9.8	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	53.0	16.1	32.1	12.9	58.9	12.0	36.3
Change Period (Y+Rc), s	4.9	* 4.9	4.6	* 4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	10.5	* 48	12.5	* 32	12.5	46.1	12.5	32.4
Max Q Clear Time (g_c+I1), s	7.3	9.1	10.9	24.0	9.4	10.8	8.4	21.2
Green Ext Time (p_c), s	0.2	4.5	0.6	2.1	0.1	8.8	0.1	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

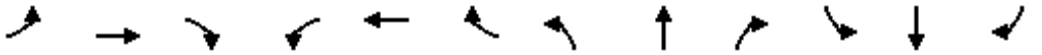
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	800	60	80	710	110	90	250	50	130	590	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	116	842	63	84	747	116	95	263	53	137	621	137
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	1279	96	117	1176	183	112	954	189	148	959	211
Arrive On Green	0.15	0.77	0.76	0.07	0.38	0.38	0.02	0.11	0.10	0.17	0.67	0.65
Sat Flow, veh/h	1774	3336	250	1774	3067	476	1774	2939	583	1774	2878	634
Grp Volume(v), veh/h	116	447	458	84	431	432	95	157	159	137	381	377
Grp Sat Flow(s),veh/h/ln	1774	1770	1816	1774	1770	1773	1774	1770	1752	1774	1770	1743
Q Serve(g_s), s	7.7	14.3	14.3	5.6	23.8	23.9	6.4	9.8	10.1	9.1	15.1	15.4
Cycle Q Clear(g_c), s	7.7	14.3	14.3	5.6	23.8	23.9	6.4	9.8	10.1	9.1	15.1	15.4
Prop In Lane	1.00		0.14	1.00		0.27	1.00		0.33	1.00		0.36
Lane Grp Cap(c), veh/h	133	678	696	117	679	680	112	574	569	148	590	581
V/C Ratio(X)	0.87	0.66	0.66	0.72	0.63	0.64	0.85	0.27	0.28	0.93	0.65	0.65
Avail Cap(c_a), veh/h	237	678	696	148	679	680	118	574	569	148	590	581
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.91	0.91	0.91	0.66	0.66	0.66	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	50.4	10.3	10.4	54.9	30.1	30.2	58.2	40.5	40.7	49.6	15.9	16.2
Incr Delay (d2), s/veh	6.0	4.5	4.4	5.0	3.0	3.0	37.4	1.2	1.2	47.3	4.7	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.0	7.6	7.7	2.9	12.2	12.2	4.3	5.0	5.1	6.4	8.0	7.9
LnGrp Delay(d),s/veh	56.4	14.8	14.8	59.9	33.1	33.2	95.6	41.7	41.9	96.9	20.5	21.0
LnGrp LOS	E	B	B	E	C	C	F	D	D	F	C	C
Approach Vol, veh/h		1021			947			411			895	
Approach Delay, s/veh		19.5			35.5			54.2			32.4	
Approach LOS		B			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	43.0	13.0	50.0	13.0	44.0	13.0	50.0
Change Period (Y+Rc), s	3.5	4.9	4.6	* 4.6	4.9	* 4.9	3.5	4.6
Max Green Setting (Gmax), s	10.5	37.1	10.5	* 45	8.5	* 39	16.5	39.4
Max Q Clear Time (g_c+I1), s	11.1	12.1	7.6	16.3	8.4	17.4	9.7	25.9
Green Ext Time (p_c), s	0.0	2.3	0.1	8.0	0.0	6.3	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay	32.0
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	740	80	130	480	270	80	930	130	330	1310	110
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	158	779	84	137	505	284	84	979	137	347	1379	116
Adj No. of Lanes	1	3	0	1	3	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	177	1076	115	176	816	371	99	1622	226	314	2275	191
Arrive On Green	0.10	0.23	0.22	0.10	0.24	0.23	0.06	0.36	0.35	0.18	0.48	0.47
Sat Flow, veh/h	1774	4664	500	1774	3390	1541	1774	4511	630	1774	4766	401
Grp Volume(v), veh/h	158	565	298	137	505	284	84	735	381	347	981	514
Grp Sat Flow(s),veh/h/ln	1774	1695	1774	1774	1695	1541	1774	1695	1750	1774	1695	1776
Q Serve(g_s), s	11.4	20.0	20.2	9.8	17.3	22.4	6.1	23.1	23.2	23.0	27.7	27.7
Cycle Q Clear(g_c), s	11.4	20.0	20.2	9.8	17.3	22.4	6.1	23.1	23.2	23.0	27.7	27.7
Prop In Lane	1.00		0.28	1.00		1.00	1.00		0.36	1.00		0.23
Lane Grp Cap(c), veh/h	177	782	409	176	816	371	99	1219	629	314	1619	848
V/C Ratio(X)	0.89	0.72	0.73	0.78	0.62	0.77	0.85	0.60	0.61	1.11	0.61	0.61
Avail Cap(c_a), veh/h	232	782	409	246	816	371	273	1219	629	314	1619	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.8	46.2	46.4	57.2	44.0	46.4	60.8	34.0	34.3	53.5	25.0	25.1
Incr Delay (d2), s/veh	23.5	5.7	10.8	6.4	3.5	14.0	7.3	2.2	4.3	82.2	1.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.8	10.0	11.2	5.1	8.5	10.9	3.2	11.2	12.0	18.4	13.3	14.3
LnGrp Delay(d),s/veh	81.4	51.9	57.2	63.6	47.5	60.4	68.1	36.3	38.6	135.7	26.7	28.3
LnGrp LOS	F	D	E	E	D	E	E	D	D	F	C	C
Approach Vol, veh/h		1021			926			1200			1842	
Approach Delay, s/veh		58.0			53.9			39.2			47.7	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	50.7	17.0	35.3	11.3	66.5	18.3	34.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	* 5.3	4.9	* 4.9
Max Green Setting (Gmax), s	23.5	41.7	17.5	30.1	20.5	* 45	18.5	* 29
Max Q Clear Time (g_c+I1), s	25.0	25.2	13.4	24.4	8.1	29.7	11.8	22.2
Green Ext Time (p_c), s	0.0	15.3	0.1	3.0	0.1	14.4	1.7	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	48.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	650	10	10	750	70	20	10	20	190	10	60
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	32	684	11	11	789	74	21	11	21	200	11	63
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	1485	24	391	1362	128	331	183	282	562	42	149
Arrive On Green	0.83	0.83	0.79	0.42	0.42	0.40	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	638	3564	57	745	3269	307	549	406	627	1017	94	332
Grp Volume(v), veh/h	32	339	356	11	427	436	53	0	0	274	0	0
Grp Sat Flow(s),veh/h/ln	638	1770	1852	745	1770	1806	1582	0	0	1443	0	0
Q Serve(g_s), s	1.8	3.1	3.1	0.6	11.1	11.2	0.0	0.0	0.0	6.5	0.0	0.0
Cycle Q Clear(g_c), s	13.0	3.1	3.1	3.7	11.1	11.2	1.0	0.0	0.0	7.5	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.17	0.40		0.40	0.73		0.23
Lane Grp Cap(c), veh/h	267	737	772	391	737	753	796	0	0	753	0	0
V/C Ratio(X)	0.12	0.46	0.46	0.03	0.58	0.58	0.07	0.00	0.00	0.36	0.00	0.00
Avail Cap(c_a), veh/h	267	737	772	391	737	753	796	0	0	753	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	0.89	0.89	0.89	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	7.3	3.2	3.2	12.3	13.5	13.6	9.4	0.0	0.0	11.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	2.0	1.9	0.1	3.0	2.9	0.0	0.0	0.0	1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	1.7	1.8	0.1	5.9	6.1	0.5	0.0	0.0	3.3	0.0	0.0
LnGrp Delay(d),s/veh	8.2	5.2	5.1	12.4	16.4	16.5	9.4	0.0	0.0	12.4	0.0	0.0
LnGrp LOS	A	A	A	B	B	B	A			B		
Approach Vol, veh/h		727			874			53			274	
Approach Delay, s/veh		5.3			16.4			9.4			12.4	
Approach LOS		A			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.0		29.0		31.0		29.0
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		27.0		23.7		27.0		23.7
Max Q Clear Time (g_c+I1), s		9.5		13.2		3.0		15.0
Green Ext Time (p_c), s		1.3		8.1		1.4		6.9

Intersection Summary	
HCM 2010 Ctrl Delay	11.4
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	710	160	130	710	50	70	50	60	150	160	60
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.97		0.95	0.96		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	747	168	137	747	53	74	53	63	158	168	63
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	30	1677	377	155	2199	156	181	170	202	265	288	108
Arrive On Green	0.02	0.59	0.58	0.17	1.00	1.00	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1774	2861	643	1774	3348	237	1112	752	894	1221	1271	477
Grp Volume(v), veh/h	21	462	453	137	395	405	74	0	116	158	0	231
Grp Sat Flow(s),veh/h/ln	1774	1770	1735	1774	1770	1816	1112	0	1646	1221	0	1747
Q Serve(g_s), s	1.4	17.5	17.6	9.0	0.0	0.0	7.6	0.0	7.0	14.8	0.0	14.1
Cycle Q Clear(g_c), s	1.4	17.5	17.6	9.0	0.0	0.0	21.8	0.0	7.0	21.9	0.0	14.1
Prop In Lane	1.00		0.37	1.00		0.13	1.00		0.54	1.00		0.27
Lane Grp Cap(c), veh/h	30	1037	1017	155	1162	1193	181	0	373	265	0	396
V/C Ratio(X)	0.70	0.45	0.45	0.88	0.34	0.34	0.41	0.00	0.31	0.60	0.00	0.58
Avail Cap(c_a), veh/h	89	1037	1017	296	1162	1193	188	0	384	273	0	408
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.44	0.44	0.44	0.85	0.85	0.85	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	58.7	13.9	14.0	48.9	0.0	0.0	51.1	0.0	38.6	47.7	0.0	41.4
Incr Delay (d2), s/veh	4.9	0.6	0.6	5.4	0.7	0.7	0.6	0.0	0.2	2.2	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.7	8.6	8.5	4.6	0.2	0.2	2.4	0.0	3.2	5.2	0.0	6.9
LnGrp Delay(d),s/veh	63.6	14.5	14.6	54.3	0.7	0.7	51.6	0.0	38.8	50.0	0.0	42.7
LnGrp LOS	E	B	B	D	A	A	D		D	D		D
Approach Vol, veh/h		936			937			190			389	
Approach Delay, s/veh		15.7			8.5			43.8			45.6	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.5	74.3		31.2	6.0	82.8		31.2
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	20.5	59.4		28.0	6.5	73.4		28.0
Max Q Clear Time (g_c+I1), s	11.0	19.6		23.9	3.4	2.0		23.8
Green Ext Time (p_c), s	0.1	21.3		0.9	0.0	27.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	19.9
HCM 2010 LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	720	120	150	670	70	130	390	130	220	740	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.92	1.00		0.86	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	758	126	158	705	74	137	411	137	232	779	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	98	1354	541	178	1514	613	156	607	198	252	953	91
Arrive On Green	0.11	0.76	0.75	0.10	0.43	0.42	0.09	0.24	0.23	0.14	0.30	0.29
Sat Flow, veh/h	1774	3539	1444	1774	3539	1459	1774	2509	818	1774	3225	306
Grp Volume(v), veh/h	84	758	126	158	705	74	137	287	261	232	427	426
Grp Sat Flow(s),veh/h/ln	1774	1770	1444	1774	1770	1459	1774	1770	1557	1774	1770	1761
Q Serve(g_s), s	5.6	10.6	3.2	10.6	17.1	3.7	9.2	17.6	18.3	15.5	26.9	27.0
Cycle Q Clear(g_c), s	5.6	10.6	3.2	10.6	17.1	3.7	9.2	17.6	18.3	15.5	26.9	27.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.53	1.00		0.17
Lane Grp Cap(c), veh/h	98	1354	541	178	1514	613	156	428	377	252	523	521
V/C Ratio(X)	0.86	0.56	0.23	0.89	0.47	0.12	0.88	0.67	0.69	0.92	0.82	0.82
Avail Cap(c_a), veh/h	157	1354	541	296	1514	613	207	442	389	281	523	521
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	0.97	0.97	0.97	0.77	0.77	0.77
Uniform Delay (d), s/veh	52.9	10.0	9.8	53.3	24.5	21.3	54.1	41.2	41.7	50.8	39.2	39.3
Incr Delay (d2), s/veh	11.7	1.4	0.9	9.5	1.0	0.4	21.6	2.9	4.0	25.6	7.3	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.0	5.3	1.3	5.6	8.5	1.6	5.4	9.0	8.3	9.4	14.2	14.2
LnGrp Delay(d),s/veh	64.6	11.4	10.6	62.8	25.6	21.7	75.6	44.1	45.6	76.4	46.5	46.7
LnGrp LOS	E	B	B	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		968			937			685			1085	
Approach Delay, s/veh		15.9			31.5			51.0			53.0	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	33.0	16.1	49.9	14.6	39.5	10.6	55.3
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	3.5	4.9
Max Green Setting (Gmax), s	19.5	29.1	20.5	34.1	14.5	34.1	11.1	43.5
Max Q Clear Time (g_c+I1), s	17.5	20.3	12.6	12.6	11.2	29.0	7.6	19.1
Green Ext Time (p_c), s	0.0	2.3	0.1	14.0	0.0	2.2	0.0	15.3

Intersection Summary	
HCM 2010 Ctrl Delay	37.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	830	90	80	820	20	50	50	120	50	150	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.98		0.95	0.97		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	32	874	95	84	863	21	53	53	126	53	158	84
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	1796	195	151	2223	54	138	124	374	78	196	95
Arrive On Green	0.02	0.56	0.55	0.17	1.00	1.00	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3218	350	1774	3531	86	376	501	1510	171	791	383
Grp Volume(v), veh/h	32	481	488	84	433	451	106	0	126	295	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1798	1774	1770	1847	877	0	1510	1345	0	0
Q Serve(g_s), s	2.2	19.8	19.8	5.2	0.0	0.0	0.0	0.0	8.2	14.3	0.0	0.0
Cycle Q Clear(g_c), s	2.2	19.8	19.8	5.2	0.0	0.0	11.9	0.0	8.2	26.2	0.0	0.0
Prop In Lane	1.00		0.19	1.00		0.05	0.50		1.00	0.18		0.28
Lane Grp Cap(c), veh/h	41	988	1004	151	1114	1163	262	0	374	368	0	0
V/C Ratio(X)	0.78	0.49	0.49	0.56	0.39	0.39	0.40	0.00	0.34	0.80	0.00	0.00
Avail Cap(c_a), veh/h	148	988	1004	151	1114	1163	277	0	390	386	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	0.68	0.68	0.68	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.3	16.1	16.1	47.7	0.0	0.0	37.6	0.0	37.1	44.4	0.0	0.0
Incr Delay (d2), s/veh	6.5	1.0	1.0	1.8	0.7	0.7	0.4	0.0	0.2	10.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	9.9	10.0	2.6	0.2	0.2	3.0	0.0	3.5	10.5	0.0	0.0
LnGrp Delay(d),s/veh	64.8	17.0	17.1	49.5	0.7	0.7	37.9	0.0	37.3	54.5	0.0	0.0
LnGrp LOS	E	B	B	D	A	A	D		D	D		
Approach Vol, veh/h		1001			968			232			295	
Approach Delay, s/veh		18.6			4.9			37.6			54.5	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		33.7	15.3	71.0		33.7	6.8	79.5
Change Period (Y+Rc), s		4.0	4.6	* 4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		31.0	10.5	* 66		31.0	10.5	66.4
Max Q Clear Time (g_c+I1), s		13.9	7.2	21.8		28.2	4.2	2.0
Green Ext Time (p_c), s		1.9	0.2	9.7		0.6	0.0	8.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	790	60	160	780	50	40	10	120	160	20	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	832	63	168	821	53	42	11	126	168	21	11
Adj No. of Lanes	1	2	1	2	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	0	0	0	0	0
Cap, veh/h	24	1662	740	258	1792	116	498	123	667	447	54	25
Arrive On Green	0.01	0.47	0.47	0.07	0.53	0.52	0.36	0.36	0.34	0.36	0.36	0.35
Sat Flow, veh/h	1774	3539	1577	3442	3376	218	1198	345	1605	1051	153	70
Grp Volume(v), veh/h	11	832	63	168	430	444	53	0	126	200	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1577	1721	1770	1824	1543	0	1605	1274	0	0
Q Serve(g_s), s	0.6	14.7	2.0	4.3	13.6	13.6	0.0	0.0	4.5	10.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	14.7	2.0	4.3	13.6	13.6	1.8	0.0	4.5	11.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.12	0.79		1.00	0.84		0.05
Lane Grp Cap(c), veh/h	24	1662	740	258	939	968	620	0	667	527	0	0
V/C Ratio(X)	0.46	0.50	0.09	0.65	0.46	0.46	0.09	0.00	0.19	0.38	0.00	0.00
Avail Cap(c_a), veh/h	158	1662	740	421	939	968	620	0	667	527	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.84	0.84	0.84	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	44.1	16.6	13.2	40.5	13.1	13.1	19.3	0.0	16.7	23.0	0.0	0.0
Incr Delay (d2), s/veh	4.3	1.0	0.2	0.9	1.3	1.3	0.3	0.0	0.6	2.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.3	7.4	0.9	2.1	6.9	7.1	0.9	0.0	2.1	4.1	0.0	0.0
LnGrp Delay(d),s/veh	48.4	17.5	13.4	41.3	14.4	14.5	19.5	0.0	17.3	25.0	0.0	0.0
LnGrp LOS	D	B	B	D	B	B	B		B	C		
Approach Vol, veh/h		906			1042			179			200	
Approach Delay, s/veh		17.6			18.8			18.0			25.0	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	9.7	45.3		35.0	4.2	50.8
Change Period (Y+Rc), s		4.9	3.5	5.3		4.9	3.5	5.3
Max Green Setting (Gmax), s		30.1	10.5	35.7		30.1	7.5	38.7
Max Q Clear Time (g_c+I1), s		6.5	6.3	16.7		13.8	2.6	15.6
Green Ext Time (p_c), s		1.1	0.1	13.6		1.0	0.0	15.7

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

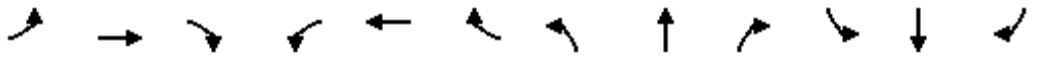
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	780	240	310	680	250	160	350	550	280	1110	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	137	821	206	326	716	81	168	436	207	295	1168	92
Adj No. of Lanes	2	3	0	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	1320	329	370	1209	536	355	1248	526	339	1180	523
Arrive On Green	0.08	0.33	0.32	0.11	0.34	0.34	0.10	0.33	0.33	0.10	0.33	0.33
Sat Flow, veh/h	3442	4054	1010	3442	3539	1569	3548	3725	1569	3442	3539	1569
Grp Volume(v), veh/h	137	686	341	326	716	81	168	436	207	295	1168	92
Grp Sat Flow(s),veh/h/ln	1721	1695	1673	1721	1770	1569	1774	1863	1569	1721	1770	1569
Q Serve(g_s), s	4.6	20.5	20.8	11.2	20.0	3.1	5.4	10.6	12.1	10.1	39.4	3.6
Cycle Q Clear(g_c), s	4.6	20.5	20.8	11.2	20.0	3.1	5.4	10.6	12.1	10.1	39.4	3.6
Prop In Lane	1.00		0.60	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	1104	545	370	1209	536	355	1248	526	339	1180	523
V/C Ratio(X)	0.50	0.62	0.63	0.88	0.59	0.15	0.47	0.35	0.39	0.87	0.99	0.18
Avail Cap(c_a), veh/h	315	1104	545	516	1209	536	355	1248	526	459	1180	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.87	1.00	1.00	1.00	1.00	1.00	1.00	0.64	0.64	0.64
Uniform Delay (d), s/veh	52.9	34.2	34.5	52.8	32.6	14.5	51.0	30.1	30.6	53.3	39.8	15.1
Incr Delay (d2), s/veh	0.5	2.3	4.7	9.7	2.1	0.6	4.5	0.8	2.2	7.0	18.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	10.0	10.3	5.8	10.1	1.4	2.9	5.6	5.5	5.2	22.2	1.6
LnGrp Delay(d),s/veh	53.3	36.5	39.2	62.5	34.7	15.1	55.5	30.8	32.8	60.4	58.4	15.2
LnGrp LOS	D	D	D	E	C	B	E	C	C	E	E	B
Approach Vol, veh/h		1164			1123			811			1555	
Approach Delay, s/veh		39.3			41.4			36.4			56.2	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	44.2	16.9	43.1	16.0	44.0	15.0	45.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	16.5	34.7	18.5	33.1	12.5	38.7	11.5	* 40
Max Q Clear Time (g_c+I1), s	12.1	14.1	13.2	22.8	7.4	41.4	6.6	22.0
Green Ext Time (p_c), s	0.2	14.9	0.2	5.6	0.1	0.0	0.4	6.2

Intersection Summary	
HCM 2010 Ctrl Delay	45.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	460	10	30	610	180	30	20	60	180	20	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	32	484	11	32	642	189	32	21	63	189	21	63
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	380	1592	36	445	1212	356	96	41	659	114	7	659
Arrive On Green	0.45	0.45	0.43	0.90	0.90	0.86	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	656	3537	80	896	2694	792	0	98	1582	0	17	1582
Grp Volume(v), veh/h	32	242	253	32	421	410	53	0	63	210	0	63
Grp Sat Flow(s),veh/h/ln	656	1770	1848	896	1770	1716	98	0	1582	17	0	1582
Q Serve(g_s), s	1.9	5.2	5.2	0.6	2.7	3.2	0.0	0.0	1.5	0.0	0.0	1.5
Cycle Q Clear(g_c), s	5.1	5.2	5.2	5.9	2.7	3.2	25.0	0.0	1.5	25.0	0.0	1.5
Prop In Lane	1.00		0.04	1.00		0.46	0.60		1.00	0.90		1.00
Lane Grp Cap(c), veh/h	380	796	832	445	796	772	137	0	659	121	0	659
V/C Ratio(X)	0.08	0.30	0.30	0.07	0.53	0.53	0.39	0.00	0.10	1.74	0.00	0.10
Avail Cap(c_a), veh/h	380	796	832	445	796	772	137	0	659	121	0	659
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.78	0.78	0.78	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.5	10.5	10.5	2.7	1.8	2.2	15.2	0.0	10.6	28.6	0.0	10.6
Incr Delay (d2), s/veh	0.4	0.9	0.8	0.2	2.0	2.0	8.1	0.0	0.3	363.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	2.7	2.9	0.2	1.4	1.7	0.8	0.0	0.7	14.2	0.0	0.7
LnGrp Delay(d),s/veh	11.9	11.4	11.4	3.0	3.7	4.2	23.2	0.0	10.9	392.2	0.0	10.9
LnGrp LOS	B	B	B	A	A	A	C		B	F		B
Approach Vol, veh/h		527			863			116			273	
Approach Delay, s/veh		11.4			3.9			16.5			304.2	
Approach LOS		B			A			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		31.0		29.0		31.0
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		25.0		25.7		25.0		25.7
Max Q Clear Time (g_c+I1), s		27.0		7.2		27.0		7.9
Green Ext Time (p_c), s		0.0		11.2		0.0		11.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.1
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	930	10	10	900	90	10	0	10	50	0	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	979	11	11	947	95	11	0	11	53	0	84
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	2377	27	6	2696	270	177	14	146	381	0	360
Arrive On Green	0.17	1.00	1.00	0.00	0.19	0.19	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1774	3584	40	1774	4688	469	568	60	628	1366	0	1543
Grp Volume(v), veh/h	126	483	507	11	684	358	22	0	0	53	0	84
Grp Sat Flow(s),veh/h/ln	1774	1770	1855	1774	1695	1767	1256	0	0	1366	0	1543
Q Serve(g_s), s	8.3	0.0	0.0	0.4	21.0	21.1	0.1	0.0	0.0	0.0	0.0	5.3
Cycle Q Clear(g_c), s	8.3	0.0	0.0	0.4	21.0	21.1	5.4	0.0	0.0	3.6	0.0	5.3
Prop In Lane	1.00		0.02	1.00		0.27	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	146	1174	1230	6	1949	1016	338	0	0	381	0	360
V/C Ratio(X)	0.86	0.41	0.41	1.77	0.35	0.35	0.07	0.00	0.00	0.14	0.00	0.23
Avail Cap(c_a), veh/h	163	1174	1230	163	1949	1016	338	0	0	381	0	360
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.31	0.31	0.31	0.96	0.96	0.96	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.4	0.0	0.0	59.9	29.2	29.2	35.8	0.0	0.0	36.6	0.0	37.3
Incr Delay (d2), s/veh	11.7	0.3	0.3	390.9	0.5	0.9	0.0	0.0	0.0	0.8	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	116.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	0.1	0.1	0.9	10.0	10.6	0.6	0.0	0.0	1.5	0.0	2.4
LnGrp Delay(d),s/veh	61.2	0.3	0.3	567.3	29.7	30.2	35.8	0.0	0.0	37.4	0.0	38.8
LnGrp LOS	E	A	A	F	C	C	D			D		D
Approach Vol, veh/h		1116			1053			22			137	
Approach Delay, s/veh		7.2			35.4			35.8			38.3	
Approach LOS		A			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.0	4.4	83.6		32.0	15.0	73.0
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	4.6	* 4.6
Max Green Setting (Gmax), s		28.0	11.5	68.4		28.0	11.5	* 68
Max Q Clear Time (g_c+I1), s		7.4	2.4	2.0		7.3	10.3	23.1
Green Ext Time (p_c), s		0.5	0.0	10.1		0.5	0.1	10.9

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

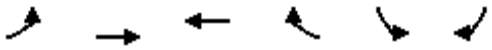
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1010	20	30	1100	60	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1541	1770	3539	1770	1508
Flt Permitted	1.00	1.00	0.17	1.00	0.95	1.00
Satd. Flow (perm)	3539	1541	318	3539	1770	1508
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1063	21	32	1158	63	32
RTOR Reduction (vph)	0	5	0	0	0	29
Lane Group Flow (vph)	1063	16	32	1158	63	3
Confl. Peds. (#/hr)		2	2			10
Turn Type	NA	Perm	D.P+P	NA	Prot	Perm
Protected Phases	1		2 4	1 2 4	3	
Permitted Phases		1	1			3
Actuated Green, G (s)	60.4	60.4	91.6	101.4	9.4	9.4
Effective Green, g (s)	61.3	61.3	94.3	102.3	10.0	10.0
Actuated g/C Ratio	0.51	0.51	0.79	0.85	0.08	0.08
Clearance Time (s)	4.9	4.9			4.6	4.6
Vehicle Extension (s)	1.5	1.5			2.5	2.5
Lane Grp Cap (vph)	1807	787	649	3016	147	125
v/s Ratio Prot	c0.30		0.01	c0.33	c0.04	
v/s Ratio Perm		0.01	0.03			0.00
v/c Ratio	0.59	0.02	0.05	0.38	0.43	0.02
Uniform Delay, d1	20.5	14.5	5.1	1.9	52.3	50.5
Progression Factor	1.00	1.00	0.05	0.03	1.00	1.00
Incremental Delay, d2	1.4	0.0	0.0	0.0	1.5	0.1
Delay (s)	21.9	14.6	0.3	0.1	53.7	50.6
Level of Service	C	B	A	A	D	D
Approach Delay (s)	21.8			0.1	52.7	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		

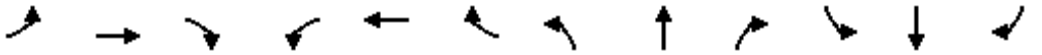
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	60	980	1010	70	130	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.93	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1770	3539	3539	1541	1695	
Flt Permitted	0.17	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	318	3539	3539	1541	1695	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	1032	1063	74	137	137
RTOR Reduction (vph)	0	0	0	27	31	0
Lane Group Flow (vph)	63	1032	1063	47	243	0
Confl. Peds. (#/hr)	2			2	10	
Turn Type	D.P+P	NA	NA	Perm	Prot	
Protected Phases	2 3	1 2 3	1		4	
Permitted Phases	1			1		
Actuated Green, G (s)	81.5	86.4	60.4	60.4	24.1	
Effective Green, g (s)	79.6	83.6	61.3	61.3	24.7	
Actuated g/C Ratio	0.66	0.70	0.51	0.51	0.21	
Clearance Time (s)			4.9	4.9	4.6	
Vehicle Extension (s)			1.5	1.5	2.5	
Lane Grp Cap (vph)	432	2465	1807	787	348	
v/s Ratio Prot	0.02	c0.29	c0.30		c0.14	
v/s Ratio Perm	0.07			0.03		
v/c Ratio	0.15	0.42	0.59	0.06	0.70	
Uniform Delay, d1	9.5	7.8	20.5	14.8	44.2	
Progression Factor	0.14	0.10	0.68	0.82	1.00	
Incremental Delay, d2	0.1	0.1	1.2	0.1	5.5	
Delay (s)	1.4	0.9	15.1	12.3	49.7	
Level of Service	A	A	B	B	D	
Approach Delay (s)		0.9	14.9		49.7	
Approach LOS		A	B		D	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	630	430	180	500	120	280	2070	20	180	2660	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	663	282	189	526	22	295	2179	20	189	2800	162
Adj No. of Lanes	1	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	767	343	152	699	313	424	2966	27	295	2508	144
Arrive On Green	0.11	0.22	0.22	0.09	0.20	0.20	0.25	0.90	0.90	0.11	0.53	0.53
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	6597	61	3442	6246	359
Grp Volume(v), veh/h	179	663	282	189	526	22	295	1587	612	189	2150	812
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	1602	1852	1721	1602	1799
Q Serve(g_s), s	13.9	25.3	23.8	12.0	19.6	1.6	10.9	13.7	13.7	7.3	56.2	56.2
Cycle Q Clear(g_c), s	13.9	25.3	23.8	12.0	19.6	1.6	10.9	13.7	13.7	7.3	56.2	56.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.03	1.00		0.20
Lane Grp Cap(c), veh/h	203	767	343	152	699	313	424	2161	833	295	1929	722
V/C Ratio(X)	0.88	0.86	0.82	1.24	0.75	0.07	0.70	0.73	0.73	0.64	1.11	1.12
Avail Cap(c_a), veh/h	228	877	392	152	726	325	424	2161	833	295	1929	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	0.83	0.83	0.83	0.35	0.35	0.35	0.59	0.59	0.59	0.39	0.39	0.39
Uniform Delay (d), s/veh	61.1	52.8	52.2	64.0	52.9	45.7	50.4	4.6	4.6	60.0	32.6	32.6
Incr Delay (d2), s/veh	25.0	6.9	9.9	127.7	1.6	0.0	3.0	1.4	3.5	1.8	54.8	63.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.2	13.1	11.3	11.3	9.7	0.7	5.3	5.5	6.9	3.6	34.3	40.4
LnGrp Delay(d),s/veh	86.1	59.7	62.2	191.7	54.5	45.7	53.3	5.9	8.0	61.8	87.4	96.5
LnGrp LOS	F	E	E	F	D	D	D	A	A	E	F	F
Approach Vol, veh/h		1124			737			2494			3151	
Approach Delay, s/veh		64.5			89.4			12.0			88.2	
Approach LOS		E			F			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	68.7	18.3	36.7	23.0	62.0	21.0	34.0
Change Period (Y+Rc), s	* 4.3	5.8	6.3	* 6.3	5.8	* 5.8	5.0	6.3
Max Green Setting (Gmax), s	* 12	59.9	12.0	* 35	15.7	* 56	18.0	28.7
Max Q Clear Time (g_c+I1), s	9.3	15.7	14.0	27.3	12.9	58.2	15.9	21.6
Green Ext Time (p_c), s	0.1	25.8	0.0	3.1	1.4	0.0	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	59.5
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	160	480	0	2230	2870	940
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	168	254	0	2347	3021	0
Adj No. of Lanes	3	2	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	522	291	0	5222	5222	1290
Arrive On Green	0.10	0.10	0.00	1.00	1.00	0.00
Sat Flow, veh/h	5003	2787	0	6929	6669	1583
Grp Volume(v), veh/h	168	254	0	2347	3021	0
Grp Sat Flow(s),veh/h/ln	1668	1393	0	1602	1602	1583
Q Serve(g_s), s	4.4	12.6	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.4	12.6	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	522	291	0	5222	5222	1290
V/C Ratio(X)	0.32	0.87	0.00	0.45	0.58	0.00
Avail Cap(c_a), veh/h	525	293	0	5222	5222	1290
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	0.57	0.09	0.00
Uniform Delay (d), s/veh	58.1	61.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	23.9	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.0	10.3	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	58.5	85.7	0.0	0.2	0.0	0.0
LnGrp LOS	E	F		A	A	
Approach Vol, veh/h	422			2347	3021	
Approach Delay, s/veh	74.9			0.2	0.0	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		120.1		19.9		120.1		
Change Period (Y+Rc), s		6.0		* 5.3		6.0		
Max Green Setting (Gmax), s		114.0		* 15		73.0		
Max Q Clear Time (g_c+I1), s		2.0		14.6		2.0		
Green Ext Time (p_c), s		44.1		0.0		56.5		

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	900	140	140	430	280	140	1730	230	450	2460	430
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	242	947	70	147	453	111	147	1821	136	474	2589	356
Adj No. of Lanes	2	4	0	2	2	1	2	4	1	2	4	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	1294	95	319	770	345	294	2450	605	516	2864	1484
Arrive On Green	0.09	0.21	0.21	0.09	0.22	0.22	0.17	0.76	0.76	0.20	0.59	0.59
Sat Flow, veh/h	3442	6139	450	3442	3539	1583	3442	6408	1583	3442	6408	2787
Grp Volume(v), veh/h	242	740	277	147	453	111	147	1821	136	474	2589	356
Grp Sat Flow(s),veh/h/ln	1721	1602	1783	1721	1770	1583	1721	1602	1583	1721	1602	1393
Q Serve(g_s), s	9.7	20.1	20.3	5.7	16.1	8.3	5.4	21.7	3.4	18.9	49.6	7.4
Cycle Q Clear(g_c), s	9.7	20.1	20.3	5.7	16.1	8.3	5.4	21.7	3.4	18.9	49.6	7.4
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	295	1013	376	319	770	345	294	2450	605	516	2864	1484
V/C Ratio(X)	0.82	0.73	0.74	0.46	0.59	0.32	0.50	0.74	0.22	0.92	0.90	0.24
Avail Cap(c_a), veh/h	295	1177	437	320	910	407	295	2450	605	526	2864	1484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	0.44	0.44	0.44
Uniform Delay (d), s/veh	62.9	51.5	51.6	60.2	49.1	46.1	55.3	12.7	10.6	55.2	25.8	12.5
Incr Delay (d2), s/veh	16.6	2.0	5.5	1.0	0.7	0.5	1.1	1.7	0.7	11.2	2.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.3	9.1	10.6	2.7	7.9	3.7	2.6	9.4	1.6	9.8	22.1	2.9
LnGrp Delay(d),s/veh	79.6	53.5	57.1	61.3	49.9	46.6	56.4	14.4	11.3	66.4	28.2	12.6
LnGrp LOS	E	D	E	E	D	D	E	B	B	E	C	B
Approach Vol, veh/h		1259			711			2104			3419	
Approach Delay, s/veh		59.3			51.7			17.2			31.9	
Approach LOS		E			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.6	59.3	18.3	35.8	17.6	68.4	17.3	36.8
Change Period (Y+Rc), s	* 5.6	5.8	* 5.3	* 6.3	* 5.6	5.8	* 5.3	* 6.3
Max Green Setting (Gmax), s	* 21	48.3	* 13	* 34	* 12	57.7	* 12	* 36
Max Q Clear Time (g_c+I1), s	20.9	23.7	7.7	22.3	7.4	51.6	11.7	18.1
Green Ext Time (p_c), s	0.1	24.3	0.2	7.2	0.2	6.1	0.0	9.3

Intersection Summary	
HCM 2010 Ctrl Delay	34.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

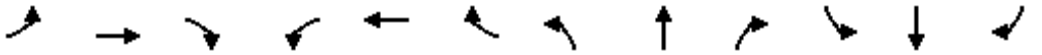
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	470	340	300	550	170	180	1950	270	160	2400	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	189	495	209	316	579	33	189	2053	237	168	2526	71
Adj No. of Lanes	1	2	1	1	2	1	1	4	1	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	214	624	279	247	715	320	167	2632	858	247	2975	84
Arrive On Green	0.12	0.18	0.18	0.14	0.20	0.20	0.13	0.55	0.54	0.14	0.46	0.45
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6408	1583	1774	6455	181
Grp Volume(v), veh/h	189	495	209	316	579	33	189	2053	237	168	1880	717
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1583	1774	1602	1831
Q Serve(g_s), s	14.7	18.8	13.9	19.5	21.9	1.7	13.2	35.5	0.0	12.6	48.5	48.7
Cycle Q Clear(g_c), s	14.7	18.8	13.9	19.5	21.9	1.7	13.2	35.5	0.0	12.6	48.5	48.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	214	624	279	247	715	320	167	2632	858	247	2215	844
V/C Ratio(X)	0.88	0.79	0.75	1.28	0.81	0.10	1.13	0.78	0.28	0.68	0.85	0.85
Avail Cap(c_a), veh/h	231	733	328	247	758	339	167	2632	858	247	2215	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	0.83	0.83	0.83	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.6	55.2	34.4	60.3	53.3	23.6	61.2	26.8	12.9	57.3	33.4	33.5
Incr Delay (d2), s/veh	25.8	5.2	8.1	152.9	6.7	0.2	102.7	2.0	0.7	6.0	4.3	10.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.7	9.7	6.7	20.0	11.4	0.8	11.2	16.0	3.8	6.6	22.3	27.0
LnGrp Delay(d),s/veh	86.4	60.5	42.5	213.1	60.0	23.8	163.9	28.7	13.6	63.3	37.7	44.0
LnGrp LOS	F	E	D	F	E	C	F	C	B	E	D	D
Approach Vol, veh/h		893			928			2479			2765	
Approach Delay, s/veh		61.7			110.8			37.6			40.9	
Approach LOS		E			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.6	61.5	24.9	29.0	17.6	68.5	21.0	32.9
Change Period (Y+Rc), s	5.3	* 5.3	* 5.6	* 5.3	* 4.6	5.3	* 4.3	* 5.6
Max Green Setting (Gmax), s	17.0	* 56	* 19	* 28	* 13	60.2	* 18	* 29
Max Q Clear Time (g_c+I1), s	14.6	37.5	21.5	20.8	15.2	50.7	16.7	23.9
Green Ext Time (p_c), s	1.8	16.4	0.0	2.9	0.0	9.3	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	51.6
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



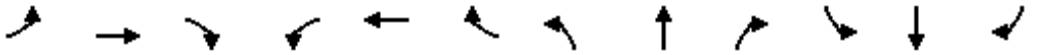
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	400	140	100	380	140	110	2390	90	150	2710	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	74	421	147	105	400	147	116	2516	95	158	2853	84
Adj No. of Lanes	1	2	1	1	2	1	1	4	0	1	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	556	249	137	558	250	163	2860	108	266	3334	824
Arrive On Green	0.08	0.16	0.16	0.08	0.16	0.16	0.03	0.15	0.15	0.30	1.00	1.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6386	241	1774	6408	1583
Grp Volume(v), veh/h	74	421	147	105	400	147	116	1892	719	158	2853	84
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1820	1774	1602	1583
Q Serve(g_s), s	5.6	15.9	12.1	8.1	15.0	8.7	9.1	54.0	54.2	10.6	0.0	0.0
Cycle Q Clear(g_c), s	5.6	15.9	12.1	8.1	15.0	8.7	9.1	54.0	54.2	10.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	144	556	249	137	558	250	163	2152	815	266	3334	824
V/C Ratio(X)	0.52	0.76	0.59	0.77	0.72	0.59	0.71	0.88	0.88	0.59	0.86	0.10
Avail Cap(c_a), veh/h	152	683	305	170	733	328	165	2152	815	266	3334	824
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.88	0.88	0.88	0.87	0.87	0.87	0.53	0.53	0.53	0.76	0.76	0.76
Uniform Delay (d), s/veh	61.7	56.4	54.8	63.4	56.0	28.2	66.0	55.9	56.0	45.4	0.0	0.0
Incr Delay (d2), s/veh	2.5	3.4	2.0	13.4	2.0	1.9	7.4	3.1	7.7	2.7	2.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.9	8.0	5.4	4.5	7.5	3.9	4.8	24.6	29.1	5.4	0.5	0.0
LnGrp Delay(d),s/veh	64.2	59.9	56.8	76.7	58.0	30.1	73.4	59.0	63.7	48.1	2.4	0.2
LnGrp LOS	E	E	E	E	E	C	E	E	E	D	A	A
Approach Vol, veh/h		642			652			2727			3095	
Approach Delay, s/veh		59.7			54.7			60.9			4.6	
Approach LOS		E			D			E			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.3	69.0	15.7	28.0	17.2	79.1	15.6	28.1
Change Period (Y+Rc), s	6.3	* 6.3	4.9	6.0	* 4.3	6.3	* 4.3	6.0
Max Green Setting (Gmax), s	15.1	* 63	13.4	27.0	* 13	65.1	* 12	29.0
Max Q Clear Time (g_c+I1), s	12.6	56.2	10.1	17.9	11.1	2.0	7.6	17.0
Green Ext Time (p_c), s	0.7	6.0	0.1	4.1	0.0	49.6	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	35.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



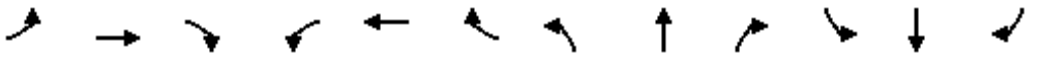
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	410	310	70	200	140	120	1680	60	110	2350	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	232	432	326	74	211	147	126	1768	63	116	2474	168
Adj No. of Lanes	1	2	0	1	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	387	290	132	249	211	168	3242	116	138	2996	203
Arrive On Green	0.14	0.20	0.20	0.07	0.13	0.13	0.09	0.51	0.51	0.08	0.49	0.49
Sat Flow, veh/h	1774	1930	1447	1774	1863	1583	1774	6400	228	1774	6177	418
Grp Volume(v), veh/h	232	396	362	74	211	147	126	1328	503	116	1923	719
Grp Sat Flow(s),veh/h/ln	1774	1770	1607	1774	1863	1583	1774	1602	1823	1774	1602	1789
Q Serve(g_s), s	18.0	28.1	28.1	5.6	15.5	10.4	9.7	26.4	26.4	9.0	48.1	48.5
Cycle Q Clear(g_c), s	18.0	28.1	28.1	5.6	15.5	10.4	9.7	26.4	26.4	9.0	48.1	48.5
Prop In Lane	1.00		0.90	1.00		1.00	1.00		0.13	1.00		0.23
Lane Grp Cap(c), veh/h	254	355	323	132	249	211	168	2434	923	138	2331	868
V/C Ratio(X)	0.91	1.11	1.12	0.56	0.85	0.70	0.75	0.55	0.55	0.84	0.82	0.83
Avail Cap(c_a), veh/h	254	355	323	139	386	328	168	2434	923	139	2331	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	1.00	1.00	1.00	0.70	0.70	0.70
Uniform Delay (d), s/veh	59.1	56.0	56.0	62.6	59.3	40.3	61.8	23.6	23.6	63.7	30.9	31.1
Incr Delay (d2), s/veh	33.9	82.5	87.3	3.9	8.8	3.5	17.3	0.9	2.3	25.8	2.5	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	11.2	21.9	20.3	2.9	8.6	4.7	5.6	11.9	13.9	5.4	21.7	25.3
LnGrp Delay(d),s/veh	93.0	138.4	143.2	66.5	68.1	43.8	79.1	24.4	25.9	89.5	33.4	37.6
LnGrp LOS	F	F	F	E	E	D	E	C	C	F	C	D
Approach Vol, veh/h		990			432			1957			2758	
Approach Delay, s/veh		129.5			59.6			28.3			36.9	
Approach LOS		F			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	76.2	15.3	33.0	18.5	73.2	25.0	23.3
Change Period (Y+Rc), s	* 4.6	5.3	4.9	* 4.9	5.3	* 5.3	4.9	* 4.6
Max Green Setting (Gmax), s	* 11	70.2	11.0	* 28	13.0	* 68	11.0	* 29
Max Q Clear Time (g_c+I1), s	11.0	28.4	7.6	30.1	11.7	50.5	20.0	17.5
Green Ext Time (p_c), s	0.0	18.1	0.0	0.0	0.9	14.7	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	50.7
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	10	50	80	0	40	40	1880	50	160	2510	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	11	53	97	0	28	42	1979	53	168	2642	11
Adj No. of Lanes	1	1	0	2	0	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	24	117	222	0	138	103	3269	88	1075	5072	21
Arrive On Green	0.09	0.09	0.09	0.09	0.00	0.09	0.06	0.51	0.51	0.31	0.76	0.76
Sat Flow, veh/h	1377	279	1346	2665	0	1583	1774	6465	173	3442	6636	28
Grp Volume(v), veh/h	32	0	64	97	0	28	42	1471	561	168	1913	740
Grp Sat Flow(s),veh/h/ln	1377	0	1625	1332	0	1583	1774	1602	1832	1721	1602	1858
Q Serve(g_s), s	3.5	0.0	6.0	5.7	0.0	2.6	3.7	34.9	34.9	5.6	24.9	25.0
Cycle Q Clear(g_c), s	3.5	0.0	6.0	11.7	0.0	2.6	3.7	34.9	34.9	5.6	24.9	25.0
Prop In Lane	1.00		0.83	1.00		1.00	1.00		0.09	1.00		0.01
Lane Grp Cap(c), veh/h	165	0	141	222	0	138	103	2430	926	1075	3673	1420
V/C Ratio(X)	0.19	0.00	0.45	0.44	0.00	0.20	0.41	0.61	0.61	0.16	0.52	0.52
Avail Cap(c_a), veh/h	303	0	305	257	0	158	122	2430	926	1075	3673	1420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.76	0.76	0.76	0.70	0.70	0.70
Uniform Delay (d), s/veh	68.3	0.0	69.4	75.0	0.0	67.9	72.7	28.2	28.2	39.8	7.4	7.4
Incr Delay (d2), s/veh	0.6	0.0	2.3	1.4	0.0	0.7	2.0	0.9	2.3	0.0	0.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.0	2.8	2.2	0.0	1.2	1.9	15.6	18.2	2.7	11.1	13.1
LnGrp Delay(d),s/veh	68.8	0.0	71.7	76.3	0.0	68.6	74.7	29.0	30.4	39.8	7.8	8.4
LnGrp LOS	E		E	E		E	E	C	C	D	A	A
Approach Vol, veh/h		96			125			2074			2821	
Approach Delay, s/veh		70.7			74.6			30.3			9.8	
Approach LOS		E			E			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	55.3	86.2		18.5	13.9	127.6		18.5
Change Period (Y+Rc), s	5.3	* 5.3		* 4.6	* 4.6	5.3		* 4.6
Max Green Setting (Gmax), s	15.0	* 81		* 30	* 11	84.9		* 16
Max Q Clear Time (g_c+I1), s	7.6	36.9		8.0	5.7	27.0		13.7
Green Ext Time (p_c), s	5.1	20.7		0.8	0.0	37.8		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	250	430	160	420	430	150	210	1990	150	210	2480	430
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	263	453	168	442	453	158	221	2095	158	221	2611	453
Adj No. of Lanes	2	2	0	2	2	0	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	401	509	187	369	502	174	270	2822	213	300	2638	446
Arrive On Green	0.12	0.20	0.20	0.11	0.19	0.19	0.03	0.15	0.15	0.12	0.63	0.63
Sat Flow, veh/h	3442	2535	933	3442	2582	893	3442	6126	462	3442	5562	940
Grp Volume(v), veh/h	263	315	306	442	309	302	221	1643	610	221	2247	817
Grp Sat Flow(s),veh/h/ln	1721	1770	1698	1721	1770	1705	1721	1602	1781	1721	1602	1697
Q Serve(g_s), s	10.2	24.2	24.6	15.0	23.9	24.2	8.9	45.8	45.8	8.7	63.9	66.4
Cycle Q Clear(g_c), s	10.2	24.2	24.6	15.0	23.9	24.2	8.9	45.8	45.8	8.7	63.9	66.4
Prop In Lane	1.00		0.55	1.00		0.52	1.00		0.26	1.00		0.55
Lane Grp Cap(c), veh/h	401	355	341	369	344	331	270	2214	821	300	2279	805
V/C Ratio(X)	0.66	0.89	0.90	1.20	0.90	0.91	0.82	0.74	0.74	0.74	0.99	1.02
Avail Cap(c_a), veh/h	411	379	364	369	367	353	270	2214	821	300	2279	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.40	0.40	0.40	0.73	0.73	0.73	0.90	0.90	0.90	0.09	0.09	0.09
Uniform Delay (d), s/veh	59.2	54.4	54.5	62.5	55.1	55.2	67.2	51.4	51.4	60.3	25.4	25.8
Incr Delay (d2), s/veh	1.5	9.7	11.1	107.3	18.4	20.6	16.0	2.1	5.5	0.9	3.3	13.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.9	12.8	12.6	12.6	13.4	13.3	4.9	20.8	23.9	4.2	28.7	33.8
LnGrp Delay(d),s/veh	60.6	64.1	65.6	169.8	73.5	75.8	83.2	53.5	56.9	61.2	28.7	39.6
LnGrp LOS	E	E	E	F	E	E	F	D	E	E	C	F
Approach Vol, veh/h		884			1053			2474			3285	
Approach Delay, s/veh		63.6			114.6			57.0			33.6	
Approach LOS		E			F			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	69.8	20.0	32.7	15.6	71.7	20.9	31.8
Change Period (Y+Rc), s	5.3	* 5.3	5.0	4.6	* 4.6	5.3	4.6	* 4.6
Max Green Setting (Gmax), s	11.0	* 65	15.0	30.0	* 11	64.5	16.7	* 29
Max Q Clear Time (g_c+I1), s	10.7	47.8	17.0	26.6	10.9	68.4	12.2	26.2
Green Ext Time (p_c), s	0.0	12.7	0.0	1.5	0.0	0.0	1.9	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	55.6
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	30	30	60	20	110	60	1920	70	170	2440	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	32	32	63	21	116	63	2021	74	179	2568	21
Adj No. of Lanes	1	1	0	1	1	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	67	67	139	169	144	116	3019	111	780	4204	34
Arrive On Green	0.07	0.08	0.08	0.08	0.09	0.09	0.07	0.47	0.47	0.45	1.00	1.00
Sat Flow, veh/h	1774	856	856	1774	1863	1583	1774	6393	234	3442	6605	54
Grp Volume(v), veh/h	32	0	64	63	21	116	63	1519	576	179	1868	721
Grp Sat Flow(s),veh/h/ln	1774	0	1712	1774	1863	1583	1774	1602	1821	1721	1602	1853
Q Serve(g_s), s	2.4	0.0	5.0	4.8	1.5	6.7	4.8	34.2	34.2	4.4	0.0	0.0
Cycle Q Clear(g_c), s	2.4	0.0	5.0	4.8	1.5	6.7	4.8	34.2	34.2	4.4	0.0	0.0
Prop In Lane	1.00		0.50	1.00		1.00	1.00		0.13	1.00		0.03
Lane Grp Cap(c), veh/h	117	0	134	139	169	144	116	2269	860	780	3059	1179
V/C Ratio(X)	0.27	0.00	0.48	0.45	0.12	0.81	0.54	0.67	0.67	0.23	0.61	0.61
Avail Cap(c_a), veh/h	165	0	384	152	399	339	128	2269	860	780	3059	1179
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.82	0.82	0.82	0.30	0.30	0.30
Uniform Delay (d), s/veh	62.2	0.0	61.7	61.7	58.5	27.8	63.4	28.5	28.5	30.8	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	2.6	2.3	0.3	10.1	3.2	1.3	3.4	0.0	0.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	0.0	2.5	2.4	0.8	3.3	2.5	15.3	17.9	2.1	0.1	0.2
LnGrp Delay(d),s/veh	63.4	0.0	64.3	64.0	58.9	38.0	66.7	29.8	31.9	30.8	0.3	0.7
LnGrp LOS	E		E	E	E	D	E	C	C	C	A	A
Approach Vol, veh/h		96			200			2158			2768	
Approach Delay, s/veh		64.0			48.3			31.5			2.4	
Approach LOS		E			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.0	71.4	15.3	16.3	14.0	94.4	13.6	18.0
Change Period (Y+Rc), s	5.3	* 5.3	* 4.3	* 5.3	4.9	5.3	* 4.3	* 5.3
Max Green Setting (Gmax), s	11.4	* 66	* 12	* 31	10.1	67.1	* 13	* 30
Max Q Clear Time (g_c+I1), s	6.4	36.2	6.8	7.0	6.8	2.0	4.4	8.7
Green Ext Time (p_c), s	3.4	17.7	0.0	0.8	0.0	39.2	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	17.3
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

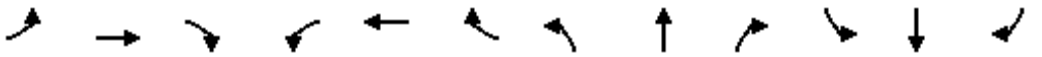
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	270	240	120	140	270	130	100	2060	110	110	2980	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	284	253	126	147	284	137	105	2168	116	116	3137	116
Adj No. of Lanes	2	2	0	1	2	0	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	319	154	171	350	165	149	3281	175	138	3329	122
Arrive On Green	0.08	0.14	0.14	0.10	0.15	0.15	0.08	0.52	0.52	0.16	1.00	1.00
Sat Flow, veh/h	3442	2316	1119	1774	2339	1100	1774	6274	335	1774	6393	235
Grp Volume(v), veh/h	284	191	188	147	213	208	105	1660	624	116	2352	901
Grp Sat Flow(s),veh/h/ln	1721	1770	1665	1774	1770	1669	1774	1602	1804	1774	1602	1821
Q Serve(g_s), s	11.5	14.6	15.3	11.4	16.3	16.9	8.1	35.2	35.3	8.9	0.0	0.0
Cycle Q Clear(g_c), s	11.5	14.6	15.3	11.4	16.3	16.9	8.1	35.2	35.3	8.9	0.0	0.0
Prop In Lane	1.00		0.67	1.00		0.66	1.00		0.19	1.00		0.13
Lane Grp Cap(c), veh/h	291	244	229	171	265	250	149	2514	943	138	2503	948
V/C Ratio(X)	0.98	0.79	0.82	0.86	0.80	0.83	0.70	0.66	0.66	0.84	0.94	0.95
Avail Cap(c_a), veh/h	291	341	321	233	430	405	152	2514	943	144	2503	948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.95	0.95	0.95	0.94	0.94	0.94	0.44	0.44	0.44	0.66	0.66	0.66
Uniform Delay (d), s/veh	64.0	58.4	58.7	62.3	57.5	57.8	62.4	24.3	24.3	58.3	0.0	0.0
Incr Delay (d2), s/veh	45.0	7.4	10.3	19.3	5.4	7.3	6.2	0.6	1.6	23.6	6.0	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.3	7.7	7.7	6.5	8.4	8.3	4.2	15.7	17.9	5.2	1.4	3.8
LnGrp Delay(d),s/veh	109.0	65.8	69.0	81.6	62.9	65.0	68.6	24.9	26.0	81.9	6.0	14.4
LnGrp LOS	F	E	E	F	E	E	E	C	C	F	A	B
Approach Vol, veh/h		663			568			2389			3369	
Approach Delay, s/veh		85.2			68.5			27.1			10.9	
Approach LOS		F			E			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	79.5	19.1	24.9	16.8	79.2	17.4	26.6
Change Period (Y+Rc), s	* 5.6	6.3	* 5.6	* 5.6	5.0	6.3	5.6	* 5.6
Max Green Setting (Gmax), s	* 11	60.1	* 18	* 27	12.0	60.1	11.4	* 34
Max Q Clear Time (g_c+I1), s	10.9	37.3	13.4	17.3	10.1	2.0	13.5	18.9
Green Ext Time (p_c), s	0.0	22.7	0.1	1.9	0.0	57.3	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	28.2
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	630	150	230	530	140	210	2170	90	220	2410	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	232	663	158	242	558	147	221	2284	95	232	2537	126
Adj No. of Lanes	2	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	736	329	190	822	368	287	2793	116	295	2728	135
Arrive On Green	0.09	0.21	0.21	0.11	0.23	0.23	0.08	0.44	0.44	0.03	0.14	0.14
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	6358	264	3442	6302	312
Grp Volume(v), veh/h	232	663	158	242	558	147	221	1726	653	232	1933	730
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1602	1816	1721	1602	1808
Q Serve(g_s), s	9.2	25.6	12.3	15.0	20.1	11.0	8.8	44.0	44.1	9.4	55.7	55.9
Cycle Q Clear(g_c), s	9.2	25.6	12.3	15.0	20.1	11.0	8.8	44.0	44.1	9.4	55.7	55.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.17
Lane Grp Cap(c), veh/h	320	736	329	190	822	368	287	2111	798	295	2080	782
V/C Ratio(X)	0.73	0.90	0.48	1.27	0.68	0.40	0.77	0.82	0.82	0.79	0.93	0.93
Avail Cap(c_a), veh/h	320	784	351	190	834	373	295	2111	798	344	2080	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.68	0.68	0.68	0.94	0.94	0.94	0.76	0.76	0.76	0.09	0.09	0.09
Uniform Delay (d), s/veh	61.8	54.0	48.8	62.5	49.0	45.5	62.8	34.3	34.4	66.7	57.9	58.0
Incr Delay (d2), s/veh	5.6	9.5	0.7	155.8	2.1	0.7	8.9	2.8	7.1	1.0	1.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	13.5	5.5	15.6	10.1	4.9	4.6	20.0	23.7	4.5	24.9	28.6
LnGrp Delay(d),s/veh	67.3	63.6	49.5	218.3	51.1	46.1	71.7	37.2	41.5	67.7	58.9	60.6
LnGrp LOS	E	E	D	F	D	D	E	D	D	E	E	E
Approach Vol, veh/h		1053			947			2600			2895	
Approach Delay, s/veh		62.3			93.0			41.2			60.0	
Approach LOS		E			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	67.3	21.0	35.1	17.5	66.4	17.6	38.5
Change Period (Y+Rc), s	* 4.6	5.8	6.0	* 6	5.8	* 5.8	* 4.6	6.0
Max Green Setting (Gmax), s	* 14	59.0	15.0	* 31	12.0	* 61	* 13	33.0
Max Q Clear Time (g_c+I1), s	11.4	46.1	17.0	27.6	10.8	57.9	11.2	22.1
Green Ext Time (p_c), s	0.2	10.9	0.0	1.5	0.1	2.5	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	58.0
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	40	40	70	20	40	10	2170	240	110	2760	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	42	42	74	21	42	11	2284	253	116	2905	11
Adj No. of Lanes	1	1	0	0	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	145	146	146	185	47	270	44	3774	416	140	4620	17
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	1.00	1.00	0.11	0.93	0.93
Sat Flow, veh/h	1334	856	856	817	276	1583	1774	5903	651	1774	6639	25
Grp Volume(v), veh/h	84	0	84	95	0	42	11	1858	679	116	2103	813
Grp Sat Flow(s),veh/h/ln	1334	0	1712	1094	0	1583	1774	1602	1748	1774	1602	1858
Q Serve(g_s), s	8.7	0.0	6.0	8.1	0.0	3.2	0.8	0.0	0.0	9.0	10.9	10.9
Cycle Q Clear(g_c), s	22.8	0.0	6.0	14.1	0.0	3.2	0.8	0.0	0.0	9.0	10.9	10.9
Prop In Lane	1.00		0.50	0.78		1.00	1.00		0.37	1.00		0.01
Lane Grp Cap(c), veh/h	145	0	292	232	0	270	44	3073	1118	140	3344	1293
V/C Ratio(X)	0.58	0.00	0.29	0.41	0.00	0.16	0.25	0.60	0.61	0.83	0.63	0.63
Avail Cap(c_a), veh/h	145	0	292	232	0	270	128	3073	1118	374	3344	1293
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.49	0.49	0.49	0.20	0.20	0.20
Uniform Delay (d), s/veh	64.6	0.0	50.6	56.0	0.0	49.5	65.3	0.0	0.0	61.7	2.0	2.0
Incr Delay (d2), s/veh	5.6	0.0	0.5	1.2	0.0	0.3	1.4	0.4	1.2	2.6	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.4	0.0	2.9	3.5	0.0	1.4	0.4	0.1	0.4	4.5	4.5	5.4
LnGrp Delay(d),s/veh	70.2	0.0	51.2	57.1	0.0	49.7	66.7	0.4	1.2	64.3	2.2	2.5
LnGrp LOS	E		D	E		D	E	A	A	E	A	A
Approach Vol, veh/h		168			137			2548			3032	
Approach Delay, s/veh		60.7			54.9			0.9			4.6	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.0	94.8		29.2	8.1	102.7		29.2
Change Period (Y+Rc), s	4.9	5.3		* 5.3	* 4.6	5.3		* 5.3
Max Green Setting (Gmax), s	29.5	71.1		* 24	* 10	90.8		* 24
Max Q Clear Time (g_c+I1), s	11.0	2.0		24.8	2.8	12.9		16.1
Green Ext Time (p_c), s	0.2	67.8		0.0	0.0	76.2		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	5.8
HCM 2010 LOS	A

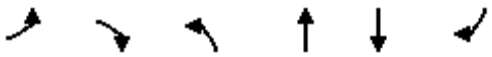
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	920	670	1530	0	0	2850
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863
Adj Flow Rate, veh/h	968	705	1611	0	0	3000
Adj No. of Lanes	2	2	4	0	0	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	0	2
Cap, veh/h	971	786	4060	0	0	4060
Arrive On Green	0.28	0.28	0.21	0.00	0.00	1.00
Sat Flow, veh/h	3442	2787	6929	0	0	6929
Grp Volume(v), veh/h	968	705	1611	0	0	3000
Grp Sat Flow(s),veh/h/ln	1721	1393	1602	0	0	1602
Q Serve(g_s), s	39.3	34.0	30.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	39.3	34.0	30.4	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	0.00	
Lane Grp Cap(c), veh/h	971	786	4060	0	0	4060
V/C Ratio(X)	1.00	0.90	0.40	0.00	0.00	0.74
Avail Cap(c_a), veh/h	971	786	4060	0	0	4060
HCM Platoon Ratio	1.00	1.00	0.33	1.00	1.00	2.00
Upstream Filter(I)	1.00	1.00	0.93	0.00	0.00	0.24
Uniform Delay (d), s/veh	50.2	48.3	32.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	28.1	13.0	0.3	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	22.5	14.5	13.6	0.0	0.0	0.1
LnGrp Delay(d),s/veh	78.3	61.3	32.6	0.0	0.0	0.3
LnGrp LOS	E	E	C			A
Approach Vol, veh/h	1673		1611			3000
Approach Delay, s/veh	71.1		32.6			0.3
Approach LOS	E		C			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		95.0				95.0		45.0
Change Period (Y+Rc), s		6.3				6.3		5.5
Max Green Setting (Gmax), s		88.7				88.7		39.5
Max Q Clear Time (g_c+I1), s		32.4				2.0		41.3
Green Ext Time (p_c), s		56.0				86.0		0.0

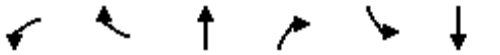
Intersection Summary	
HCM 2010 Ctrl Delay	27.4
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	220	370	0	1680	3080	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0
Adj Flow Rate, veh/h	232	389	0	1768	3242	0
Adj No. of Lanes	2	2	0	4	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	560	453	0	4826	4826	0
Arrive On Green	0.16	0.16	0.00	1.00	0.75	0.00
Sat Flow, veh/h	3442	2787	0	6929	6929	0
Grp Volume(v), veh/h	232	389	0	1768	3242	0
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1602	1602	0
Q Serve(g_s), s	8.5	19.0	0.0	0.0	35.4	0.0
Cycle Q Clear(g_c), s	8.5	19.0	0.0	0.0	35.4	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	560	453	0	4826	4826	0
V/C Ratio(X)	0.41	0.86	0.00	0.37	0.67	0.00
Avail Cap(c_a), veh/h	750	607	0	4826	4826	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.56	0.49	0.00
Uniform Delay (d), s/veh	52.6	57.1	0.0	0.0	8.6	0.0
Incr Delay (d2), s/veh	0.5	9.2	0.0	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.1	7.9	0.0	0.0	15.7	0.0
LnGrp Delay(d),s/veh	53.1	66.3	0.0	0.1	9.0	0.0
LnGrp LOS	D	E		A	A	
Approach Vol, veh/h	621			1768	3242	
Approach Delay, s/veh	61.4			0.1	9.0	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		111.7		28.3		111.7		
Change Period (Y+Rc), s		6.3		5.5		6.3		
Max Green Setting (Gmax), s		97.7		30.5		97.7		
Max Q Clear Time (g_c+I1), s		2.0		21.0		37.4		
Green Ext Time (p_c), s		93.7		1.7		59.5		

Intersection Summary	
HCM 2010 Ctrl Delay	12.0
HCM 2010 LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	150	1120	1180	540	600	1960
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	158	1179	1242	246	632	2063
Adj No. of Lanes	2	2	3	1	2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	737	1190	2192	683	733	2431
Arrive On Green	0.21	0.21	0.43	0.43	0.21	0.69
Sat Flow, veh/h	3442	2787	5253	1583	3442	3632
Grp Volume(v), veh/h	158	1179	1242	246	632	2063
Grp Sat Flow(s),veh/h/ln	1721	1393	1695	1583	1721	1770
Q Serve(g_s), s	3.8	21.4	18.4	10.5	17.7	43.7
Cycle Q Clear(g_c), s	3.8	21.4	18.4	10.5	17.7	43.7
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	737	1190	2192	683	733	2431
V/C Ratio(X)	0.21	0.99	0.57	0.36	0.86	0.85
Avail Cap(c_a), veh/h	737	1190	2192	683	1263	2431
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.61	0.61	0.81	0.81	1.00	1.00
Uniform Delay (d), s/veh	32.4	28.5	21.4	19.2	37.9	11.7
Incr Delay (d2), s/veh	0.0	18.3	0.9	1.2	2.4	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.8	19.1	8.7	4.8	8.7	22.2
LnGrp Delay(d),s/veh	32.4	46.8	22.3	20.4	40.3	15.7
LnGrp LOS	C	D	C	C	D	B
Approach Vol, veh/h	1337		1488			2695
Approach Delay, s/veh	45.1		22.0			21.4
Approach LOS	D		C			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	25.6	48.4				74.0		26.0
Change Period (Y+Rc), s	* 4.3	5.3				5.3		4.6
Max Green Setting (Gmax), s	* 37	27.7				68.7		21.4
Max Q Clear Time (g_c+I1), s	19.7	20.4				45.7		23.4
Green Ext Time (p_c), s	1.6	7.3				22.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	340	670	180	480	540	670	60	550	610	410	790	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	358	705	23	358	774	669	63	579	586	432	832	43
Adj No. of Lanes	2	3	1	1	2	1	1	2	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	535	791	244	400	840	591	81	1001	803	509	1959	609
Arrive On Green	0.32	0.32	0.32	0.08	0.08	0.08	0.02	0.10	0.10	0.15	0.40	0.40
Sat Flow, veh/h	3326	4914	1513	1714	3600	1528	1714	3420	1525	3326	4914	1528
Grp Volume(v), veh/h	358	705	23	358	774	669	63	579	586	432	832	43
Grp Sat Flow(s),veh/h/ln	1663	1638	1513	1714	1800	1528	1714	1710	1525	1663	1638	1528
Q Serve(g_s), s	11.2	16.4	1.3	24.8	25.6	28.0	4.4	19.4	32.0	15.2	14.7	2.1
Cycle Q Clear(g_c), s	11.2	16.4	1.3	24.8	25.6	28.0	4.4	19.4	32.0	15.2	14.7	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	535	791	244	400	840	591	81	1001	803	509	1959	609
V/C Ratio(X)	0.67	0.89	0.09	0.89	0.92	1.13	0.78	0.58	0.73	0.85	0.42	0.07
Avail Cap(c_a), veh/h	554	819	252	400	840	591	154	1001	803	798	1959	609
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.33	0.33	0.33	0.86	0.86	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	39.7	34.6	53.9	54.3	42.5	58.5	47.1	26.9	49.5	26.1	22.3
Incr Delay (d2), s/veh	2.6	10.5	0.1	9.0	6.2	67.4	13.1	2.1	5.0	5.2	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.3	8.1	0.5	12.8	13.5	30.5	2.4	9.5	20.6	7.3	6.7	0.9
LnGrp Delay(d),s/veh	40.5	50.2	34.7	62.9	60.5	109.9	71.6	49.2	31.9	54.7	26.8	22.6
LnGrp LOS	D	D	C	E	E	F	E	D	C	D	C	C
Approach Vol, veh/h		1086			1801			1228			1307	
Approach Delay, s/veh		46.7			79.3			42.1			35.9	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	22.6	40.1		24.3	9.8	52.8		33.0
Change Period (Y+Rc), s	* 4.2	5.0		5.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s	* 29	24.0		20.0	* 11	42.0		28.0
Max Q Clear Time (g_c+I1), s	17.2	34.0		18.4	6.4	16.7		30.0
Green Ext Time (p_c), s	1.2	0.0		1.0	0.0	13.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.9
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	940	220	0	0	250	100	790	100	40	250	0	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	989	232	0	0	263	0	832	105	40	263	0	35
Adj No. of Lanes	2	1	0	0	2	1	2	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	1123	1000	0	0	445	199	1012	378	144	0	0	0
Arrive On Green	0.33	0.54	0.00	0.00	0.13	0.00	0.29	0.29	0.29	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	3632	1583	3442	1286	490		0	
Grp Volume(v), veh/h	989	232	0	0	263	0	832	0	145		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1583	1721	0	1776			
Q Serve(g_s), s	15.1	3.7	0.0	0.0	3.9	0.0	12.5	0.0	3.5			
Cycle Q Clear(g_c), s	15.1	3.7	0.0	0.0	3.9	0.0	12.5	0.0	3.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.28			
Lane Grp Cap(c), veh/h	1123	1000	0	0	445	199	1012	0	523			
V/C Ratio(X)	0.88	0.23	0.00	0.00	0.59	0.00	0.82	0.00	0.28			
Avail Cap(c_a), veh/h	1566	1518	0	0	974	436	3114	0	1607			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	17.7	6.8	0.0	0.0	22.9	0.0	18.3	0.0	15.1			
Incr Delay (d2), s/veh	3.6	0.0	0.0	0.0	0.5	0.0	0.7	0.0	0.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(0%),veh/ln	7.7	1.9	0.0	0.0	1.9	0.0	6.0	0.0	1.7			
LnGrp Delay(d),s/veh	21.3	6.9	0.0	0.0	23.4	0.0	18.9	0.0	15.2			
LnGrp LOS	C	A			C		B		B			
Approach Vol, veh/h		1221			263			977				
Approach Delay, s/veh		18.5			23.4			18.4				
Approach LOS		B			C			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		21.1		34.5			22.8	11.7
Change Period (Y+Rc), s		* 4.7		* 4.7			* 4.7	* 4.7
Max Green Setting (Gmax), s		* 50		* 45			* 25	* 15
Max Q Clear Time (g_c+I1), s		14.5		5.7			17.1	5.9
Green Ext Time (p_c), s		1.8		1.5			1.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

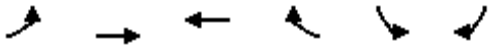
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	570	0	0	550	20	1040	50	210	10	0	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	0	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	32	600	0	0	579	16	1095	53	50	11	0	0
Adj No. of Lanes	1	3	0	0	3	0	2	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	59	2339	0	0	1827	50	887	480	408	24	0	21
Arrive On Green	0.01	0.16	0.00	0.00	0.37	0.37	0.27	0.27	0.27	0.01	0.00	0.00
Sat Flow, veh/h	1714	5076	0	0	5079	135	3326	1800	1530	1714	0	1530
Grp Volume(v), veh/h	32	600	0	0	385	210	1095	53	50	11	0	0
Grp Sat Flow(s),veh/h/ln	1714	1638	0	0	1638	1776	1663	1800	1530	1714	0	1530
Q Serve(g_s), s	1.1	6.4	0.0	0.0	5.0	5.1	16.0	1.3	1.5	0.4	0.0	0.0
Cycle Q Clear(g_c), s	1.1	6.4	0.0	0.0	5.0	5.1	16.0	1.3	1.5	0.4	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	2339	0	0	1217	660	887	480	408	24	0	21
V/C Ratio(X)	0.54	0.26	0.00	0.00	0.32	0.32	1.23	0.11	0.12	0.46	0.00	0.00
Avail Cap(c_a), veh/h	223	2339	0	0	1217	660	887	480	408	211	0	189
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.50	0.50	0.00	0.00	0.95	0.95	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.2	16.0	0.0	0.0	13.4	13.4	22.0	16.6	16.7	29.4	0.0	0.0
Incr Delay (d2), s/veh	3.8	0.1	0.0	0.0	0.6	1.2	115.4	0.1	0.1	13.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.6	2.9	0.0	0.0	2.4	2.7	21.5	0.7	0.6	0.3	0.0	0.0
LnGrp Delay(d),s/veh	33.0	16.1	0.0	0.0	14.1	14.6	137.4	16.7	16.8	42.5	0.0	0.0
LnGrp LOS	C	B			B	B	F	B	B	D		
Approach Vol, veh/h		632			595			1198			11	
Approach Delay, s/veh		17.0			14.3			127.0			42.5	
Approach LOS		B			B			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		33.6		5.4	6.3	27.3		21.0
Change Period (Y+Rc), s		5.0		4.6	* 4.2	5.0		5.0
Max Green Setting (Gmax), s		22.0		7.4	* 7.8	10.0		16.0
Max Q Clear Time (g_c+I1), s		8.4		2.4	3.1	7.1		18.0
Green Ext Time (p_c), s		6.0		0.0	0.0	1.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	70.5
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	720	710	0	440	30
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1800	1800
Adj Flow Rate, veh/h	0	758	747	0	493	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2199	2199	0	658	294
Arrive On Green	0.00	1.00	1.00	0.00	0.19	0.00
Sat Flow, veh/h	0	3600	3600	0	3429	1530
Grp Volume(v), veh/h	0	758	747	0	493	0
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1714	1530
Q Serve(g_s), s	0.0	0.0	0.0	0.0	8.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	8.1	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2199	2199	0	658	294
V/C Ratio(X)	0.00	0.34	0.34	0.00	0.75	0.00
Avail Cap(c_a), veh/h	0	2199	2199	0	1166	520
HCM Platoon Ratio	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.93	0.46	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	22.9	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.2	0.0	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.1	0.1	0.0	4.0	0.0
LnGrp Delay(d),s/veh	0.0	0.4	0.2	0.0	24.6	0.0
LnGrp LOS		A	A		C	
Approach Vol, veh/h		758	747		493	
Approach Delay, s/veh		0.4	0.2		24.6	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.9		16.1		43.9		
Change Period (Y+Rc), s		5.3		4.6		5.3		
Max Green Setting (Gmax), s		29.7		20.4		29.7		
Max Q Clear Time (g_c+I1), s		2.0		10.1		2.0		
Green Ext Time (p_c), s		11.3		1.4		11.3		

Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	140	480	0	1500	1260	360
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	147	457	0	1579	1326	0
Adj No. of Lanes	1	2	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	347	619	0	3927	3927	970
Arrive On Green	0.20	0.20	0.00	1.00	0.63	0.00
Sat Flow, veh/h	1714	3060	0	6696	6444	1530
Grp Volume(v), veh/h	147	457	0	1579	1326	0
Grp Sat Flow(s),veh/h/ln	1714	1530	0	1548	1548	1530
Q Serve(g_s), s	4.5	8.4	0.0	0.0	6.0	0.0
Cycle Q Clear(g_c), s	4.5	8.4	0.0	0.0	6.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	347	619	0	3927	3927	970
V/C Ratio(X)	0.42	0.74	0.00	0.40	0.34	0.00
Avail Cap(c_a), veh/h	577	1030	0	3927	3927	970
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.00	0.77	0.72	0.00
Uniform Delay (d), s/veh	20.9	22.4	0.0	0.0	5.1	0.0
Incr Delay (d2), s/veh	0.8	1.7	0.0	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	3.7	0.0	0.1	2.5	0.0
LnGrp Delay(d),s/veh	21.7	24.1	0.0	0.2	5.3	0.0
LnGrp LOS	C	C		A	A	
Approach Vol, veh/h	604			1579	1326	
Approach Delay, s/veh	23.5			0.2	5.3	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		43.1		16.9		43.1		
Change Period (Y+Rc), s		5.0		* 4.8		5.0		
Max Green Setting (Gmax), s		30.0		* 20		30.0		
Max Q Clear Time (g_c+I1), s		2.0		10.4		8.0		
Green Ext Time (p_c), s		23.2		1.7		18.9		

Intersection Summary	
HCM 2010 Ctrl Delay	6.1
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	170	10	20	190	220	0	0	0	450	30	30
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800				1800	1800	1800
Adj Flow Rate, veh/h	63	179	4	21	200	81				497	0	10
Adj No. of Lanes	1	2	0	0	2	1				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	618	1073	24	240	986	480				976	0	435
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31				0.28	0.00	0.28
Sat Flow, veh/h	1057	3420	76	137	3143	1530				3429	0	1530
Grp Volume(v), veh/h	63	89	94	121	100	81				497	0	10
Grp Sat Flow(s),veh/h/ln	1057	1710	1787	1724	1556	1530				1714	0	1530
Q Serve(g_s), s	1.0	0.8	0.8	0.0	1.0	0.8				2.6	0.0	0.1
Cycle Q Clear(g_c), s	2.0	0.8	0.8	1.1	1.0	0.8				2.6	0.0	0.1
Prop In Lane	1.00		0.04	0.17		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	618	536	560	738	488	480				976	0	435
V/C Ratio(X)	0.10	0.17	0.17	0.16	0.21	0.17				0.51	0.00	0.02
Avail Cap(c_a), veh/h	1802	2452	2562	2577	2232	2194				4116	0	1837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	6.1	5.3	5.3	5.4	5.4	5.3				6.4	0.0	5.5
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.1	0.2	0.2				0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.3	0.4	0.4	0.5	0.4	0.4				1.2	0.0	0.0
LnGrp Delay(d),s/veh	6.2	5.5	5.5	5.5	5.6	5.5				6.8	0.0	5.5
LnGrp LOS	A	A	A	A	A	A				A		A
Approach Vol, veh/h		246			302						507	
Approach Delay, s/veh		5.7			5.5						6.8	
Approach LOS		A			A						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		11.0		10.4		11.0		
Change Period (Y+Rc), s		* 4.3		* 4.3		* 4.3		
Max Green Setting (Gmax), s		* 31		* 26		* 31		
Max Q Clear Time (g_c+I1), s		4.0		4.6		3.1		
Green Ext Time (p_c), s		3.0		1.8		3.0		

Intersection Summary	
HCM 2010 Ctrl Delay	6.2
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	960	290	110	970	140	200	540	160	150	1000	140
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1937	1863	1863	1937	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	158	1011	305	116	1021	147	211	568	168	158	1053	147
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	1348	603	162	1205	561	252	912	269	208	974	136
Arrive On Green	0.12	0.37	0.37	0.18	0.68	0.68	0.14	0.33	0.33	0.12	0.30	0.30
Sat Flow, veh/h	1774	3681	1647	1774	3539	1647	1774	2805	827	1774	3245	452
Grp Volume(v), veh/h	158	1011	305	116	1021	147	211	372	364	158	597	603
Grp Sat Flow(s),veh/h/ln	1774	1840	1647	1774	1770	1647	1774	1840	1791	1774	1840	1857
Q Serve(g_s), s	11.2	31.2	18.7	8.0	28.3	4.5	15.1	22.2	22.4	11.2	39.0	39.0
Cycle Q Clear(g_c), s	11.2	31.2	18.7	8.0	28.3	4.5	15.1	22.2	22.4	11.2	39.0	39.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.46	1.00		0.24
Lane Grp Cap(c), veh/h	208	1348	603	162	1205	561	252	598	582	208	552	557
V/C Ratio(X)	0.76	0.75	0.51	0.71	0.85	0.26	0.84	0.62	0.62	0.76	1.08	1.08
Avail Cap(c_a), veh/h	252	1348	603	252	1205	561	252	598	582	252	552	557
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.54	0.54	0.54	0.97	0.97	0.97	0.69	0.69	0.69	0.64	0.64	0.64
Uniform Delay (d), s/veh	55.6	36.0	32.1	51.5	18.2	14.4	54.3	37.1	37.2	55.6	45.5	45.5
Incr Delay (d2), s/veh	4.4	2.1	1.6	2.1	7.3	1.1	14.6	1.6	1.7	5.2	54.7	55.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.7	16.3	8.8	4.0	14.5	2.2	8.4	11.5	11.3	5.8	28.2	28.5
LnGrp Delay(d),s/veh	60.0	38.1	33.7	53.6	25.5	15.5	68.9	38.7	38.8	60.8	100.2	100.9
LnGrp LOS	E	D	C	D	C	B	E	D	D	E	F	F
Approach Vol, veh/h		1474			1284			947			1358	
Approach Delay, s/veh		39.6			26.9			45.5			95.9	
Approach LOS		D			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	51.6	21.0	43.0	17.7	48.3	17.7	46.3
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0
Max Green Setting (Gmax), s	16.5	39.0	16.5	37.0	16.5	39.0	16.5	37.0
Max Q Clear Time (g_c+I1), s	10.0	33.2	17.1	41.0	13.2	30.3	13.2	24.4
Green Ext Time (p_c), s	0.1	5.6	0.0	0.0	0.1	8.4	0.1	10.4

Intersection Summary	
HCM 2010 Ctrl Delay	52.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	890	240	330	760	150	70	740	220	200	1860	120
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1863	1863	1863	1863	1863	1863	1788
Adj Flow Rate, veh/h	105	937	253	347	800	158	74	779	232	211	1958	126
Adj No. of Lanes	2	2	0	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	873	235	258	1313	587	2988	6216	1935	273	2076	621
Arrive On Green	0.05	0.32	0.32	0.08	0.37	0.37	0.87	1.00	1.00	0.03	0.13	0.13
Sat Flow, veh/h	3442	2758	743	3442	3539	1583	3442	5085	1583	3442	5085	1520
Grp Volume(v), veh/h	105	600	590	347	800	158	74	779	232	211	1958	126
Grp Sat Flow(s),veh/h/ln	1721	1770	1732	1721	1770	1583	1721	1695	1583	1721	1695	1520
Q Serve(g_s), s	3.6	38.0	38.0	9.0	22.0	8.4	0.3	0.0	0.0	7.3	45.8	20.0
Cycle Q Clear(g_c), s	3.6	38.0	38.0	9.0	22.0	8.4	0.3	0.0	0.0	7.3	45.8	20.0
Prop In Lane	1.00		0.43	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	560	548	258	1313	587	2988	6216	1935	273	2076	621
V/C Ratio(X)	0.67	1.07	1.08	1.34	0.61	0.27	0.02	0.13	0.12	0.77	0.94	0.20
Avail Cap(c_a), veh/h	258	560	548	258	1313	587	2988	6216	1935	488	2076	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.39	0.39	0.39	1.00	1.00	1.00	1.00	1.00	1.00	0.84	0.84	0.84
Uniform Delay (d), s/veh	56.4	41.0	41.0	55.5	30.7	26.4	1.1	0.0	0.0	57.4	50.5	177.0
Incr Delay (d2), s/veh	0.7	45.4	47.0	178.6	0.6	0.1	0.0	0.0	0.1	1.5	8.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	25.6	25.3	10.7	10.9	3.7	0.2	0.0	0.1	3.5	23.2	8.6
LnGrp Delay(d),s/veh	57.1	86.4	88.0	234.1	31.3	26.5	1.1	0.0	0.1	58.8	59.4	177.6
LnGrp LOS	E	F	F	F	C	C	A	A	A	E	E	F
Approach Vol, veh/h		1295			1305			1085			2295	
Approach Delay, s/veh		84.8			84.6			0.1			65.9	
Approach LOS		F			F			A			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	44.0	112.3	55.0	8.5	50.5	12.5	154.8
Change Period (Y+Rc), s	* 6	* 6	* 6	* 6	3.0	* 6	3.0	* 6
Max Green Setting (Gmax), s	* 9	* 38	* 6	* 49	9.0	* 38	17.0	* 38
Max Q Clear Time (g_c+I1), s	11.0	40.0	2.3	47.8	5.6	24.0	9.3	2.0
Green Ext Time (p_c), s	0.0	0.0	0.1	1.0	0.0	3.8	0.2	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	62.1
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

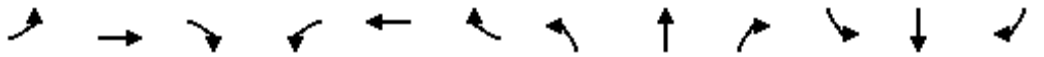
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	430	150	130	430	170	100	930	70	150	1620	130
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	211	453	158	137	453	179	105	979	74	158	1705	137
Adj No. of Lanes	1	2	0	1	2	0	1	3	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	552	191	233	541	212	307	2434	688	185	1822	567
Arrive On Green	0.03	0.07	0.07	0.09	0.22	0.22	0.06	0.14	0.14	0.10	0.36	0.36
Sat Flow, veh/h	1774	2575	890	1774	2479	971	1774	5588	1580	1774	5085	1582
Grp Volume(v), veh/h	211	310	301	137	322	310	105	979	74	158	1705	137
Grp Sat Flow(s),veh/h/ln	1774	1770	1695	1774	1770	1680	1774	1863	1580	1774	1695	1582
Q Serve(g_s), s	11.0	20.7	21.0	3.4	20.9	21.2	6.8	19.1	3.4	10.5	38.8	5.4
Cycle Q Clear(g_c), s	11.0	20.7	21.0	3.4	20.9	21.2	6.8	19.1	3.4	10.5	38.8	5.4
Prop In Lane	1.00		0.53	1.00		0.58	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	379	363	233	386	367	307	2434	688	185	1822	567
V/C Ratio(X)	0.95	0.82	0.83	0.59	0.83	0.84	0.34	0.40	0.11	0.85	0.94	0.24
Avail Cap(c_a), veh/h	223	501	480	241	501	476	307	2434	688	266	1822	567
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.68	0.68	0.68	1.00	1.00	1.00	0.74	0.74	0.74	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	53.4	53.6	50.4	44.8	44.9	50.0	37.2	15.1	52.8	37.2	14.8
Incr Delay (d2), s/veh	35.7	4.1	4.8	2.3	7.3	8.5	0.2	0.4	0.2	12.0	10.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.4	10.6	10.4	4.4	11.0	10.7	3.4	10.0	1.5	5.8	19.9	2.5
LnGrp Delay(d),s/veh	84.5	57.5	58.3	52.7	52.1	53.4	50.2	37.5	15.4	64.9	47.7	15.8
LnGrp LOS	F	E	E	D	D	D	D	D	B	E	D	B
Approach Vol, veh/h		822			769			1158			2000	
Approach Delay, s/veh		64.7			52.7			37.3			46.9	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	30.7	25.8	48.0	15.0	31.2	16.5	57.3
Change Period (Y+Rc), s	5.0	* 5	5.0	* 5	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	11.0	* 34	14.0	* 43	11.0	34.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	5.4	23.0	8.8	40.8	13.0	23.2	12.5	21.1
Green Ext Time (p_c), s	1.4	1.8	0.2	1.6	0.0	2.0	0.1	4.3

Intersection Summary	
HCM 2010 Ctrl Delay	48.6
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	950	120	150	630	80	70	370	170	180	850	80
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	1000	126	158	663	84	74	389	179	189	895	84
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	446	1302	164	183	783	99	94	500	227	213	912	86
Arrive On Green	0.25	0.41	0.41	0.10	0.25	0.25	0.05	0.21	0.21	0.12	0.28	0.28
Sat Flow, veh/h	1774	3164	398	1774	3162	400	1774	2368	1075	1774	3271	307
Grp Volume(v), veh/h	95	559	567	158	371	376	74	289	279	189	484	495
Grp Sat Flow(s),veh/h/ln	1774	1770	1792	1774	1770	1792	1774	1770	1673	1774	1770	1809
Q Serve(g_s), s	5.5	35.3	35.4	11.4	25.9	26.0	5.4	20.0	20.5	13.6	35.3	35.3
Cycle Q Clear(g_c), s	5.5	35.3	35.4	11.4	25.9	26.0	5.4	20.0	20.5	13.6	35.3	35.3
Prop In Lane	1.00		0.22	1.00		0.22	1.00		0.64	1.00		0.17
Lane Grp Cap(c), veh/h	446	728	738	183	438	444	94	374	354	213	493	504
V/C Ratio(X)	0.21	0.77	0.77	0.87	0.85	0.85	0.79	0.77	0.79	0.89	0.98	0.98
Avail Cap(c_a), veh/h	446	728	738	246	667	675	177	422	399	246	493	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.38	0.38	0.38	0.76	0.76	0.76	1.00	1.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	38.5	32.9	32.9	57.4	46.6	46.6	60.9	48.3	48.5	56.3	46.5	46.5
Incr Delay (d2), s/veh	0.0	3.0	3.0	13.5	14.3	14.2	5.5	7.8	9.1	21.2	31.3	30.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.7	17.9	18.1	6.3	14.4	14.6	2.8	10.6	10.3	7.9	21.5	21.9
LnGrp Delay(d),s/veh	38.5	35.9	35.9	70.9	60.8	60.8	66.3	56.1	57.6	77.5	77.8	77.4
LnGrp LOS	D	D	D	E	E	E	E	E	E	E	E	E
Approach Vol, veh/h		1221			905			642			1168	
Approach Delay, s/veh		36.1			62.6			57.9			77.6	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	59.5	10.9	42.3	38.7	38.2	19.6	33.5
Change Period (Y+Rc), s	4.0	* 6	4.0	* 6	* 6	* 6	4.0	* 6
Max Green Setting (Gmax), s	18.0	* 43	13.0	* 36	* 12	* 49	18.0	* 31
Max Q Clear Time (g_c+I1), s	13.4	37.4	7.4	37.3	7.5	28.0	15.6	22.5
Green Ext Time (p_c), s	0.0	3.1	0.0	0.0	2.6	4.2	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	58.1
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

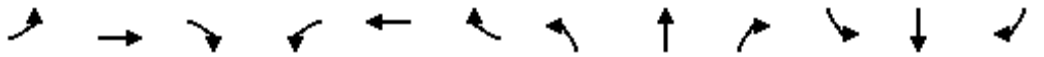
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	920	100	240	900	190	220	580	260	380	930	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	968	105	253	947	200	232	611	274	400	979	116
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1	849	92	234	1248	263	234	773	346	234	1036	123
Arrive On Green	0.00	0.26	0.26	0.13	0.43	0.43	0.13	0.32	0.32	0.13	0.32	0.32
Sat Flow, veh/h	1774	3221	349	1774	2910	614	1774	2378	1066	1774	3188	378
Grp Volume(v), veh/h	0	532	541	253	575	572	232	455	430	400	543	552
Grp Sat Flow(s),veh/h/ln	1774	1770	1801	1774	1770	1754	1774	1770	1675	1774	1770	1796
Q Serve(g_s), s	0.0	39.9	39.9	20.0	41.7	41.8	19.8	35.3	35.4	20.0	45.3	45.3
Cycle Q Clear(g_c), s	0.0	39.9	39.9	20.0	41.7	41.8	19.8	35.3	35.4	20.0	45.3	45.3
Prop In Lane	1.00		0.19	1.00		0.35	1.00		0.64	1.00		0.21
Lane Grp Cap(c), veh/h	1	466	475	234	759	752	234	575	544	234	575	583
V/C Ratio(X)	0.00	1.14	1.14	1.08	0.76	0.76	0.99	0.79	0.79	1.71	0.95	0.95
Avail Cap(c_a), veh/h	234	466	475	234	759	752	234	582	551	234	582	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	55.7	55.7	65.7	36.6	36.6	65.6	46.4	46.4	65.7	49.8	49.8
Incr Delay (d2), s/veh	0.0	85.9	85.8	81.5	4.0	4.1	55.7	6.6	7.0	335.5	24.0	23.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	30.6	31.1	15.1	21.1	21.0	13.3	18.4	17.4	31.6	26.0	26.4
LnGrp Delay(d),s/veh	0.0	141.7	141.5	147.2	40.6	40.7	121.2	53.0	53.4	401.2	73.8	73.7
LnGrp LOS		F	F	F	D	D	F	D	D	F	E	E
Approach Vol, veh/h		1073			1400			1117			1495	
Approach Delay, s/veh		141.6			59.9			67.3			161.3	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	46.0	25.0	55.4	0.0	71.0	25.0	55.4
Change Period (Y+Rc), s	5.0	* 6.1	5.0	* 6.2	5.0	* 6.1	5.0	* 6.2
Max Green Setting (Gmax), s	20.0	* 40	20.0	* 50	20.0	* 40	20.0	* 50
Max Q Clear Time (g_c+I1), s	22.0	41.9	21.8	47.3	0.0	43.8	22.0	37.4
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9	0.0	0.0	0.0	6.6

Intersection Summary	
HCM 2010 Ctrl Delay	108.6
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	570	190	160	420	150	90	930	90	310	1530	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	179	600	200	168	442	158	95	979	95	326	1611	105
Adj No. of Lanes	1	3	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	262	817	266	261	539	191	118	1343	130	350	2030	132
Arrive On Green	0.10	0.22	0.22	0.09	0.22	0.22	0.07	0.30	0.30	0.27	0.57	0.57
Sat Flow, veh/h	1714	3660	1192	1714	2471	875	1714	4552	441	1714	4712	307
Grp Volume(v), veh/h	179	536	264	168	305	295	95	704	370	326	1120	596
Grp Sat Flow(s),veh/h/ln	1714	1638	1576	1714	1710	1636	1714	1638	1717	1714	1638	1743
Q Serve(g_s), s	9.6	18.2	18.8	9.0	20.3	20.7	6.6	23.2	23.2	22.2	32.1	32.2
Cycle Q Clear(g_c), s	9.6	18.2	18.8	9.0	20.3	20.7	6.6	23.2	23.2	22.2	32.1	32.2
Prop In Lane	1.00		0.76	1.00		0.53	1.00		0.26	1.00		0.18
Lane Grp Cap(c), veh/h	262	731	352	261	373	357	118	967	507	350	1411	751
V/C Ratio(X)	0.68	0.73	0.75	0.64	0.82	0.83	0.81	0.73	0.73	0.93	0.79	0.79
Avail Cap(c_a), veh/h	268	756	364	275	395	378	171	967	507	386	1411	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	0.83	0.83	0.83
Uniform Delay (d), s/veh	33.8	43.3	43.5	33.5	44.6	44.7	55.1	38.0	38.0	42.9	21.5	21.5
Incr Delay (d2), s/veh	6.8	3.6	8.3	4.5	11.4	12.9	16.2	4.8	9.0	24.3	3.9	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.0	8.6	9.0	4.5	10.8	10.6	3.6	11.1	12.3	12.9	15.1	16.7
LnGrp Delay(d),s/veh	40.6	46.9	51.8	38.0	56.0	57.6	71.2	42.8	47.0	67.2	25.4	28.6
LnGrp LOS	D	D	D	D	E	E	E	D	D	E	C	C
Approach Vol, veh/h		979			768			1169			2042	
Approach Delay, s/veh		47.0			52.7			46.4			33.0	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.5	41.4	16.0	33.1	13.2	57.7	16.6	32.5
Change Period (Y+Rc), s	5.0	* 6	5.0	* 6.3	5.0	* 6	5.0	* 6.3
Max Green Setting (Gmax), s	27.0	* 31	12.0	* 28	12.0	* 46	12.0	* 28
Max Q Clear Time (g_c+I1), s	24.2	25.2	11.0	20.8	8.6	34.2	11.6	22.7
Green Ext Time (p_c), s	0.3	5.3	0.0	4.3	0.1	10.3	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	42.0
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	490	40	60	410	140	40	410	40	200	760	200
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	137	516	42	63	432	147	42	432	42	211	800	211
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	1321	107	322	1037	349	221	877	745	363	1305	344
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	831	3316	269	848	2601	877	555	1863	1583	916	2772	731
Grp Volume(v), veh/h	137	275	283	63	293	286	42	432	42	211	511	500
Grp Sat Flow(s),veh/h/ln	831	1770	1815	848	1770	1708	555	1863	1583	916	1770	1734
Q Serve(g_s), s	13.1	10.1	10.2	5.2	10.9	11.1	5.6	14.7	1.3	18.9	19.7	19.7
Cycle Q Clear(g_c), s	24.2	10.1	10.2	15.4	10.9	11.1	25.3	14.7	1.3	33.6	19.7	19.7
Prop In Lane	1.00		0.15	1.00		0.51	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	309	705	723	322	705	681	221	877	745	363	833	816
V/C Ratio(X)	0.44	0.39	0.39	0.20	0.41	0.42	0.19	0.49	0.06	0.58	0.61	0.61
Avail Cap(c_a), veh/h	386	869	891	400	869	838	232	914	777	382	869	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	19.6	19.6	25.1	19.9	19.9	27.5	16.7	13.2	28.3	18.1	18.1
Incr Delay (d2), s/veh	1.4	0.5	0.5	0.4	0.6	0.6	0.6	0.6	0.0	2.6	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	5.1	5.2	1.3	5.4	5.4	0.9	7.6	0.6	5.0	9.8	9.6
LnGrp Delay(d),s/veh	30.1	20.1	20.1	25.6	20.4	20.5	28.1	17.3	13.2	30.9	19.5	19.6
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		695			642			516			1222	
Approach Delay, s/veh		22.1			21.0			17.9			21.5	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.1		42.5		49.1		42.5
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		35.6		17.4		27.3		26.2
Green Ext Time (p_c), s		7.6		12.8		12.7		10.4

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	130	0	30	0	830	130	40	2100	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1976	1863	1824	0	1863	1824	1863	1863	0
Adj Flow Rate, veh/h				137	0	32	0	874	137	42	2211	0
Adj No. of Lanes				0	1	0	0	3	0	1	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	2	0	0	2	2	2	2	0
Cap, veh/h				229	0	53	0	2889	451	481	3312	0
Arrive On Green				0.18	0.00	0.18	0.00	1.00	1.00	0.65	0.65	0.00
Sat Flow, veh/h				1255	0	293	0	4604	692	555	5253	0
Grp Volume(v), veh/h				169	0	0	0	667	344	42	2211	0
Grp Sat Flow(s),veh/h/ln				1548	0	0	0	1695	1739	555	1695	0
Q Serve(g_s), s				6.0	0.0	0.0	0.0	0.0	0.0	1.7	16.1	0.0
Cycle Q Clear(g_c), s				6.0	0.0	0.0	0.0	0.0	0.0	1.7	16.1	0.0
Prop In Lane				0.81		0.19	0.00		0.40	1.00		0.00
Lane Grp Cap(c), veh/h				282	0	0	0	2208	1132	481	3312	0
V/C Ratio(X)				0.60	0.00	0.00	0.00	0.30	0.30	0.09	0.67	0.00
Avail Cap(c_a), veh/h				697	0	0	0	2208	1132	481	3312	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.91	0.91	0.17	0.17	0.00
Uniform Delay (d), s/veh				22.5	0.0	0.0	0.0	0.0	0.0	3.9	6.5	0.0
Incr Delay (d2), s/veh				0.8	0.0	0.0	0.0	0.3	0.6	0.1	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln				2.6	0.0	0.0	0.0	0.1	0.2	0.3	7.4	0.0
LnGrp Delay(d),s/veh				23.3	0.0	0.0	0.0	0.3	0.6	4.0	6.6	0.0
LnGrp LOS				C				A	A	A	A	
Approach Vol, veh/h					169			1011			2253	
Approach Delay, s/veh					23.3			0.4			6.6	
Approach LOS					C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		45.1				45.1		14.9
Change Period (Y+Rc), s		* 6				* 6		4.0
Max Green Setting (Gmax), s		* 23				* 23		27.0
Max Q Clear Time (g_c+I1), s		2.0				18.1		8.0
Green Ext Time (p_c), s		20.3				4.8		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	5.6
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	30	120	270	20	70	40	840	70	100	2100	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1863	1863	1863	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	32	32	126	284	21	74	42	884	74	105	2211	42
Adj No. of Lanes	0	1	0	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	92	279	351	528	447	100	2153	180	207	2728	52
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.06	0.45	0.45	0.23	1.00	1.00
Sat Flow, veh/h	178	323	986	1222	1863	1578	1774	4783	399	1774	5138	97
Grp Volume(v), veh/h	190	0	0	284	21	74	42	626	332	105	1457	796
Grp Sat Flow(s),veh/h/ln	1487	0	0	1222	1863	1578	1774	1695	1792	1774	1695	1845
Q Serve(g_s), s	2.7	0.0	0.0	21.0	1.0	4.2	2.7	14.9	15.0	6.2	0.0	0.0
Cycle Q Clear(g_c), s	12.1	0.0	0.0	33.1	1.0	4.2	2.7	14.9	15.0	6.2	0.0	0.0
Prop In Lane	0.17		0.66	1.00		1.00	1.00		0.22	1.00		0.05
Lane Grp Cap(c), veh/h	456	0	0	351	528	447	100	1526	807	207	1800	980
V/C Ratio(X)	0.42	0.00	0.00	0.81	0.04	0.17	0.42	0.41	0.41	0.51	0.81	0.81
Avail Cap(c_a), veh/h	456	0	0	351	528	447	251	1526	807	207	1800	980
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.75	0.75
Uniform Delay (d), s/veh	35.1	0.0	0.0	44.7	31.2	32.3	54.7	22.3	22.3	43.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	14.2	0.1	0.3	1.0	0.8	1.6	0.6	3.1	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.2	0.0	0.0	10.7	0.5	1.9	1.4	7.1	7.7	3.1	0.8	1.5
LnGrp Delay(d),s/veh	35.7	0.0	0.0	58.9	31.2	32.6	55.7	23.1	23.8	43.6	3.1	5.6
LnGrp LOS	D			E	C	C	E	C	C	D	A	A
Approach Vol, veh/h		190			379			1000			2358	
Approach Delay, s/veh		35.7			52.2			24.7			5.7	
Approach LOS		D			D			C			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		40.0	10.3	69.7		40.0	20.0	60.0
Change Period (Y+Rc), s		* 6	3.5	* 6		* 6	* 6	* 6
Max Green Setting (Gmax), s		* 34	17.0	* 54		* 34	* 14	* 54
Max Q Clear Time (g_c+I1), s		14.1	4.7	2.0		35.1	8.2	17.0
Green Ext Time (p_c), s		3.6	0.0	41.2		0.0	0.2	11.8

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	650	360	330	610	30	140	20	190	50	40	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1900	1863	1900	1863	1900
Adj Flow Rate, veh/h	11	684	322	347	642	30	147	21	32	53	42	7
Adj No. of Lanes	1	2	0	1	2	0	2	0	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	762	359	377	1831	85	547	0	252	69	55	9
Arrive On Green	0.01	0.33	0.33	0.21	0.53	0.53	0.16	0.16	0.16	0.07	0.07	0.07
Sat Flow, veh/h	1774	2338	1100	1774	3443	161	3442	0	1583	932	739	123
Grp Volume(v), veh/h	11	518	488	347	330	342	147	0	32	102	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1669	1774	1770	1834	1721	0	1583	1794	0	0
Q Serve(g_s), s	0.6	26.2	26.2	18.0	10.1	10.1	3.5	0.0	1.6	5.2	0.0	0.0
Cycle Q Clear(g_c), s	0.6	26.2	26.2	18.0	10.1	10.1	3.5	0.0	1.6	5.2	0.0	0.0
Prop In Lane	1.00		0.66	1.00		0.09	1.00		1.00	0.52		0.07
Lane Grp Cap(c), veh/h	12	577	544	377	941	975	547	0	252	133	0	0
V/C Ratio(X)	0.90	0.90	0.90	0.92	0.35	0.35	0.27	0.00	0.13	0.76	0.00	0.00
Avail Cap(c_a), veh/h	378	667	629	378	941	975	935	0	430	472	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	46.6	30.1	30.1	36.2	12.6	12.6	34.7	0.0	33.9	42.6	0.0	0.0
Incr Delay (d2), s/veh	50.9	12.6	13.3	26.6	0.1	0.1	0.1	0.0	0.1	3.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.5	14.8	14.1	11.6	4.9	5.1	1.7	0.0	0.7	2.7	0.0	0.0
LnGrp Delay(d),s/veh	97.5	42.8	43.4	62.8	12.7	12.7	34.8	0.0	34.0	46.0	0.0	0.0
LnGrp LOS	F	D	D	E	B	B	C		C	D		
Approach Vol, veh/h		1017			1019			179			102	
Approach Delay, s/veh		43.7			29.8			34.6			46.0	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		20.4	25.0	36.2		12.3	5.6	55.5
Change Period (Y+Rc), s		5.5	5.0	* 5.6		5.3	5.0	* 5.6
Max Green Setting (Gmax), s		25.5	20.0	* 35		24.7	20.0	* 36
Max Q Clear Time (g_c+I1), s		5.5	20.0	28.2		7.2	2.6	12.1
Green Ext Time (p_c), s		0.3	0.0	2.4		0.3	0.0	7.3

Intersection Summary	
HCM 2010 Ctrl Delay	37.0
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

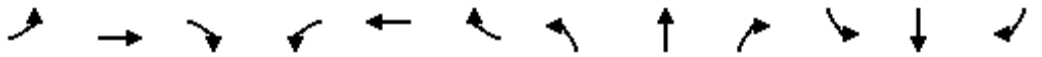
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	60	330	20	60	50	240	360	10	30	450	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	158	63	59	21	63	20	253	379	9	32	474	87
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	383	393	334	389	286	91	319	1470	35	39	772	141
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.18	0.42	0.42	0.02	0.26	0.26
Sat Flow, veh/h	1310	1863	1583	1264	1356	431	1774	3534	84	1774	2990	546
Grp Volume(v), veh/h	158	63	59	21	0	83	253	190	198	32	279	282
Grp Sat Flow(s),veh/h/ln	1310	1863	1583	1264	0	1787	1774	1770	1848	1774	1770	1766
Q Serve(g_s), s	5.2	1.3	1.4	0.6	0.0	1.8	6.3	3.2	3.2	0.8	6.4	6.5
Cycle Q Clear(g_c), s	7.0	1.3	1.4	1.9	0.0	1.8	6.3	3.2	3.2	0.8	6.4	6.5
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.05	1.00		0.31
Lane Grp Cap(c), veh/h	383	393	334	389	0	377	319	736	768	39	457	456
V/C Ratio(X)	0.41	0.16	0.18	0.05	0.00	0.22	0.79	0.26	0.26	0.82	0.61	0.62
Avail Cap(c_a), veh/h	978	1239	1053	968	0	1196	1160	1173	1225	774	1173	1171
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	14.8	14.8	15.5	0.0	15.0	18.0	8.8	8.8	22.3	15.0	15.0
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.0	0.0	0.1	1.7	0.1	0.1	14.7	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.9	0.7	0.6	0.2	0.0	0.9	3.2	1.5	1.6	0.5	3.2	3.2
LnGrp Delay(d),s/veh	18.1	14.8	14.9	15.6	0.0	15.1	19.7	8.8	8.8	37.0	15.5	15.5
LnGrp LOS	B	B	B	B		B	B	A	A	D	B	B
Approach Vol, veh/h		280			104			641			593	
Approach Delay, s/veh		16.7			15.2			13.1			16.7	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	24.7		15.2	13.2	17.4		15.2
Change Period (Y+Rc), s	5.0	* 5.6		5.5	5.0	* 5.6		* 5.5
Max Green Setting (Gmax), s	20.0	* 30		30.5	30.0	* 30		* 31
Max Q Clear Time (g_c+I1), s	2.8	5.2		9.0	8.3	8.5		3.9
Green Ext Time (p_c), s	0.0	3.5		0.8	0.3	3.4		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	15.2
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	80	30	20	80	110	10	390	20	80	770	20
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	84	32	21	84	116	11	411	21	84	811	21
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	141	224	74	104	140	173	277	960	49	549	988	26
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	222	1134	374	83	710	876	657	1757	90	952	1808	47
Grp Volume(v), veh/h	148	0	0	221	0	0	11	0	432	84	0	832
Grp Sat Flow(s),veh/h/ln	1730	0	0	1669	0	0	657	0	1847	952	0	1854
Q Serve(g_s), s	0.0	0.0	0.0	1.3	0.0	0.0	0.6	0.0	6.2	2.6	0.0	16.6
Cycle Q Clear(g_c), s	3.2	0.0	0.0	5.4	0.0	0.0	17.2	0.0	6.2	8.8	0.0	16.6
Prop In Lane	0.22		0.22	0.10		0.52	1.00		0.05	1.00		0.03
Lane Grp Cap(c), veh/h	439	0	0	418	0	0	277	0	1009	549	0	1013
V/C Ratio(X)	0.34	0.00	0.00	0.53	0.00	0.00	0.04	0.00	0.43	0.15	0.00	0.82
Avail Cap(c_a), veh/h	1387	0	0	1388	0	0	429	0	1438	770	0	1444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	0.0	16.6	0.0	0.0	15.5	0.0	6.0	8.6	0.0	8.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	0.0	0.0	2.6	0.0	0.0	0.1	0.0	3.2	0.7	0.0	8.8
LnGrp Delay(d),s/veh	15.9	0.0	0.0	17.0	0.0	0.0	15.5	0.0	6.1	8.7	0.0	10.1
LnGrp LOS	B			B			B		A	A		B
Approach Vol, veh/h		148			221			443			916	
Approach Delay, s/veh		15.9			17.0			6.4			10.0	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.6		14.4		30.6		14.4
Change Period (Y+Rc), s		6.0		5.5		6.0		5.5
Max Green Setting (Gmax), s		35.0		35.5		35.0		35.5
Max Q Clear Time (g_c+I1), s		18.6		5.2		19.2		7.4
Green Ext Time (p_c), s		5.4		1.6		5.3		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	10.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	290	110	140	330	60	60	340	90	140	740	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	95	305	116	147	347	63	63	358	95	147	779	200
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	397	970	362	390	1152	207	257	1312	344	470	1318	338
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	972	2525	941	962	2998	539	572	2776	728	934	2790	716
Grp Volume(v), veh/h	95	212	209	147	203	207	63	227	226	147	494	485
Grp Sat Flow(s),veh/h/ln	972	1770	1697	962	1770	1768	572	1770	1734	934	1770	1736
Q Serve(g_s), s	5.3	5.8	6.0	8.8	5.6	5.7	6.3	5.4	5.5	7.9	14.3	14.3
Cycle Q Clear(g_c), s	11.0	5.8	6.0	14.9	5.6	5.7	20.6	5.4	5.5	13.4	14.3	14.3
Prop In Lane	1.00		0.55	1.00		0.30	1.00		0.42	1.00		0.41
Lane Grp Cap(c), veh/h	397	680	652	390	680	679	257	836	819	470	836	820
V/C Ratio(X)	0.24	0.31	0.32	0.38	0.30	0.30	0.25	0.27	0.28	0.31	0.59	0.59
Avail Cap(c_a), veh/h	511	888	851	502	888	887	273	888	870	498	888	871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	15.0	15.1	20.3	14.9	15.0	21.0	11.1	11.2	15.2	13.5	13.5
Incr Delay (d2), s/veh	0.7	0.6	0.6	1.3	0.5	0.5	1.1	0.4	0.4	0.8	1.6	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	2.9	2.9	2.5	2.8	2.9	1.1	2.7	2.7	2.1	7.2	7.1
LnGrp Delay(d),s/veh	19.5	15.6	15.7	21.6	15.5	15.5	22.1	11.5	11.6	16.0	15.1	15.1
LnGrp LOS	B	B	B	C	B	B	C	B	B	B	B	B
Approach Vol, veh/h		516			557			516			1126	
Approach Delay, s/veh		16.3			17.1			12.8			15.2	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		38.0		31.8		38.0		31.8
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s		35.0		35.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		22.6		13.0		16.3		16.9
Green Ext Time (p_c), s		10.4		11.2		14.8		9.9

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	910	210	380	900	0	240	0	360	0	0	0
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.97		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	958	205	400	947	0	253	0	126	0	0	0
Adj No. of Lanes	1	2	0	1	3	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	402	1697	363	539	3683	0	360	0	348	0	422	0
Arrive On Green	0.00	1.00	1.00	0.11	0.72	0.00	0.23	0.00	0.23	0.00	0.00	0.00
Sat Flow, veh/h	1774	2897	619	1774	5253	0	1374	0	1541	0	1863	0
Grp Volume(v), veh/h	0	585	578	400	947	0	253	0	126	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1747	1774	1695	0	1374	0	1541	0	1863	0
Q Serve(g_s), s	0.0	0.0	0.0	10.2	7.6	0.0	21.0	0.0	8.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	10.2	7.6	0.0	21.0	0.0	8.3	0.0	0.0	0.0
Prop In Lane	1.00		0.35	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	402	1036	1023	539	3683	0	370	0	348	0	422	0
V/C Ratio(X)	0.00	0.56	0.57	0.74	0.26	0.00	0.68	0.00	0.36	0.00	0.00	0.00
Avail Cap(c_a), veh/h	563	1036	1023	662	3683	0	426	0	411	0	498	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.90	0.90	1.00	1.00	0.00	0.92	0.00	0.92	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	6.7	5.6	0.0	44.4	0.0	39.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.0	2.0	2.6	0.2	0.0	2.4	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.6	0.6	5.3	3.6	0.0	8.1	0.0	3.6	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	2.0	2.0	9.3	5.8	0.0	46.8	0.0	39.4	0.0	0.0	0.0
LnGrp LOS		A	A	A	A		D		D			
Approach Vol, veh/h		1163			1347			379			0	
Approach Delay, s/veh		2.0			6.8			44.4			0.0	
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	89.9		30.1	16.6	73.3		30.1
Change Period (Y+Rc), s	4.0	5.0		4.9	4.0	5.0		4.9
Max Green Setting (Gmax), s	10.0	66.0		30.1	21.0	55.0		30.1
Max Q Clear Time (g_c+I1), s	0.0	9.6		23.0	12.2	2.0		0.0
Green Ext Time (p_c), s	0.0	13.3		0.7	0.4	13.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	940	30	30	820	320	10	10	40	150	10	50
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	147	989	32	32	863	337	11	11	42	158	11	53
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	466	2619	85	452	2601	1011	59	61	161	275	0	241
Arrive On Green	0.05	0.75	0.74	0.03	0.97	0.95	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1774	3497	113	1774	3585	1394	152	397	1049	1333	0	1565
Grp Volume(v), veh/h	147	500	521	32	816	384	64	0	0	158	0	53
Grp Sat Flow(s),veh/h/ln	1774	1770	1841	1774	1695	1589	1599	0	0	1333	0	1565
Q Serve(g_s), s	2.4	11.9	11.9	0.6	1.5	1.9	0.0	0.0	0.0	8.5	0.0	3.6
Cycle Q Clear(g_c), s	2.4	11.9	11.9	0.6	1.5	1.9	4.1	0.0	0.0	12.6	0.0	3.6
Prop In Lane	1.00		0.06	1.00		0.88	0.17		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	466	1325	1378	452	2460	1153	281	0	0	275	0	241
V/C Ratio(X)	0.32	0.38	0.38	0.07	0.33	0.33	0.23	0.00	0.00	0.57	0.00	0.22
Avail Cap(c_a), veh/h	577	1325	1378	604	2460	1153	457	0	0	426	0	417
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.97	0.97	0.97	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	3.3	5.3	5.3	4.5	0.6	0.8	45.0	0.0	0.0	48.0	0.0	44.5
Incr Delay (d2), s/veh	0.1	0.8	0.8	0.0	0.4	0.8	0.2	0.0	0.0	0.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	6.0	6.2	0.3	0.7	1.0	1.9	0.0	0.0	5.1	0.0	1.6
LnGrp Delay(d),s/veh	3.5	6.1	6.1	4.5	1.0	1.5	45.1	0.0	0.0	48.7	0.0	44.6
LnGrp LOS	A	A	A	A	A	A	D			D		D
Approach Vol, veh/h		1168			1232			64			211	
Approach Delay, s/veh		5.8			1.2			45.1			47.7	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	90.1		21.4	5.7	92.9		21.4
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	12.0	64.0		30.0	12.0	64.0		30.0
Max Q Clear Time (g_c+I1), s	4.4	3.9		6.1	2.6	13.9		14.6
Green Ext Time (p_c), s	0.1	14.0		0.6	0.0	13.7		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	7.9
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	20	20	2310	30	20	1810
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	21	2432	32	21	1905
Adj No. of Lanes	1	1	3	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	83	74	4208	1305	65	4545
Arrive On Green	0.05	0.05	1.00	1.00	0.07	1.00
Sat Flow, veh/h	1774	1583	5253	1577	1774	5253
Grp Volume(v), veh/h	21	21	2432	32	21	1905
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1577	1774	1695
Q Serve(g_s), s	1.5	1.7	0.0	0.0	1.5	0.0
Cycle Q Clear(g_c), s	1.5	1.7	0.0	0.0	1.5	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	83	74	4208	1305	65	4545
V/C Ratio(X)	0.25	0.28	0.58	0.02	0.32	0.42
Avail Cap(c_a), veh/h	434	387	4208	1305	315	4545
HCM Platoon Ratio	1.00	1.00	1.33	1.33	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.80	0.80	0.91	0.91
Uniform Delay (d), s/veh	62.0	62.1	0.0	0.0	61.0	0.0
Incr Delay (d2), s/veh	0.6	0.8	0.5	0.0	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	0.8	0.2	0.0	0.8	0.1
LnGrp Delay(d),s/veh	62.6	62.9	0.5	0.0	61.9	0.3
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	42		2464			1926
Approach Delay, s/veh	62.8		0.5			0.9
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.0	115.7				124.7		10.3
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	64.7				92.7		33.0
Max Q Clear Time (g_c+I1), s	3.5	2.0				2.0		3.7
Green Ext Time (p_c), s	0.0	62.3				90.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.3
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	80	100	1760	160	180	1850
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	84	105	1853	168	189	1947
Adj No. of Lanes	1	1	2	1	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	144	129	2527	1131	205	4371
Arrive On Green	0.08	0.08	1.00	1.00	0.23	1.00
Sat Flow, veh/h	1774	1583	3632	1583	1774	5253
Grp Volume(v), veh/h	84	105	1853	168	189	1947
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	1583	1774	1695
Q Serve(g_s), s	6.2	8.8	0.0	0.0	14.0	0.0
Cycle Q Clear(g_c), s	6.2	8.8	0.0	0.0	14.0	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	144	129	2527	1131	205	4371
V/C Ratio(X)	0.58	0.82	0.73	0.15	0.92	0.45
Avail Cap(c_a), veh/h	394	352	2527	1131	315	4371
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.62	0.62	0.88	0.88
Uniform Delay (d), s/veh	59.8	61.0	0.0	0.0	51.3	0.0
Incr Delay (d2), s/veh	1.4	4.7	1.2	0.2	16.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.1	4.0	0.4	0.1	7.8	0.1
LnGrp Delay(d),s/veh	61.2	65.7	1.2	0.2	67.5	0.3
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	189		2021			2136
Approach Delay, s/veh	63.7		1.1			6.2
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	19.6	100.4				120.0		15.0
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	67.7				95.7		30.0
Max Q Clear Time (g_c+I1), s	16.0	2.0				2.0		10.8
Green Ext Time (p_c), s	0.1	64.8				92.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	6.4
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	20	20	20	1850	2010	20
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	21	21	1947	2116	21
Adj No. of Lanes	1	1	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	63	56	17	3205	4405	1372
Arrive On Green	0.04	0.04	0.02	1.00	0.87	0.87
Sat Flow, veh/h	1774	1583	1774	3632	5253	1583
Grp Volume(v), veh/h	21	21	21	1947	2116	21
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1695	1583
Q Serve(g_s), s	1.6	1.8	1.3	0.0	12.9	0.2
Cycle Q Clear(g_c), s	1.6	1.8	1.3	0.0	12.9	0.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	63	56	17	3205	4405	1372
V/C Ratio(X)	0.34	0.38	1.23	0.61	0.48	0.02
Avail Cap(c_a), veh/h	407	364	105	3205	4405	1372
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.61	0.61	0.60	0.60
Uniform Delay (d), s/veh	63.6	63.7	66.2	0.0	2.1	1.2
Incr Delay (d2), s/veh	1.2	1.5	125.9	0.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	19.7	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.8	1.6	1.2	0.2	6.0	0.1
LnGrp Delay(d),s/veh	64.7	65.2	211.8	0.5	2.3	1.2
LnGrp LOS	E	E	F	A	A	A
Approach Vol, veh/h	42			1968	2137	
Approach Delay, s/veh	65.0			2.8	2.3	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		126.2		8.8	5.3	120.9		
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		
Max Green Setting (Gmax), s		94.7		31.0	8.5	82.7		
Max Q Clear Time (g_c+I1), s		2.0		3.8	3.3	14.9		
Green Ext Time (p_c), s		91.5		0.0	0.0	67.2		

Intersection Summary	
HCM 2010 Ctrl Delay	3.2
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	120	160	2180	200	30	1790
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	168	2295	211	32	1884
Adj No. of Lanes	1	1	3	1	2	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	206	184	3976	1238	45	4193
Arrive On Green	0.12	0.12	0.78	0.78	0.03	1.00
Sat Flow, veh/h	1774	1583	5253	1583	3442	5253
Grp Volume(v), veh/h	126	168	2295	211	32	1884
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1583	1721	1695
Q Serve(g_s), s	9.1	14.2	24.2	4.5	1.2	0.0
Cycle Q Clear(g_c), s	9.1	14.2	24.2	4.5	1.2	0.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	206	184	3976	1238	45	4193
V/C Ratio(X)	0.61	0.91	0.58	0.17	0.71	0.45
Avail Cap(c_a), veh/h	210	188	3976	1238	204	4193
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.92	0.92
Uniform Delay (d), s/veh	56.8	59.0	5.9	3.7	65.5	0.0
Incr Delay (d2), s/veh	3.5	40.8	0.6	0.3	6.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.7	8.3	11.3	2.0	0.6	0.1
LnGrp Delay(d),s/veh	60.3	99.8	6.5	4.0	72.3	0.3
LnGrp LOS	E	F	A	A	E	A
Approach Vol, veh/h	294		2506			1916
Approach Delay, s/veh	82.9		6.3			1.5
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	5.8	109.6				115.3		19.7
Change Period (Y+Rc), s	3.5	5.3				5.3		3.5
Max Green Setting (Gmax), s	8.5	97.7				109.7		16.5
Max Q Clear Time (g_c+I1), s	3.2	26.2				2.0		16.2
Green Ext Time (p_c), s	0.0	70.9				106.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.1
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	10	30	2150	20	40	1930
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	11	32	2263	21	42	2032
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	63	56	4263	40	98	4603
Arrive On Green	0.04	0.04	1.00	1.00	0.11	1.00
Sat Flow, veh/h	1774	1583	5364	48	1774	5253
Grp Volume(v), veh/h	11	32	1476	808	42	2032
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	1854	1774	1695
Q Serve(g_s), s	0.8	2.7	0.0	0.0	3.0	0.0
Cycle Q Clear(g_c), s	0.8	2.7	0.0	0.0	3.0	0.0
Prop In Lane	1.00	1.00		0.03	1.00	
Lane Grp Cap(c), veh/h	63	56	2782	1521	98	4603
V/C Ratio(X)	0.17	0.57	0.53	0.53	0.43	0.44
Avail Cap(c_a), veh/h	407	364	2782	1521	315	4603
HCM Platoon Ratio	1.00	1.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.82	0.82	0.48	0.48
Uniform Delay (d), s/veh	63.2	64.1	0.0	0.0	58.1	0.0
Incr Delay (d2), s/veh	0.5	3.3	0.6	1.1	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	1.2	0.2	0.5	1.5	0.1
LnGrp Delay(d),s/veh	63.7	67.4	0.6	1.1	58.6	0.1
LnGrp LOS	E	E	A	A	E	A
Approach Vol, veh/h	43		2284			2074
Approach Delay, s/veh	66.4		0.8			1.3
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.4	114.8				126.2		8.8
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	24.5	66.7				94.7		31.0
Max Q Clear Time (g_c+I1), s	5.0	2.0				2.0		4.7
Green Ext Time (p_c), s	0.0	64.2				91.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	1.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	680	500	70	390	60	610	1530	70	150	1440	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	232	716	273	74	411	11	642	1611	71	158	1516	190
Adj No. of Lanes	1	2	1	1	2	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	878	389	87	667	294	670	2632	116	197	1981	614
Arrive On Green	0.10	0.25	0.25	0.05	0.19	0.19	0.39	1.00	1.00	0.02	0.13	0.13
Sat Flow, veh/h	1774	3539	1568	1774	3539	1563	3442	4993	220	3442	5085	1576
Grp Volume(v), veh/h	232	716	273	74	411	11	642	1094	588	158	1516	190
Grp Sat Flow(s),veh/h/ln	1774	1770	1568	1774	1770	1563	1721	1695	1823	1721	1695	1576
Q Serve(g_s), s	14.0	25.7	21.4	5.6	14.4	0.8	24.5	0.0	0.0	6.2	38.9	14.8
Cycle Q Clear(g_c), s	14.0	25.7	21.4	5.6	14.4	0.8	24.5	0.0	0.0	6.2	38.9	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	184	878	389	87	667	294	670	1787	961	197	1981	614
V/C Ratio(X)	1.26	0.82	0.70	0.85	0.62	0.04	0.96	0.61	0.61	0.80	0.77	0.31
Avail Cap(c_a), veh/h	184	1049	465	145	970	428	765	1787	961	408	1981	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	0.98	0.98	0.98	0.84	0.84	0.84	0.89	0.89	0.89
Uniform Delay (d), s/veh	60.5	47.8	46.2	63.7	50.3	44.8	40.7	0.0	0.0	65.5	52.9	42.3
Incr Delay (d2), s/veh	153.6	3.6	2.6	10.2	0.3	0.0	18.3	1.3	2.4	2.6	2.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	14.7	13.0	9.6	3.0	7.1	0.3	13.2	0.3	0.7	3.0	18.8	6.7
LnGrp Delay(d),s/veh	214.1	51.4	48.8	73.9	50.7	44.8	59.0	1.3	2.4	68.1	55.4	43.5
LnGrp LOS	F	D	D	E	D	D	E	A	A	E	E	D
Approach Vol, veh/h		1221			496			2324			1864	
Approach Delay, s/veh		81.8			54.0			17.5			55.3	
Approach LOS		F			D			B			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	75.2	10.6	37.5	30.3	56.6	18.0	30.1
Change Period (Y+Rc), s	3.5	5.3	3.5	6.0	3.5	5.3	3.5	* 6
Max Green Setting (Gmax), s	16.5	50.7	11.5	38.0	30.5	36.7	14.5	* 36
Max Q Clear Time (g_c+I1), s	8.2	2.0	7.6	27.7	26.5	40.9	16.0	16.4
Green Ext Time (p_c), s	0.1	27.0	0.0	3.8	0.3	0.0	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	45.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	880	100	200	910	270	160	790	130	180	490	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1863	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	232	926	94	211	958	80	168	832	126	189	516	126
Adj No. of Lanes	1	3	0	1	3	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	354	1809	183	263	1569	488	212	888	135	242	862	210
Arrive On Green	0.40	0.74	0.74	0.05	0.10	0.10	0.24	0.55	0.55	0.04	0.10	0.10
Sat Flow, veh/h	1774	4882	494	1774	5085	1583	1774	3206	486	1774	2938	714
Grp Volume(v), veh/h	232	668	352	211	958	80	168	478	480	189	322	320
Grp Sat Flow(s),veh/h/ln	1774	1763	1850	1774	1695	1583	1774	1840	1852	1774	1840	1811
Q Serve(g_s), s	13.8	10.3	10.3	15.3	23.5	4.3	11.6	31.3	31.3	13.7	21.8	22.0
Cycle Q Clear(g_c), s	13.8	10.3	10.3	15.3	23.5	4.3	11.6	31.3	31.3	13.7	21.8	22.0
Prop In Lane	1.00		0.27	1.00		1.00	1.00		0.26	1.00		0.39
Lane Grp Cap(c), veh/h	354	1306	685	263	1569	488	212	510	513	242	540	532
V/C Ratio(X)	0.65	0.51	0.51	0.80	0.61	0.16	0.79	0.94	0.94	0.78	0.60	0.60
Avail Cap(c_a), veh/h	354	1306	685	266	1569	488	266	525	528	266	540	532
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	0.94	0.94	0.94	0.93	0.93	0.93	0.93	0.93	0.93	0.91	0.91	0.91
Uniform Delay (d), s/veh	35.4	11.9	11.9	59.9	50.9	21.7	47.9	27.9	27.9	60.2	51.3	51.4
Incr Delay (d2), s/veh	3.2	1.3	2.6	13.7	1.7	0.7	8.8	22.6	22.5	10.3	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.0	5.1	5.6	8.5	11.3	2.0	6.1	18.9	19.0	7.4	11.3	11.2
LnGrp Delay(d),s/veh	38.6	13.3	14.5	73.6	52.6	22.3	56.7	50.5	50.5	70.5	52.5	52.6
LnGrp LOS	D	B	B	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1252			1249			1126			831	
Approach Delay, s/veh		18.3			54.2			51.4			56.6	
Approach LOS		B			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	38.9	20.8	51.1	17.1	41.1	28.9	43.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	17.5	35.1	17.5	43.1	17.5	35.1	22.5	* 38
Max Q Clear Time (g_c+I1), s	15.7	33.3	17.3	12.3	13.6	24.0	15.8	25.5
Green Ext Time (p_c), s	0.0	0.7	0.0	10.0	0.0	4.9	4.1	6.6

Intersection Summary	
HCM 2010 Ctrl Delay	43.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

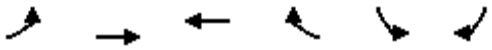
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	340	760	220	270	820	260	260	1340	200	160	1080	260
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1788	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	358	800	191	284	863	126	274	1411	195	168	1137	246
Adj No. of Lanes	2	3	0	2	3	1	2	3	0	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	464	1192	282	383	1357	406	376	1575	218	554	2304	866
Arrive On Green	0.09	0.19	0.19	0.15	0.36	0.36	0.11	0.35	0.35	0.16	0.41	0.41
Sat Flow, veh/h	3442	4108	973	3442	5085	1520	3442	4519	624	3548	5588	1583
Grp Volume(v), veh/h	358	659	332	284	863	126	274	1058	548	168	1137	246
Grp Sat Flow(s),veh/h/ln	1721	1695	1691	1721	1695	1520	1721	1695	1753	1774	1863	1583
Q Serve(g_s), s	13.2	23.4	23.7	10.3	18.4	5.2	10.0	38.4	38.5	5.5	19.5	10.8
Cycle Q Clear(g_c), s	13.2	23.4	23.7	10.3	18.4	5.2	10.0	38.4	38.5	5.5	19.5	10.8
Prop In Lane	1.00		0.58	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	464	984	491	383	1357	406	376	1181	611	554	2304	866
V/C Ratio(X)	0.77	0.67	0.68	0.74	0.64	0.31	0.73	0.90	0.90	0.30	0.49	0.28
Avail Cap(c_a), veh/h	649	984	491	569	1357	406	516	1181	611	554	2304	866
HCM Platoon Ratio	0.67	0.67	0.67	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	0.96	0.96	0.96	0.86	0.86	0.86	0.59	0.59	0.59
Uniform Delay (d), s/veh	57.2	46.6	46.7	53.6	36.7	15.0	56.1	40.1	40.1	48.6	28.2	15.8
Incr Delay (d2), s/veh	2.1	3.3	6.7	1.0	2.2	1.9	1.5	9.4	16.2	0.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.4	11.4	12.0	4.9	8.9	2.4	4.8	19.5	21.3	2.7	10.1	4.8
LnGrp Delay(d),s/veh	59.3	49.9	53.4	54.6	38.9	16.9	57.5	49.5	56.4	48.7	28.6	16.3
LnGrp LOS	E	D	D	D	D	B	E	D	E	D	C	B
Approach Vol, veh/h		1349			1273			1880			1551	
Approach Delay, s/veh		53.3			40.2			52.7			28.8	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	57.3	19.0	38.0	24.0	49.0	16.0	41.0
Change Period (Y+Rc), s	3.5	5.7	3.5	5.3	5.7	* 5.7	3.5	5.3
Max Green Setting (Gmax), s	17.5	39.3	22.5	32.7	13.5	* 43	19.5	35.7
Max Q Clear Time (g_c+I1), s	12.0	21.5	15.2	20.4	7.5	40.5	12.3	25.7
Green Ext Time (p_c), s	0.2	11.1	0.3	10.1	0.5	2.5	0.2	8.4

Intersection Summary	
HCM 2010 Ctrl Delay	44.1
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



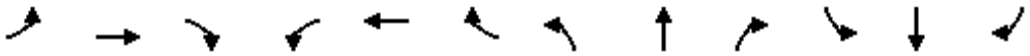
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	40	880	920	70	70	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.2	5.2	5.2	5.5	5.5
Lane Util. Factor	1.00	0.91	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	5085	3539	1583	1770	1559
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	5085	3539	1583	1770	1559
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	42	926	968	74	74	158
RTOR Reduction (vph)	0	0	0	0	0	145
Lane Group Flow (vph)	42	926	968	74	74	13
Confl. Peds. (#/hr)						1
Turn Type	Prot	NA	NA	Perm	Prot	Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	6.0	68.3	70.8	70.8	9.5	9.5
Effective Green, g (s)	5.5	69.6	72.1	72.1	9.7	9.7
Actuated g/C Ratio	0.05	0.58	0.60	0.60	0.08	0.08
Clearance Time (s)	3.5	6.5	6.5	6.5	5.7	5.7
Vehicle Extension (s)	1.5	4.3	4.3	4.3	2.0	2.0
Lane Grp Cap (vph)	81	2949	2126	951	143	126
v/s Ratio Prot	c0.02	0.18	c0.27		c0.04	
v/s Ratio Perm				0.05		0.01
v/c Ratio	0.52	0.31	0.46	0.08	0.52	0.10
Uniform Delay, d1	56.0	12.9	13.2	10.0	52.9	51.1
Progression Factor	1.00	1.00	0.52	0.37	1.00	1.00
Incremental Delay, d2	2.3	0.3	0.7	0.2	1.3	0.1
Delay (s)	58.3	13.2	7.5	3.8	54.2	51.2
Level of Service	E	B	A	A	D	D
Approach Delay (s)		15.2	7.2		52.2	
Approach LOS		B	A		D	

Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	840	110	80	870	110	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.2	6.5	4.0	5.2	5.5	5.5
Lane Util. Factor	0.95	1.00	1.00	0.91	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1583	1770	5085	1770	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1583	1770	5085	1770	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	884	116	84	916	116	95
RTOR Reduction (vph)	0	50	0	0	0	85
Lane Group Flow (vph)	884	66	84	916	116	10
Turn Type	NA	Perm	Prot	NA	Prot	Perm
Protected Phases	4		3	8	5	
Permitted Phases		4				5
Actuated Green, G (s)	68.3	68.3	8.5	70.8	12.3	12.3
Effective Green, g (s)	69.6	68.3	8.0	72.1	12.5	12.5
Actuated g/C Ratio	0.58	0.57	0.07	0.60	0.10	0.10
Clearance Time (s)	6.5	6.5	3.5	6.5	5.7	5.7
Vehicle Extension (s)	4.3	4.3	1.5	4.3	2.0	2.0
Lane Grp Cap (vph)	2052	900	118	3055	184	164
v/s Ratio Prot	c0.25		c0.05	0.18	c0.07	
v/s Ratio Perm		0.04				0.01
v/c Ratio	0.43	0.07	0.71	0.30	0.63	0.06
Uniform Delay, d1	14.1	11.6	54.9	11.7	51.5	48.5
Progression Factor	0.34	0.05	1.06	1.14	1.00	1.00
Incremental Delay, d2	0.6	0.2	15.2	0.2	5.1	0.1
Delay (s)	5.5	0.8	73.5	13.5	56.6	48.5
Level of Service	A	A	E	B	E	D
Approach Delay (s)	4.9			18.6	53.0	
Approach LOS	A			B	D	

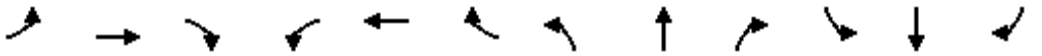
Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.4
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	170	900	90	70	1080	130	50	20	40	100	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	12	12	10	11	10	11	11	11	11	11	11
Total Lost time (s)	1.5	3.0		1.5	3.0	3.0		2.6			1.5	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00			1.00	
Frt	1.00	0.99		1.00	1.00	0.85		0.95			0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.96	
Satd. Flow (prot)	3204	5016		1652	4916	1478		1674			1698	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.84			0.69	
Satd. Flow (perm)	3204	5016		1652	4916	1478		1447			1219	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	179	947	95	74	1137	137	53	21	42	105	11	21
RTOR Reduction (vph)	0	6	0	0	0	27	0	22	0	0	7	0
Lane Group Flow (vph)	179	1036	0	74	1137	110	0	94	0	0	130	0
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2 5			1 6	
Permitted Phases						8	2 5			1 6		
Actuated Green, G (s)	11.2	79.9		10.5	79.2	79.2		20.5			25.5	
Effective Green, g (s)	13.2	81.9		12.5	81.2	81.2		24.5			28.5	
Actuated g/C Ratio	0.10	0.63		0.10	0.62	0.62		0.19			0.22	
Clearance Time (s)	3.5	5.0		3.5	5.0	5.0						
Vehicle Extension (s)	1.5	3.9		1.5	3.9	3.9						
Lane Grp Cap (vph)	325	3160		158	3070	923		272			267	
v/s Ratio Prot	c0.06	0.21		0.04	c0.23							
v/s Ratio Perm						0.07		0.07			c0.11	
v/c Ratio	0.55	0.33		0.47	0.37	0.12		0.35			0.49	
Uniform Delay, d1	55.6	11.2		55.6	11.9	9.9		45.8			44.4	
Progression Factor	1.00	1.00		1.22	0.38	0.13		1.00			1.00	
Incremental Delay, d2	1.1	0.3		0.8	0.3	0.2		0.3			0.5	
Delay (s)	56.7	11.5		68.8	4.8	1.5		46.1			44.9	
Level of Service	E	B		E	A	A		D			D	
Approach Delay (s)		18.1			8.0			46.1			44.9	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		

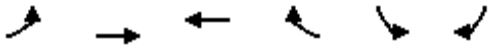
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	930	60	80	1100	40	90	30	120	110	40	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	11	11	10	13	13	10	10	10	10	14	14
Total Lost time (s)	1.5	3.0		1.5	3.0		1.5	2.6		1.5	2.6	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.88		1.00	0.90	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1652	4871		1652	5227		1652	1531		1652	1780	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1652	4871		1652	5227		1652	1531		1652	1780	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	979	63	84	1158	42	95	32	126	116	42	95
RTOR Reduction (vph)	0	3	0	0	2	0	0	115	0	0	77	0
Lane Group Flow (vph)	53	1039	0	84	1198	0	95	43	0	116	60	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	11.2	79.9		10.5	79.2		11.4	9.1		13.9	11.6	
Effective Green, g (s)	13.2	81.9		12.5	81.2		13.4	11.1		15.9	13.6	
Actuated g/C Ratio	0.10	0.63		0.10	0.62		0.10	0.09		0.12	0.10	
Clearance Time (s)	3.5	5.0		3.5	5.0		3.5	4.6		3.5	4.6	
Vehicle Extension (s)	1.5	3.9		1.5	3.9		1.5	2.0		1.5	2.0	
Lane Grp Cap (vph)	167	3068		158	3264		170	130		202	186	
v/s Ratio Prot	0.03	0.21		c0.05	c0.23		0.06	0.03		c0.07	c0.03	
v/s Ratio Perm												
v/c Ratio	0.32	0.34		0.53	0.37		0.56	0.33		0.57	0.32	
Uniform Delay, d1	54.2	11.3		56.0	11.9		55.5	55.9		53.9	53.9	
Progression Factor	1.47	0.48		1.11	0.20		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.4	0.3		1.4	0.3		2.3	0.5		2.4	0.4	
Delay (s)	80.0	5.8		63.6	2.7		57.7	56.5		56.3	54.3	
Level of Service	E	A		E	A		E	E		E	D	
Approach Delay (s)		9.4			6.7			57.0			55.2	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.6
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	40	1300	820	250	80	40
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	42	1368	863	263	63	64
Adj No. of Lanes	1	3	3	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	80	4493	4191	1419	128	117
Arrive On Green	0.09	1.00	1.00	1.00	0.07	0.07
Sat Flow, veh/h	1703	5253	5253	1583	1774	1615
Grp Volume(v), veh/h	42	1368	863	263	63	64
Grp Sat Flow(s),veh/h/ln	1703	1695	1695	1583	1774	1615
Q Serve(g_s), s	2.8	0.0	0.0	0.0	4.1	4.6
Cycle Q Clear(g_c), s	2.8	0.0	0.0	0.0	4.1	4.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	80	4493	4191	1419	128	117
V/C Ratio(X)	0.52	0.30	0.21	0.19	0.49	0.55
Avail Cap(c_a), veh/h	206	4493	4191	1419	503	458
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.89	0.89	1.00	1.00
Uniform Delay (d), s/veh	53.1	0.0	0.0	0.0	53.5	53.8
Incr Delay (d2), s/veh	1.9	0.2	0.1	0.3	1.1	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.1	0.0	0.1	2.1	4.1
LnGrp Delay(d),s/veh	54.9	0.2	0.1	0.3	54.6	55.3
LnGrp LOS	D	A	A	A	D	E
Approach Vol, veh/h		1410	1126		127	
Approach Delay, s/veh		1.8	0.1		54.9	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				109.3		10.7	7.1	102.2
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				78.7		32.0	12.5	62.7
Max Q Clear Time (g_c+I1), s				2.0		6.6	4.8	2.0
Green Ext Time (p_c), s				54.8		0.2	0.0	46.2

Intersection Summary	
HCM 2010 Ctrl Delay	3.6
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	910	60	170	420	180	70	650	130	110	570	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1937	1863	1937	1976
Adj Flow Rate, veh/h	137	958	63	179	442	189	74	684	137	116	600	63
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	191	1410	93	237	1602	499	123	1432	666	170	1451	152
Arrive On Green	0.11	0.29	0.29	0.04	0.10	0.10	0.07	0.40	0.40	0.06	0.29	0.29
Sat Flow, veh/h	1774	4876	320	1774	5085	1583	1774	3539	1647	1774	3363	352
Grp Volume(v), veh/h	137	665	356	179	442	189	74	684	137	116	328	335
Grp Sat Flow(s),veh/h/ln	1774	1695	1806	1774	1695	1583	1774	1770	1647	1774	1840	1875
Q Serve(g_s), s	9.0	20.8	20.9	12.0	9.6	13.4	4.9	17.1	6.5	7.7	17.3	17.3
Cycle Q Clear(g_c), s	9.0	20.8	20.9	12.0	9.6	13.4	4.9	17.1	6.5	7.7	17.3	17.3
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	191	980	522	237	1602	499	123	1432	666	170	794	809
V/C Ratio(X)	0.72	0.68	0.68	0.76	0.28	0.38	0.60	0.48	0.21	0.68	0.41	0.41
Avail Cap(c_a), veh/h	333	980	522	333	1602	499	214	1432	666	288	794	809
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00	0.97	0.97	0.97
Uniform Delay (d), s/veh	51.8	37.7	37.7	55.4	41.1	42.8	54.3	26.4	23.2	54.3	30.4	30.4
Incr Delay (d2), s/veh	1.9	3.8	7.0	3.4	0.4	2.2	1.8	1.1	0.7	1.7	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	10.2	11.4	6.1	4.6	6.2	2.4	8.6	3.1	3.9	9.1	9.3
LnGrp Delay(d),s/veh	53.7	41.5	44.8	58.8	41.6	45.0	56.0	27.5	23.9	56.1	31.9	31.9
LnGrp LOS	D	D	D	E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		1158			810			895			779	
Approach Delay, s/veh		43.9			46.2			29.3			35.5	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	51.5	17.5	38.0	9.8	54.7	14.4	41.1
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	17.5	32.1	20.5	32.7	12.5	37.1	20.5	32.7
Max Q Clear Time (g_c+I1), s	9.7	19.1	14.0	22.9	6.9	19.3	11.0	15.4
Green Ext Time (p_c), s	0.0	9.2	0.1	7.7	0.0	11.6	0.1	12.3

Intersection Summary	
HCM 2010 Ctrl Delay	39.0
HCM 2010 LOS	D

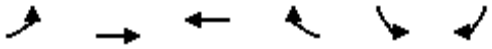
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	1060	160	400	710	520	190	1380	270	150	1280	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1788	1937	1937
Adj Flow Rate, veh/h	211	1116	76	421	747	382	200	1453	259	158	1347	89
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	1420	587	523	1855	577	316	1733	540	280	1880	585
Arrive On Green	0.18	0.56	0.56	0.15	0.36	0.36	0.03	0.11	0.11	0.17	0.71	0.71
Sat Flow, veh/h	3442	5085	1583	3442	5085	1583	3442	5085	1583	3304	5289	1647
Grp Volume(v), veh/h	211	1116	76	421	747	382	200	1453	259	158	1347	89
Grp Sat Flow(s),veh/h/ln	1721	1695	1583	1721	1695	1583	1721	1695	1583	1652	1763	1647
Q Serve(g_s), s	6.9	20.7	1.5	14.2	13.1	17.0	6.9	33.6	18.4	5.3	18.0	2.1
Cycle Q Clear(g_c), s	6.9	20.7	1.5	14.2	13.1	17.0	6.9	33.6	18.4	5.3	18.0	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	1420	587	523	1855	577	316	1733	540	280	1880	585
V/C Ratio(X)	0.67	0.79	0.13	0.81	0.40	0.66	0.63	0.84	0.48	0.56	0.72	0.15
Avail Cap(c_a), veh/h	473	1420	587	531	1855	577	531	1733	540	427	1880	585
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	2.00	2.00	2.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	0.85	0.85	0.85	0.93	0.93	0.93
Uniform Delay (d), s/veh	47.4	23.7	6.4	49.2	28.4	15.7	56.2	50.0	43.3	47.8	13.8	11.5
Incr Delay (d2), s/veh	0.9	4.3	0.4	8.1	0.7	5.9	0.7	4.3	2.6	0.6	2.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	10.1	0.7	7.3	6.3	8.3	3.3	16.5	8.5	2.4	8.9	1.0
LnGrp Delay(d),s/veh	48.2	28.0	6.8	57.2	29.0	21.6	56.9	54.3	45.9	48.4	16.0	12.0
LnGrp LOS	D	C	A	E	C	C	E	D	D	D	B	B
Approach Vol, veh/h		1403			1550			1912			1594	
Approach Delay, s/veh		29.9			34.9			53.5			19.0	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	45.0	22.7	38.0	12.5	46.8	12.5	48.3
Change Period (Y+Rc), s	6.1	* 6.1	6.5	* 6.5	3.5	6.1	3.5	6.5
Max Green Setting (Gmax), s	13.5	* 39	16.5	* 32	16.5	35.9	14.5	33.5
Max Q Clear Time (g_c+I1), s	7.3	35.6	16.2	22.7	8.9	20.0	8.9	19.0
Green Ext Time (p_c), s	0.5	2.9	0.0	6.0	0.1	11.1	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.4
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	180	780	680	240	230	180
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1863	1788	1863	1937
Adj Flow Rate, veh/h	189	821	716	253	242	189
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	466	2505	2409	1034	360	334
Arrive On Green	0.91	0.91	0.68	0.68	0.20	0.20
Sat Flow, veh/h	578	3778	3632	1520	1774	1647
Grp Volume(v), veh/h	189	821	716	253	242	189
Grp Sat Flow(s),veh/h/ln	578	1840	1770	1520	1774	1647
Q Serve(g_s), s	7.0	1.8	4.9	3.8	7.6	6.2
Cycle Q Clear(g_c), s	11.9	1.8	4.9	3.8	7.6	6.2
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	466	2505	2409	1034	360	334
V/C Ratio(X)	0.41	0.33	0.30	0.24	0.67	0.57
Avail Cap(c_a), veh/h	466	2505	2409	1034	967	897
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.41	0.41	0.99	0.99
Uniform Delay (d), s/veh	2.3	1.0	3.8	3.7	22.1	21.5
Incr Delay (d2), s/veh	2.4	0.3	0.1	0.2	0.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.9	2.3	1.6	3.8	2.8
LnGrp Delay(d),s/veh	4.7	1.3	4.0	3.9	22.9	22.1
LnGrp LOS	A	A	A	A	C	C
Approach Vol, veh/h		1010	969		431	
Approach Delay, s/veh		1.9	3.9		22.5	
Approach LOS		A	A		C	

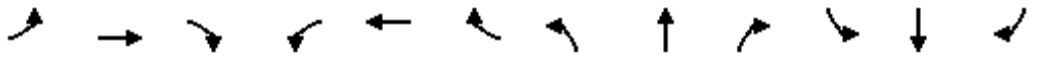
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				44.5		15.5		44.5
Change Period (Y+Rc), s				5.7		5.3		5.7
Max Green Setting (Gmax), s				18.3		30.7		18.3
Max Q Clear Time (g_c+I1), s				13.9		9.6		6.9
Green Ext Time (p_c), s				4.0		0.6		9.9

Intersection Summary	
HCM 2010 Ctrl Delay	6.4
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	970	40	20	1190	20	30	10	30	10	10	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1863	1900	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	42	1021	42	21	1253	21	32	11	32	11	11	42
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	4312	177	53	4181	70	131	38	109	140	30	116
Arrive On Green	0.05	0.83	0.83	0.06	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	1774	5211	214	1774	5151	86	1346	438	1274	1358	353	1347
Grp Volume(v), veh/h	42	690	373	21	825	449	32	0	43	11	0	53
Grp Sat Flow(s),veh/h/ln	1774	1763	1899	1774	1695	1848	1346	0	1712	1358	0	1700
Q Serve(g_s), s	3.0	5.5	5.5	1.5	0.0	0.0	3.0	0.0	3.1	1.0	0.0	3.8
Cycle Q Clear(g_c), s	3.0	5.5	5.5	1.5	0.0	0.0	6.8	0.0	3.1	4.1	0.0	3.8
Prop In Lane	1.00		0.11	1.00		0.05	1.00		0.74	1.00		0.79
Lane Grp Cap(c), veh/h	81	2918	1572	53	2752	1500	131	0	147	140	0	146
V/C Ratio(X)	0.52	0.24	0.24	0.40	0.30	0.30	0.24	0.00	0.29	0.08	0.00	0.36
Avail Cap(c_a), veh/h	198	2918	1572	198	2752	1500	393	0	479	404	0	476
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.76	0.76	0.76	0.89	0.89	0.89	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.7	2.4	2.4	60.0	0.0	0.0	59.3	0.0	55.7	57.6	0.0	56.1
Incr Delay (d2), s/veh	1.5	0.1	0.3	1.6	0.2	0.5	0.4	0.0	0.4	0.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	2.6	2.9	0.7	0.1	0.2	1.1	0.0	1.5	0.4	0.0	1.8
LnGrp Delay(d),s/veh	62.1	2.5	2.7	61.6	0.2	0.5	59.6	0.0	56.1	57.7	0.0	56.6
LnGrp LOS	E	A	A	E	A	A	E		E	E		E
Approach Vol, veh/h		1105			1295			75			64	
Approach Delay, s/veh		4.9			1.3			57.6			56.8	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		13.8	5.4	110.9		13.8	7.4	108.8
Change Period (Y+Rc), s		4.6	3.5	5.3		4.6	3.5	5.3
Max Green Setting (Gmax), s		34.4	12.5	69.7		34.4	12.5	69.7
Max Q Clear Time (g_c+I1), s		8.8	3.5	7.5		6.1	5.0	2.0
Green Ext Time (p_c), s		0.4	0.0	39.9		0.4	0.0	41.9

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	260	700	120	300	760	320	230	1180	110	260	960	120
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	274	737	126	316	800	337	242	1242	116	274	1011	126
Adj No. of Lanes	2	3	0	2	3	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	378	1022	173	425	1311	849	477	1273	119	494	1356	169
Arrive On Green	0.11	0.23	0.23	0.12	0.26	0.26	0.27	0.27	0.27	0.28	0.28	0.28
Sat Flow, veh/h	3442	4380	742	3442	5085	1583	1774	4733	442	1774	4875	606
Grp Volume(v), veh/h	274	569	294	316	800	337	242	890	468	274	772	365
Grp Sat Flow(s),veh/h/ln	1721	1695	1732	1721	1695	1583	1774	1695	1785	1774	1863	1756
Q Serve(g_s), s	9.9	19.9	20.2	11.4	17.9	16.2	14.9	33.5	33.6	17.0	24.3	24.4
Cycle Q Clear(g_c), s	9.9	19.9	20.2	11.4	17.9	16.2	14.9	33.5	33.6	17.0	24.3	24.4
Prop In Lane	1.00		0.43	1.00		1.00	1.00		0.25	1.00		0.35
Lane Grp Cap(c), veh/h	378	791	404	425	1311	849	477	912	480	494	1036	488
V/C Ratio(X)	0.73	0.72	0.73	0.74	0.61	0.40	0.51	0.98	0.98	0.56	0.74	0.75
Avail Cap(c_a), veh/h	494	791	404	494	1311	849	477	912	480	494	1036	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.94	0.94	0.94	0.67	0.67	0.67	0.41	0.41	0.41
Uniform Delay (d), s/veh	55.5	45.6	45.7	54.6	42.2	17.6	39.9	46.7	46.7	39.7	42.4	42.4
Incr Delay (d2), s/veh	2.2	5.6	10.9	3.8	2.0	1.3	2.6	19.2	28.2	1.8	2.0	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.8	9.9	10.9	5.7	8.6	11.6	7.7	18.1	20.3	8.6	12.8	12.4
LnGrp Delay(d),s/veh	57.8	51.1	56.6	58.4	44.2	18.9	42.5	65.9	74.9	41.6	44.4	46.7
LnGrp LOS	E	D	E	E	D	B	D	E	E	D	D	D
Approach Vol, veh/h		1137			1453			1600			1411	
Approach Delay, s/veh		54.2			41.4			65.0			44.5	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		39.2	15.7	36.2		38.0	18.8	33.0
Change Period (Y+Rc), s		5.3	3.5	4.9		5.3	4.9	* 4.9
Max Green Setting (Gmax), s		32.7	16.5	28.1		32.7	16.5	* 28
Max Q Clear Time (g_c+I1), s		26.4	11.9	19.9		35.6	13.4	22.2
Green Ext Time (p_c), s		4.7	0.2	5.2		0.0	0.5	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	51.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	1030	70	160	1110	110	90	10	130	100	30	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1863	1900	1900	1863	1863
Adj Flow Rate, veh/h	126	1084	74	168	1168	116	95	11	137	105	32	105
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	2260	154	393	2831	281	189	32	395	246	69	422
Arrive On Green	0.03	0.15	0.15	0.44	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1774	5057	345	1774	4892	486	1247	119	1482	739	258	1583
Grp Volume(v), veh/h	126	755	403	168	842	442	95	0	148	137	0	105
Grp Sat Flow(s),veh/h/ln	1774	1763	1876	1774	1763	1852	1247	0	1601	997	0	1583
Q Serve(g_s), s	9.1	25.6	25.6	8.5	0.0	0.0	9.6	0.0	9.7	11.0	0.0	6.8
Cycle Q Clear(g_c), s	9.1	25.6	25.6	8.5	0.0	0.0	30.3	0.0	9.7	20.7	0.0	6.8
Prop In Lane	1.00		0.18	1.00		0.26	1.00		0.93	0.77		1.00
Lane Grp Cap(c), veh/h	179	1576	839	393	2040	1072	189	0	427	315	0	422
V/C Ratio(X)	0.70	0.48	0.48	0.43	0.41	0.41	0.50	0.00	0.35	0.44	0.00	0.25
Avail Cap(c_a), veh/h	389	1576	839	393	2040	1072	206	0	448	333	0	443
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.79	0.81	0.81	0.81	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.9	41.5	41.6	30.5	0.0	0.0	56.1	0.0	38.5	45.9	0.0	37.4
Incr Delay (d2), s/veh	1.5	0.8	1.6	0.2	0.5	0.9	0.8	0.0	0.2	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	12.7	13.7	4.1	0.1	0.3	3.3	0.0	4.3	4.4	0.0	3.0
LnGrp Delay(d),s/veh	62.4	42.4	43.1	30.7	0.5	0.9	56.8	0.0	38.7	46.3	0.0	37.6
LnGrp LOS	E	D	D	C	A	A	E		D	D		D
Approach Vol, veh/h		1284			1452			243			242	
Approach Delay, s/veh		44.6			4.1			45.8			42.5	
Approach LOS		D			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		37.3	31.7	61.0		37.3	14.6	78.1
Change Period (Y+Rc), s		4.6	4.9	* 4.9		4.6	3.5	4.9
Max Green Setting (Gmax), s		34.4	26.5	* 56		34.4	26.5	56.1
Max Q Clear Time (g_c+I1), s		32.3	10.5	27.6		22.7	11.1	2.0
Green Ext Time (p_c), s		0.4	1.0	11.6		1.3	0.1	16.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	860	130	10	980	100	50	20	10	60	20	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	32	905	137	11	1032	105	53	21	11	63	21	32
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	2639	399	41	2693	274	152	120	63	171	69	106
Arrive On Green	0.10	1.00	1.00	0.02	0.80	0.80	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1774	3207	485	1774	3374	343	1346	1199	628	1372	694	1057
Grp Volume(v), veh/h	32	519	523	11	563	574	53	0	32	63	0	53
Grp Sat Flow(s),veh/h/ln	1774	1840	1852	1774	1840	1877	1346	0	1826	1372	0	1751
Q Serve(g_s), s	2.2	0.0	0.0	0.8	11.6	11.6	4.9	0.0	2.1	5.7	0.0	3.7
Cycle Q Clear(g_c), s	2.2	0.0	0.0	0.8	11.6	11.6	8.6	0.0	2.1	7.8	0.0	3.7
Prop In Lane	1.00		0.26	1.00		0.18	1.00		0.34	1.00		0.60
Lane Grp Cap(c), veh/h	85	1515	1524	41	1469	1498	152	0	183	171	0	175
V/C Ratio(X)	0.38	0.34	0.34	0.27	0.38	0.38	0.35	0.00	0.17	0.37	0.00	0.30
Avail Cap(c_a), veh/h	198	1515	1524	198	1469	1498	332	0	427	354	0	409
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	0.09	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	57.0	0.0	0.0	62.4	3.8	3.8	58.3	0.0	53.6	57.2	0.0	54.3
Incr Delay (d2), s/veh	0.1	0.1	0.1	1.3	0.8	0.7	0.5	0.0	0.2	0.5	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	0.0	0.0	0.4	6.1	6.2	1.9	0.0	1.1	2.2	0.0	1.8
LnGrp Delay(d),s/veh	57.1	0.1	0.1	63.7	4.6	4.6	58.8	0.0	53.7	57.6	0.0	54.6
LnGrp LOS	E	A	A	E	A	A	E		D	E		D
Approach Vol, veh/h		1074			1148			85			116	
Approach Delay, s/veh		1.8			5.1			56.9			56.3	
Approach LOS		A			A			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	109.9		15.6	7.7	106.7		15.6
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	12.5	76.1		28.4	12.5	76.1		28.4
Max Q Clear Time (g_c+I1), s	2.8	2.0		9.8	4.2	13.6		10.6
Green Ext Time (p_c), s	0.0	46.1		0.4	0.0	41.5		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	7.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	1130	20	60	710	90	10	10	50	130	30	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1788	1863	1900	1863	1863	1900	1976	1937	1976	1900	1863	1863
Adj Flow Rate, veh/h	53	1189	21	63	747	95	11	11	53	137	32	53
Adj No. of Lanes	1	3	0	1	4	0	0	1	0	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	2992	53	110	3038	379	34	46	111	152	30	475
Arrive On Green	0.21	1.00	1.00	0.04	0.35	0.35	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1703	5146	91	1774	5815	726	0	154	371	327	100	1583
Grp Volume(v), veh/h	53	783	427	63	615	227	75	0	0	169	0	53
Grp Sat Flow(s),veh/h/ln	1703	1695	1847	1774	1602	1735	525	0	0	427	0	1583
Q Serve(g_s), s	3.1	0.0	0.0	4.2	10.9	11.2	0.0	0.0	0.0	0.0	0.0	2.9
Cycle Q Clear(g_c), s	3.1	0.0	0.0	4.2	10.9	11.2	36.0	0.0	0.0	36.0	0.0	2.9
Prop In Lane	1.00		0.05	1.00		0.42	0.15		0.71	0.81		1.00
Lane Grp Cap(c), veh/h	180	1971	1074	110	2511	906	192	0	0	182	0	475
V/C Ratio(X)	0.29	0.40	0.40	0.57	0.24	0.25	0.39	0.00	0.00	0.93	0.00	0.11
Avail Cap(c_a), veh/h	206	1971	1074	214	2511	906	192	0	0	182	0	475
HCM Platoon Ratio	2.00	2.00	2.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	0.98	0.98	0.98	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.5	0.0	0.0	55.9	22.2	22.3	33.3	0.0	0.0	45.8	0.0	30.4
Incr Delay (d2), s/veh	0.3	0.6	1.1	1.7	0.2	0.7	0.5	0.0	0.0	45.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.5	0.2	0.3	2.1	4.9	5.5	1.8	0.0	0.0	7.9	0.0	1.3
LnGrp Delay(d),s/veh	43.8	0.6	1.1	57.7	22.4	22.9	33.8	0.0	0.0	91.0	0.0	30.5
LnGrp LOS	D	A	A	E	C	C	C			F		C
Approach Vol, veh/h		1263			905			75			222	
Approach Delay, s/veh		2.6			25.0			33.8			76.5	
Approach LOS		A			C			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.0	8.9	73.1		38.0	16.0	66.0
Change Period (Y+Rc), s		4.0	3.5	5.3		4.0	5.3	* 5.3
Max Green Setting (Gmax), s		34.0	12.5	60.7		34.0	12.5	* 61
Max Q Clear Time (g_c+I1), s		38.0	6.2	2.0		38.0	5.1	13.2
Green Ext Time (p_c), s		0.0	0.0	17.6		0.0	0.5	10.3

Intersection Summary	
HCM 2010 Ctrl Delay	18.4
HCM 2010 LOS	B

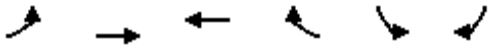
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	850	100	120	980	170	120	540	130	70	340	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1976	1863	1937	1976	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	116	895	105	126	1032	179	126	568	137	74	358	95
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	2671	312	176	2560	443	226	840	202	140	824	216
Arrive On Green	0.18	1.00	1.00	0.10	0.56	0.56	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1774	4803	561	1774	4538	786	934	2945	708	740	2887	757
Grp Volume(v), veh/h	116	656	344	126	801	410	126	354	351	74	227	226
Grp Sat Flow(s),veh/h/ln	1774	1763	1838	1774	1763	1799	934	1840	1812	740	1840	1804
Q Serve(g_s), s	8.0	0.0	0.0	9.0	16.7	16.7	16.6	22.2	22.3	12.8	13.0	13.3
Cycle Q Clear(g_c), s	8.0	0.0	0.0	9.0	16.7	16.7	29.9	22.2	22.3	35.1	13.0	13.3
Prop In Lane	1.00		0.31	1.00		0.44	1.00		0.39	1.00		0.42
Lane Grp Cap(c), veh/h	162	1961	1022	176	1989	1015	226	525	517	140	525	515
V/C Ratio(X)	0.72	0.33	0.34	0.72	0.40	0.40	0.56	0.67	0.68	0.53	0.43	0.44
Avail Cap(c_a), veh/h	198	1961	1022	307	1989	1015	226	525	517	140	525	515
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.98	0.98	1.00	1.00	1.00	0.52	0.52	0.52	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	0.0	0.0	56.8	16.0	16.0	50.2	41.1	41.2	56.7	37.9	38.0
Incr Delay (d2), s/veh	6.3	0.5	0.9	2.0	0.6	1.2	1.0	1.5	1.5	1.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	0.1	0.2	4.5	8.3	8.6	4.3	11.4	11.3	2.7	6.6	6.7
LnGrp Delay(d),s/veh	57.8	0.5	0.9	58.8	16.6	17.2	51.1	42.6	42.7	58.6	38.1	38.2
LnGrp LOS	E	A	A	E	B	B	D	D	D	E	D	D
Approach Vol, veh/h		1116			1337			831			527	
Approach Delay, s/veh		6.5			20.8			43.9			41.0	
Approach LOS		A			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.4	75.6		40.0	13.4	76.6		40.0
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	20.5	60.7		35.1	12.5	68.7		35.1
Max Q Clear Time (g_c+I1), s	11.0	2.0		37.1	10.0	18.7		31.9
Green Ext Time (p_c), s	0.1	36.1		0.0	0.0	32.7		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	24.4
HCM 2010 LOS	C



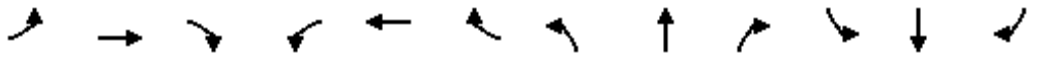
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	130	1120	670	50	100	130
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	137	1179	705	53	105	137
Adj No. of Lanes	1	3	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	0
Cap, veh/h	186	4260	4419	328	210	191
Arrive On Green	0.21	1.00	1.00	1.00	0.12	0.12
Sat Flow, veh/h	1774	5253	6394	455	1774	1615
Grp Volume(v), veh/h	137	1179	550	208	105	137
Grp Sat Flow(s),veh/h/ln	1774	1695	1602	1782	1774	1615
Q Serve(g_s), s	8.7	0.0	0.0	0.0	6.7	9.8
Cycle Q Clear(g_c), s	8.7	0.0	0.0	0.0	6.7	9.8
Prop In Lane	1.00			0.26	1.00	1.00
Lane Grp Cap(c), veh/h	186	4260	3462	1284	210	191
V/C Ratio(X)	0.74	0.28	0.16	0.16	0.50	0.72
Avail Cap(c_a), veh/h	214	4260	3462	1284	517	471
HCM Platoon Ratio	2.00	2.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.79	0.79	0.99	0.99	1.00	1.00
Uniform Delay (d), s/veh	45.9	0.0	0.0	0.0	49.6	51.0
Incr Delay (d2), s/veh	6.9	0.1	0.1	0.3	0.7	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	0.1	0.0	0.1	3.3	8.7
LnGrp Delay(d),s/veh	52.7	0.1	0.1	0.3	50.3	52.9
LnGrp LOS	D	A	A	A	D	D
Approach Vol, veh/h		1316	758		242	
Approach Delay, s/veh		5.6	0.1		51.8	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				103.8		16.2	14.1	89.8
Change Period (Y+Rc), s				5.3		4.0	3.5	5.3
Max Green Setting (Gmax), s				77.7		33.0	12.5	61.7
Max Q Clear Time (g_c+I1), s				2.0		11.8	10.7	2.0
Green Ext Time (p_c), s				39.8		0.4	0.0	35.1

Intersection Summary	
HCM 2010 Ctrl Delay	8.6
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	30	120	20	10	10	70	1780	30	20	1330	260
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	116	32	126	21	11	11	74	1874	32	21	1400	274
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	44	174	73	38	23	93	3827	65	30	3021	590
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.11	1.00	1.00	0.02	0.71	0.71
Sat Flow, veh/h	1384	331	1302	212	284	171	1774	5150	88	1774	4271	835
Grp Volume(v), veh/h	116	0	158	43	0	0	74	1233	673	21	1111	563
Grp Sat Flow(s),veh/h/ln	1384	0	1633	667	0	0	1774	1695	1847	1774	1695	1715
Q Serve(g_s), s	1.0	0.0	11.1	0.9	0.0	0.0	4.9	0.0	0.0	1.4	17.1	17.2
Cycle Q Clear(g_c), s	13.0	0.0	11.1	12.0	0.0	0.0	4.9	0.0	0.0	1.4	17.1	17.2
Prop In Lane	1.00		0.80	0.49		0.26	1.00		0.05	1.00		0.49
Lane Grp Cap(c), veh/h	208	0	218	134	0	0	93	2520	1373	30	2398	1213
V/C Ratio(X)	0.56	0.00	0.73	0.32	0.00	0.00	0.79	0.49	0.49	0.71	0.46	0.46
Avail Cap(c_a), veh/h	508	0	572	444	0	0	200	2520	1373	200	2398	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.30	0.30	0.30	0.62	0.62	0.62
Uniform Delay (d), s/veh	50.8	0.0	49.9	48.1	0.0	0.0	53.0	0.0	0.0	58.7	7.6	7.7
Incr Delay (d2), s/veh	0.9	0.0	1.7	0.5	0.0	0.0	1.7	0.2	0.4	6.8	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	0.0	5.2	1.4	0.0	0.0	2.4	0.1	0.1	0.8	8.0	8.2
LnGrp Delay(d),s/veh	51.7	0.0	51.6	48.6	0.0	0.0	54.7	0.2	0.4	65.5	8.0	8.4
LnGrp LOS	D		D	D			D	A	A	E	A	A
Approach Vol, veh/h		274			43			1980			1695	
Approach Delay, s/veh		51.7			48.6			2.3			8.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	90.2		20.0	5.5	94.5		20.0
Change Period (Y+Rc), s	3.5	5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	13.5	51.7		42.0	13.5	51.7		42.0
Max Q Clear Time (g_c+I1), s	6.9	19.2		15.0	3.4	2.0		14.0
Green Ext Time (p_c), s	0.0	31.7		1.0	0.0	47.7		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	9.0
HCM 2010 LOS	A

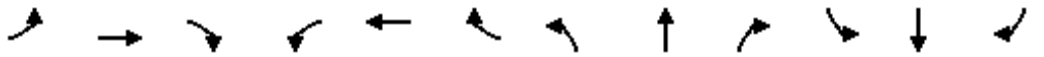
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	10	40	30	10	20	60	1760	30	60	1260	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	11	42	32	11	21	63	1853	32	63	1326	63
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	17	51	112	43	54	80	2690	46	445	3696	176
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.09	1.00	1.00	0.50	1.00	1.00
Sat Flow, veh/h	929	164	483	641	405	511	1774	5148	89	1774	4975	236
Grp Volume(v), veh/h	137	0	0	64	0	0	63	1220	665	63	904	485
Grp Sat Flow(s),veh/h/ln	1576	0	0	1558	0	0	1774	1695	1847	1774	1695	1821
Q Serve(g_s), s	5.6	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0	2.3	0.0	0.0
Cycle Q Clear(g_c), s	10.0	0.0	0.0	4.4	0.0	0.0	4.2	0.0	0.0	2.3	0.0	0.0
Prop In Lane	0.61		0.31	0.50		0.33	1.00		0.05	1.00		0.13
Lane Grp Cap(c), veh/h	214	0	0	209	0	0	80	1771	965	445	2518	1353
V/C Ratio(X)	0.64	0.00	0.00	0.31	0.00	0.00	0.79	0.69	0.69	0.14	0.36	0.36
Avail Cap(c_a), veh/h	450	0	0	449	0	0	170	1771	965	445	2518	1353
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.62	0.62	0.62	0.70	0.70	0.70
Uniform Delay (d), s/veh	52.3	0.0	0.0	49.9	0.0	0.0	54.0	0.0	0.0	23.0	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.3	0.0	0.0	3.9	1.4	2.5	0.0	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.5	0.0	0.0	2.0	0.0	0.0	2.1	0.3	0.7	1.1	0.1	0.2
LnGrp Delay(d),s/veh	53.5	0.0	0.0	50.2	0.0	0.0	57.9	1.4	2.5	23.0	0.3	0.5
LnGrp LOS	D			D			E	A	A	C	A	A
Approach Vol, veh/h		137			64			1948			1452	
Approach Delay, s/veh		53.5			50.2			3.6			1.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	35.4	68.0		16.6	8.9	94.4		16.6
Change Period (Y+Rc), s	5.3	* 5.3		4.0	3.5	5.3		4.0
Max Green Setting (Gmax), s	12.5	* 63		32.0	11.5	63.7		32.0
Max Q Clear Time (g_c+I1), s	4.3	2.0		12.0	6.2	2.0		6.4
Green Ext Time (p_c), s	1.8	35.5		0.7	0.0	21.6		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	5.4
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	510	170	120	590	120	220	1560	170	170	1120	140
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.90	1.00		0.98	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	126	537	179	126	621	126	232	1642	179	179	1179	147
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	572	189	152	640	129	255	2018	219	203	2058	600
Arrive On Green	0.09	0.22	0.22	0.09	0.22	0.22	0.29	0.87	0.87	0.23	0.81	0.81
Sat Flow, veh/h	1774	2569	852	1774	2875	581	1774	4647	505	1774	5085	1481
Grp Volume(v), veh/h	126	369	347	126	382	365	232	1197	624	179	1179	147
Grp Sat Flow(s),veh/h/ln	1774	1770	1651	1774	1770	1687	1774	1695	1762	1774	1695	1481
Q Serve(g_s), s	8.4	24.6	24.8	8.4	25.6	25.8	15.1	18.9	19.2	11.7	9.9	2.8
Cycle Q Clear(g_c), s	8.4	24.6	24.8	8.4	25.6	25.8	15.1	18.9	19.2	11.7	9.9	2.8
Prop In Lane	1.00		0.52	1.00		0.34	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	152	394	367	152	394	375	255	1472	765	203	2058	600
V/C Ratio(X)	0.83	0.94	0.94	0.83	0.97	0.97	0.91	0.81	0.82	0.88	0.57	0.25
Avail Cap(c_a), veh/h	214	394	367	214	394	375	392	1472	765	259	2058	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.91	0.91	0.91	0.89	0.89	0.89	0.83	0.83	0.83	0.88	0.88	0.88
Uniform Delay (d), s/veh	54.0	45.8	45.9	54.0	46.2	46.3	42.0	5.7	5.7	45.5	7.7	7.1
Incr Delay (d2), s/veh	11.1	28.4	31.3	10.9	34.7	36.9	11.4	4.2	7.9	18.8	1.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	15.1	14.5	4.6	16.3	15.8	8.2	8.8	10.0	6.7	4.5	1.2
LnGrp Delay(d),s/veh	65.2	74.2	77.2	64.9	81.0	83.2	53.4	9.9	13.6	64.3	8.8	7.9
LnGrp LOS	E	E	E	E	F	F	D	A	B	E	A	A
Approach Vol, veh/h		842			873			2053			1505	
Approach Delay, s/veh		74.1			79.6			15.9			15.3	
Approach LOS		E			E			B			B	

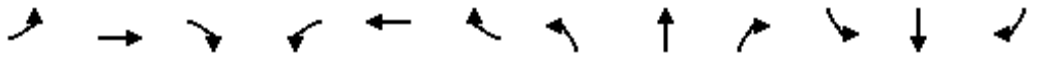
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.8	53.5	13.8	32.0	17.2	57.0	13.8	32.0
Change Period (Y+Rc), s	3.5	4.9	3.5	5.3	3.5	4.9	3.5	5.3
Max Green Setting (Gmax), s	26.5	35.1	14.5	26.7	17.5	44.1	14.5	26.7
Max Q Clear Time (g_c+I1), s	17.1	11.9	10.4	27.8	13.7	21.2	10.4	26.8
Green Ext Time (p_c), s	0.1	22.2	0.0	0.0	0.1	22.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	90	70	30	120	70	80	820	20	50	520	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	95	74	32	126	74	84	863	21	53	547	84
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	156	103	94	228	122	572	2322	56	453	2023	310
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.66	0.66	0.64	0.66	0.66	0.64
Sat Flow, veh/h	423	712	469	142	1041	554	792	3531	86	625	3077	471
Grp Volume(v), veh/h	253	0	0	232	0	0	84	432	452	53	314	317
Grp Sat Flow(s),veh/h/ln	1605	0	0	1737	0	0	792	1770	1847	625	1770	1778
Q Serve(g_s), s	1.4	0.0	0.0	0.0	0.0	0.0	3.2	7.2	7.2	2.7	4.8	4.9
Cycle Q Clear(g_c), s	9.1	0.0	0.0	7.6	0.0	0.0	8.1	7.2	7.2	9.9	4.8	4.9
Prop In Lane	0.33		0.29	0.14		0.32	1.00		0.05	1.00		0.26
Lane Grp Cap(c), veh/h	426	0	0	444	0	0	572	1164	1215	453	1164	1169
V/C Ratio(X)	0.59	0.00	0.00	0.52	0.00	0.00	0.15	0.37	0.37	0.12	0.27	0.27
Avail Cap(c_a), veh/h	695	0	0	741	0	0	572	1164	1215	453	1164	1169
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.63	0.63	0.63	0.67	0.67	0.67
Uniform Delay (d), s/veh	23.2	0.0	0.0	22.8	0.0	0.0	6.3	5.0	5.1	7.3	4.6	4.7
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	0.3	0.6	0.6	0.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	0.0	0.0	3.8	0.0	0.0	0.8	3.7	3.8	0.5	2.4	2.4
LnGrp Delay(d),s/veh	23.7	0.0	0.0	23.2	0.0	0.0	6.7	5.6	5.6	7.6	5.0	5.1
LnGrp LOS	C			C			A	A	A	A	A	A
Approach Vol, veh/h		253			232			968			684	
Approach Delay, s/veh		23.7			23.2			5.7			5.2	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		46.7		18.3		46.7		18.3
Change Period (Y+Rc), s		4.9		4.0		4.9		4.0
Max Green Setting (Gmax), s		30.1		26.0		30.1		26.0
Max Q Clear Time (g_c+I1), s		10.1		11.1		11.9		9.6
Green Ext Time (p_c), s		5.0		2.0		4.9		2.0

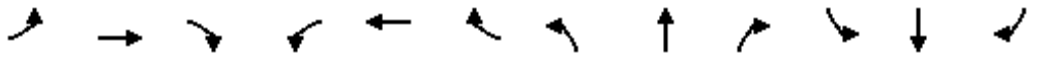
Intersection Summary	
HCM 2010 Ctrl Delay	9.6
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	780	110	80	500	110	90	560	120	100	520	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	168	821	116	84	526	116	95	589	126	105	547	126
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	957	135	99	781	171	387	1580	337	454	1557	357
Arrive On Green	0.09	0.31	0.30	0.06	0.27	0.26	1.00	1.00	1.00	0.54	0.54	0.54
Sat Flow, veh/h	1774	3113	440	1774	2884	633	762	2902	619	732	2858	656
Grp Volume(v), veh/h	168	467	470	84	322	320	95	359	356	105	338	335
Grp Sat Flow(s),veh/h/ln	1774	1770	1783	1774	1770	1748	762	1770	1751	732	1770	1745
Q Serve(g_s), s	12.0	32.3	32.3	6.1	21.1	21.3	4.2	0.0	0.0	9.9	14.0	14.1
Cycle Q Clear(g_c), s	12.0	32.3	32.3	6.1	21.1	21.3	18.3	0.0	0.0	9.9	14.0	14.1
Prop In Lane	1.00		0.25	1.00		0.36	1.00		0.35	1.00		0.38
Lane Grp Cap(c), veh/h	164	544	548	99	479	473	387	964	954	454	964	950
V/C Ratio(X)	1.03	0.86	0.86	0.85	0.67	0.68	0.25	0.37	0.37	0.23	0.35	0.35
Avail Cap(c_a), veh/h	164	803	809	177	817	807	387	964	954	454	964	950
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.67	0.54	0.54	0.54	0.48	0.48	0.48	0.25	0.25	0.25
Uniform Delay (d), s/veh	59.0	42.3	42.5	60.9	42.3	42.5	1.8	0.0	0.0	15.7	16.7	16.8
Incr Delay (d2), s/veh	64.5	2.9	2.9	4.2	0.3	0.3	0.7	0.5	0.5	0.3	0.3	0.3
Initial Q Delay(d3),s/veh	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.8	16.3	16.4	3.1	10.3	10.3	0.9	0.1	0.1	2.0	6.8	6.9
LnGrp Delay(d),s/veh	123.8	45.3	45.4	65.1	42.6	42.8	2.6	0.5	0.5	16.0	16.9	17.1
LnGrp LOS	F	D	D	E	D	D	A	A	A	B	B	B
Approach Vol, veh/h		1105			726			810			778	
Approach Delay, s/veh		57.3			45.3			0.8			16.9	
Approach LOS		E			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		74.8	11.2	44.0		74.8	16.0	39.2
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	13.5	58.1		45.1	12.5	59.1
Max Q Clear Time (g_c+I1), s		20.3	8.1	34.3		16.1	14.0	23.3
Green Ext Time (p_c), s		5.1	0.0	4.8		5.2	0.0	5.0

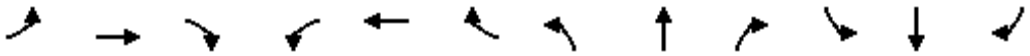
Intersection Summary	
HCM 2010 Ctrl Delay	32.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	540	100	50	680	130	120	760	70	70	430	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	105	568	105	53	716	137	126	800	74	74	453	105
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	1549	286	61	1438	275	296	1159	107	147	1010	232
Arrive On Green	0.07	0.52	0.51	0.03	0.49	0.48	0.35	0.35	0.35	0.71	0.71	0.69
Sat Flow, veh/h	1774	2984	550	1774	2964	567	847	3274	303	632	2855	657
Grp Volume(v), veh/h	105	336	337	53	427	426	126	432	442	74	279	279
Grp Sat Flow(s),veh/h/ln	1774	1770	1765	1774	1770	1761	847	1770	1807	632	1770	1743
Q Serve(g_s), s	7.6	14.7	14.8	3.9	21.3	21.4	16.3	27.2	27.2	14.1	8.8	9.1
Cycle Q Clear(g_c), s	7.6	14.7	14.8	3.9	21.3	21.4	25.3	27.2	27.2	41.3	8.8	9.1
Prop In Lane	1.00		0.31	1.00		0.32	1.00		0.17	1.00		0.38
Lane Grp Cap(c), veh/h	122	919	916	61	859	855	296	626	640	147	626	617
V/C Ratio(X)	0.86	0.37	0.37	0.86	0.50	0.50	0.43	0.69	0.69	0.50	0.45	0.45
Avail Cap(c_a), veh/h	164	919	916	123	859	855	296	626	640	147	626	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.47	0.47	0.47	0.50	0.50	0.50	0.42	0.42	0.42	0.97	0.97	0.97
Uniform Delay (d), s/veh	59.9	18.6	18.7	62.4	22.7	22.8	39.1	35.9	36.0	30.9	13.6	13.8
Incr Delay (d2), s/veh	12.3	0.5	0.5	6.6	1.0	1.0	1.9	2.7	2.6	11.5	2.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.2	7.3	7.4	2.0	10.7	10.7	4.0	13.7	14.0	2.9	4.6	4.6
LnGrp Delay(d),s/veh	72.3	19.1	19.2	69.0	23.7	23.9	41.0	38.6	38.6	42.4	15.8	16.2
LnGrp LOS	E	B	B	E	C	C	D	D	D	D	B	B
Approach Vol, veh/h		778			906			1000			632	
Approach Delay, s/veh		26.3			26.4			38.9			19.1	
Approach LOS		C			C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		50.0	8.5	71.5		50.0	12.9	67.1
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		45.1	9.5	62.1		45.1	12.5	59.1
Max Q Clear Time (g_c+I1), s		29.2	5.9	16.8		43.3	9.6	23.4
Green Ext Time (p_c), s		4.7	0.0	5.7		1.1	0.0	5.7

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	150	0	90	0	600	120	60	580	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor					1.00	1.00		0.95		1.00	0.95	
Frt					1.00	0.85		0.98		1.00	1.00	
Flt Protected					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)					1770	1583		3451		1770	3539	
Flt Permitted					0.95	1.00		1.00		0.95	1.00	
Satd. Flow (perm)					1770	1583		3451		1770	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	158	0	95	0	632	126	63	611	0
RTOR Reduction (vph)	0	0	0	0	0	83	0	6	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	158	12	0	752	0	63	611	0
Turn Type				Split	NA	Perm		NA		Prot	NA	
Protected Phases				8	8			2		1	6	
Permitted Phases						8						
Actuated Green, G (s)					14.7	14.7		85.6		7.3	96.4	
Effective Green, g (s)					14.7	14.7		86.5		6.8	97.3	
Actuated g/C Ratio					0.12	0.12		0.72		0.06	0.81	
Clearance Time (s)					4.0	4.0		4.9		3.5	4.9	
Vehicle Extension (s)					1.5	1.5		1.5		1.5	1.5	
Lane Grp Cap (vph)					216	193		2487		100	2869	
v/s Ratio Prot					c0.09			c0.22		c0.04	0.17	
v/s Ratio Perm						0.01						
v/c Ratio					0.73	0.06		0.30		0.63	0.21	
Uniform Delay, d1					50.7	46.5		6.0		55.4	2.6	
Progression Factor					0.84	1.01		0.47		0.81	1.08	
Incremental Delay, d2					9.9	0.0		0.2		7.3	0.1	
Delay (s)					52.4	46.8		3.0		52.4	2.9	
Level of Service					D	D		A		D	A	
Approach Delay (s)		0.0			50.3			3.0			7.6	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	20	60	100	20	140	80	740	150	110	580	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	21	63	105	21	147	84	779	158	116	611	32
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	51	85	185	37	193	98	2167	963	133	2160	113
Arrive On Green	0.06	0.06	0.06	0.12	0.12	0.12	0.11	1.00	1.00	0.15	1.00	1.00
Sat Flow, veh/h	909	909	1532	1490	298	1560	1774	3539	1573	1774	3420	179
Grp Volume(v), veh/h	42	0	63	126	0	147	84	779	158	116	316	327
Grp Sat Flow(s),veh/h/ln	1817	0	1532	1788	0	1560	1774	1770	1573	1774	1770	1830
Q Serve(g_s), s	2.7	0.0	4.9	8.0	0.0	10.9	5.6	0.0	0.0	7.7	0.0	0.0
Cycle Q Clear(g_c), s	2.7	0.0	4.9	8.0	0.0	10.9	5.6	0.0	0.0	7.7	0.0	0.0
Prop In Lane	0.50		1.00	0.83		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	101	0	85	222	0	193	98	2167	963	133	1118	1156
V/C Ratio(X)	0.41	0.00	0.74	0.57	0.00	0.76	0.85	0.36	0.16	0.87	0.28	0.28
Avail Cap(c_a), veh/h	136	0	115	402	0	351	281	2167	963	163	1118	1156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.82	0.82	0.82	0.98	0.98	0.98
Uniform Delay (d), s/veh	54.8	0.0	55.8	49.5	0.0	50.8	52.9	0.0	0.0	50.5	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	9.3	0.9	0.0	2.3	6.4	0.4	0.3	28.7	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.0	2.3	4.0	0.0	4.8	2.9	0.1	0.1	4.8	0.2	0.2
LnGrp Delay(d),s/veh	55.8	0.0	65.1	50.4	0.0	53.2	59.2	0.4	0.3	79.1	0.6	0.6
LnGrp LOS	E		E	D		D	E	A	A	E	A	A
Approach Vol, veh/h		105			273			1021			759	
Approach Delay, s/veh		61.3			51.9			5.2			12.6	
Approach LOS		E			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	77.5		10.7	10.7	79.8		18.9
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	11.5	56.1		9.0	19.5	48.1		27.0
Max Q Clear Time (g_c+I1), s	9.7	2.0		6.9	7.6	2.0		12.9
Green Ext Time (p_c), s	0.0	5.0		0.0	0.0	5.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	16.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	30	20	60	20	180	30	800	40	150	600	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	32	10	63	21	9	32	842	40	158	632	50
Adj No. of Lanes	1	1	0	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	161	50	158	46	185	33	2340	111	178	2533	200
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.04	1.00	1.00	0.10	0.76	0.75
Sat Flow, veh/h	1355	1355	423	886	382	1551	1774	3440	163	1774	3323	263
Grp Volume(v), veh/h	42	0	42	84	0	9	32	433	449	158	336	346
Grp Sat Flow(s),veh/h/ln	1355	0	1778	1268	0	1551	1774	1770	1833	1774	1770	1816
Q Serve(g_s), s	3.6	0.0	2.6	5.8	0.0	0.6	2.2	0.0	0.0	10.6	6.7	6.7
Cycle Q Clear(g_c), s	12.0	0.0	2.6	8.3	0.0	0.6	2.2	0.0	0.0	10.6	6.7	6.7
Prop In Lane	1.00		0.24	0.75		1.00	1.00		0.09	1.00		0.14
Lane Grp Cap(c), veh/h	127	0	212	204	0	185	33	1204	1247	178	1349	1384
V/C Ratio(X)	0.33	0.00	0.20	0.41	0.00	0.05	0.97	0.36	0.36	0.89	0.25	0.25
Avail Cap(c_a), veh/h	226	0	341	308	0	297	118	1204	1247	281	1349	1384
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.93	0.93	0.93	0.66	0.66	0.66
Uniform Delay (d), s/veh	55.9	0.0	47.7	50.8	0.0	46.8	57.7	0.0	0.0	53.3	4.2	4.2
Incr Delay (d2), s/veh	0.6	0.0	0.2	0.5	0.0	0.0	35.9	0.8	0.8	8.7	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.0	1.3	2.7	0.0	0.3	1.4	0.3	0.3	5.6	3.4	3.5
LnGrp Delay(d),s/veh	56.5	0.0	47.9	51.3	0.0	46.9	93.6	0.8	0.8	62.0	4.5	4.5
LnGrp LOS	E		D	D		D	F	A	A	E	A	A
Approach Vol, veh/h		84			93			914			840	
Approach Delay, s/veh		52.2			50.9			4.0			15.3	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.1	85.7		18.3	6.2	95.5		18.3
Change Period (Y+Rc), s	3.5	4.9		4.0	3.5	4.9		4.0
Max Green Setting (Gmax), s	19.5	65.1		23.0	8.5	76.1		23.0
Max Q Clear Time (g_c+I1), s	12.6	2.0		14.0	4.2	8.7		10.3
Green Ext Time (p_c), s	0.1	4.8		0.3	0.0	4.8		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	13.3
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	340	110	430	370	120	400
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1863
Adj Flow Rate, veh/h	358	91	453	389	126	181
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1513	380	458	1549	181	564
Arrive On Green	0.54	0.53	0.26	0.83	0.10	0.10
Sat Flow, veh/h	2895	703	1774	1863	1774	1583
Grp Volume(v), veh/h	224	225	453	389	126	181
Grp Sat Flow(s),veh/h/ln	1770	1735	1774	1863	1774	1583
Q Serve(g_s), s	8.0	8.3	30.5	5.3	8.2	10.0
Cycle Q Clear(g_c), s	8.0	8.3	30.5	5.3	8.2	10.0
Prop In Lane		0.41	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	955	937	458	1549	181	564
V/C Ratio(X)	0.23	0.24	0.99	0.25	0.70	0.32
Avail Cap(c_a), veh/h	955	937	458	1549	340	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.92	0.92	0.96	0.96
Uniform Delay (d), s/veh	14.5	14.7	44.3	2.2	52.1	28.1
Incr Delay (d2), s/veh	0.6	0.6	37.2	0.4	1.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.1	4.1	19.7	2.9	4.1	4.4
LnGrp Delay(d),s/veh	15.1	15.4	81.5	2.5	53.9	28.2
LnGrp LOS	B	B	F	A	D	C
Approach Vol, veh/h	449			842	307	
Approach Delay, s/veh	15.2			45.0	38.7	
Approach LOS	B			D	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	35.0	68.8				103.8		16.2
Change Period (Y+Rc), s	3.5	5.3				5.3		4.0
Max Green Setting (Gmax), s	31.5	52.7				87.7		23.0
Max Q Clear Time (g_c+I1), s	32.5	10.3				7.3		12.0
Green Ext Time (p_c), s	0.0	9.0				9.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	35.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	760	340	220	550	20	330	10	270	20	20	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	800	306	232	579	19	355	0	80	21	21	0
Adj No. of Lanes	1	3	0	1	3	0	2	0	1	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	15	1931	733	252	3370	110	520	0	436	80	84	0
Arrive On Green	0.01	0.53	0.52	0.14	0.67	0.66	0.15	0.00	0.13	0.05	0.05	0.00
Sat Flow, veh/h	1774	3625	1376	1774	5057	165	3548	0	1566	1774	1863	0
Grp Volume(v), veh/h	21	748	358	232	387	211	355	0	80	21	21	0
Grp Sat Flow(s),veh/h/ln	1774	1695	1611	1774	1695	1832	1774	0	1566	1774	1863	0
Q Serve(g_s), s	1.0	15.9	16.3	15.5	5.2	5.2	11.4	0.0	4.7	1.4	1.3	0.0
Cycle Q Clear(g_c), s	1.0	15.9	16.3	15.5	5.2	5.2	11.4	0.0	4.7	1.4	1.3	0.0
Prop In Lane	1.00		0.85	1.00		0.09	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	15	1806	858	252	2259	1221	520	0	436	80	84	0
V/C Ratio(X)	1.39	0.41	0.42	0.92	0.17	0.17	0.68	0.00	0.18	0.26	0.25	0.00
Avail Cap(c_a), veh/h	148	1806	858	296	2259	1221	976	0	637	237	248	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.77	0.92	0.92	0.92	0.95	0.00	0.95	1.00	1.00	0.00
Uniform Delay (d), s/veh	59.5	16.8	17.2	50.8	7.5	7.6	48.6	0.0	33.1	55.4	55.3	0.0
Incr Delay (d2), s/veh	197.6	0.5	1.2	26.5	0.2	0.3	2.1	0.0	0.3	0.6	0.6	0.0
Initial Q Delay(d3),s/veh	21.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	7.5	7.5	9.5	2.5	2.7	5.7	0.0	2.0	0.7	0.7	0.0
LnGrp Delay(d),s/veh	278.5	17.3	18.4	77.3	7.7	7.9	50.6	0.0	33.3	56.0	55.9	0.0
LnGrp LOS	F	B	B	E	A	A	D		C	E	E	
Approach Vol, veh/h		1127			830			435			42	
Approach Delay, s/veh		22.5			27.2			47.4			55.9	
Approach LOS		C			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	21.0	67.9		9.4	5.0	84.0		21.6
Change Period (Y+Rc), s	3.5	5.3		4.9	3.5	5.3		4.9
Max Green Setting (Gmax), s	20.5	33.7		15.1	10.5	43.7		32.1
Max Q Clear Time (g_c+I1), s	17.5	18.3		3.4	3.0	7.2		13.4
Green Ext Time (p_c), s	0.1	11.9		0.0	0.0	22.2		2.1

Intersection Summary	
HCM 2010 Ctrl Delay	29.2
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	1020	10	20	690	50	10	0	10	40	10	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	63	1074	11	21	726	53	11	0	11	42	11	137
Adj No. of Lanes	1	3	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	428	2467	25	340	2299	167	84	0	84	262	0	231
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.10	0.00	0.10	0.15	0.15	0.15
Sat Flow, veh/h	688	5190	53	517	4836	351	829	0	829	1774	0	1564
Grp Volume(v), veh/h	63	702	383	21	508	271	22	0	0	42	0	137
Grp Sat Flow(s),veh/h/ln	688	1695	1853	517	1695	1796	1658	0	0	1774	0	1564
Q Serve(g_s), s	2.7	6.0	6.0	1.2	4.0	4.1	0.5	0.0	0.0	0.9	0.0	3.6
Cycle Q Clear(g_c), s	6.8	6.0	6.0	7.2	4.0	4.1	0.5	0.0	0.0	0.9	0.0	3.6
Prop In Lane	1.00		0.03	1.00		0.20	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	428	1612	881	340	1612	854	169	0	0	262	0	231
V/C Ratio(X)	0.15	0.44	0.44	0.06	0.32	0.32	0.13	0.00	0.00	0.16	0.00	0.59
Avail Cap(c_a), veh/h	527	2100	1148	415	2100	1113	951	0	0	1018	0	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	9.2	7.6	7.6	9.9	7.1	7.1	17.8	0.0	0.0	16.2	0.0	17.4
Incr Delay (d2), s/veh	0.2	0.2	0.3	0.1	0.1	0.2	0.3	0.0	0.0	0.3	0.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.5	2.8	3.1	0.2	1.9	2.0	0.3	0.0	0.0	0.5	0.0	1.7
LnGrp Delay(d),s/veh	9.3	7.7	7.9	10.0	7.2	7.3	18.2	0.0	0.0	16.5	0.0	19.8
LnGrp LOS	A	A	A	B	A	A	B			B		B
Approach Vol, veh/h		1148			800			22			179	
Approach Delay, s/veh		7.9			7.3			18.2			19.0	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		8.4		24.7		10.4		24.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		27.0		25.0		27.0
Max Q Clear Time (g_c+I1), s		2.5		8.8		5.6		9.2
Green Ext Time (p_c), s		0.1		11.7		0.5		11.5

Intersection Summary	
HCM 2010 Ctrl Delay	8.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	340	460	10	10	430	450	10	10	10	650	10	190
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	358	484	9	11	453	153	11	11	0	692	0	78
Adj No. of Lanes	1	3	0	1	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	382	3587	67	467	1573	696	30	30	0	566	0	251
Arrive On Green	0.22	0.70	0.69	0.44	0.44	0.44	0.03	0.03	0.00	0.16	0.00	0.16
Sat Flow, veh/h	1774	5140	95	895	3539	1566	909	909	0	3548	0	1574
Grp Volume(v), veh/h	358	319	174	11	453	153	22	0	0	692	0	78
Grp Sat Flow(s),veh/h/ln	1774	1695	1845	895	1770	1566	1817	0	0	1774	0	1574
Q Serve(g_s), s	20.6	3.3	3.3	0.7	8.5	6.3	1.2	0.0	0.0	16.6	0.0	4.6
Cycle Q Clear(g_c), s	20.6	3.3	3.3	0.7	8.5	6.3	1.2	0.0	0.0	16.6	0.0	4.6
Prop In Lane	1.00		0.05	1.00		1.00	0.50		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	382	2366	1288	467	1573	696	60	0	0	566	0	251
V/C Ratio(X)	0.94	0.13	0.14	0.02	0.29	0.22	0.37	0.00	0.00	1.22	0.00	0.31
Avail Cap(c_a), veh/h	529	2366	1288	467	1573	696	157	0	0	566	0	251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	0.97	0.97	0.97	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.1	5.2	5.3	16.3	18.4	17.8	49.2	0.0	0.0	43.7	0.0	38.6
Incr Delay (d2), s/veh	17.1	0.1	0.2	0.1	0.4	0.7	1.4	0.0	0.0	115.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	12.0	1.5	1.7	0.2	4.3	2.8	0.6	0.0	0.0	17.2	0.0	2.0
LnGrp Delay(d),s/veh	57.3	5.4	5.5	16.3	18.9	18.5	50.6	0.0	0.0	158.7	0.0	39.3
LnGrp LOS	E	A	A	B	B	B	D			F		D
Approach Vol, veh/h		851			617			22			770	
Approach Delay, s/veh		27.2			18.7			50.6			146.7	
Approach LOS		C			B			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		76.6		20.0	26.4	50.2		7.4
Change Period (Y+Rc), s		5.3		4.0	3.5	5.3		4.6
Max Green Setting (Gmax), s		65.7		16.0	31.5	30.7		8.4
Max Q Clear Time (g_c+I1), s		5.3		18.6	22.6	10.5		3.2
Green Ext Time (p_c), s		13.9		0.0	0.2	9.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.8
HCM 2010 LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

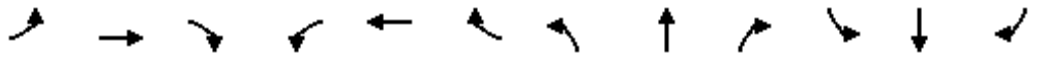
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	80	90	70	60	70	70	1490	80	40	1340	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	32	84	95	74	63	74	74	1568	84	42	1411	32
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	71	166	166	133	112	111	93	3013	161	53	3008	68
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.11	1.00	1.00	0.01	0.20	0.20
Sat Flow, veh/h	157	716	715	400	484	478	1714	4769	255	1714	4941	112
Grp Volume(v), veh/h	211	0	0	211	0	0	74	1077	575	42	935	508
Grp Sat Flow(s),veh/h/ln	1588	0	0	1362	0	0	1714	1638	1748	1714	1638	1777
Q Serve(g_s), s	0.0	0.0	0.0	3.6	0.0	0.0	5.1	0.0	0.0	2.9	30.2	30.2
Cycle Q Clear(g_c), s	13.7	0.0	0.0	17.3	0.0	0.0	5.1	0.0	0.0	2.9	30.2	30.2
Prop In Lane	0.15		0.45	0.35		0.35	1.00		0.15	1.00		0.06
Lane Grp Cap(c), veh/h	403	0	0	357	0	0	93	2070	1105	53	1994	1082
V/C Ratio(X)	0.52	0.00	0.00	0.59	0.00	0.00	0.80	0.52	0.52	0.79	0.47	0.47
Avail Cap(c_a), veh/h	466	0	0	414	0	0	150	2070	1105	107	1994	1082
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.84	0.84	0.84	0.85	0.85	0.85
Uniform Delay (d), s/veh	40.6	0.0	0.0	41.7	0.0	0.0	52.9	0.0	0.0	59.0	30.8	30.8
Incr Delay (d2), s/veh	1.1	0.0	0.0	1.7	0.0	0.0	12.2	0.8	1.5	19.3	0.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.3	0.0	0.0	6.6	0.0	0.0	2.7	0.2	0.5	1.7	13.9	15.3
LnGrp Delay(d),s/veh	41.7	0.0	0.0	43.4	0.0	0.0	65.1	0.8	1.5	78.3	31.5	32.1
LnGrp LOS	D			D			E	A	A	E	C	C
Approach Vol, veh/h		211			211			1726			1485	
Approach Delay, s/veh		41.7			43.4			3.8			33.0	
Approach LOS		D			D			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	80.7		32.1	10.0	78.0		32.1
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	67.1		* 33	10.5	64.1		* 33
Max Q Clear Time (g_c+I1), s	4.9	2.0		15.7	7.1	32.2		19.3
Green Ext Time (p_c), s	0.0	42.2		2.6	0.0	25.3		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	20.2
HCM 2010 LOS	C

Notes

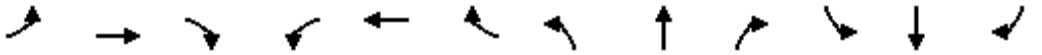
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	10	20	20	10	70	20	1670	20	80	1620	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	32	11	21	21	11	74	21	1758	21	84	1705	53
Adj No. of Lanes	0	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	104	39	48	56	27	108	25	3640	43	105	3789	118
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.03	1.00	1.00	0.06	0.77	0.77
Sat Flow, veh/h	593	391	481	200	267	1080	1714	5005	60	1714	4897	152
Grp Volume(v), veh/h	64	0	0	106	0	0	21	1150	629	84	1140	618
Grp Sat Flow(s),veh/h/ln	1466	0	0	1547	0	0	1714	1638	1789	1714	1638	1773
Q Serve(g_s), s	0.0	0.0	0.0	3.1	0.0	0.0	1.5	0.0	0.0	5.8	14.5	14.5
Cycle Q Clear(g_c), s	4.7	0.0	0.0	7.8	0.0	0.0	1.5	0.0	0.0	5.8	14.5	14.5
Prop In Lane	0.50		0.33	0.20		0.70	1.00		0.03	1.00		0.09
Lane Grp Cap(c), veh/h	191	0	0	191	0	0	25	2382	1301	105	2535	1372
V/C Ratio(X)	0.33	0.00	0.00	0.56	0.00	0.00	0.84	0.48	0.48	0.80	0.45	0.45
Avail Cap(c_a), veh/h	408	0	0	421	0	0	121	2382	1301	121	2535	1372
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.29	0.29	0.29	0.66	0.66	0.66
Uniform Delay (d), s/veh	50.6	0.0	0.0	52.1	0.0	0.0	58.1	0.0	0.0	55.6	4.7	4.7
Incr Delay (d2), s/veh	1.0	0.0	0.0	2.5	0.0	0.0	18.7	0.2	0.4	19.3	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.0	0.0	0.0	3.5	0.0	0.0	0.8	0.1	0.1	3.3	6.6	7.3
LnGrp Delay(d),s/veh	51.6	0.0	0.0	54.6	0.0	0.0	76.9	0.2	0.4	74.9	5.1	5.4
LnGrp LOS	D			D			E	A	A	E	A	A
Approach Vol, veh/h		64			106			1800			1842	
Approach Delay, s/veh		51.6			54.6			1.2			8.4	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.8	92.6		16.6	5.2	98.2		16.6
Change Period (Y+Rc), s	3.5	5.3		4.6	3.5	5.3		4.6
Max Green Setting (Gmax), s	8.5	67.7		30.4	8.5	67.7		30.4
Max Q Clear Time (g_c+I1), s	7.8	2.0		6.7	3.5	16.5		9.8
Green Ext Time (p_c), s	0.0	51.7		1.0	0.0	42.3		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	60	40	20	160	50	140	20	1400	150	110	1260	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	63	42	21	168	53	147	21	1474	158	116	1326	42
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	137	87	44	299	71	197	25	1866	200	317	2915	92
Arrive On Green	0.08	0.08	0.08	0.17	0.17	0.17	0.01	0.41	0.41	0.18	0.60	0.60
Sat Flow, veh/h	1714	1091	546	1714	408	1132	1714	4499	482	1714	4890	155
Grp Volume(v), veh/h	63	0	63	168	0	200	21	1073	559	116	888	480
Grp Sat Flow(s),veh/h/ln	1714	0	1637	1714	0	1540	1714	1638	1705	1714	1638	1769
Q Serve(g_s), s	4.5	0.0	4.7	11.5	0.0	15.8	1.6	36.5	36.5	7.6	19.2	19.2
Cycle Q Clear(g_c), s	4.5	0.0	4.7	11.5	0.0	15.8	1.6	36.5	36.5	7.6	19.2	19.2
Prop In Lane	1.00		0.33	1.00		0.74	1.00		0.28	1.00		0.09
Lane Grp Cap(c), veh/h	137	0	131	299	0	268	25	1359	707	317	1953	1054
V/C Ratio(X)	0.46	0.00	0.48	0.56	0.00	0.75	0.83	0.79	0.79	0.37	0.45	0.45
Avail Cap(c_a), veh/h	214	0	205	376	0	338	114	1359	707	317	1953	1054
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.56	0.00	0.56	0.75	0.75	0.75	0.93	0.93	0.93
Uniform Delay (d), s/veh	56.3	0.0	56.4	48.4	0.0	50.2	62.9	32.6	32.6	45.6	14.3	14.3
Incr Delay (d2), s/veh	2.4	0.0	2.7	0.9	0.0	3.8	38.7	3.6	6.7	0.7	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	0.0	2.2	5.5	0.0	7.0	1.0	17.1	18.4	3.6	8.8	9.7
LnGrp Delay(d),s/veh	58.6	0.0	59.1	49.3	0.0	54.0	101.6	36.2	39.3	46.3	15.0	15.6
LnGrp LOS	E		E	D		D	F	D	D	D	B	B
Approach Vol, veh/h		126			368			1653			1484	
Approach Delay, s/veh		58.9			51.9			38.1			17.7	
Approach LOS		E			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	28.6	58.0		14.2	5.4	81.2		27.2
Change Period (Y+Rc), s	4.9	* 4.9		4.0	3.5	4.9		4.9
Max Green Setting (Gmax), s	13.5	* 53		16.0	8.5	58.1		28.1
Max Q Clear Time (g_c+I1), s	9.6	38.5		6.7	3.6	21.2		17.8
Green Ext Time (p_c), s	0.2	8.6		0.3	0.0	10.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	31.9
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	30	30	30	20	60	20	1520	60	40	1330	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.94	0.95		0.94	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	84	32	32	32	21	63	21	1600	63	42	1400	53
Adj No. of Lanes	1	1	0	0	1	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	308	175	175	107	76	173	25	3124	123	53	3209	121
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.01	0.64	0.64	0.06	1.00	1.00
Sat Flow, veh/h	1203	797	797	314	348	786	1714	4850	191	1714	4858	184
Grp Volume(v), veh/h	84	0	64	116	0	0	21	1081	582	42	944	509
Grp Sat Flow(s),veh/h/ln	1203	0	1595	1448	0	0	1714	1638	1765	1714	1638	1766
Q Serve(g_s), s	1.1	0.0	3.9	2.5	0.0	0.0	1.5	21.0	21.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	8.8	0.0	3.9	7.7	0.0	0.0	1.5	21.0	21.0	2.9	0.0	0.0
Prop In Lane	1.00		0.50	0.28		0.54	1.00		0.11	1.00		0.10
Lane Grp Cap(c), veh/h	308	0	351	357	0	0	25	2111	1137	53	2164	1166
V/C Ratio(X)	0.27	0.00	0.18	0.33	0.00	0.00	0.84	0.51	0.51	0.79	0.44	0.44
Avail Cap(c_a), veh/h	352	0	409	409	0	0	107	2111	1137	107	2164	1166
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.74	0.74	0.74	0.80	0.80	0.80
Uniform Delay (d), s/veh	40.0	0.0	38.0	39.4	0.0	0.0	59.0	11.3	11.3	55.9	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.2	0.5	0.0	0.0	39.4	0.7	1.2	18.8	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.4	0.0	1.7	3.3	0.0	0.0	1.0	9.6	10.6	1.7	0.2	0.3
LnGrp Delay(d),s/veh	40.5	0.0	38.3	40.0	0.0	0.0	98.4	12.0	12.6	74.8	0.5	0.9
LnGrp LOS	D		D	D			F	B	B	E	A	A
Approach Vol, veh/h		148			116			1684			1495	
Approach Delay, s/veh		39.6			40.0			13.3			2.7	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	82.2		30.6	5.2	84.2		30.6
Change Period (Y+Rc), s	3.5	4.9		* 4.2	3.5	4.9		* 4.2
Max Green Setting (Gmax), s	7.5	69.1		* 31	7.5	69.1		* 31
Max Q Clear Time (g_c+I1), s	4.9	23.0		10.8	3.5	2.0		9.7
Green Ext Time (p_c), s	0.0	33.7		1.4	0.0	43.4		1.4

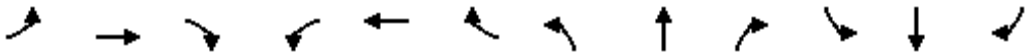
Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	70	90	1300	70	120	1310
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2		4.9		3.5	4.9
Lane Util. Factor	1.00		0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00		1.00	1.00
Flpb, ped/bikes	1.00		1.00		1.00	1.00
Frt	0.92		0.99		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1606		4876		1710	4914
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1606		4876		1710	4914
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	74	95	1368	74	126	1379
RTOR Reduction (vph)	45	0	4	0	0	0
Lane Group Flow (vph)	124	0	1438	0	126	1379
Confl. Peds. (#/hr)		9				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	Prot		NA		Prot	NA
Protected Phases	4		2 9		1	6
Permitted Phases						
Actuated Green, G (s)	14.4		68.6		14.7	68.1
Effective Green, g (s)	14.4		68.6		14.7	68.1
Actuated g/C Ratio	0.12		0.57		0.12	0.57
Clearance Time (s)	4.2				3.5	4.9
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	192		2787		209	2788
v/s Ratio Prot	c0.08		c0.29		c0.07	0.28
v/s Ratio Perm						
v/c Ratio	0.65		0.52		0.60	0.49
Uniform Delay, d1	50.4		15.6		49.9	15.6
Progression Factor	1.00		0.05		1.00	1.00
Incremental Delay, d2	7.3		0.6		4.8	0.6
Delay (s)	57.6		1.4		54.7	16.2
Level of Service	E		A		D	B
Approach Delay (s)	57.6		1.4			19.5
Approach LOS	E		A			B

Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	0	50	10	10	10	30	1330	10	20	1280	80
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.85		1.00	0.93		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1710	1530		1710	1665		1710	4907		1710	4860	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1710	1530		1710	1665		1710	4907		1710	4860	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	0	53	11	11	11	32	1400	11	21	1347	84
RTOR Reduction (vph)	0	50	0	0	10	0	0	1	0	0	4	0
Lane Group Flow (vph)	32	3	0	11	12	0	32	1410	0	21	1428	0
Confl. Peds. (#/hr)							5		7	7		5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	3	3		4	4		5	2		1	6 10	
Permitted Phases												
Actuated Green, G (s)	5.9	5.9		14.4	14.4		5.3	57.4		14.7	78.0	
Effective Green, g (s)	5.9	5.9		14.4	14.4		5.3	57.4		14.7	78.0	
Actuated g/C Ratio	0.05	0.05		0.12	0.12		0.04	0.48		0.12	0.65	
Clearance Time (s)	4.2	4.2		4.2	4.2		3.5	4.9		3.5		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0		
Lane Grp Cap (vph)	84	75		205	199		75	2347		209	3159	
v/s Ratio Prot	c0.02	0.00		0.01	c0.01		c0.02	c0.29		0.01	c0.29	
v/s Ratio Perm												
v/c Ratio	0.38	0.03		0.05	0.06		0.43	0.60		0.10	0.45	
Uniform Delay, d1	55.3	54.3		46.8	46.8		55.9	22.9		46.8	10.4	
Progression Factor	1.00	1.00		1.00	1.00		1.43	0.30		1.69	0.07	
Incremental Delay, d2	2.9	0.2		0.1	0.1		3.3	1.0		0.2	0.4	
Delay (s)	58.2	54.5		46.9	46.9		83.1	7.9		79.1	1.1	
Level of Service	E	D		D	D		F	A		E	A	
Approach Delay (s)		55.9			46.9			9.6			2.2	
Approach LOS		E			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	21.3
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	130	60	150	180	90	70	1300	160	90	1230	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	74	137	63	158	189	95	74	1368	168	95	1295	53
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	94	342	149	184	448	215	94	2387	293	117	2672	109
Arrive On Green	0.05	0.15	0.15	0.11	0.20	0.20	0.02	0.18	0.18	0.09	0.73	0.73
Sat Flow, veh/h	1714	2304	1004	1714	2231	1071	1714	4431	544	1714	4841	198
Grp Volume(v), veh/h	74	100	100	158	143	141	74	1011	525	95	876	472
Grp Sat Flow(s),veh/h/ln	1714	1710	1598	1714	1710	1592	1714	1638	1699	1714	1638	1763
Q Serve(g_s), s	5.1	6.3	6.8	10.9	8.7	9.3	5.2	33.9	33.9	6.5	13.2	13.2
Cycle Q Clear(g_c), s	5.1	6.3	6.8	10.9	8.7	9.3	5.2	33.9	33.9	6.5	13.2	13.2
Prop In Lane	1.00		0.63	1.00		0.67	1.00		0.32	1.00		0.11
Lane Grp Cap(c), veh/h	94	254	237	184	344	320	94	1765	915	117	1808	973
V/C Ratio(X)	0.79	0.39	0.42	0.86	0.42	0.44	0.79	0.57	0.57	0.81	0.48	0.48
Avail Cap(c_a), veh/h	207	476	445	207	476	443	121	1765	915	121	1808	973
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.81	0.81	0.81	0.69	0.69	0.69	0.84	0.84	0.84	0.90	0.90	0.90
Uniform Delay (d), s/veh	56.0	46.2	46.4	52.7	41.8	42.0	58.2	36.7	36.7	53.8	8.9	8.9
Incr Delay (d2), s/veh	11.1	0.8	1.0	19.6	0.6	0.7	19.4	1.1	2.2	29.5	0.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.7	3.0	3.1	6.1	4.2	4.2	3.0	15.7	16.6	4.1	6.1	6.7
LnGrp Delay(d),s/veh	67.1	47.0	47.4	72.3	42.4	42.7	77.7	37.9	38.9	83.4	9.7	10.5
LnGrp LOS	E	D	D	E	D	D	E	D	D	F	A	B
Approach Vol, veh/h		274			442			1610			1443	
Approach Delay, s/veh		52.6			53.2			40.0			14.8	
Approach LOS		D			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	69.5	16.4	22.4	10.1	71.1	10.1	28.7
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	8.5	47.1	14.5	33.4	8.5	47.1	14.5	33.4
Max Q Clear Time (g_c+I1), s	8.5	35.9	12.9	8.8	7.2	15.2	7.1	11.3
Green Ext Time (p_c), s	0.0	9.9	0.1	2.8	0.0	23.8	0.1	2.8

Intersection Summary	
HCM 2010 Ctrl Delay	32.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	220	70	40	40	50	40	70	1360	50	50	1300	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.98		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	232	74	42	42	53	42	74	1432	53	53	1368	168
Adj No. of Lanes	0	1	1	0	1	0	1	3	0	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	193	45	405	39	44	19	93	2844	105	67	2801	856
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.11	1.00	1.00	0.08	1.00	1.00
Sat Flow, veh/h	511	163	1472	0	160	71	1714	4860	180	1714	4914	1502
Grp Volume(v), veh/h	306	0	42	137	0	0	74	965	520	53	1368	168
Grp Sat Flow(s),veh/h/ln	674	0	1472	230	0	0	1714	1638	1764	1714	1638	1502
Q Serve(g_s), s	0.0	0.0	2.6	0.0	0.0	0.0	5.1	0.0	0.0	3.6	0.0	0.0
Cycle Q Clear(g_c), s	33.0	0.0	2.6	33.0	0.0	0.0	5.1	0.0	0.0	3.6	0.0	0.0
Prop In Lane	0.76		1.00	0.31		0.31	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	238	0	405	103	0	0	93	1917	1032	67	2801	856
V/C Ratio(X)	1.28	0.00	0.10	1.34	0.00	0.00	0.80	0.50	0.50	0.79	0.49	0.20
Avail Cap(c_a), veh/h	238	0	405	103	0	0	179	1917	1032	121	2801	856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	0.80	0.80	0.80	0.88	0.88	0.88
Uniform Delay (d), s/veh	47.2	0.0	32.5	41.0	0.0	0.0	52.8	0.0	0.0	54.8	0.0	0.0
Incr Delay (d2), s/veh	156.1	0.0	0.1	203.1	0.0	0.0	11.6	0.8	1.4	16.4	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	18.2	0.0	1.1	9.2	0.0	0.0	2.7	0.2	0.4	2.0	0.1	0.1
LnGrp Delay(d),s/veh	203.3	0.0	32.6	244.1	0.0	0.0	64.5	0.8	1.4	71.3	0.5	0.5
LnGrp LOS	F		C	F			E	A	A	E	A	A
Approach Vol, veh/h		348			137			1559			1589	
Approach Delay, s/veh		182.7			244.1			4.0			2.9	
Approach LOS		F			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	74.8		37.0	10.0	73.0		37.0
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	8.5	66.4		33.0	12.5	62.4		33.0
Max Q Clear Time (g_c+I1), s	5.6	2.0		35.0	7.1	2.0		35.0
Green Ext Time (p_c), s	0.0	40.2		0.0	0.1	38.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	270	40	20	360	160	30	380	50	100	340	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	84	284	0	21	379	168	32	400	53	105	358	53
Adj No. of Lanes	0	2	1	0	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	477	469	50	641	288	33	1683	222	122	1813	266
Arrive On Green	0.30	0.30	0.00	0.30	0.30	0.29	0.02	0.54	0.53	0.07	0.59	0.58
Sat Flow, veh/h	429	1610	1583	60	2167	973	1774	3144	414	1774	3096	455
Grp Volume(v), veh/h	84	284	0	306	0	262	32	224	229	105	203	208
Grp Sat Flow(s),veh/h/ln	429	1610	1583	1683	0	1516	1774	1770	1788	1774	1770	1781
Q Serve(g_s), s	11.1	18.1	0.0	1.8	0.0	17.7	2.2	8.1	8.2	7.0	6.5	6.6
Cycle Q Clear(g_c), s	28.8	18.1	0.0	19.8	0.0	17.7	2.2	8.1	8.2	7.0	6.5	6.6
Prop In Lane	1.00		1.00	0.07		0.64	1.00		0.23	1.00		0.26
Lane Grp Cap(c), veh/h	187	477	469	530	0	449	33	947	957	122	1036	1043
V/C Ratio(X)	0.45	0.60	0.00	0.58	0.00	0.58	0.97	0.24	0.24	0.86	0.20	0.20
Avail Cap(c_a), veh/h	333	751	739	833	0	708	148	947	957	148	1036	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.00	0.86	0.00	0.86	0.95	0.95	0.95	0.81	0.81	0.81
Uniform Delay (d), s/veh	48.2	36.1	0.0	35.8	0.0	36.2	58.8	14.8	14.9	55.3	11.6	11.7
Incr Delay (d2), s/veh	0.5	0.4	0.0	0.3	0.0	0.4	36.0	0.6	0.6	24.6	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.7	8.1	0.0	8.9	0.0	7.4	1.4	4.1	4.2	4.3	3.3	3.3
LnGrp Delay(d),s/veh	48.8	36.5	0.0	36.1	0.0	36.6	94.9	15.4	15.5	79.9	12.0	12.1
LnGrp LOS	D	D		D		D	F	B	B	E	B	B
Approach Vol, veh/h		368			568			485			516	
Approach Delay, s/veh		39.3			36.3			20.7			25.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.3	68.2		39.5	6.2	74.3		39.5
Change Period (Y+Rc), s	3.5	4.9		4.9	3.5	4.9		4.9
Max Green Setting (Gmax), s	10.5	41.1		55.1	10.5	41.1		55.1
Max Q Clear Time (g_c+I1), s	9.0	10.2		30.8	4.2	8.6		21.8
Green Ext Time (p_c), s	0.0	2.3		3.8	0.0	2.3		3.9

Intersection Summary	
HCM 2010 Ctrl Delay	30.2
HCM 2010 LOS	C

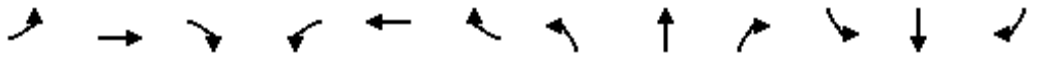
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	40	70	110	70	190	60	1400	90	130	1110	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1824	1863	1863	1863	1863	1863	1863	1863	1824
Adj Flow Rate, veh/h	32	42	41	116	74	43	63	1474	79	137	1168	59
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	46	56	37	162	87	412	119	1943	868	161	2772	140
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.07	0.55	0.55	0.09	0.56	0.56
Sat Flow, veh/h	40	213	140	448	335	1576	1774	3539	1580	1774	4957	250
Grp Volume(v), veh/h	115	0	0	190	0	43	63	1474	79	137	799	428
Grp Sat Flow(s),veh/h/ln	393	0	0	782	0	1576	1774	1770	1580	1774	1695	1817
Q Serve(g_s), s	3.4	0.0	0.0	0.0	0.0	2.7	4.5	41.8	3.1	9.9	17.7	17.7
Cycle Q Clear(g_c), s	34.0	0.0	0.0	30.6	0.0	2.7	4.5	41.8	3.1	9.9	17.7	17.7
Prop In Lane	0.28		0.36	0.61		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	138	0	0	249	0	412	119	1943	868	161	1896	1016
V/C Ratio(X)	0.83	0.00	0.00	0.76	0.00	0.10	0.53	0.76	0.09	0.85	0.42	0.42
Avail Cap(c_a), veh/h	138	0	0	249	0	412	143	1943	868	198	1896	1016
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.34	0.34	0.34
Uniform Delay (d), s/veh	46.7	0.0	0.0	46.2	0.0	36.4	58.7	22.7	13.9	58.2	16.5	16.5
Incr Delay (d2), s/veh	31.5	0.0	0.0	11.8	0.0	0.0	1.4	2.8	0.2	8.3	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.3	0.0	0.0	7.5	0.0	1.2	2.2	21.0	1.4	5.2	8.3	8.9
LnGrp Delay(d),s/veh	78.2	0.0	0.0	57.9	0.0	36.5	60.0	25.5	14.1	66.5	16.8	17.0
LnGrp LOS	E			E		D	E	C	B	E	B	B
Approach Vol, veh/h		115			233			1616			1364	
Approach Delay, s/veh		78.2			54.0			26.3			21.8	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.3	76.7		38.0	14.0	78.0		38.0
Change Period (Y+Rc), s	3.5	5.3		4.0	5.3	* 5.3		4.0
Max Green Setting (Gmax), s	14.5	68.7		34.0	10.5	* 73		34.0
Max Q Clear Time (g_c+I1), s	11.9	43.8		36.0	6.5	19.7		32.6
Green Ext Time (p_c), s	0.0	16.8		0.0	0.7	17.2		0.2

Intersection Summary			
HCM 2010 Ctrl Delay		28.2	
HCM 2010 LOS		C	

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	540	70	140	630	310	160	1220	130	170	830	140
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1788	1863	1863	1788	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	211	568	15	147	663	67	168	1284	128	179	874	129
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	922	391	169	865	368	391	1845	184	206	1229	181
Arrive On Green	0.11	0.26	0.26	0.19	0.49	0.49	0.22	0.39	0.39	0.04	0.09	0.09
Sat Flow, veh/h	1774	3539	1502	1774	3539	1505	1774	4699	468	1774	4476	658
Grp Volume(v), veh/h	211	568	15	147	663	67	168	926	486	179	661	342
Grp Sat Flow(s),veh/h/ln	1774	1770	1502	1774	1770	1505	1774	1695	1778	1774	1695	1743
Q Serve(g_s), s	14.5	18.4	1.0	10.4	19.9	2.0	10.6	29.7	29.7	13.0	24.6	24.8
Cycle Q Clear(g_c), s	14.5	18.4	1.0	10.4	19.9	2.0	10.6	29.7	29.7	13.0	24.6	24.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.26	1.00		0.38
Lane Grp Cap(c), veh/h	198	922	391	169	865	368	391	1331	698	206	931	479
V/C Ratio(X)	1.07	0.62	0.04	0.87	0.77	0.18	0.43	0.70	0.70	0.87	0.71	0.71
Avail Cap(c_a), veh/h	198	988	420	217	1026	436	391	1331	698	280	931	479
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.09	0.09	0.09	0.51	0.51	0.51	0.93	0.93	0.93	0.58	0.58	0.58
Uniform Delay (d), s/veh	57.8	42.3	35.9	51.8	30.2	9.4	43.7	33.0	33.0	61.5	54.1	54.2
Incr Delay (d2), s/veh	39.7	0.1	0.0	12.0	1.8	0.2	0.3	2.8	5.3	9.7	2.7	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.3	9.0	0.4	5.6	9.8	0.8	5.2	14.4	15.6	7.0	11.9	12.7
LnGrp Delay(d),s/veh	97.5	42.5	35.9	63.8	32.0	9.5	43.9	35.8	38.3	71.2	56.8	59.4
LnGrp LOS	F	D	D	E	C	A	D	D	D	E	E	E
Approach Vol, veh/h		794			877			1580			1182	
Approach Delay, s/veh		57.0			35.6			37.5			59.7	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	56.3	18.0	37.1	33.9	41.0	15.9	39.2
Change Period (Y+Rc), s	3.5	5.3	3.5	5.3	5.3	* 5.3	3.5	5.3
Max Green Setting (Gmax), s	20.5	39.7	14.5	37.7	24.5	* 36	15.9	36.3
Max Q Clear Time (g_c+I1), s	15.0	31.7	16.5	21.9	12.6	26.8	12.4	20.4
Green Ext Time (p_c), s	0.1	6.2	0.0	9.8	5.1	5.2	0.0	9.8

Intersection Summary	
HCM 2010 Ctrl Delay	46.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

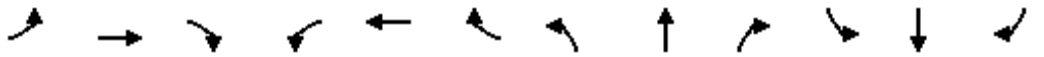
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	450	80	100	570	190	160	1530	130	210	1200	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1824	1863	1863	1824	1863	1863	1824	1863	1863	1863
Adj Flow Rate, veh/h	116	474	84	105	600	200	168	1611	137	221	1263	126
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	806	142	129	656	218	186	1905	162	245	1481	656
Arrive On Green	0.08	0.26	0.26	0.02	0.08	0.08	0.11	0.40	0.40	0.14	0.42	0.42
Sat Flow, veh/h	1774	3127	551	1774	2606	867	1774	4774	406	1774	3539	1567
Grp Volume(v), veh/h	116	278	280	105	407	393	168	1144	604	221	1263	126
Grp Sat Flow(s),veh/h/ln	1774	1840	1838	1774	1770	1704	1774	1695	1789	1774	1770	1567
Q Serve(g_s), s	8.4	17.2	17.4	7.7	29.7	29.8	12.2	39.8	39.9	15.9	41.9	4.9
Cycle Q Clear(g_c), s	8.4	17.2	17.4	7.7	29.7	29.8	12.2	39.8	39.9	15.9	41.9	4.9
Prop In Lane	1.00		0.30	1.00		0.51	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	140	474	474	129	445	429	186	1353	714	245	1481	656
V/C Ratio(X)	0.83	0.59	0.59	0.81	0.91	0.92	0.90	0.85	0.85	0.90	0.85	0.19
Avail Cap(c_a), veh/h	171	504	503	135	449	432	186	1353	714	280	1481	656
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.80	0.80	0.80	0.36	0.36	0.36	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.0	42.2	42.3	62.6	58.2	58.3	57.5	35.4	35.5	55.1	34.2	13.4
Incr Delay (d2), s/veh	18.8	1.4	1.5	22.8	19.6	20.5	18.4	2.5	4.7	25.8	6.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.9	8.9	9.0	4.6	17.0	16.5	6.9	19.1	20.6	9.6	21.7	2.2
LnGrp Delay(d),s/veh	77.8	43.6	43.8	85.4	77.8	78.8	76.0	38.0	40.2	81.0	40.6	14.0
LnGrp LOS	E	D	D	F	E	E	E	D	D	F	D	B
Approach Vol, veh/h		674			905			1916			1610	
Approach Delay, s/veh		49.6			79.1			42.0			44.1	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	57.2	12.9	38.4	19.0	59.7	13.7	37.6
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	5.3	* 5.3	3.5	4.9
Max Green Setting (Gmax), s	20.5	46.8	9.9	35.6	12.9	* 54	12.5	33.0
Max Q Clear Time (g_c+I1), s	17.9	41.9	9.7	19.4	14.2	43.9	10.4	31.8
Green Ext Time (p_c), s	0.1	4.4	0.0	7.4	0.0	7.7	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	50.2
HCM 2010 LOS	D

Notes

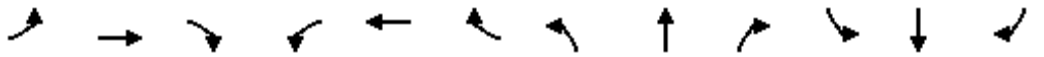
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	100	620	110	100	620	140	210	1290	140	140	980	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1824	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	105	653	116	105	653	147	221	1358	147	147	1032	158
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	856	152	127	813	183	212	1933	209	172	1744	267
Arrive On Green	0.10	0.38	0.38	0.14	0.57	0.57	0.12	0.41	0.41	0.10	0.39	0.39
Sat Flow, veh/h	1774	3005	533	1774	2862	643	1774	4659	504	1774	4447	680
Grp Volume(v), veh/h	105	384	385	105	403	397	221	988	517	147	786	404
Grp Sat Flow(s),veh/h/ln	1774	1770	1768	1774	1770	1735	1774	1695	1773	1774	1695	1737
Q Serve(g_s), s	7.6	24.7	24.7	7.5	23.5	23.6	15.5	31.3	31.3	10.6	23.9	23.9
Cycle Q Clear(g_c), s	7.6	24.7	24.7	7.5	23.5	23.6	15.5	31.3	31.3	10.6	23.9	23.9
Prop In Lane	1.00		0.30	1.00		0.37	1.00		0.28	1.00		0.39
Lane Grp Cap(c), veh/h	128	504	503	127	503	493	212	1406	735	172	1330	681
V/C Ratio(X)	0.82	0.76	0.76	0.83	0.80	0.80	1.04	0.70	0.70	0.86	0.59	0.59
Avail Cap(c_a), veh/h	225	573	573	184	532	522	212	1406	735	198	1330	681
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	0.84	0.84	0.84	0.55	0.55	0.55	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	36.5	36.6	54.9	25.2	25.2	57.3	31.4	31.4	57.8	31.3	31.3
Incr Delay (d2), s/veh	2.8	3.3	3.4	10.5	7.4	7.7	57.9	1.6	3.1	24.1	1.9	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	12.5	12.5	4.0	12.2	12.1	11.0	14.9	15.8	6.4	11.5	12.2
LnGrp Delay(d),s/veh	60.7	39.9	40.0	65.5	32.6	32.8	115.1	33.0	34.5	82.0	33.2	35.0
LnGrp LOS	E	D	D	E	C	C	F	C	C	F	C	D
Approach Vol, veh/h		874			905			1726			1337	
Approach Delay, s/veh		42.4			36.5			44.0			39.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	59.2	12.8	41.9	19.0	56.3	12.9	41.8
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	3.5	4.9
Max Green Setting (Gmax), s	14.5	42.7	13.5	42.1	15.5	41.7	16.5	39.1
Max Q Clear Time (g_c+I1), s	12.6	33.3	9.5	26.7	17.5	25.9	9.6	25.6
Green Ext Time (p_c), s	0.0	9.0	0.0	10.3	0.0	14.8	0.0	9.3

Intersection Summary	
HCM 2010 Ctrl Delay	41.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	730	30	70	650	110	40	590	130	140	400	90
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	53	768	32	74	684	116	42	621	137	147	421	95
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	62	1284	53	87	1162	197	353	908	765	218	908	765
Arrive On Green	0.03	0.37	0.36	0.05	0.39	0.38	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1774	3460	144	1774	3015	511	881	1863	1570	704	1863	1570
Grp Volume(v), veh/h	53	393	407	74	401	399	42	621	137	147	421	95
Grp Sat Flow(s),veh/h/ln	1774	1770	1834	1774	1770	1756	881	1863	1570	704	1863	1570
Q Serve(g_s), s	3.9	23.3	23.3	5.4	23.4	23.5	4.3	33.3	6.4	26.4	19.5	4.3
Cycle Q Clear(g_c), s	3.9	23.3	23.3	5.4	23.4	23.5	23.8	33.3	6.4	59.7	19.5	4.3
Prop In Lane	1.00		0.08	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	62	657	681	87	682	677	353	908	765	218	908	765
V/C Ratio(X)	0.86	0.60	0.60	0.85	0.59	0.59	0.12	0.68	0.18	0.67	0.46	0.12
Avail Cap(c_a), veh/h	131	657	681	164	682	677	357	917	773	222	917	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.40	0.40	0.40	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.86	0.86
Uniform Delay (d), s/veh	62.4	33.1	33.1	61.3	31.7	31.9	29.9	25.6	18.7	48.5	22.1	18.2
Incr Delay (d2), s/veh	5.4	1.6	1.6	8.3	3.7	3.7	0.1	1.7	0.0	5.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.0	11.6	12.1	2.9	12.2	12.1	1.1	17.5	2.8	5.5	10.0	1.9
LnGrp Delay(d),s/veh	67.8	34.7	34.6	69.6	35.4	35.6	30.0	27.3	18.7	53.9	22.2	18.2
LnGrp LOS	E	C	C	E	D	D	C	C	B	D	C	B
Approach Vol, veh/h		853			874			800			663	
Approach Delay, s/veh		36.7			38.4			26.0			28.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		67.4	8.5	54.1		67.4	10.4	52.2
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		63.1	10.1	43.5		63.1	12.5	41.1
Max Q Clear Time (g_c+I1), s		35.3	5.9	25.5		61.7	7.4	25.3
Green Ext Time (p_c), s		4.6	0.0	5.3		0.8	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.8
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	100	200	120	930	870	120
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	105	28	126	979	916	112
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	200	179	160	2378	1543	189
Arrive On Green	0.11	0.11	0.09	0.67	0.49	0.49
Sat Flow, veh/h	1774	1583	1774	3632	3269	388
Grp Volume(v), veh/h	105	28	126	979	510	518
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1794
Q Serve(g_s), s	2.3	0.7	2.9	5.2	8.7	8.7
Cycle Q Clear(g_c), s	2.3	0.7	2.9	5.2	8.7	8.7
Prop In Lane	1.00	1.00	1.00			0.22
Lane Grp Cap(c), veh/h	200	179	160	2378	860	872
V/C Ratio(X)	0.52	0.16	0.79	0.41	0.59	0.59
Avail Cap(c_a), veh/h	1188	1060	212	2793	1016	1030
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	16.8	18.6	3.1	7.8	7.8
Incr Delay (d2), s/veh	2.1	0.4	13.3	0.1	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.3	0.6	2.0	2.5	4.3	4.3
LnGrp Delay(d),s/veh	19.6	17.2	31.9	3.2	8.4	8.4
LnGrp LOS	B	B	C	A	A	A
Approach Vol, veh/h	133			1105	1028	
Approach Delay, s/veh	19.1			6.5	8.4	
Approach LOS	B			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		33.1		8.7	7.8	25.3		
Change Period (Y+Rc), s		5.0		4.0	4.0	5.0		
Max Green Setting (Gmax), s		33.0		28.0	5.0	24.0		
Max Q Clear Time (g_c+I1), s		7.2		4.3	4.9	10.7		
Green Ext Time (p_c), s		15.3		0.4	0.0	9.6		

Intersection Summary	
HCM 2010 Ctrl Delay	8.1
HCM 2010 LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	30	70	1070	50	100	860
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	32	74	1126	53	105	905
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	41	94	2233	105	120	2773
Arrive On Green	0.08	0.08	0.65	0.63	0.07	0.78
Sat Flow, veh/h	490	1133	3535	162	1774	3632
Grp Volume(v), veh/h	107	0	579	600	105	905
Grp Sat Flow(s),veh/h/ln	1638	0	1770	1834	1774	1770
Q Serve(g_s), s	3.8	0.0	10.2	10.3	3.5	4.5
Cycle Q Clear(g_c), s	3.8	0.0	10.2	10.3	3.5	4.5
Prop In Lane	0.30	0.69		0.09	1.00	
Lane Grp Cap(c), veh/h	136	0	1148	1190	120	2773
V/C Ratio(X)	0.79	0.00	0.50	0.50	0.87	0.33
Avail Cap(c_a), veh/h	464	0	1148	1190	237	2773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.53	0.53	0.72	0.72
Uniform Delay (d), s/veh	27.0	0.0	5.5	5.5	27.7	1.9
Incr Delay (d2), s/veh	3.7	0.0	0.8	0.8	5.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.9	0.0	5.1	5.3	1.9	2.2
LnGrp Delay(d),s/veh	30.7	0.0	6.3	6.3	33.1	2.1
LnGrp LOS	C		A	A	C	A
Approach Vol, veh/h	107		1179			1010
Approach Delay, s/veh	30.7		6.3			5.3
Approach LOS	C		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.1	42.9				51.0		9.0
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	22.1				34.1		17.0
Max Q Clear Time (g_c+I1), s	5.5	12.3				6.5		5.8
Green Ext Time (p_c), s	0.0	5.1				7.9		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	80	620	100	60	600	130	100	580	80	140	450	100
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	84	653	105	63	632	137	105	611	84	147	474	105
Adj No. of Lanes	1	2	0	1	2	0	0	2	0	0	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	866	139	123	859	186	137	832	120	155	524	122
Arrive On Green	0.06	0.28	0.28	0.07	0.30	0.29	0.10	0.10	0.10	0.15	0.15	0.14
Sat Flow, veh/h	1774	3043	489	1774	2881	623	455	2775	400	696	2350	545
Grp Volume(v), veh/h	84	379	379	63	388	381	424	0	376	386	0	340
Grp Sat Flow(s),veh/h/ln	1774	1770	1762	1774	1770	1735	1840	0	1790	1828	0	1763
Q Serve(g_s), s	6.1	25.4	25.5	4.5	25.6	25.7	29.2	0.0	26.4	27.2	0.0	24.5
Cycle Q Clear(g_c), s	6.1	25.4	25.5	4.5	25.6	25.7	29.2	0.0	26.4	27.2	0.0	24.5
Prop In Lane	1.00		0.28	1.00		0.36	0.25		0.22	0.38		0.31
Lane Grp Cap(c), veh/h	99	504	501	123	528	518	552	0	537	408	0	393
V/C Ratio(X)	0.85	0.75	0.76	0.51	0.73	0.74	0.77	0.00	0.70	0.95	0.00	0.86
Avail Cap(c_a), veh/h	123	504	501	123	528	518	552	0	537	408	0	393
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.67	0.67	0.67
Upstream Filter(I)	0.30	0.30	0.30	0.40	0.40	0.40	0.80	0.00	0.80	0.29	0.00	0.29
Uniform Delay (d), s/veh	60.9	42.3	42.5	58.4	41.0	41.2	54.2	0.0	52.9	54.5	0.0	53.5
Incr Delay (d2), s/veh	11.4	3.2	3.3	5.9	3.6	3.7	8.0	0.0	6.0	13.5	0.0	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.3	12.9	12.9	2.4	13.0	12.8	16.2	0.0	14.0	15.3	0.0	12.6
LnGrp Delay(d),s/veh	72.3	45.5	45.7	64.3	44.6	44.9	62.2	0.0	58.9	68.0	0.0	59.3
LnGrp LOS	E	D	D	E	D	D	E		E	E		E
Approach Vol, veh/h		842			832			800			726	
Approach Delay, s/veh		48.3			46.2			60.6			63.9	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		43.0	11.2	42.8		33.0	13.0	41.0
Change Period (Y+Rc), s		4.9	3.5	4.9		4.9	3.5	4.9
Max Green Setting (Gmax), s		38.1	9.5	36.1		28.1	9.5	36.1
Max Q Clear Time (g_c+I1), s		31.2	8.1	27.7		29.2	6.5	27.5
Green Ext Time (p_c), s		1.9	0.0	3.6		0.0	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	54.4
HCM 2010 LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	120	60	1280	100	50	1100
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	126	63	1347	105	53	1158
Adj No. of Lanes	0	0	2	0	1	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	160	80	2433	189	61	2819
Arrive On Green	0.14	0.14	0.73	0.72	0.03	0.80
Sat Flow, veh/h	1125	562	3421	259	1774	3632
Grp Volume(v), veh/h	190	0	714	738	53	1158
Grp Sat Flow(s),veh/h/ln	1696	0	1770	1816	1774	1770
Q Serve(g_s), s	14.1	0.0	23.7	24.0	3.9	12.9
Cycle Q Clear(g_c), s	14.1	0.0	23.7	24.0	3.9	12.9
Prop In Lane	0.66	0.33		0.14	1.00	
Lane Grp Cap(c), veh/h	241	0	1294	1328	61	2819
V/C Ratio(X)	0.79	0.00	0.55	0.56	0.86	0.41
Avail Cap(c_a), veh/h	417	0	1294	1328	109	2819
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.40	0.40	0.28	0.28
Uniform Delay (d), s/veh	53.9	0.0	7.9	8.0	62.4	4.0
Incr Delay (d2), s/veh	2.2	0.0	0.7	0.7	3.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.7	0.0	11.8	12.2	2.0	6.2
LnGrp Delay(d),s/veh	56.1	0.0	8.6	8.6	66.4	4.1
LnGrp LOS	E		A	A	E	A
Approach Vol, veh/h	190		1452			1211
Approach Delay, s/veh	56.1		8.6			6.9
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.5	99.0				107.5		22.5
Change Period (Y+Rc), s	3.5	4.9				4.9		4.0
Max Green Setting (Gmax), s	8.5	77.1				89.1		32.0
Max Q Clear Time (g_c+I1), s	5.9	26.0				14.9		16.1
Green Ext Time (p_c), s	0.0	13.3				13.8		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	11.0
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	50	30	60	30	20	50	50	1110	50	40	770	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	53	32	63	32	21	53	53	1168	53	42	811	53
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	88	118	160	88	141	64	1653	75	49	1590	104
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.04	0.48	0.48	0.03	0.47	0.47
Sat Flow, veh/h	411	505	679	304	507	812	1774	3448	156	1774	3373	220
Grp Volume(v), veh/h	148	0	0	106	0	0	53	599	622	42	425	439
Grp Sat Flow(s),veh/h/ln	1595	0	0	1624	0	0	1774	1770	1835	1774	1770	1824
Q Serve(g_s), s	1.1	0.0	0.0	0.0	0.0	0.0	1.3	11.7	11.7	1.0	7.3	7.4
Cycle Q Clear(g_c), s	3.5	0.0	0.0	2.4	0.0	0.0	1.3	11.7	11.7	1.0	7.3	7.4
Prop In Lane	0.36		0.43	0.30		0.50	1.00		0.09	1.00		0.12
Lane Grp Cap(c), veh/h	389	0	0	389	0	0	64	849	880	49	834	860
V/C Ratio(X)	0.38	0.00	0.00	0.27	0.00	0.00	0.83	0.71	0.71	0.85	0.51	0.51
Avail Cap(c_a), veh/h	1095	0	0	1097	0	0	202	927	961	202	927	955
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	0.0	0.0	16.0	0.0	0.0	21.0	9.0	9.0	21.3	8.1	8.1
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.4	0.0	0.0	23.0	2.2	2.2	31.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	0.0	0.0	1.2	0.0	0.0	1.0	6.2	6.4	0.9	3.7	3.8
LnGrp Delay(d),s/veh	17.0	0.0	0.0	16.3	0.0	0.0	44.1	11.2	11.2	52.2	8.6	8.6
LnGrp LOS	B			B			D	B	B	D	A	A
Approach Vol, veh/h		148			106			1274			906	
Approach Delay, s/veh		17.0			16.3			12.6			10.6	
Approach LOS		B			B			B			B	

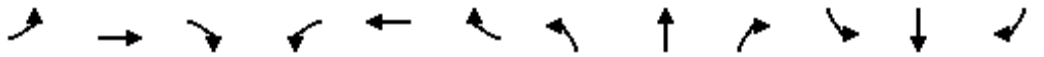
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	26.1		12.6	5.6	25.7		12.6
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	23.0		28.0	5.0	23.0		28.0
Max Q Clear Time (g_c+I1), s	3.0	13.7		5.5	3.3	9.4		4.4
Green Ext Time (p_c), s	0.0	7.3		1.5	0.0	10.1		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	12.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	20	30	80	70	30	40	130	1120	120	50	750	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	21	32	84	74	32	42	137	1179	126	53	789	32
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	79	162	217	80	74	177	1664	177	64	1568	64
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.10	0.52	0.52	0.04	0.45	0.45
Sat Flow, veh/h	143	492	1006	658	497	458	1774	3227	344	1774	3467	141
Grp Volume(v), veh/h	137	0	0	148	0	0	137	645	660	53	403	418
Grp Sat Flow(s),veh/h/ln	1641	0	0	1613	0	0	1774	1770	1802	1774	1770	1838
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	3.7	13.5	13.6	1.4	7.9	7.9
Cycle Q Clear(g_c), s	3.6	0.0	0.0	3.7	0.0	0.0	3.7	13.5	13.6	1.4	7.9	7.9
Prop In Lane	0.15		0.61	0.50		0.28	1.00		0.19	1.00		0.08
Lane Grp Cap(c), veh/h	349	0	0	370	0	0	177	913	929	64	800	831
V/C Ratio(X)	0.39	0.00	0.00	0.40	0.00	0.00	0.77	0.71	0.71	0.82	0.50	0.50
Avail Cap(c_a), veh/h	1007	0	0	971	0	0	328	1017	1035	182	872	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.7	0.0	0.0	18.7	0.0	0.0	21.4	9.0	9.0	23.3	9.5	9.5
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.7	0.0	0.0	7.0	2.0	2.0	22.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	0.0	0.0	1.9	0.0	0.0	2.1	7.0	7.1	1.1	3.9	4.1
LnGrp Delay(d),s/veh	19.4	0.0	0.0	19.4	0.0	0.0	28.4	11.0	11.0	45.3	10.0	9.9
LnGrp LOS	B			B			C	B	B	D	A	A
Approach Vol, veh/h		137			148			1442			874	
Approach Delay, s/veh		19.4			19.4			12.7			12.1	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	30.1		12.8	8.9	27.0		12.8
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	28.0		28.0	9.0	24.0		28.0
Max Q Clear Time (g_c+I1), s	3.4	15.6		5.6	5.7	9.9		5.7
Green Ext Time (p_c), s	0.0	9.5		1.7	0.1	10.6		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	90	490	10	20	420	70	10	10	50	130	10	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	95	516	11	21	442	74	11	11	53	137	11	137
Adj No. of Lanes	1	2	0	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	289	1101	23	270	1100	481	77	53	907	99	4	907
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	875	3542	75	867	3539	1548	0	93	1578	0	7	1578
Grp Volume(v), veh/h	95	258	269	21	442	74	22	0	53	148	0	137
Grp Sat Flow(s),veh/h/ln	875	1770	1847	867	1770	1548	93	0	1578	7	0	1578
Q Serve(g_s), s	6.7	8.2	8.2	1.4	6.9	2.4	0.0	0.0	1.0	0.0	0.0	2.8
Cycle Q Clear(g_c), s	13.6	8.2	8.2	9.6	6.9	2.4	40.2	0.0	1.0	40.2	0.0	2.8
Prop In Lane	1.00		0.04	1.00		1.00	0.50		1.00	0.93		1.00
Lane Grp Cap(c), veh/h	289	550	574	270	1100	481	130	0	907	103	0	907
V/C Ratio(X)	0.33	0.47	0.47	0.08	0.40	0.15	0.17	0.00	0.06	1.43	0.00	0.15
Avail Cap(c_a), veh/h	417	809	845	397	1618	708	130	0	907	103	0	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.80	0.80	0.80	0.72	0.72	0.72	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	19.4	19.5	23.3	19.0	17.5	16.8	0.0	6.5	33.3	0.0	6.9
Incr Delay (d2), s/veh	0.5	0.5	0.5	0.1	0.2	0.1	2.8	0.0	0.1	241.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.7	4.1	4.3	0.3	3.4	1.0	0.3	0.0	0.5	8.9	0.0	1.3
LnGrp Delay(d),s/veh	24.9	19.9	19.9	23.4	19.2	17.6	19.6	0.0	6.7	274.5	0.0	7.3
LnGrp LOS	C	B	B	C	B	B	B		A	F		A
Approach Vol, veh/h		622			537			75			285	
Approach Delay, s/veh		20.7			19.1			10.5			146.1	
Approach LOS		C			B			B			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.2		25.8		44.2		25.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		30.0		32.0		30.0		32.0
Max Q Clear Time (g_c+I1), s		42.2		15.6		42.2		11.6
Green Ext Time (p_c), s		0.0		6.2		0.0		6.8

Intersection Summary	
HCM 2010 Ctrl Delay	43.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	70	310	50	100	340	90	80	490	140	60	440	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	326	53	105	358	95	84	516	147	63	463	105
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	730	117	206	663	174	99	1685	478	74	1736	391
Arrive On Green	0.24	0.24	0.23	0.24	0.24	0.23	0.06	0.62	0.61	0.04	0.60	0.60
Sat Flow, veh/h	931	3049	490	996	2770	725	1774	2722	772	1774	2870	646
Grp Volume(v), veh/h	74	188	191	105	227	226	84	335	328	63	284	284
Grp Sat Flow(s),veh/h/ln	931	1770	1770	996	1770	1726	1774	1770	1724	1774	1770	1746
Q Serve(g_s), s	9.1	10.8	11.1	12.1	13.4	13.8	5.6	10.7	10.8	4.2	9.1	9.2
Cycle Q Clear(g_c), s	22.8	10.8	11.1	23.1	13.4	13.8	5.6	10.7	10.8	4.2	9.1	9.2
Prop In Lane	1.00		0.28	1.00		0.42	1.00		0.45	1.00		0.37
Lane Grp Cap(c), veh/h	176	423	424	206	423	413	99	1096	1067	74	1071	1056
V/C Ratio(X)	0.42	0.44	0.45	0.51	0.54	0.55	0.85	0.31	0.31	0.85	0.27	0.27
Avail Cap(c_a), veh/h	232	531	531	267	531	518	163	1096	1067	163	1071	1056
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.83	0.91	0.91	0.91	0.73	0.73	0.73	0.61	0.61	0.61
Uniform Delay (d), s/veh	50.0	38.8	39.0	48.8	39.8	40.1	56.2	10.7	10.9	57.1	11.2	11.3
Incr Delay (d2), s/veh	0.5	0.2	0.2	0.7	0.4	0.4	7.5	0.5	0.5	6.4	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.4	5.3	5.5	3.4	6.6	6.6	3.0	5.4	5.3	2.2	4.5	4.5
LnGrp Delay(d),s/veh	50.5	39.1	39.2	49.5	40.2	40.5	63.6	11.3	11.4	63.5	11.5	11.7
LnGrp LOS	D	D	D	D	D	D	E	B	B	E	B	B
Approach Vol, veh/h		453			558			747			631	
Approach Delay, s/veh		41.0			42.0			17.2			16.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	78.3		32.7	10.7	76.6		32.7
Change Period (Y+Rc), s	3.5	4.9		4.6	3.5	4.9		4.6
Max Green Setting (Gmax), s	11.5	60.1		35.4	11.5	60.1		35.4
Max Q Clear Time (g_c+I1), s	6.2	12.8		24.8	7.6	11.2		25.1
Green Ext Time (p_c), s	0.0	5.1		3.0	0.0	5.1		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	900	10	10	960	150	10	10	10	100	10	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	179	947	11	11	1011	158	11	11	11	105	11	168
Adj No. of Lanes	1	2	0	1	3	1	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	2315	27	6	2741	815	45	31	384	57	3	384
Arrive On Green	0.22	1.00	1.00	0.00	0.54	0.54	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1774	3582	42	1774	5085	1513	0	124	1538	0	13	1538
Grp Volume(v), veh/h	179	468	490	11	1011	158	22	0	11	116	0	168
Grp Sat Flow(s),veh/h/ln	1774	1770	1854	1774	1695	1513	124	0	1538	13	0	1538
Q Serve(g_s), s	11.8	0.0	0.0	0.4	13.7	6.5	0.0	0.0	0.6	0.0	0.0	11.0
Cycle Q Clear(g_c), s	11.8	0.0	0.0	0.4	13.7	6.5	30.0	0.0	0.6	30.0	0.0	11.0
Prop In Lane	1.00		0.02	1.00		1.00	0.50		1.00	0.91		1.00
Lane Grp Cap(c), veh/h	197	1144	1198	6	2741	815	76	0	384	60	0	384
V/C Ratio(X)	0.91	0.41	0.41	1.77	0.37	0.19	0.29	0.00	0.03	1.92	0.00	0.44
Avail Cap(c_a), veh/h	251	1144	1198	148	2741	815	76	0	384	60	0	384
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	0.45	0.45	0.45	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.1	0.0	0.0	59.8	15.9	14.2	37.4	0.0	34.0	58.4	0.0	37.9
Incr Delay (d2), s/veh	24.2	1.0	0.9	367.9	0.2	0.2	0.8	0.0	0.0	469.0	0.0	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	116.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.1	0.3	0.3	0.8	6.4	2.7	0.6	0.0	0.3	9.9	0.0	5.0
LnGrp Delay(d),s/veh	70.3	1.0	0.9	544.2	16.1	14.5	38.2	0.0	34.0	527.4	0.0	41.5
LnGrp LOS	E	A	A	F	B	B	D		C	F		D
Approach Vol, veh/h		1137			1180			33			284	
Approach Delay, s/veh		11.9			20.8			36.8			240.0	
Approach LOS		B			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	4.4	81.6		34.0	17.3	68.7
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	17.5	60.4
Max Q Clear Time (g_c+I1), s		32.0	2.4	2.0		32.0	13.8	15.7
Green Ext Time (p_c), s		0.0	0.0	32.7		0.0	0.1	26.8

Intersection Summary	
HCM 2010 Ctrl Delay	40.8
HCM 2010 LOS	D

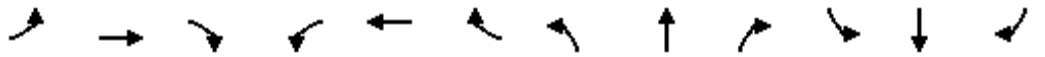
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	770	290	180	800	130	260	450	210	100	400	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	211	811	305	189	842	137	274	474	221	105	421	126
Adj No. of Lanes	1	2	0	1	3	0	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	1031	387	211	1501	243	317	617	285	122	647	191
Arrive On Green	0.06	0.14	0.13	0.04	0.11	0.11	0.09	0.27	0.26	0.07	0.24	0.24
Sat Flow, veh/h	1774	2501	939	1774	4394	710	3442	2312	1069	1774	2658	785
Grp Volume(v), veh/h	211	573	543	189	648	331	274	362	333	105	278	269
Grp Sat Flow(s),veh/h/ln	1774	1770	1671	1774	1695	1714	1721	1770	1611	1774	1770	1673
Q Serve(g_s), s	14.0	37.6	37.7	12.7	21.7	22.0	9.4	22.6	23.0	7.0	17.0	17.4
Cycle Q Clear(g_c), s	14.0	37.6	37.7	12.7	21.7	22.0	9.4	22.6	23.0	7.0	17.0	17.4
Prop In Lane	1.00		0.56	1.00		0.41	1.00		0.66	1.00		0.47
Lane Grp Cap(c), veh/h	315	729	688	211	1158	585	317	472	430	122	431	407
V/C Ratio(X)	0.67	0.79	0.79	0.90	0.56	0.56	0.86	0.77	0.78	0.86	0.65	0.66
Avail Cap(c_a), veh/h	315	729	688	296	1158	585	430	472	430	177	431	407
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	0.92	0.92	0.92	0.92	0.92	0.92	0.99	0.99	0.99
Uniform Delay (d), s/veh	53.0	46.7	46.9	56.9	44.7	44.8	53.7	40.6	41.0	55.3	40.8	41.1
Incr Delay (d2), s/veh	3.9	7.5	8.0	16.7	1.8	3.6	9.5	10.5	11.9	17.2	7.2	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.2	20.0	19.0	7.2	10.5	11.0	4.9	12.4	11.6	4.0	9.1	9.0
LnGrp Delay(d),s/veh	57.0	54.3	54.9	73.6	46.5	48.5	63.2	51.0	52.9	72.5	48.0	49.1
LnGrp LOS	E	D	D	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1327			1168			969			652	
Approach Delay, s/veh		54.9			51.4			55.1			52.4	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	36.0	18.3	53.4	15.1	33.2	26.7	45.0
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	3.5	4.9	4.9	* 4.9
Max Green Setting (Gmax), s	12.5	31.1	20.5	39.1	15.5	28.1	19.5	* 40
Max Q Clear Time (g_c+I1), s	9.0	25.0	14.7	39.7	11.4	19.4	16.0	24.0
Green Ext Time (p_c), s	0.0	2.3	0.1	0.0	0.1	2.8	0.4	6.9

Intersection Summary	
HCM 2010 Ctrl Delay	53.6
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	600	200	170	680	140	330	1130	170	160	1050	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	211	632	45	179	716	30	347	1189	164	168	1105	143
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	251	974	409	223	945	396	384	2175	300	208	1961	253
Arrive On Green	0.14	0.54	0.54	0.02	0.09	0.09	0.22	0.95	0.93	0.12	0.85	0.83
Sat Flow, veh/h	3510	3610	1514	3510	3610	1511	3510	4588	633	3510	4627	598
Grp Volume(v), veh/h	211	632	45	179	716	30	347	896	457	168	826	422
Grp Sat Flow(s),veh/h/ln	1755	1805	1514	1755	1805	1511	1755	1729	1763	1755	1729	1767
Q Serve(g_s), s	7.0	14.9	1.7	6.1	23.3	2.2	11.5	3.3	3.7	5.6	8.4	8.6
Cycle Q Clear(g_c), s	7.0	14.9	1.7	6.1	23.3	2.2	11.5	3.3	3.7	5.6	8.4	8.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		0.34
Lane Grp Cap(c), veh/h	251	974	409	223	945	396	384	1639	836	208	1466	749
V/C Ratio(X)	0.84	0.65	0.11	0.80	0.76	0.08	0.90	0.55	0.55	0.81	0.56	0.56
Avail Cap(c_a), veh/h	380	993	416	380	993	416	468	1639	836	322	1466	749
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.92	0.92	0.92	0.93	0.93	0.93	0.87	0.87	0.87	0.87	0.87	0.87
Uniform Delay (d), s/veh	50.8	23.6	20.6	58.0	51.1	41.5	46.2	1.7	1.9	52.2	5.9	6.1
Incr Delay (d2), s/veh	5.8	1.0	0.0	2.4	2.6	0.0	14.7	1.1	2.2	3.6	1.4	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	7.5	0.7	3.0	12.0	0.9	6.4	1.5	1.8	2.8	3.9	4.4
LnGrp Delay(d),s/veh	56.6	24.6	20.6	60.4	53.7	41.5	61.0	2.9	4.1	55.9	7.3	8.8
LnGrp LOS	E	C	C	E	D	D	E	A	A	E	A	A
Approach Vol, veh/h		888			925			1700			1416	
Approach Delay, s/veh		32.0			54.6			15.1			13.5	
Approach LOS		C			D			B			B	

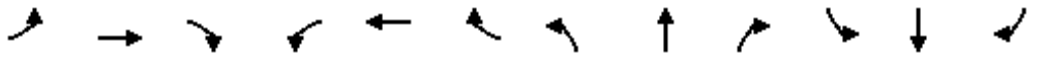
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	60.9	11.6	36.4	17.1	54.9	12.6	35.4
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	11.5	46.1	13.5	32.4	16.5	41.1	13.5	32.4
Max Q Clear Time (g_c+I1), s	7.6	5.7	8.1	16.9	13.5	10.6	9.0	25.3
Green Ext Time (p_c), s	0.0	17.3	0.1	5.8	0.1	15.4	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	25.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	120	780	60	50	840	140	80	410	80	120	420	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	821	63	53	884	147	84	432	84	126	442	116
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	1665	128	61	1377	229	99	738	142	146	766	199
Arrive On Green	0.16	1.00	0.99	0.03	0.45	0.45	0.02	0.08	0.08	0.03	0.09	0.09
Sat Flow, veh/h	1774	3330	255	1774	3034	504	1774	2952	570	1774	2772	721
Grp Volume(v), veh/h	126	436	448	53	516	515	84	258	258	126	281	277
Grp Sat Flow(s),veh/h/ln	1774	1770	1815	1774	1770	1769	1774	1770	1752	1774	1770	1724
Q Serve(g_s), s	8.3	0.0	0.1	3.6	26.9	27.0	5.7	16.8	17.1	8.5	18.3	18.5
Cycle Q Clear(g_c), s	8.3	0.0	0.1	3.6	26.9	27.0	5.7	16.8	17.1	8.5	18.3	18.5
Prop In Lane	1.00		0.14	1.00		0.29	1.00		0.33	1.00		0.42
Lane Grp Cap(c), veh/h	143	885	908	61	803	803	99	442	438	146	489	476
V/C Ratio(X)	0.88	0.49	0.49	0.87	0.64	0.64	0.85	0.58	0.59	0.86	0.57	0.58
Avail Cap(c_a), veh/h	177	885	908	148	803	803	148	442	438	192	489	476
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Upstream Filter(I)	0.94	0.94	0.94	0.56	0.56	0.56	0.98	0.98	0.98	0.94	0.94	0.94
Uniform Delay (d), s/veh	49.7	0.0	0.0	57.7	25.3	25.3	58.4	49.0	49.2	57.7	47.8	47.9
Incr Delay (d2), s/veh	26.9	1.8	1.8	7.8	2.2	2.2	16.4	5.4	5.6	20.4	4.6	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.1	0.5	0.5	1.9	13.7	13.7	3.2	8.9	9.0	5.0	9.6	9.5
LnGrp Delay(d),s/veh	76.6	1.8	1.8	65.5	27.5	27.6	74.8	54.4	54.8	78.1	52.3	52.8
LnGrp LOS	E	A	A	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1010			1084			600			684	
Approach Delay, s/veh		11.2			29.4			57.4			57.3	
Approach LOS		B			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	34.0	8.1	64.0	10.7	37.1	13.7	58.4
Change Period (Y+Rc), s	3.5	4.9	3.5	4.6	3.5	4.9	3.5	4.6
Max Green Setting (Gmax), s	13.5	29.1	10.5	50.4	10.5	32.1	12.5	48.4
Max Q Clear Time (g_c+I1), s	10.5	19.1	5.6	2.1	7.7	20.5	10.3	29.0
Green Ext Time (p_c), s	0.0	5.5	0.0	24.8	0.0	6.0	0.0	13.9

Intersection Summary	
HCM 2010 Ctrl Delay	34.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	240	720	110	220	880	370	80	1260	140	220	1160	110
Number	3	8	18	7	4	14	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	253	758	116	232	926	389	84	1326	147	232	1221	116
Adj No. of Lanes	1	3	0	1	3	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1645	250	246	1278	536	99	2759	306	232	3156	300
Arrive On Green	0.15	0.37	0.36	0.14	0.36	0.36	0.06	0.59	0.58	0.13	0.67	0.66
Sat Flow, veh/h	1774	4454	676	1774	3502	1469	1774	4647	515	1774	4718	448
Grp Volume(v), veh/h	253	575	299	232	896	419	84	967	506	232	877	460
Grp Sat Flow(s),veh/h/ln	1774	1695	1740	1774	1695	1581	1774	1695	1772	1774	1695	1776
Q Serve(g_s), s	18.3	16.8	17.0	16.9	29.7	29.8	6.1	21.1	21.2	17.0	15.0	15.1
Cycle Q Clear(g_c), s	18.3	16.8	17.0	16.9	29.7	29.8	6.1	21.1	21.2	17.0	15.0	15.1
Prop In Lane	1.00		0.39	1.00		0.93	1.00		0.29	1.00		0.25
Lane Grp Cap(c), veh/h	272	1252	643	246	1237	577	99	2013	1052	232	2268	1188
V/C Ratio(X)	0.93	0.46	0.46	0.94	0.72	0.73	0.85	0.48	0.48	1.00	0.39	0.39
Avail Cap(c_a), veh/h	396	1252	643	246	1237	577	177	2013	1052	232	2268	1188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	31.1	31.4	55.5	35.6	36.0	60.9	15.0	15.1	56.5	9.6	9.7
Incr Delay (d2), s/veh	18.5	1.2	2.4	41.8	3.7	7.8	7.5	0.8	1.6	59.1	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	10.4	8.0	8.6	11.1	14.5	14.3	3.2	10.0	10.7	12.1	7.1	7.6
LnGrp Delay(d),s/veh	72.8	32.4	33.8	97.3	39.3	43.8	68.4	15.8	16.7	115.6	10.1	10.7
LnGrp LOS	E	C	C	F	D	D	E	B	B	F	B	B
Approach Vol, veh/h		1127			1547			1557			1569	
Approach Delay, s/veh		41.8			49.2			18.9			25.9	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	82.6	24.0	51.4	11.2	92.4	23.4	52.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	17.5	29.7	29.5	36.1	13.5	33.7	18.5	* 47
Max Q Clear Time (g_c+I1), s	19.0	23.2	20.3	31.8	8.1	17.1	18.9	19.0
Green Ext Time (p_c), s	0.0	6.3	0.1	3.3	0.0	15.7	0.0	8.3

Intersection Summary	
HCM 2010 Ctrl Delay	33.3
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	880	10	20	590	120	0	10	10	90	0	20
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	42	926	11	21	621	126	0	11	11	95	0	21
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	643	2941	35	548	2407	487	0	96	96	171	3	26
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.11	0.11	0.11	0.00	0.11
Sat Flow, veh/h	710	3582	43	595	2932	594	0	853	853	1035	31	236
Grp Volume(v), veh/h	42	457	480	21	374	373	0	0	22	116	0	0
Grp Sat Flow(s),veh/h/ln	710	1770	1855	595	1770	1756	0	0	1707	1301	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	9.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	10.7	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.34	0.00		0.50	0.82		0.18
Lane Grp Cap(c), veh/h	643	1453	1523	548	1453	1442	0	0	192	201	0	0
V/C Ratio(X)	0.07	0.31	0.31	0.04	0.26	0.26	0.00	0.00	0.11	0.58	0.00	0.00
Avail Cap(c_a), veh/h	643	1453	1523	548	1453	1442	0	0	512	465	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.94	0.95	0.95	0.95	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.9	52.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.5	0.5	0.1	0.4	0.4	0.0	0.0	0.1	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.0	0.7	3.8	0.0	0.0
LnGrp Delay(d),s/veh	0.2	0.5	0.5	0.1	0.4	0.4	0.0	0.0	48.0	53.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A			D	D		
Approach Vol, veh/h		979			768			22			116	
Approach Delay, s/veh		0.5			0.4			48.0			53.5	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		17.5		102.5		17.5		102.5
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		36.0		74.7		36.0		74.7
Max Q Clear Time (g_c+I1), s		12.7		2.0		3.4		2.0
Green Ext Time (p_c), s		0.5		30.4		0.6		30.4

Intersection Summary	
HCM 2010 Ctrl Delay	4.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	940	100	130	890	100	100	60	90	90	40	50
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.96		0.95	0.97		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	989	105	137	937	105	105	63	95	95	42	53
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	1932	205	136	2094	235	284	150	226	231	168	212
Arrive On Green	0.02	0.60	0.59	0.15	1.00	1.00	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1774	3223	342	1774	3203	359	1243	649	978	1182	726	916
Grp Volume(v), veh/h	32	543	551	137	518	524	105	0	158	95	0	95
Grp Sat Flow(s),veh/h/ln	1774	1770	1795	1774	1770	1792	1243	0	1627	1182	0	1642
Q Serve(g_s), s	2.3	23.0	23.1	10.0	0.0	0.0	9.8	0.0	10.7	9.7	0.0	6.1
Cycle Q Clear(g_c), s	2.3	23.0	23.1	10.0	0.0	0.0	15.9	0.0	10.7	20.4	0.0	6.1
Prop In Lane	1.00		0.19	1.00		0.20	1.00		0.60	1.00		0.56
Lane Grp Cap(c), veh/h	40	1061	1076	136	1157	1172	284	0	376	231	0	380
V/C Ratio(X)	0.80	0.51	0.51	1.00	0.45	0.45	0.37	0.00	0.42	0.41	0.00	0.25
Avail Cap(c_a), veh/h	136	1061	1076	136	1157	1172	312	0	413	258	0	417
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.43	0.43	0.43	0.77	0.77	0.77	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	63.2	15.0	15.1	55.0	0.0	0.0	47.3	0.0	42.5	51.2	0.0	40.8
Incr Delay (d2), s/veh	5.9	0.8	0.8	68.8	1.0	1.0	0.3	0.0	0.3	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	11.4	11.6	7.5	0.3	0.3	3.4	0.0	4.9	3.2	0.0	2.8
LnGrp Delay(d),s/veh	69.2	15.8	15.8	123.8	1.0	1.0	47.6	0.0	42.8	51.7	0.0	40.9
LnGrp LOS	E	B	B	F	A	A	D		D	D		D
Approach Vol, veh/h		1126			1179			263			190	
Approach Delay, s/veh		17.3			15.2			44.7			46.3	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	81.9		34.1	6.9	89.0		34.1
Change Period (Y+Rc), s	3.5	4.6		4.0	3.5	4.6		4.0
Max Green Setting (Gmax), s	10.5	74.4		33.0	10.5	74.4		33.0
Max Q Clear Time (g_c+I1), s	12.0	25.1		22.4	4.3	2.0		17.9
Green Ext Time (p_c), s	0.0	32.1		1.2	0.0	40.0		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	870	130	180	740	220	170	680	170	150	630	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.87	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	916	137	189	779	232	179	716	179	158	663	116
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	195	1409	567	208	1434	578	199	711	178	177	698	122
Arrive On Green	0.22	0.80	0.78	0.12	0.41	0.40	0.11	0.26	0.26	0.10	0.24	0.23
Sat Flow, veh/h	1774	3539	1450	1774	3539	1452	1774	2714	678	1774	2929	511
Grp Volume(v), veh/h	179	916	137	189	779	232	179	467	428	158	400	379
Grp Sat Flow(s),veh/h/ln	1774	1770	1450	1774	1770	1452	1774	1770	1622	1774	1770	1670
Q Serve(g_s), s	12.8	14.2	2.3	13.7	21.8	14.9	12.9	34.1	34.1	11.4	28.9	29.1
Cycle Q Clear(g_c), s	12.8	14.2	2.3	13.7	21.8	14.9	12.9	34.1	34.1	11.4	28.9	29.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		0.31
Lane Grp Cap(c), veh/h	195	1409	567	208	1434	578	199	464	425	177	422	398
V/C Ratio(X)	0.92	0.65	0.24	0.91	0.54	0.40	0.90	1.01	1.01	0.89	0.95	0.95
Avail Cap(c_a), veh/h	205	1409	567	246	1434	578	246	464	425	232	422	398
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00	0.91	0.91	0.91	0.85	0.85	0.85
Uniform Delay (d), s/veh	50.1	9.4	4.2	56.7	29.5	28.0	57.0	48.0	48.2	57.9	48.7	48.9
Incr Delay (d2), s/veh	34.8	2.0	0.9	29.3	1.5	2.1	23.7	41.4	43.4	20.9	27.3	29.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.2	7.0	1.0	8.4	10.9	6.3	7.7	22.0	20.4	6.6	17.3	16.6
LnGrp Delay(d),s/veh	85.0	11.4	5.1	86.1	31.0	30.1	80.6	89.4	91.6	78.8	76.0	78.1
LnGrp LOS	F	B	A	F	C	C	F	F	F	E	E	E
Approach Vol, veh/h		1232			1200			1074			937	
Approach Delay, s/veh		21.4			39.5			88.8			77.3	
Approach LOS		C			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	38.1	19.2	55.8	20.0	35.0	18.3	56.7
Change Period (Y+Rc), s	3.5	4.9	3.5	4.9	4.9	* 4.9	3.5	4.9
Max Green Setting (Gmax), s	17.5	31.1	18.5	46.1	18.5	* 30	15.5	49.1
Max Q Clear Time (g_c+I1), s	13.4	36.1	15.7	16.2	14.9	31.1	14.8	23.8
Green Ext Time (p_c), s	0.0	0.0	0.0	21.1	0.2	0.0	0.0	18.7

Intersection Summary	
HCM 2010 Ctrl Delay	54.4
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	800	50	90	910	50	40	70	60	50	60	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	0.97		0.95	0.96		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	32	842	53	95	958	53	42	74	63	53	63	42
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	2085	131	110	2236	124	142	232	332	120	137	78
Arrive On Green	0.02	0.62	0.61	0.12	1.00	1.00	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1774	3380	213	1774	3409	189	456	1050	1502	360	619	354
Grp Volume(v), veh/h	32	441	454	95	497	514	116	0	63	158	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1823	1774	1770	1828	1506	0	1502	1333	0	0
Q Serve(g_s), s	2.2	15.3	15.3	6.3	0.0	0.0	0.0	0.0	4.1	6.8	0.0	0.0
Cycle Q Clear(g_c), s	2.2	15.3	15.3	6.3	0.0	0.0	7.5	0.0	4.1	14.2	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.10	0.36		1.00	0.34		0.27
Lane Grp Cap(c), veh/h	41	1092	1125	110	1161	1199	374	0	332	335	0	0
V/C Ratio(X)	0.78	0.40	0.40	0.86	0.43	0.43	0.31	0.00	0.19	0.47	0.00	0.00
Avail Cap(c_a), veh/h	148	1092	1125	148	1161	1199	420	0	375	378	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.65	0.65	0.65	0.67	0.67	0.67	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.3	11.7	11.8	52.0	0.0	0.0	39.0	0.0	38.0	42.1	0.0	0.0
Incr Delay (d2), s/veh	7.5	0.7	0.7	18.1	0.8	0.8	0.2	0.0	0.1	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.1	7.6	7.8	3.6	0.3	0.3	3.2	0.0	1.7	4.7	0.0	0.0
LnGrp Delay(d),s/veh	65.8	12.5	12.5	70.1	0.8	0.8	39.2	0.0	38.1	42.5	0.0	0.0
LnGrp LOS	E	B	B	E	A	A	D		D	D		
Approach Vol, veh/h		927			1106			179			158	
Approach Delay, s/veh		14.3			6.7			38.8			42.5	
Approach LOS		B			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.5	11.5	78.0		30.5	6.8	82.7
Change Period (Y+Rc), s		4.0	3.5	4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		30.0	10.5	67.4		30.0	10.5	67.4
Max Q Clear Time (g_c+I1), s		9.5	8.3	17.3		16.2	4.2	2.0
Green Ext Time (p_c), s		1.2	0.0	24.8		1.1	0.0	27.6

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	990	40	150	630	100	40	20	260	90	20	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	1042	42	158	663	105	42	21	274	95	21	11
Adj No. of Lanes	1	2	1	2	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	0	0	0	0	0	0
Cap, veh/h	21	1982	884	223	1878	297	349	165	567	300	64	30
Arrive On Green	0.02	1.00	1.00	0.13	1.00	1.00	0.30	0.30	0.29	0.30	0.30	0.29
Sat Flow, veh/h	1774	3539	1578	3442	3062	484	997	551	1603	825	214	99
Grp Volume(v), veh/h	11	1042	42	158	383	385	63	0	274	127	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1578	1721	1770	1777	1549	0	1603	1138	0	0
Q Serve(g_s), s	0.7	0.0	0.0	5.3	0.0	0.0	0.0	0.0	16.0	9.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	5.3	0.0	0.0	3.3	0.0	16.0	12.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.27	0.67		1.00	0.75		0.09
Lane Grp Cap(c), veh/h	21	1982	884	223	1085	1089	515	0	567	394	0	0
V/C Ratio(X)	0.52	0.53	0.05	0.71	0.35	0.35	0.12	0.00	0.48	0.32	0.00	0.00
Avail Cap(c_a), veh/h	163	1982	884	315	1085	1089	515	0	567	394	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.93	0.84	0.84	0.84	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	58.2	0.0	0.0	51.1	0.0	0.0	30.5	0.0	30.3	34.5	0.0	0.0
Incr Delay (d2), s/veh	6.8	0.9	0.1	1.3	0.8	0.8	0.5	0.0	2.9	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	0.3	0.0	2.5	0.2	0.2	1.6	0.0	7.5	3.6	0.0	0.0
LnGrp Delay(d),s/veh	65.0	0.9	0.1	52.4	0.8	0.8	31.0	0.0	33.2	36.6	0.0	0.0
LnGrp LOS	E	A	A	D	A	A	C		C	D		
Approach Vol, veh/h		1095			926			337			127	
Approach Delay, s/veh		1.5			9.6			32.8			36.6	
Approach LOS		A			A			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		39.0	10.8	70.2		39.0	4.4	76.6
Change Period (Y+Rc), s		4.9	3.5	5.3		4.9	3.5	5.3
Max Green Setting (Gmax), s		34.1	10.5	61.7		34.1	10.5	61.7
Max Q Clear Time (g_c+I1), s		18.0	7.3	2.0		14.3	2.7	2.0
Green Ext Time (p_c), s		0.9	0.1	30.1		1.0	0.0	30.1

Intersection Summary	
HCM 2010 Ctrl Delay	10.6
HCM 2010 LOS	B

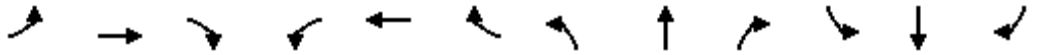
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	210	1080	140	190	690	430	180	650	630	290	770	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	221	1137	133	200	726	287	189	794	379	305	811	79
Adj No. of Lanes	2	3	0	2	2	1	2	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	1821	213	243	1298	576	296	1120	471	347	1125	499
Arrive On Green	0.17	0.79	0.77	0.07	0.37	0.37	0.08	0.30	0.30	0.10	0.32	0.32
Sat Flow, veh/h	3442	4614	539	3442	3539	1570	3548	3725	1568	3442	3539	1568
Grp Volume(v), veh/h	221	835	435	200	726	287	189	794	379	305	811	79
Grp Sat Flow(s),veh/h/ln	1721	1695	1763	1721	1770	1570	1774	1863	1568	1721	1770	1568
Q Serve(g_s), s	7.3	12.3	12.5	6.9	19.6	12.1	6.2	22.7	26.8	10.5	24.3	3.2
Cycle Q Clear(g_c), s	7.3	12.3	12.5	6.9	19.6	12.1	6.2	22.7	26.8	10.5	24.3	3.2
Prop In Lane	1.00		0.31	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	300	1338	696	243	1298	576	296	1120	471	347	1125	499
V/C Ratio(X)	0.74	0.62	0.62	0.82	0.56	0.50	0.64	0.71	0.80	0.88	0.72	0.16
Avail Cap(c_a), veh/h	300	1338	696	402	1298	576	296	1120	471	402	1180	523
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.89	0.89
Uniform Delay (d), s/veh	48.3	8.9	9.2	55.0	30.3	14.9	53.3	37.3	38.7	53.2	36.2	15.5
Incr Delay (d2), s/veh	7.0	1.9	3.6	2.6	1.7	3.1	10.2	3.8	13.6	14.8	2.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	5.9	6.5	3.4	9.9	5.7	3.5	12.3	13.4	5.7	12.2	1.4
LnGrp Delay(d),s/veh	55.2	10.8	12.7	57.7	32.0	18.0	63.4	41.1	52.3	68.0	38.3	15.7
LnGrp LOS	E	B	B	E	C	B	E	D	D	E	D	B
Approach Vol, veh/h		1491			1213			1362			1195	
Approach Delay, s/veh		18.0			32.9			47.3			44.4	
Approach LOS		B			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	40.1	12.5	51.4	14.0	42.2	15.8	48.0
Change Period (Y+Rc), s	3.5	5.3	3.5	4.9	3.5	5.3	4.9	* 4.9
Max Green Setting (Gmax), s	14.5	34.7	14.5	39.1	10.5	38.7	10.5	* 43
Max Q Clear Time (g_c+I1), s	12.5	28.8	8.9	14.5	8.2	26.3	9.3	21.6
Green Ext Time (p_c), s	0.1	5.4	0.1	11.9	0.1	10.5	0.1	8.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	840	20	40	480	100	20	0	40	70	0	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	32	884	21	42	505	105	21	0	42	74	0	21
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	617	2440	58	424	2016	417	65	0	384	65	0	384
Arrive On Green	0.69	0.69	0.68	1.00	1.00	1.00	0.24	0.00	0.24	0.24	0.00	0.24
Sat Flow, veh/h	806	3533	84	613	2919	604	21	0	1581	21	0	1581
Grp Volume(v), veh/h	32	443	462	42	305	305	21	0	42	74	0	21
Grp Sat Flow(s),veh/h/ln	806	1770	1847	613	1770	1753	21	0	1581	21	0	1581
Q Serve(g_s), s	1.5	12.4	12.4	1.3	0.0	0.0	0.4	0.0	2.5	0.4	0.0	1.2
Cycle Q Clear(g_c), s	1.5	12.4	12.4	13.0	0.0	0.0	29.1	0.0	2.5	29.1	0.0	1.2
Prop In Lane	1.00		0.05	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	617	1222	1276	424	1222	1211	65	0	384	65	0	384
V/C Ratio(X)	0.05	0.36	0.36	0.10	0.25	0.25	0.32	0.00	0.11	1.14	0.00	0.05
Avail Cap(c_a), veh/h	617	1222	1276	424	1222	1211	144	0	474	143	0	474
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.59	0.59	0.59	0.96	0.96	0.96	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.0	7.7	7.7	0.9	0.0	0.0	59.9	0.0	35.3	60.0	0.0	34.9
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.4	0.5	0.5	1.0	0.0	0.0	81.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	6.2	6.5	0.3	0.2	0.2	0.7	0.0	1.1	3.6	0.0	0.5
LnGrp Delay(d),s/veh	6.1	8.2	8.1	1.4	0.5	0.5	61.0	0.0	35.4	141.9	0.0	34.9
LnGrp LOS	A	A	A	A	A	A	E		D	F		C
Approach Vol, veh/h		937			652			63			95	
Approach Delay, s/veh		8.1			0.5			43.9			118.2	
Approach LOS		A			A			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		33.5		86.5		33.5		86.5
Change Period (Y+Rc), s		4.0		5.3		4.0		5.3
Max Green Setting (Gmax), s		36.0		74.7		36.0		74.7
Max Q Clear Time (g_c+I1), s		31.1		14.4		31.1		15.0
Green Ext Time (p_c), s		0.1		24.4		0.1		24.4

Intersection Summary	
HCM 2010 Ctrl Delay	12.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	890	30	40	980	100	30	10	20	110	10	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.97	0.98		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	147	937	32	42	1032	105	32	11	21	116	11	126
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	2035	70	132	2682	272	157	58	83	345	29	336
Arrive On Green	0.09	0.58	0.58	0.15	1.00	1.00	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	1774	3489	119	1774	4681	475	480	249	356	1344	126	1439
Grp Volume(v), veh/h	147	475	494	42	747	390	64	0	0	116	0	137
Grp Sat Flow(s),veh/h/ln	1774	1770	1838	1774	1695	1766	1084	0	0	1344	0	1564
Q Serve(g_s), s	9.8	18.4	18.4	2.5	0.0	0.0	2.2	0.0	0.0	0.4	0.0	8.8
Cycle Q Clear(g_c), s	9.8	18.4	18.4	2.5	0.0	0.0	11.0	0.0	0.0	11.5	0.0	8.8
Prop In Lane	1.00		0.06	1.00		0.27	0.50		0.33	1.00		0.92
Lane Grp Cap(c), veh/h	166	1032	1072	132	1942	1012	298	0	0	345	0	365
V/C Ratio(X)	0.88	0.46	0.46	0.32	0.38	0.39	0.21	0.00	0.00	0.34	0.00	0.38
Avail Cap(c_a), veh/h	177	1032	1072	148	1942	1012	298	0	0	345	0	365
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.44	0.44	0.44	0.94	0.94	0.94	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.7	14.2	14.3	48.4	0.0	0.0	39.2	0.0	0.0	39.7	0.0	38.7
Incr Delay (d2), s/veh	18.5	0.7	0.6	0.5	0.5	1.0	0.1	0.0	0.0	2.6	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.7	9.0	9.5	1.3	0.1	0.3	1.8	0.0	0.0	3.6	0.0	4.1
LnGrp Delay(d),s/veh	72.2	14.9	14.9	48.9	0.5	1.0	39.4	0.0	0.0	42.3	0.0	41.6
LnGrp LOS	E	B	B	D	A	A	D			D		D
Approach Vol, veh/h		1116			1179			64			253	
Approach Delay, s/veh		22.4			2.4			39.4			41.9	
Approach LOS		C			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.0	14.0	74.0		32.0	15.2	72.8
Change Period (Y+Rc), s		4.0	4.6	* 4.6		4.0	3.5	4.6
Max Green Setting (Gmax), s		28.0	10.5	* 69		28.0	12.5	67.4
Max Q Clear Time (g_c+I1), s		13.0	4.5	20.4		13.5	11.8	2.0
Green Ext Time (p_c), s		0.9	3.9	9.8		0.9	0.0	13.0

Intersection Summary	
HCM 2010 Ctrl Delay	15.7
HCM 2010 LOS	B

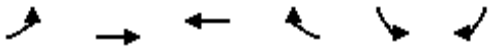
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1190	50	60	1140	80	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1541	1770	3539	1770	1514
Flt Permitted	1.00	1.00	0.12	1.00	0.95	1.00
Satd. Flow (perm)	3539	1541	222	3539	1770	1514
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1253	53	63	1200	84	42
RTOR Reduction (vph)	0	10	0	0	0	38
Lane Group Flow (vph)	1253	43	63	1200	84	4
Confl. Peds. (#/hr)		2	2			10
Turn Type	NA	Perm	D.P+P	NA	Prot	Perm
Protected Phases	1		2 4	1 2 4	3	
Permitted Phases		1	1			3
Actuated Green, G (s)	61.8	61.8	90.6	100.4	10.4	10.4
Effective Green, g (s)	62.7	62.7	93.3	101.3	11.0	11.0
Actuated g/C Ratio	0.52	0.52	0.78	0.84	0.09	0.09
Clearance Time (s)	4.9	4.9			4.6	4.6
Vehicle Extension (s)	1.5	1.5			2.5	2.5
Lane Grp Cap (vph)	1849	805	567	2987	162	138
v/s Ratio Prot	c0.35		0.03	c0.34	c0.05	
v/s Ratio Perm		0.03	0.06			0.00
v/c Ratio	0.68	0.05	0.11	0.40	0.52	0.03
Uniform Delay, d1	21.2	14.1	7.2	2.2	52.0	49.6
Progression Factor	1.00	1.00	1.14	0.02	1.00	1.00
Incremental Delay, d2	2.0	0.1	0.0	0.1	2.1	0.1
Delay (s)	23.2	14.2	8.3	0.1	54.1	49.7
Level of Service	C	B	A	A	D	D
Approach Delay (s)	22.8			0.5	52.6	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

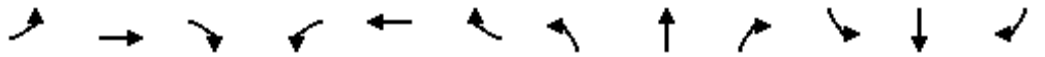
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	110	1120	1130	80	80	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.93	
Flt Protected	0.95	1.00	1.00	1.00	0.98	
Satd. Flow (prot)	1770	3539	3539	1541	1690	
Flt Permitted	0.14	1.00	1.00	1.00	0.98	
Satd. Flow (perm)	255	3539	3539	1541	1690	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	116	1179	1189	84	84	95
RTOR Reduction (vph)	0	0	0	26	37	0
Lane Group Flow (vph)	116	1179	1189	58	142	0
Confl. Peds. (#/hr)	2			2	10	
Turn Type	D.P+P	NA	NA	Perm	Prot	
Protected Phases	2 3	1 2 3	1		4	
Permitted Phases	1			1		
Actuated Green, G (s)	85.9	90.8	61.8	61.8	19.7	
Effective Green, g (s)	84.0	88.0	62.7	62.7	20.3	
Actuated g/C Ratio	0.70	0.73	0.52	0.52	0.17	
Clearance Time (s)			4.9	4.9	4.6	
Vehicle Extension (s)			1.5	1.5	2.5	
Lane Grp Cap (vph)	447	2595	1849	805	285	
v/s Ratio Prot	0.05	c0.33	c0.34		c0.08	
v/s Ratio Perm	0.14			0.04		
v/c Ratio	0.26	0.45	0.64	0.07	0.50	
Uniform Delay, d1	9.8	6.4	20.6	14.2	45.2	
Progression Factor	2.87	0.10	0.41	0.53	1.00	
Incremental Delay, d2	0.2	0.1	1.5	0.1	1.0	
Delay (s)	28.2	0.7	9.8	7.7	46.2	
Level of Service	C	A	A	A	D	
Approach Delay (s)		3.2	9.7		46.2	
Approach LOS		A	A		D	

Intersection Summary			
HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.7
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	180	570	290	210	520	220	330	2620	30	190	2220	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	189	600	131	221	547	70	347	2758	31	200	2337	200
Adj No. of Lanes	1	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	685	306	215	628	281	413	2939	33	295	2433	207
Arrive On Green	0.13	0.19	0.19	0.12	0.18	0.18	0.16	0.59	0.59	0.03	0.13	0.13
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	3442	6582	74	3442	6061	517
Grp Volume(v), veh/h	189	600	131	221	547	70	347	2013	776	200	1851	686
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1721	1602	1850	1721	1602	1772
Q Serve(g_s), s	14.6	23.0	7.6	17.0	21.1	4.3	13.7	53.8	53.9	8.1	53.6	53.9
Cycle Q Clear(g_c), s	14.6	23.0	7.6	17.0	21.1	4.3	13.7	53.8	53.9	8.1	53.6	53.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		0.29
Lane Grp Cap(c), veh/h	228	685	306	215	628	281	413	2146	826	295	1929	711
V/C Ratio(X)	0.83	0.88	0.43	1.03	0.87	0.25	0.84	0.94	0.94	0.68	0.96	0.96
Avail Cap(c_a), veh/h	228	751	336	215	726	325	413	2146	826	295	1929	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	0.33	0.33	0.33
Upstream Filter(I)	0.93	0.93	0.93	0.09	0.09	0.09	0.09	0.09	0.09	0.57	0.57	0.57
Uniform Delay (d), s/veh	59.5	54.8	27.5	61.5	56.0	32.0	57.5	26.7	26.7	66.1	59.6	59.7
Incr Delay (d2), s/veh	20.8	10.1	0.9	25.4	1.1	0.0	1.5	1.1	2.8	3.6	8.6	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	8.5	12.2	3.4	9.8	10.4	1.9	6.6	23.8	27.9	4.0	25.4	30.1
LnGrp Delay(d),s/veh	80.3	64.9	28.4	87.0	57.1	32.1	59.0	27.8	29.4	69.7	68.2	78.0
LnGrp LOS	F	E	C	F	E	C	E	C	C	E	E	E
Approach Vol, veh/h		920			838			3136			2737	
Approach Delay, s/veh		62.9			62.9			31.6			70.8	
Approach LOS		E			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	68.3	22.0	33.4	22.6	62.0	24.3	31.1
Change Period (Y+Rc), s	* 4.3	5.8	5.0	6.3	5.8	* 5.8	6.3	* 6.3
Max Green Setting (Gmax), s	* 12	59.9	17.0	29.7	15.7	* 56	18.0	* 29
Max Q Clear Time (g_c+I1), s	10.1	55.9	19.0	25.0	15.7	55.9	16.6	23.1
Green Ext Time (p_c), s	0.1	3.8	0.0	2.0	0.0	0.3	0.7	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	52.9
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	350	920	0	2680	2280	860
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	1863
Adj Flow Rate, veh/h	368	712	0	2821	2400	0
Adj No. of Lanes	2	3	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	361	379	0	5218	5218	1289
Arrive On Green	0.10	0.10	0.00	1.00	1.00	0.00
Sat Flow, veh/h	3442	3610	0	6929	6669	1583
Grp Volume(v), veh/h	368	712	0	2821	2400	0
Grp Sat Flow(s),veh/h/ln	1721	1203	0	1602	1602	1583
Q Serve(g_s), s	14.7	14.7	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	14.7	14.7	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	361	379	0	5218	5218	1289
V/C Ratio(X)	1.02	1.88	0.00	0.54	0.46	0.00
Avail Cap(c_a), veh/h	361	379	0	5218	5218	1289
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.33	1.33
Upstream Filter(I)	1.00	1.00	0.00	0.45	0.33	0.00
Uniform Delay (d), s/veh	62.7	62.7	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	52.1	405.2	0.0	0.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.6	23.5	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	114.8	467.8	0.0	0.2	0.1	0.0
LnGrp LOS	F	F		A	A	
Approach Vol, veh/h	1080			2821	2400	
Approach Delay, s/veh	347.5			0.2	0.1	
Approach LOS	F			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		120.0		20.0		120.0		
Change Period (Y+Rc), s		6.0		* 5.3		6.0		
Max Green Setting (Gmax), s		114.0		* 15		63.0		
Max Q Clear Time (g_c+I1), s		2.0		16.7		2.0		
Green Ext Time (p_c), s		70.6		0.0		37.1		

Intersection Summary	
HCM 2010 Ctrl Delay	59.7
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	360	790	280	170	560	190	400	2040	380	290	2250	700
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	379	832	222	179	589	35	421	2147	252	305	2368	683
Adj No. of Lanes	2	4	0	2	2	1	2	4	1	2	4	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	401	1132	294	319	693	310	531	2709	669	339	2343	1344
Arrive On Green	0.12	0.22	0.22	0.09	0.20	0.20	0.31	0.85	0.85	0.20	0.73	0.73
Sat Flow, veh/h	3442	5106	1328	3442	3539	1583	3442	6408	1583	3442	6408	2787
Grp Volume(v), veh/h	379	782	272	179	589	35	421	2147	252	305	2368	683
Grp Sat Flow(s),veh/h/ln	1721	1602	1628	1721	1770	1583	1721	1602	1583	1721	1602	1393
Q Serve(g_s), s	15.3	21.2	21.9	7.0	22.5	2.0	15.7	22.0	5.1	12.1	51.2	0.0
Cycle Q Clear(g_c), s	15.3	21.2	21.9	7.0	22.5	2.0	15.7	22.0	5.1	12.1	51.2	0.0
Prop In Lane	1.00		0.82	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	401	1065	361	319	693	310	531	2709	669	339	2343	1344
V/C Ratio(X)	0.95	0.73	0.75	0.56	0.85	0.11	0.79	0.79	0.38	0.90	1.01	0.51
Avail Cap(c_a), veh/h	401	1287	436	347	910	407	531	2709	669	339	2343	1344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.40	0.40	0.40	0.54	0.54	0.54
Uniform Delay (d), s/veh	61.4	50.6	50.9	60.8	54.3	28.0	46.4	7.9	6.6	55.5	18.8	8.9
Incr Delay (d2), s/veh	31.4	1.8	6.0	1.7	6.0	0.2	3.4	1.0	0.7	15.8	16.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.0	9.5	10.4	3.4	11.5	0.9	7.6	9.1	2.2	6.5	24.5	3.3
LnGrp Delay(d),s/veh	92.8	52.4	56.9	62.5	60.3	28.2	49.8	9.0	7.3	71.4	35.1	9.6
LnGrp LOS	F	D	E	E	E	C	D	A	A	E	F	A
Approach Vol, veh/h		1433			803			2820			3356	
Approach Delay, s/veh		63.9			59.4			14.9			33.2	
Approach LOS		E			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.4	65.0	18.3	37.3	27.4	57.0	22.6	33.0
Change Period (Y+Rc), s	* 5.6	5.8	* 5.3	* 6.3	5.8	* 5.8	* 6.3	* 5.6
Max Green Setting (Gmax), s	* 14	51.6	* 14	* 38	14.2	* 51	* 16	* 36
Max Q Clear Time (g_c+I1), s	14.1	24.0	9.0	23.9	17.7	53.2	17.3	24.5
Green Ext Time (p_c), s	0.0	21.6	0.2	6.8	0.0	0.0	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay	34.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	470	330	260	540	260	210	2460	390	200	1960	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	242	495	170	274	568	100	221	2589	371	211	2063	100
Adj No. of Lanes	1	2	1	1	2	1	1	4	1	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	231	621	278	251	687	307	205	2807	905	205	2764	134
Arrive On Green	0.13	0.18	0.18	0.14	0.19	0.19	0.23	0.88	0.86	0.12	0.44	0.43
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6408	1583	1774	6309	306
Grp Volume(v), veh/h	242	495	170	274	568	100	221	2589	371	211	1571	592
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1583	1774	1602	1809
Q Serve(g_s), s	18.2	18.8	10.6	19.8	21.6	7.6	16.2	36.5	2.2	16.2	38.2	38.3
Cycle Q Clear(g_c), s	18.2	18.8	10.6	19.8	21.6	7.6	16.2	36.5	2.2	16.2	38.2	38.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	231	621	278	251	687	307	205	2807	905	205	2105	792
V/C Ratio(X)	1.05	0.80	0.61	1.09	0.83	0.33	1.08	0.92	0.41	1.03	0.75	0.75
Avail Cap(c_a), veh/h	231	733	328	251	758	339	205	2807	905	205	2105	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.81	1.00	1.00	1.00	0.68	0.68	0.68	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.9	55.3	31.4	60.1	54.2	48.5	53.8	7.1	1.2	61.9	32.8	33.0
Incr Delay (d2), s/veh	66.7	4.8	2.7	83.4	7.4	0.9	73.5	4.6	0.9	70.3	2.5	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile BackOfQ(0%),veh/ln	13.2	9.6	4.9	15.5	11.3	3.4	12.1	15.6	1.0	11.9	17.4	20.5
LnGrp Delay(d),s/veh	127.6	60.1	34.1	143.5	61.6	49.4	127.3	11.7	2.1	132.3	35.3	39.3
LnGrp LOS	F	E	C	F	E	D	F	B	A	F	D	D
Approach Vol, veh/h		907			942			3181			2374	
Approach Delay, s/veh		73.3			84.1			18.6			44.9	
Approach LOS		E			F			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.6	65.3	25.2	28.9	20.6	65.3	22.3	31.8
Change Period (Y+Rc), s	* 4.6	5.3	* 5.6	* 5.3	* 4.6	5.3	* 4.3	* 5.6
Max Green Setting (Gmax), s	* 16	57.2	* 19	* 28	* 16	57.2	* 18	* 29
Max Q Clear Time (g_c+I1), s	18.2	38.5	21.8	20.8	18.2	40.3	20.2	23.6
Green Ext Time (p_c), s	0.0	18.6	0.0	2.8	0.0	16.9	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	42.1
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	280	90	90	310	180	100	2850	110	160	2460	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	42	295	95	95	326	189	105	3000	116	168	2589	63
Adj No. of Lanes	1	2	1	1	2	1	1	4	0	1	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	505	226	136	548	245	162	3306	127	189	3433	848
Arrive On Green	0.07	0.14	0.14	0.08	0.15	0.15	0.18	1.00	1.00	0.21	1.00	1.00
Sat Flow, veh/h	1774	3539	1583	1774	3539	1583	1774	6380	245	1774	6408	1583
Grp Volume(v), veh/h	42	295	95	95	326	189	105	2255	861	168	2589	63
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1583	1774	1602	1819	1774	1602	1583
Q Serve(g_s), s	3.2	10.9	7.7	7.3	12.0	16.0	7.7	0.0	0.0	12.9	0.0	0.0
Cycle Q Clear(g_c), s	3.2	10.9	7.7	7.3	12.0	16.0	7.7	0.0	0.0	12.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	122	505	226	136	548	245	162	2491	943	189	3433	848
V/C Ratio(X)	0.34	0.58	0.42	0.70	0.60	0.77	0.65	0.91	0.91	0.89	0.75	0.07
Avail Cap(c_a), veh/h	152	715	320	153	733	328	165	2491	943	215	3433	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	0.43	0.43	0.43	0.78	0.78	0.78	0.21	0.21	0.21	0.77	0.77	0.77
Uniform Delay (d), s/veh	62.1	56.1	54.7	63.1	55.1	56.8	55.1	0.0	0.0	54.3	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.5	0.5	9.0	0.8	6.1	1.9	1.4	3.9	25.2	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	5.4	3.4	3.9	5.9	7.4	3.8	0.3	1.0	7.6	0.3	0.0
LnGrp Delay(d),s/veh	62.9	56.6	55.3	72.1	55.9	62.9	57.0	1.4	3.9	79.5	1.2	0.1
LnGrp LOS	E	E	E	E	E	E	E	A	A	E	A	A
Approach Vol, veh/h		432			610			3221			2820	
Approach Delay, s/veh		56.9			60.6			3.9			5.9	
Approach LOS		E			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	78.9	15.6	26.0	17.1	81.3	14.0	27.7
Change Period (Y+Rc), s	* 4.6	6.3	4.9	6.0	* 4.3	6.3	* 4.3	6.0
Max Green Setting (Gmax), s	* 17	60.8	12.1	28.3	* 13	65.1	* 12	29.0
Max Q Clear Time (g_c+I1), s	14.9	2.0	9.3	12.9	9.7	2.0	5.2	18.0
Green Ext Time (p_c), s	0.1	58.4	0.0	4.3	0.1	62.6	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	12.8
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

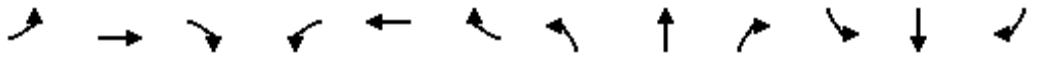
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	230	270	250	30	330	140	190	2290	40	200	2090	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	242	284	263	32	347	147	200	2411	42	211	2200	189
Adj No. of Lanes	1	2	0	1	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	453	406	99	373	317	177	2623	46	250	2695	231
Arrive On Green	0.11	0.26	0.26	0.06	0.20	0.20	0.10	0.40	0.40	0.28	0.89	0.89
Sat Flow, veh/h	1774	1770	1583	1774	1863	1583	1774	6535	114	1774	6058	519
Grp Volume(v), veh/h	242	284	263	32	347	147	200	1773	680	211	1744	645
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1863	1583	1774	1602	1843	1774	1602	1771
Q Serve(g_s), s	16.0	19.9	20.7	2.4	25.6	11.5	14.0	49.0	49.0	15.7	20.4	20.6
Cycle Q Clear(g_c), s	16.0	19.9	20.7	2.4	25.6	11.5	14.0	49.0	49.0	15.7	20.4	20.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.06	1.00		0.29
Lane Grp Cap(c), veh/h	203	453	406	99	373	317	177	1929	740	250	2138	788
V/C Ratio(X)	1.19	0.63	0.65	0.32	0.93	0.46	1.13	0.92	0.92	0.85	0.82	0.82
Avail Cap(c_a), veh/h	203	453	406	139	386	328	177	1929	740	253	2138	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.75	0.75	0.75	1.00	1.00	1.00	0.70	0.70	0.70
Uniform Delay (d), s/veh	62.0	46.1	46.4	63.5	55.1	49.4	63.0	39.7	39.8	48.9	5.4	5.4
Incr Delay (d2), s/veh	125.2	2.7	3.6	1.4	23.5	0.8	105.9	8.6	18.4	16.4	2.5	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	14.9	10.0	9.5	1.2	15.6	5.1	12.1	23.2	28.7	8.8	8.5	10.4
LnGrp Delay(d),s/veh	187.2	48.8	50.0	64.9	78.6	50.2	168.9	48.3	58.2	65.3	7.9	12.0
LnGrp LOS	F	D	D	E	E	D	F	D	E	E	A	B
Approach Vol, veh/h		789			526			2653			2600	
Approach Delay, s/veh		91.7			69.8			59.9			13.6	
Approach LOS		F			E			E			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	61.5	12.7	40.8	18.9	67.6	20.9	32.6
Change Period (Y+Rc), s	5.3	* 5.3	4.9	* 4.9	4.9	5.3	4.9	* 4.6
Max Green Setting (Gmax), s	20.0	* 56	11.0	* 33	14.0	61.9	16.0	* 29
Max Q Clear Time (g_c+I1), s	17.7	51.0	4.4	22.7	16.0	22.6	18.0	27.6
Green Ext Time (p_c), s	1.6	4.7	0.0	2.9	0.0	26.8	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	46.2
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	10	30	290	10	180	60	2460	100	320	2230	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	11	32	368	0	130	63	2589	105	337	2347	21
Adj No. of Lanes	1	1	0	2	0	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	34	99	329	0	147	127	2678	108	908	4077	36
Arrive On Green	0.08	0.08	0.08	0.09	0.00	0.09	0.14	0.84	0.84	0.53	1.00	1.00
Sat Flow, veh/h	1774	421	1225	3548	0	1583	1774	6366	257	3442	6599	59
Grp Volume(v), veh/h	32	0	43	368	0	130	63	1953	741	337	1709	659
Grp Sat Flow(s),veh/h/ln	1774	0	1647	1774	0	1583	1774	1602	1817	1721	1602	1852
Q Serve(g_s), s	2.4	0.0	3.4	13.0	0.0	11.4	4.6	48.2	49.1	8.0	0.0	0.0
Cycle Q Clear(g_c), s	2.4	0.0	3.4	13.0	0.0	11.4	4.6	48.2	49.1	8.0	0.0	0.0
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.14	1.00		0.03
Lane Grp Cap(c), veh/h	144	0	133	329	0	147	127	2022	765	908	2969	1144
V/C Ratio(X)	0.22	0.00	0.32	1.12	0.00	0.88	0.49	0.97	0.97	0.37	0.58	0.58
Avail Cap(c_a), veh/h	380	0	353	329	0	147	139	2022	765	908	2969	1144
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.23	0.23	0.23	0.59	0.59	0.59
Uniform Delay (d), s/veh	60.2	0.0	60.7	63.5	0.0	62.8	57.6	10.2	10.3	26.2	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	1.4	85.0	0.0	42.3	0.7	4.5	9.9	0.1	0.5	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.2	0.0	1.6	10.2	0.0	6.7	2.3	20.4	24.8	3.8	0.1	0.4
LnGrp Delay(d),s/veh	61.0	0.0	62.1	148.5	0.0	105.0	58.3	14.7	20.3	26.4	0.5	1.2
LnGrp LOS	E		E	F		F	E	B	C	C	A	A
Approach Vol, veh/h		75			498			2757			2705	
Approach Delay, s/veh		61.6			137.1			17.2			3.9	
Approach LOS		E			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	42.2	64.2		16.0	14.7	91.8		17.6
Change Period (Y+Rc), s	5.3	* 5.3		* 4.6	* 4.6	5.3		4.6
Max Green Setting (Gmax), s	19.0	* 59		* 30	* 11	66.9		13.0
Max Q Clear Time (g_c+I1), s	10.0	51.1		5.4	6.6	2.0		15.0
Green Ext Time (p_c), s	7.4	7.2		0.3	0.0	37.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	21.7
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	410	500	180	350	450	150	230	2480	340	190	2050	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	432	526	189	368	474	158	242	2611	358	200	2158	337
Adj No. of Lanes	2	2	0	2	2	0	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	477	548	196	413	519	172	290	2570	346	258	2493	387
Arrive On Green	0.14	0.21	0.21	0.12	0.20	0.20	0.03	0.15	0.15	0.08	0.44	0.44
Sat Flow, veh/h	3442	2556	915	3442	2614	865	3442	5756	776	3442	5639	876
Grp Volume(v), veh/h	432	363	352	368	320	312	242	2173	796	200	1838	657
Grp Sat Flow(s),veh/h/ln	1721	1770	1701	1721	1770	1710	1721	1602	1726	1721	1602	1708
Q Serve(g_s), s	17.3	28.4	28.7	14.8	24.8	25.1	9.8	62.5	62.5	8.0	48.3	48.9
Cycle Q Clear(g_c), s	17.3	28.4	28.7	14.8	24.8	25.1	9.8	62.5	62.5	8.0	48.3	48.9
Prop In Lane	1.00		0.54	1.00		0.51	1.00		0.45	1.00		0.51
Lane Grp Cap(c), veh/h	477	379	365	413	351	339	290	2145	770	258	2125	755
V/C Ratio(X)	0.91	0.96	0.96	0.89	0.91	0.92	0.83	1.01	1.03	0.77	0.86	0.87
Avail Cap(c_a), veh/h	477	379	365	418	367	354	295	2145	770	270	2125	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.56	0.56	0.56	0.56	0.56	0.56	0.77	0.77	0.77	0.22	0.22	0.22
Uniform Delay (d), s/veh	59.4	54.4	54.5	60.7	54.9	55.0	67.1	59.7	59.7	63.6	35.3	35.4
Incr Delay (d2), s/veh	13.2	24.6	26.5	12.9	16.6	18.4	14.4	20.3	37.5	3.1	1.2	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	9.1	16.5	16.2	7.7	13.7	13.6	5.3	31.8	37.9	3.9	21.5	23.7
LnGrp Delay(d),s/veh	72.6	79.0	81.0	73.6	71.5	73.4	81.5	80.0	97.2	66.6	36.5	38.8
LnGrp LOS	E	E	F	E	E	E	F	F	F	E	D	D
Approach Vol, veh/h		1147			1000			3211			2695	
Approach Delay, s/veh		77.2			72.9			84.3			39.3	
Approach LOS		E			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	67.8	21.8	34.6	16.4	67.2	24.0	32.4
Change Period (Y+Rc), s	5.3	* 5.3	5.0	4.6	* 4.6	5.3	4.6	* 4.6
Max Green Setting (Gmax), s	11.0	* 63	17.0	30.0	* 12	61.5	18.7	* 29
Max Q Clear Time (g_c+I1), s	10.0	64.5	16.8	30.7	11.8	50.9	19.3	27.1
Green Ext Time (p_c), s	0.1	0.0	0.0	0.0	0.0	9.5	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	66.8
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

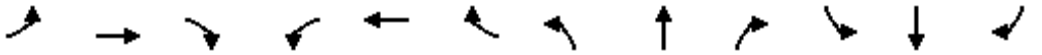
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	20	40	150	60	210	130	2510	90	330	2270	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	42	21	4	158	63	32	137	2642	92	347	2389	21
Adj No. of Lanes	1	1	0	1	1	1	1	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	119	23	184	208	177	127	3818	133	270	3966	35
Arrive On Green	0.07	0.08	0.08	0.10	0.11	0.11	0.14	1.00	1.00	0.16	1.00	1.00
Sat Flow, veh/h	1774	1522	290	1774	1863	1583	1774	6407	223	3442	6600	58
Grp Volume(v), veh/h	42	0	25	158	63	32	137	1980	754	347	1739	671
Grp Sat Flow(s),veh/h/ln	1774	0	1812	1774	1863	1583	1774	1602	1823	1721	1602	1853
Q Serve(g_s), s	3.1	0.0	1.8	12.3	4.4	2.6	10.0	0.0	0.0	11.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	1.8	12.3	4.4	2.6	10.0	0.0	0.0	11.0	0.0	0.0
Prop In Lane	1.00		0.16	1.00		1.00	1.00		0.12	1.00		0.03
Lane Grp Cap(c), veh/h	133	0	142	184	208	177	127	2864	1087	270	2888	1113
V/C Ratio(X)	0.32	0.00	0.18	0.86	0.30	0.18	1.08	0.69	0.69	1.28	0.60	0.60
Avail Cap(c_a), veh/h	165	0	401	219	464	395	127	2864	1087	270	2888	1113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.40	0.40	0.40	0.25	0.25	0.25
Uniform Delay (d), s/veh	61.4	0.0	60.3	61.8	57.2	56.4	60.0	0.0	0.0	59.0	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.6	24.4	0.8	0.5	74.2	0.6	1.5	134.6	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.6	0.0	0.9	7.3	2.3	1.1	7.5	0.2	0.5	10.2	0.1	0.2
LnGrp Delay(d),s/veh	62.7	0.0	60.9	86.2	58.0	56.9	134.2	0.6	1.5	193.6	0.2	0.6
LnGrp LOS	E		E	F	E	E	F	A	A	F	A	A
Approach Vol, veh/h		67			253			2871			2757	
Approach Delay, s/veh		62.0			75.5			7.2			24.7	
Approach LOS		E			E			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	88.7	19.8	15.9	14.9	89.4	14.8	20.9
Change Period (Y+Rc), s	* 4.6	5.3	5.3	* 4.9	4.9	5.3	* 4.3	* 5.3
Max Green Setting (Gmax), s	* 11	61.6	17.3	* 31	10.0	62.3	* 13	* 35
Max Q Clear Time (g_c+I1), s	13.0	2.0	14.3	3.8	12.0	2.0	5.1	6.4
Green Ext Time (p_c), s	0.0	58.2	0.3	0.1	0.0	58.8	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	310	260	120	150	240	100	170	2500	140	130	2310	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	326	274	126	158	253	105	179	2632	147	137	2432	158
Adj No. of Lanes	2	2	0	1	2	0	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	397	334	150	181	314	127	408	3139	175	161	2213	143
Arrive On Green	0.19	0.23	0.23	0.10	0.13	0.13	0.23	0.50	0.50	0.03	0.12	0.12
Sat Flow, veh/h	3442	2379	1065	1774	2463	994	1774	6259	348	1774	6197	401
Grp Volume(v), veh/h	326	202	198	158	180	178	179	2018	761	137	1884	706
Grp Sat Flow(s),veh/h/ln	1721	1770	1675	1774	1770	1687	1774	1602	1801	1774	1602	1792
Q Serve(g_s), s	12.7	15.1	15.8	12.3	13.8	14.4	12.1	50.5	51.0	10.8	50.0	50.0
Cycle Q Clear(g_c), s	12.7	15.1	15.8	12.3	13.8	14.4	12.1	50.5	51.0	10.8	50.0	50.0
Prop In Lane	1.00		0.64	1.00		0.59	1.00		0.19	1.00		0.22
Lane Grp Cap(c), veh/h	397	249	235	181	225	215	408	2410	903	161	1716	640
V/C Ratio(X)	0.82	0.81	0.84	0.87	0.80	0.83	0.44	0.84	0.84	0.85	1.10	1.10
Avail Cap(c_a), veh/h	397	341	323	196	341	325	408	2410	903	167	1716	640
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.80	0.80	0.80	0.95	0.95	0.95	0.24	0.24	0.24	0.80	0.80	0.80
Uniform Delay (d), s/veh	55.1	51.8	52.1	61.9	59.3	59.6	46.1	30.0	30.1	67.0	61.8	61.8
Incr Delay (d2), s/veh	10.6	8.2	11.1	29.5	7.2	10.0	0.2	0.9	2.4	26.1	52.0	63.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.6	8.0	8.0	7.5	7.2	7.3	5.9	22.4	26.0	6.5	30.5	36.1
LnGrp Delay(d),s/veh	65.8	60.1	63.2	91.5	66.5	69.6	46.3	30.9	32.5	93.0	113.7	125.3
LnGrp LOS	E	E	E	F	E	E	D	C	C	F	F	F
Approach Vol, veh/h		726			516			2958			2727	
Approach Delay, s/veh		63.5			75.2			32.2			115.7	
Approach LOS		E			E			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	76.5	19.9	25.3	38.5	56.3	21.7	23.4
Change Period (Y+Rc), s	* 5.6	6.3	* 5.6	* 5.6	6.3	* 6.3	5.6	* 5.6
Max Green Setting (Gmax), s	* 13	61.2	* 16	* 27	25.0	* 50	15.5	* 27
Max Q Clear Time (g_c+I1), s	12.8	53.0	14.3	17.8	14.1	52.0	14.7	16.4
Green Ext Time (p_c), s	0.0	7.6	0.0	1.9	9.2	0.0	0.3	1.4

Intersection Summary	
HCM 2010 Ctrl Delay	71.6
HCM 2010 LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	240	650	130	200	580	190	310	2470	100	220	2250	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	253	684	137	211	611	200	326	2600	105	232	2368	179
Adj No. of Lanes	2	2	1	1	2	1	2	4	0	2	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	750	335	190	835	374	379	2729	110	289	2500	188
Arrive On Green	0.09	0.21	0.21	0.11	0.24	0.24	0.04	0.14	0.14	0.11	0.54	0.54
Sat Flow, veh/h	3442	3539	1583	1774	3539	1583	3442	6367	256	3442	6126	462
Grp Volume(v), veh/h	253	684	137	211	611	200	326	1961	744	232	1856	691
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1774	1770	1583	1721	1602	1817	1721	1602	1781
Q Serve(g_s), s	10.1	26.4	8.0	15.0	22.3	12.1	13.2	56.7	56.9	9.2	50.8	51.3
Cycle Q Clear(g_c), s	10.1	26.4	8.0	15.0	22.3	12.1	13.2	56.7	56.9	9.2	50.8	51.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.26
Lane Grp Cap(c), veh/h	320	750	335	190	835	374	379	2060	779	289	1961	727
V/C Ratio(X)	0.79	0.91	0.41	1.11	0.73	0.54	0.86	0.95	0.96	0.80	0.95	0.95
Avail Cap(c_a), veh/h	320	784	351	190	835	374	418	2060	779	320	1961	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.33	1.33	1.33
Upstream Filter(I)	0.81	0.81	0.81	0.91	0.91	0.91	0.56	0.56	0.56	0.09	0.09	0.09
Uniform Delay (d), s/veh	62.2	53.9	27.5	62.5	49.4	28.4	66.4	58.7	58.8	61.1	30.6	30.7
Incr Delay (d2), s/veh	10.5	12.4	0.6	94.8	3.0	1.4	9.4	7.3	15.7	1.3	1.4	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.3	14.2	3.5	12.3	11.3	5.4	6.8	26.6	32.1	4.4	22.5	25.8
LnGrp Delay(d),s/veh	72.7	66.3	28.2	157.3	52.4	29.8	75.8	66.0	74.4	62.3	31.9	34.3
LnGrp LOS	E	E	C	F	D	C	E	E	E	E	C	C
Approach Vol, veh/h		1074			1022			3031			2779	
Approach Delay, s/veh		62.9			69.6			69.1			35.1	
Approach LOS		E			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	65.8	21.0	35.6	20.4	62.9	17.6	39.0
Change Period (Y+Rc), s	5.8	* 5.8	6.0	* 6	* 5	5.8	* 4.6	6.0
Max Green Setting (Gmax), s	13.0	* 60	15.0	* 31	* 17	55.6	* 13	33.0
Max Q Clear Time (g_c+I1), s	11.2	58.9	17.0	28.4	15.2	53.3	12.1	24.3
Green Ext Time (p_c), s	0.1	1.1	0.0	1.2	0.2	2.2	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	56.4
HCM 2010 LOS	E

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	40	20	190	60	240	30	2800	130	50	2350	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	42	21	200	63	253	32	2947	137	53	2474	21
Adj No. of Lanes	1	1	0	0	1	1	1	4	0	1	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	273	136	267	70	368	90	3759	173	111	4014	34
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.10	1.00	1.00	0.04	0.41	0.41
Sat Flow, veh/h	1059	1173	586	955	301	1583	1774	6325	292	1774	6603	56
Grp Volume(v), veh/h	11	0	63	263	0	253	32	2234	850	53	1801	694
Grp Sat Flow(s),veh/h/ln	1059	0	1759	1256	0	1583	1774	1602	1811	1774	1602	1853
Q Serve(g_s), s	1.4	0.0	4.0	25.1	0.0	20.4	2.4	0.0	0.0	4.1	41.5	41.5
Cycle Q Clear(g_c), s	30.5	0.0	4.0	29.1	0.0	20.4	2.4	0.0	0.0	4.1	41.5	41.5
Prop In Lane	1.00		0.33	0.76		1.00	1.00		0.16	1.00		0.03
Lane Grp Cap(c), veh/h	78	0	409	337	0	368	90	2856	1076	111	2922	1126
V/C Ratio(X)	0.14	0.00	0.15	0.78	0.00	0.69	0.35	0.78	0.79	0.48	0.62	0.62
Avail Cap(c_a), veh/h	79	0	411	339	0	370	129	2856	1076	141	2922	1126
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.21	0.21	0.21	0.15	0.15	0.15
Uniform Delay (d), s/veh	67.2	0.0	42.7	54.3	0.0	49.1	60.7	0.0	0.0	64.9	28.6	28.6
Incr Delay (d2), s/veh	0.8	0.0	0.2	11.0	0.0	5.2	0.5	0.5	1.3	0.5	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	0.0	2.0	11.0	0.0	9.5	1.2	0.1	0.4	2.0	18.5	21.4
LnGrp Delay(d),s/veh	68.1	0.0	42.9	65.3	0.0	54.3	61.2	0.5	1.3	65.4	28.7	29.0
LnGrp LOS	E		D	E		D	E	A	A	E	C	C
Approach Vol, veh/h		74			516			3116			2548	
Approach Delay, s/veh		46.7			59.9			1.3			29.6	
Approach LOS		D			E			A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.6	88.5		37.9	11.7	90.4		37.9
Change Period (Y+Rc), s	4.9	5.3		* 5.3	* 4.6	5.3		* 5.3
Max Green Setting (Gmax), s	11.1	80.7		* 33	* 10	81.9		* 33
Max Q Clear Time (g_c+I1), s	6.1	2.0		32.5	4.4	43.5		31.1
Green Ext Time (p_c), s	0.0	77.4		0.1	0.0	38.1		0.5

Intersection Summary			
HCM 2010 Ctrl Delay		18.2	
HCM 2010 LOS		B	

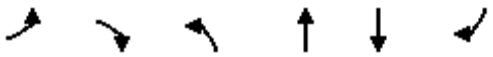
Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	1050	690	2360	0	0	2440
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	0	0	1863
Adj Flow Rate, veh/h	1105	726	2484	0	0	2568
Adj No. of Lanes	2	2	4	0	0	4
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	0	0	2
Cap, veh/h	971	786	4060	0	0	4060
Arrive On Green	0.28	0.28	1.00	0.00	0.00	1.00
Sat Flow, veh/h	3442	2787	6929	0	0	6929
Grp Volume(v), veh/h	1105	726	2484	0	0	2568
Grp Sat Flow(s),veh/h/ln	1721	1393	1602	0	0	1602
Q Serve(g_s), s	39.5	35.4	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	39.5	35.4	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	0.00	
Lane Grp Cap(c), veh/h	971	786	4060	0	0	4060
V/C Ratio(X)	1.14	0.92	0.61	0.00	0.00	0.63
Avail Cap(c_a), veh/h	971	786	4060	0	0	4060
HCM Platoon Ratio	1.00	1.00	2.00	1.00	1.00	2.00
Upstream Filter(I)	1.00	1.00	0.87	0.00	0.00	0.46
Uniform Delay (d), s/veh	50.3	48.8	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	74.8	16.4	0.6	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	28.8	15.4	0.2	0.0	0.0	0.1
LnGrp Delay(d),s/veh	125.0	65.2	0.6	0.0	0.0	0.3
LnGrp LOS	F	E	A			A
Approach Vol, veh/h	1831		2484			2568
Approach Delay, s/veh	101.3		0.6			0.3
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		95.0				95.0		45.0
Change Period (Y+Rc), s		6.3				6.3		5.5
Max Green Setting (Gmax), s		88.7				88.7		39.5
Max Q Clear Time (g_c+I1), s		2.0				2.0		41.5
Green Ext Time (p_c), s		86.2				86.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	27.3
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	340	240	0	2060	2670	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	1863	1863	0
Adj Flow Rate, veh/h	358	253	0	2168	2811	0
Adj No. of Lanes	2	2	0	4	4	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	451	365	0	5028	5028	0
Arrive On Green	0.13	0.13	0.00	0.53	1.00	0.00
Sat Flow, veh/h	3442	2787	0	6929	6929	0
Grp Volume(v), veh/h	358	253	0	2168	2811	0
Grp Sat Flow(s),veh/h/ln	1721	1393	0	1602	1602	0
Q Serve(g_s), s	14.1	12.1	0.0	29.0	0.0	0.0
Cycle Q Clear(g_c), s	14.1	12.1	0.0	29.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	451	365	0	5028	5028	0
V/C Ratio(X)	0.79	0.69	0.00	0.43	0.56	0.00
Avail Cap(c_a), veh/h	946	766	0	5028	5028	0
HCM Platoon Ratio	1.00	1.00	1.00	0.67	2.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.29	0.52	0.00
Uniform Delay (d), s/veh	59.0	58.1	0.0	14.0	0.0	0.0
Incr Delay (d2), s/veh	3.2	2.4	0.0	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	6.9	4.8	0.0	12.9	0.1	0.0
LnGrp Delay(d),s/veh	62.2	60.5	0.0	14.1	0.2	0.0
LnGrp LOS	E	E		B	A	
Approach Vol, veh/h	611			2168	2811	
Approach Delay, s/veh	61.5			14.1	0.2	
Approach LOS	E			B	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		116.2		23.8		116.2		
Change Period (Y+Rc), s		6.3		5.5		6.3		
Max Green Setting (Gmax), s		89.7		38.5		89.7		
Max Q Clear Time (g_c+I1), s		31.0		16.1		2.0		
Green Ext Time (p_c), s		57.6		2.2		85.5		

Intersection Summary	
HCM 2010 Ctrl Delay	12.3
HCM 2010 LOS	B

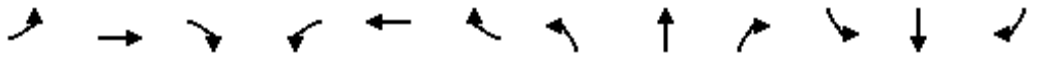
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	190	1210	1250	660	540	2020
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	200	1274	1316	327	568	2126
Adj No. of Lanes	2	2	3	1	2	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	840	1220	2137	665	667	2325
Arrive On Green	0.24	0.24	0.42	0.42	0.19	0.66
Sat Flow, veh/h	3442	2787	5253	1583	3442	3632
Grp Volume(v), veh/h	200	1274	1316	327	568	2126
Grp Sat Flow(s),veh/h/ln	1721	1393	1695	1583	1721	1770
Q Serve(g_s), s	4.7	24.4	20.2	15.1	15.9	51.6
Cycle Q Clear(g_c), s	4.7	24.4	20.2	15.1	15.9	51.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	840	1220	2137	665	667	2325
V/C Ratio(X)	0.24	1.04	0.62	0.49	0.85	0.91
Avail Cap(c_a), veh/h	840	1220	2137	665	1277	2325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.55	0.55	0.78	0.78	1.00	1.00
Uniform Delay (d), s/veh	30.3	28.1	22.7	21.2	38.9	14.7
Incr Delay (d2), s/veh	0.0	32.0	1.1	2.0	2.4	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.2	22.1	9.6	6.9	7.8	27.1
LnGrp Delay(d),s/veh	30.4	60.1	23.7	23.2	41.3	21.7
LnGrp LOS	C	F	C	C	D	C
Approach Vol, veh/h	1474		1643			2694
Approach Delay, s/veh	56.1		23.6			25.9
Approach LOS	E		C			C

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	23.7	47.3				71.0		29.0
Change Period (Y+Rc), s	* 4.3	5.3				5.3		4.6
Max Green Setting (Gmax), s	* 37	24.3				65.7		24.4
Max Q Clear Time (g_c+I1), s	17.9	22.2				53.6		26.4
Green Ext Time (p_c), s	1.4	2.1				12.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.9
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	300	610	210	490	620	530	70	720	620	410	750	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	316	642	93	390	830	517	74	758	600	432	789	145
Adj No. of Lanes	2	3	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	550	813	248	435	914	607	92	990	829	477	1093	201
Arrive On Green	0.22	0.22	0.22	0.25	0.25	0.25	0.05	0.29	0.29	0.14	0.38	0.38
Sat Flow, veh/h	3326	4914	1499	1714	3600	1528	1714	3420	1522	3326	2884	530
Grp Volume(v), veh/h	316	642	93	390	830	517	74	758	600	432	468	466
Grp Sat Flow(s),veh/h/ln	1663	1638	1499	1714	1800	1528	1714	1710	1522	1663	1710	1704
Q Serve(g_s), s	11.0	16.0	6.9	28.6	29.1	33.0	5.5	26.3	37.6	16.6	30.4	30.4
Cycle Q Clear(g_c), s	11.0	16.0	6.9	28.6	29.1	33.0	5.5	26.3	37.6	16.6	30.4	30.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	550	813	248	435	914	607	92	990	829	477	648	646
V/C Ratio(X)	0.57	0.79	0.37	0.90	0.91	0.85	0.80	0.77	0.72	0.91	0.72	0.72
Avail Cap(c_a), veh/h	665	983	300	435	914	607	92	990	829	481	648	646
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.88	0.88	0.88	0.73	0.73	0.73	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	48.6	45.0	46.8	47.0	35.7	60.8	42.2	22.2	54.8	34.5	34.5
Incr Delay (d2), s/veh	0.8	3.2	0.8	16.1	9.8	8.4	33.5	4.8	4.6	20.4	6.8	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.1	7.5	2.9	15.5	15.7	18.3	3.5	13.1	22.6	9.0	15.5	15.5
LnGrp Delay(d),s/veh	47.4	51.8	45.8	63.0	56.8	44.0	94.3	47.0	26.8	75.2	41.3	41.3
LnGrp LOS	D	D	D	E	E	D	F	D	C	E	D	D
Approach Vol, veh/h		1051			1737			1432			1366	
Approach Delay, s/veh		50.0			54.4			41.0			52.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	22.9	42.6		26.5	11.2	54.3		38.0
Change Period (Y+Rc), s	* 4.2	5.0		5.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s	* 19	33.0		26.0	* 7	44.8		33.0
Max Q Clear Time (g_c+I1), s	18.6	39.6		18.0	7.5	32.4		35.0
Green Ext Time (p_c), s	0.0	0.0		3.4	0.0	9.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	49.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	950	220	0	0	380	90	770	110	60	120	0	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	1000	232	0	0	400	0	811	116	58	126	0	29
Adj No. of Lanes	2	1	0	0	2	1	2	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	1118	1046	0	0	566	253	979	334	167	0	0	0
Arrive On Green	0.32	0.56	0.00	0.00	0.16	0.00	0.28	0.28	0.28	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	3632	1583	3442	1173	586		0	
Grp Volume(v), veh/h	1000	232	0	0	400	0	811	0	174		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1583	1721	0	1759			
Q Serve(g_s), s	16.9	3.8	0.0	0.0	6.5	0.0	13.5	0.0	4.8			
Cycle Q Clear(g_c), s	16.9	3.8	0.0	0.0	6.5	0.0	13.5	0.0	4.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.33			
Lane Grp Cap(c), veh/h	1118	1046	0	0	566	253	979	0	501			
V/C Ratio(X)	0.89	0.22	0.00	0.00	0.71	0.00	0.83	0.00	0.35			
Avail Cap(c_a), veh/h	1424	1380	0	0	886	396	2775	0	1419			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.6	6.7	0.0	0.0	24.3	0.0	20.5	0.0	17.4			
Incr Delay (d2), s/veh	5.5	0.0	0.0	0.0	0.6	0.0	0.7	0.0	0.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(0%),veh/ln	8.8	1.9	0.0	0.0	3.2	0.0	6.4	0.0	2.3			
LnGrp Delay(d),s/veh	25.2	6.7	0.0	0.0	24.9	0.0	21.2	0.0	17.5			
LnGrp LOS	C	A			C		C		B			
Approach Vol, veh/h		1232			400			985				
Approach Delay, s/veh		21.7			24.9			20.5				
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		22.1		39.0			24.6	14.5
Change Period (Y+Rc), s		* 4.7		* 4.7			* 4.7	* 4.7
Max Green Setting (Gmax), s		* 49		* 45			* 25	* 15
Max Q Clear Time (g_c+I1), s		15.5		5.8			18.9	8.5
Green Ext Time (p_c), s		1.9		2.0			1.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	21.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

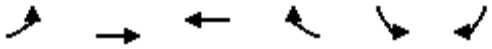
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	560	0	0	610	20	940	20	220	40	0	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	0	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	42	589	0	0	642	17	989	21	89	42	0	1
Adj No. of Lanes	1	3	0	0	3	0	2	1	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	68	2436	0	0	1959	52	924	500	425	55	0	49
Arrive On Green	0.04	0.50	0.00	0.00	0.40	0.40	0.28	0.28	0.28	0.03	0.00	0.03
Sat Flow, veh/h	1714	5076	0	0	5085	130	3326	1800	1530	1714	0	1530
Grp Volume(v), veh/h	42	589	0	0	427	232	989	21	89	42	0	1
Grp Sat Flow(s),veh/h/ln	1714	1638	0	0	1638	1777	1663	1800	1530	1714	0	1530
Q Serve(g_s), s	1.7	4.9	0.0	0.0	6.5	6.5	20.0	0.6	3.2	1.8	0.0	0.0
Cycle Q Clear(g_c), s	1.7	4.9	0.0	0.0	6.5	6.5	20.0	0.6	3.2	1.8	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	68	2436	0	0	1304	707	924	500	425	55	0	49
V/C Ratio(X)	0.62	0.24	0.00	0.00	0.33	0.33	1.07	0.04	0.21	0.76	0.00	0.02
Avail Cap(c_a), veh/h	186	2436	0	0	1304	707	924	500	425	381	0	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.53	0.53	0.00	0.00	0.94	0.94	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.0	10.4	0.0	0.0	15.0	15.0	26.0	19.0	19.9	34.6	0.0	33.8
Incr Delay (d2), s/veh	4.9	0.1	0.0	0.0	0.6	1.2	50.4	0.0	0.2	19.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.9	2.3	0.0	0.0	3.0	3.4	15.6	0.3	1.4	1.1	0.0	0.0
LnGrp Delay(d),s/veh	38.9	10.5	0.0	0.0	15.6	16.2	76.4	19.0	20.2	54.0	0.0	33.9
LnGrp LOS	D	B			B	B	F	B	C	D		C
Approach Vol, veh/h		631			659			1099			43	
Approach Delay, s/veh		12.4			15.8			70.7			53.5	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		40.7		6.3	7.0	33.7		25.0
Change Period (Y+Rc), s		5.0		4.0	* 4.2	5.0		5.0
Max Green Setting (Gmax), s		22.0		16.0	* 7.8	10.0		20.0
Max Q Clear Time (g_c+I1), s		6.9		3.8	3.7	8.5		22.0
Green Ext Time (p_c), s		6.6		0.1	0.0	1.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	40.4
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	730	820	0	410	30
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1800	0	1800	1800
Adj Flow Rate, veh/h	0	768	863	0	462	0
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2290	2290	0	611	273
Arrive On Green	0.00	0.67	0.67	0.00	0.18	0.00
Sat Flow, veh/h	0	3600	3600	0	3429	1530
Grp Volume(v), veh/h	0	768	863	0	462	0
Grp Sat Flow(s),veh/h/ln	0	1710	1710	0	1714	1530
Q Serve(g_s), s	0.0	6.2	7.2	0.0	8.3	0.0
Cycle Q Clear(g_c), s	0.0	6.2	7.2	0.0	8.3	0.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2290	2290	0	611	273
V/C Ratio(X)	0.00	0.34	0.38	0.00	0.76	0.00
Avail Cap(c_a), veh/h	0	2290	2290	0	1076	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.93	0.24	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	4.6	4.7	0.0	25.4	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.1	0.0	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	3.0	3.4	0.0	4.1	0.0
LnGrp Delay(d),s/veh	0.0	4.9	4.9	0.0	27.3	0.0
LnGrp LOS		A	A		C	
Approach Vol, veh/h		768	863		462	
Approach Delay, s/veh		4.9	4.9		27.3	
Approach LOS		A	A		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		48.8		16.2		48.8		
Change Period (Y+Rc), s		5.3		4.6		5.3		
Max Green Setting (Gmax), s		34.7		20.4		34.7		
Max Q Clear Time (g_c+I1), s		8.2		10.3		9.2		
Green Ext Time (p_c), s		12.2		1.3		12.0		

Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	240	580	0	2060	940	550
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	244	490	0	2168	989	0
Adj No. of Lanes	1	2	0	4	4	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	372	664	0	3837	3837	948
Arrive On Green	0.22	0.22	0.00	1.00	0.62	0.00
Sat Flow, veh/h	1714	3060	0	6696	6444	1530
Grp Volume(v), veh/h	244	490	0	2168	989	0
Grp Sat Flow(s),veh/h/ln	1714	1530	0	1548	1548	1530
Q Serve(g_s), s	7.8	9.0	0.0	0.0	4.3	0.0
Cycle Q Clear(g_c), s	7.8	9.0	0.0	0.0	4.3	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	372	664	0	3837	3837	948
V/C Ratio(X)	0.66	0.74	0.00	0.56	0.26	0.00
Avail Cap(c_a), veh/h	577	1030	0	3837	3837	948
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.00	0.48	0.87	0.00
Uniform Delay (d), s/veh	21.4	21.9	0.0	0.0	5.2	0.0
Incr Delay (d2), s/veh	1.8	1.5	0.0	0.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	3.9	0.0	0.1	1.9	0.0
LnGrp Delay(d),s/veh	23.3	23.4	0.0	0.3	5.3	0.0
LnGrp LOS	C	C		A	A	
Approach Vol, veh/h	734			2168	989	
Approach Delay, s/veh	23.4			0.3	5.3	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		42.2		17.8		42.2		
Change Period (Y+Rc), s		5.0		* 4.8		5.0		
Max Green Setting (Gmax), s		30.0		* 20		30.0		
Max Q Clear Time (g_c+I1), s		2.0		11.0		6.3		
Green Ext Time (p_c), s		24.1		2.1		20.8		

Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

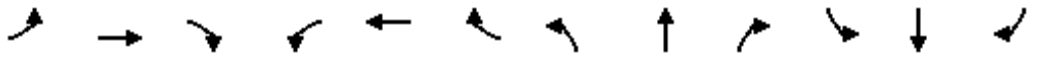
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	190	270	20	30	230	370	0	0	0	560	90	130
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800				1800	1800	1800
Adj Flow Rate, veh/h	200	284	9	32	242	145				657	0	46
Adj No. of Lanes	1	2	0	0	2	1				2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	589	1465	46	222	1305	660				1029	0	459
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43				0.30	0.00	0.30
Sat Flow, veh/h	957	3384	107	198	3014	1525				3429	0	1528
Grp Volume(v), veh/h	200	143	150	146	128	145				657	0	46
Grp Sat Flow(s),veh/h/ln	957	1710	1781	1656	1556	1525				1714	0	1528
Q Serve(g_s), s	5.3	1.7	1.7	0.0	1.6	1.9				5.3	0.0	0.7
Cycle Q Clear(g_c), s	6.9	1.7	1.7	1.6	1.6	1.9				5.3	0.0	0.7
Prop In Lane	1.00		0.06	0.22		1.00				1.00		1.00
Lane Grp Cap(c), veh/h	589	741	771	853	674	660				1029	0	459
V/C Ratio(X)	0.34	0.19	0.19	0.17	0.19	0.22				0.64	0.00	0.10
Avail Cap(c_a), veh/h	1086	1628	1695	1659	1482	1452				2201	0	981
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	7.8	5.7	5.7	5.6	5.6	5.7				9.8	0.0	8.1
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.1	0.1	0.2				0.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.4	0.8	0.8	0.8	0.7	0.8				2.6	0.0	0.3
LnGrp Delay(d),s/veh	8.1	5.8	5.8	5.7	5.8	5.9				10.4	0.0	8.2
LnGrp LOS	A	A	A	A	A	A				B		A
Approach Vol, veh/h		493			419						703	
Approach Delay, s/veh		6.7			5.8						10.3	
Approach LOS		A			A						B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		18.3		14.0		18.3		
Change Period (Y+Rc), s		* 4.3		* 4.3		* 4.3		
Max Green Setting (Gmax), s		* 31		* 21		* 31		
Max Q Clear Time (g_c+I1), s		8.9		7.3		3.9		
Green Ext Time (p_c), s		5.1		2.3		5.3		

Intersection Summary	
HCM 2010 Ctrl Delay	8.0
HCM 2010 LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	160	1330	250	130	1340	330	220	1040	150	220	950	170
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1937	1937	1863	1863	1937	1863	1937	1976	1863	1937	1976
Adj Flow Rate, veh/h	168	1400	192	137	1411	130	232	1095	149	232	1000	167
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	1222	547	182	1171	545	266	1027	140	266	996	166
Arrive On Green	0.10	0.33	0.33	0.21	0.66	0.66	0.15	0.32	0.32	0.15	0.32	0.32
Sat Flow, veh/h	1774	3681	1647	1774	3539	1647	1774	3257	442	1774	3158	527
Grp Volume(v), veh/h	168	1400	192	137	1411	130	232	618	626	232	582	585
Grp Sat Flow(s),veh/h/ln	1774	1840	1647	1774	1770	1647	1774	1840	1859	1774	1840	1844
Q Serve(g_s), s	12.2	43.1	11.5	9.4	43.0	4.1	16.6	41.0	41.0	16.6	41.0	41.0
Cycle Q Clear(g_c), s	12.2	43.1	11.5	9.4	43.0	4.1	16.6	41.0	41.0	16.6	41.0	41.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		0.29
Lane Grp Cap(c), veh/h	184	1222	547	182	1171	545	266	580	586	266	580	582
V/C Ratio(X)	0.91	1.15	0.35	0.75	1.21	0.24	0.87	1.06	1.07	0.87	1.00	1.01
Avail Cap(c_a), veh/h	184	1222	547	184	1171	545	266	580	586	266	580	582
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.49	0.49	0.49	0.94	0.94	0.94	0.56	0.56	0.56	0.84	0.84	0.84
Uniform Delay (d), s/veh	57.7	43.4	32.8	50.1	22.0	15.4	54.0	44.5	44.5	54.0	44.5	44.5
Incr Delay (d2), s/veh	25.5	71.0	0.9	13.3	100.2	1.0	15.5	46.8	47.8	21.6	35.1	35.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	7.3	33.9	5.4	5.2	36.8	2.0	9.3	28.3	28.8	9.7	26.5	26.6
LnGrp Delay(d),s/veh	83.2	114.4	33.7	63.4	122.2	16.4	69.6	91.3	92.3	75.6	79.6	80.1
LnGrp LOS	F	F	C	E	F	B	E	F	F	E	F	F
Approach Vol, veh/h		1760			1678			1476			1399	
Approach Delay, s/veh		102.6			109.2			88.3			79.1	
Approach LOS		F			F			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	47.1	22.0	45.0	16.0	47.0	22.0	45.0
Change Period (Y+Rc), s	4.5	6.0	4.5	6.0	4.5	6.0	4.5	6.0
Max Green Setting (Gmax), s	11.5	41.0	17.5	39.0	11.5	41.0	17.5	39.0
Max Q Clear Time (g_c+I1), s	11.4	45.1	18.6	43.0	14.2	45.0	18.6	43.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	95.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	200	630	110	390	820	210	210	1400	340	130	1030	110
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1824	1863	1863	1863	1863	1863	1863	1863	1863	1788
Adj Flow Rate, veh/h	211	663	102	411	863	100	221	1474	185	137	1084	37
Adj No. of Lanes	2	2	0	2	2	1	2	3	1	2	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	741	114	465	1142	511	278	1695	528	312	1872	560
Arrive On Green	0.08	0.24	0.24	0.14	0.32	0.32	0.08	0.33	0.33	0.18	0.74	0.74
Sat Flow, veh/h	3442	3076	473	3442	3539	1583	3442	5085	1583	3442	5085	1520
Grp Volume(v), veh/h	211	381	384	411	863	100	221	1474	185	137	1084	37
Grp Sat Flow(s),veh/h/ln	1721	1770	1779	1721	1770	1583	1721	1695	1583	1721	1695	1520
Q Serve(g_s), s	7.2	25.0	25.1	14.1	26.2	3.9	7.6	32.7	10.6	4.3	11.8	0.8
Cycle Q Clear(g_c), s	7.2	25.0	25.1	14.1	26.2	3.9	7.6	32.7	10.6	4.3	11.8	0.8
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	426	429	465	1142	511	278	1695	528	312	1872	560
V/C Ratio(X)	0.78	0.89	0.90	0.88	0.76	0.20	0.80	0.87	0.35	0.44	0.58	0.07
Avail Cap(c_a), veh/h	459	516	519	488	1142	511	373	1695	528	312	1872	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.83	0.83	0.83	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.93	0.93
Uniform Delay (d), s/veh	54.3	44.1	44.1	51.0	36.4	15.2	54.2	37.6	30.2	46.4	11.6	10.1
Incr Delay (d2), s/veh	1.6	12.2	12.3	15.9	2.6	0.1	5.9	6.4	1.8	0.3	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.5	13.6	13.7	7.7	13.2	1.7	3.8	16.3	4.9	2.0	5.4	0.4
LnGrp Delay(d),s/veh	55.8	56.2	56.4	66.9	39.0	15.2	60.1	43.9	32.0	46.8	12.8	10.3
LnGrp LOS	E	E	E	E	D	B	E	D	C	D	B	B
Approach Vol, veh/h		976			1374			1880			1258	
Approach Delay, s/veh		56.2			45.6			44.7			16.4	
Approach LOS		E			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	34.9	12.7	50.2	12.4	44.7	16.9	46.0
Change Period (Y+Rc), s	* 6	* 6	3.0	* 6	3.0	* 6	* 6	* 6
Max Green Setting (Gmax), s	* 17	* 35	13.0	* 37	16.0	* 36	* 10	* 40
Max Q Clear Time (g_c+I1), s	16.1	27.1	9.6	13.8	9.2	28.2	6.3	34.7
Green Ext Time (p_c), s	0.2	1.8	0.1	5.2	0.2	3.1	0.2	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	40.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

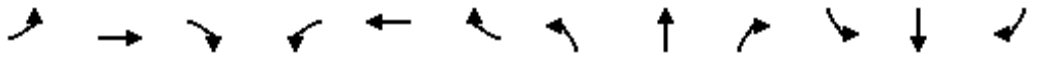
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	150	430	80	80	670	110	190	1500	90	160	1330	160
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	158	453	84	84	705	116	200	1579	95	168	1400	168
Adj No. of Lanes	1	2	0	1	2	0	1	3	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	904	167	324	835	137	207	1964	555	236	1869	581
Arrive On Green	0.09	0.30	0.30	0.06	0.27	0.27	0.12	0.35	0.35	0.13	0.37	0.37
Sat Flow, veh/h	1774	2982	549	1774	3040	500	1774	5588	1578	1774	5085	1579
Grp Volume(v), veh/h	158	268	269	84	410	411	200	1579	95	168	1400	168
Grp Sat Flow(s),veh/h/ln	1774	1770	1761	1774	1770	1770	1774	1863	1578	1774	1695	1579
Q Serve(g_s), s	7.3	14.9	15.1	4.0	26.3	26.3	13.5	30.7	5.0	10.9	28.8	9.0
Cycle Q Clear(g_c), s	7.3	14.9	15.1	4.0	26.3	26.3	13.5	30.7	5.0	10.9	28.8	9.0
Prop In Lane	1.00		0.31	1.00		0.28	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	536	534	324	486	486	207	1964	555	236	1869	581
V/C Ratio(X)	0.61	0.50	0.50	0.26	0.84	0.85	0.97	0.80	0.17	0.71	0.75	0.29
Avail Cap(c_a), veh/h	259	536	534	375	501	502	207	1964	555	266	1869	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.54	0.54	0.54	1.00	1.00	1.00	0.43	0.43	0.43	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	34.3	34.4	28.3	41.1	41.1	52.8	35.2	26.9	49.8	33.1	26.9
Incr Delay (d2), s/veh	1.6	0.1	0.2	0.2	11.5	11.6	32.2	1.6	0.3	5.8	2.8	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.7	7.3	7.4	1.9	14.4	14.5	8.5	16.1	2.2	5.7	14.0	4.1
LnGrp Delay(d),s/veh	31.3	34.5	34.6	28.5	52.6	52.7	85.0	36.8	27.1	55.7	35.9	28.1
LnGrp LOS	C	C	C	C	D	D	F	D	C	E	D	C
Approach Vol, veh/h		695			905			1874			1736	
Approach Delay, s/veh		33.8			50.4			41.4			37.1	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	41.4	18.0	49.1	14.9	37.9	19.9	47.2
Change Period (Y+Rc), s	4.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0
Max Green Setting (Gmax), s	11.0	34.0	14.0	43.0	11.0	34.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	6.0	17.1	15.5	30.8	9.3	28.3	12.9	32.7
Green Ext Time (p_c), s	0.0	4.9	0.0	9.9	0.0	1.7	0.1	5.6

Intersection Summary	
HCM 2010 Ctrl Delay	40.5
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	660	70	90	920	180	80	640	80	100	390	80
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	137	695	74	95	968	189	84	674	84	105	411	84
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	1496	159	117	1296	253	105	774	96	128	754	153
Arrive On Green	0.09	0.46	0.46	0.07	0.44	0.44	0.06	0.24	0.24	0.07	0.26	0.26
Sat Flow, veh/h	1774	3228	343	1774	2954	576	1774	3168	394	1774	2933	595
Grp Volume(v), veh/h	137	381	388	95	579	578	84	376	382	105	247	248
Grp Sat Flow(s),veh/h/ln	1774	1770	1802	1774	1770	1761	1774	1770	1793	1774	1770	1758
Q Serve(g_s), s	9.9	19.1	19.2	6.9	35.5	35.6	6.1	26.5	26.6	7.6	15.6	15.9
Cycle Q Clear(g_c), s	9.9	19.1	19.2	6.9	35.5	35.6	6.1	26.5	26.6	7.6	15.6	15.9
Prop In Lane	1.00		0.19	1.00		0.33	1.00		0.22	1.00		0.34
Lane Grp Cap(c), veh/h	161	820	835	117	776	773	105	432	438	128	455	452
V/C Ratio(X)	0.85	0.46	0.46	0.81	0.75	0.75	0.80	0.87	0.87	0.82	0.54	0.55
Avail Cap(c_a), veh/h	191	820	835	218	776	773	246	490	497	191	455	452
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	0.61	0.61	0.61	1.00	1.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	58.2	23.8	23.8	59.9	30.4	30.5	60.4	47.1	47.2	59.5	41.7	41.8
Incr Delay (d2), s/veh	16.2	1.3	1.2	3.1	4.0	4.1	5.1	14.3	14.3	8.7	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	5.6	9.6	9.8	3.5	18.2	18.2	3.1	14.7	14.9	4.0	7.8	7.9
LnGrp Delay(d),s/veh	74.4	25.1	25.1	63.0	34.5	34.5	65.5	61.4	61.4	68.2	42.8	43.0
LnGrp LOS	E	C	C	E	C	C	E	E	E	E	D	D
Approach Vol, veh/h		906			1252			842			600	
Approach Delay, s/veh		32.5			36.7			61.8			47.3	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	66.3	11.7	39.4	15.8	63.0	13.4	37.8
Change Period (Y+Rc), s	4.0	* 6	4.0	* 6	4.0	* 6	4.0	* 6
Max Green Setting (Gmax), s	16.0	* 44	18.0	* 32	14.0	* 46	14.0	* 36
Max Q Clear Time (g_c+I1), s	8.9	21.2	8.1	17.9	11.9	37.6	9.6	28.6
Green Ext Time (p_c), s	0.0	14.2	0.0	6.2	0.0	6.6	0.0	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	43.3
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1130	190	300	1230	310	200	1000	270	10	820	180
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	1189	200	316	1295	326	211	1053	284	11	863	189
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1	816	136	239	1230	304	232	1212	325	13	911	200
Arrive On Green	0.00	0.27	0.27	0.13	0.44	0.44	0.13	0.44	0.44	0.01	0.32	0.32
Sat Flow, veh/h	1774	3035	508	1774	2814	695	1774	2762	740	1774	2888	632
Grp Volume(v), veh/h	0	691	698	316	805	816	211	672	665	11	529	523
Grp Sat Flow(s),veh/h/ln	1774	1770	1773	1774	1770	1740	1774	1770	1732	1774	1770	1751
Q Serve(g_s), s	0.0	39.9	39.9	20.0	64.9	64.9	17.4	51.0	51.9	0.9	43.3	43.3
Cycle Q Clear(g_c), s	0.0	39.9	39.9	20.0	64.9	64.9	17.4	51.0	51.9	0.9	43.3	43.3
Prop In Lane	1.00		0.29	1.00		0.40	1.00		0.43	1.00		0.36
Lane Grp Cap(c), veh/h	1	476	476	239	774	761	232	777	760	13	558	552
V/C Ratio(X)	0.00	1.45	1.47	1.32	1.04	1.07	0.91	0.87	0.87	0.84	0.95	0.95
Avail Cap(c_a), veh/h	239	476	476	239	774	761	239	777	760	239	594	587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	54.3	54.3	64.2	41.8	41.8	63.6	37.7	37.9	73.6	49.6	49.6
Incr Delay (d2), s/veh	0.0	215.1	220.7	171.2	43.5	53.8	33.4	9.7	10.6	38.2	23.3	23.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	47.8	48.7	21.1	40.9	42.4	10.7	26.9	27.0	0.6	24.8	24.5
LnGrp Delay(d),s/veh	0.0	269.4	275.0	235.5	85.3	95.6	97.0	47.4	48.5	111.8	72.9	73.1
LnGrp LOS		F	F	F	F	F	F	D	D	F	E	E
Approach Vol, veh/h		1389			1937			1548			1063	
Approach Delay, s/veh		272.2			114.1			54.6			73.4	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	46.0	24.4	53.0	0.0	71.0	6.1	71.4
Change Period (Y+Rc), s	5.0	* 6.1	5.0	* 6.2	5.0	* 6.1	5.0	* 6.2
Max Green Setting (Gmax), s	20.0	* 40	20.0	* 50	20.0	* 40	20.0	* 50
Max Q Clear Time (g_c+I1), s	22.0	41.9	19.4	45.3	0.0	66.9	2.9	53.9
Green Ext Time (p_c), s	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	128.3
HCM 2010 LOS	F

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	470	160	200	510	310	150	1320	100	210	1400	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adj Flow Rate, veh/h	147	495	168	211	537	326	158	1389	105	221	1474	95
Adj No. of Lanes	1	3	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	189	871	285	273	485	294	184	1659	125	246	1851	119
Arrive On Green	0.08	0.24	0.24	0.08	0.24	0.24	0.11	0.36	0.36	0.29	0.79	0.79
Sat Flow, veh/h	1714	3642	1191	1714	2029	1230	1714	4656	352	1714	4714	304
Grp Volume(v), veh/h	147	443	220	211	452	411	158	977	517	221	1024	545
Grp Sat Flow(s),veh/h/ln	1714	1638	1557	1714	1710	1549	1714	1638	1732	1714	1638	1741
Q Serve(g_s), s	7.7	14.3	15.0	9.0	28.7	28.7	10.9	32.8	32.8	14.9	21.5	21.5
Cycle Q Clear(g_c), s	7.7	14.3	15.0	9.0	28.7	28.7	10.9	32.8	32.8	14.9	21.5	21.5
Prop In Lane	1.00		0.77	1.00		0.79	1.00		0.20	1.00		0.17
Lane Grp Cap(c), veh/h	189	784	372	273	409	371	184	1167	617	246	1286	684
V/C Ratio(X)	0.78	0.57	0.59	0.77	1.11	1.11	0.86	0.84	0.84	0.90	0.80	0.80
Avail Cap(c_a), veh/h	189	784	372	273	409	371	214	1167	617	371	1286	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	0.75	0.75	0.75	1.00	1.00	1.00	0.89	0.89	0.89
Uniform Delay (d), s/veh	34.3	40.2	40.4	37.0	45.7	45.7	52.7	35.4	35.4	41.9	10.1	10.1
Incr Delay (d2), s/veh	18.6	1.0	2.4	9.9	71.0	73.5	25.0	7.2	12.8	15.6	4.7	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	4.6	6.6	6.7	6.0	21.6	19.8	6.4	16.0	17.8	8.1	9.9	11.3
LnGrp Delay(d),s/veh	52.9	41.1	42.9	47.0	116.7	119.2	77.7	42.6	48.2	57.5	14.8	18.6
LnGrp LOS	D	D	D	D	F	F	E	D	D	E	B	B
Approach Vol, veh/h		810			1074			1652			1790	
Approach Delay, s/veh		43.7			103.9			47.7			21.2	
Approach LOS		D			F			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	48.8	14.0	35.0	17.9	53.1	14.0	35.0
Change Period (Y+Rc), s	5.0	* 6	5.0	* 6.3	5.0	* 6	5.0	* 6.3
Max Green Setting (Gmax), s	26.0	* 34	9.0	* 29	15.0	* 45	9.0	* 29
Max Q Clear Time (g_c+I1), s	16.9	34.8	11.0	17.0	12.9	23.5	9.7	30.7
Green Ext Time (p_c), s	0.4	0.0	0.0	6.8	0.1	18.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	49.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	130	450	30	50	480	230	60	700	50	110	560	100
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	137	474	32	53	505	242	63	737	53	116	589	105
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	1432	96	367	990	472	312	845	718	138	1363	242
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	711	3366	227	889	2326	1110	747	1863	1583	683	3004	534
Grp Volume(v), veh/h	137	249	257	53	384	363	63	737	53	116	346	348
Grp Sat Flow(s),veh/h/ln	711	1770	1823	889	1770	1667	747	1863	1583	683	1770	1768
Q Serve(g_s), s	17.4	9.3	9.4	4.2	15.8	15.9	6.2	35.5	1.9	9.5	13.2	13.3
Cycle Q Clear(g_c), s	33.3	9.3	9.4	13.6	15.8	15.9	19.5	35.5	1.9	45.0	13.2	13.3
Prop In Lane	1.00		0.12	1.00		0.67	1.00		1.00	1.00		0.30
Lane Grp Cap(c), veh/h	261	753	775	367	753	709	312	845	718	138	803	802
V/C Ratio(X)	0.52	0.33	0.33	0.14	0.51	0.51	0.20	0.87	0.07	0.84	0.43	0.43
Avail Cap(c_a), veh/h	281	803	827	392	803	756	312	845	718	138	803	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	19.1	19.1	23.6	20.9	20.9	25.1	24.5	15.3	46.9	18.4	18.4
Incr Delay (d2), s/veh	2.3	0.4	0.4	0.3	0.8	0.8	0.5	10.2	0.1	35.6	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.6	4.6	4.8	1.1	7.8	7.4	1.3	20.6	0.8	4.5	6.6	6.6
LnGrp Delay(d),s/veh	35.5	19.4	19.4	23.9	21.7	21.8	25.5	34.7	15.4	82.6	18.9	19.0
LnGrp LOS	D	B	B	C	C	C	C	C	B	F	B	B
Approach Vol, veh/h		643			800			853			810	
Approach Delay, s/veh		22.8			21.9			32.8			28.1	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		51.0		48.2		51.0		48.2
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		45.0		45.0		45.0		45.0
Max Q Clear Time (g_c+I1), s		47.0		17.9		37.5		35.3
Green Ext Time (p_c), s		0.0		14.2		6.2		6.9

Intersection Summary	
HCM 2010 Ctrl Delay	26.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	10	0	20	0	1500	30	30	1060	0
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1976	1863	1824	0	1863	1824	1863	1863	0
Adj Flow Rate, veh/h				11	0	21	0	1579	32	32	1116	0
Adj No. of Lanes				0	1	0	0	3	0	1	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	2	0	0	2	2	2	2	0
Cap, veh/h				15	0	28	0	3936	80	355	3901	0
Arrive On Green				0.03	0.00	0.03	0.00	0.77	0.77	0.77	0.77	0.00
Sat Flow, veh/h				509	0	971	0	5298	104	313	5253	0
Grp Volume(v), veh/h				32	0	0	0	1043	568	32	1116	0
Grp Sat Flow(s),veh/h/ln				1480	0	0	0	1695	1844	313	1695	0
Q Serve(g_s), s				1.1	0.0	0.0	0.0	5.1	5.1	1.9	3.2	0.0
Cycle Q Clear(g_c), s				1.1	0.0	0.0	0.0	5.1	5.1	7.0	3.2	0.0
Prop In Lane				0.34		0.66	0.00		0.06	1.00		0.00
Lane Grp Cap(c), veh/h				43	0	0	0	2601	1415	355	3901	0
V/C Ratio(X)				0.75	0.00	0.00	0.00	0.40	0.40	0.09	0.29	0.00
Avail Cap(c_a), veh/h				483	0	0	0	2601	1415	355	3901	0
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.00	0.77	0.77	0.72	0.72	0.00
Uniform Delay (d), s/veh				23.6	0.0	0.0	0.0	1.9	1.9	3.1	1.7	0.0
Incr Delay (d2), s/veh				22.8	0.0	0.0	0.0	0.4	0.7	0.4	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln				0.7	0.0	0.0	0.0	2.4	2.8	0.2	1.5	0.0
LnGrp Delay(d),s/veh				46.4	0.0	0.0	0.0	2.3	2.6	3.5	1.8	0.0
LnGrp LOS				D				A	A	A	A	
Approach Vol, veh/h					32			1611			1148	
Approach Delay, s/veh					46.4			2.4			1.9	
Approach LOS					D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		43.6				43.6		5.4
Change Period (Y+Rc), s		* 6				* 6		4.0
Max Green Setting (Gmax), s		* 23				* 23		16.0
Max Q Clear Time (g_c+I1), s		7.1				9.0		3.1
Green Ext Time (p_c), s		14.9				13.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	2.7
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	20	70	160	50	120	90	1390	230	70	960	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1824	1937	1824	1863	1863	1863	1863	1863	1824	1863	1863	1824
Adj Flow Rate, veh/h	32	21	74	168	53	126	95	1463	242	74	1011	32
Adj No. of Lanes	0	1	0	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	62	153	266	338	287	127	2162	357	314	3128	99
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.07	0.49	0.49	0.18	0.62	0.62
Sat Flow, veh/h	261	343	844	1294	1863	1581	1774	4398	726	1774	5064	160
Grp Volume(v), veh/h	127	0	0	168	53	126	95	1127	578	74	677	366
Grp Sat Flow(s),veh/h/ln	1448	0	0	1294	1863	1581	1774	1695	1735	1774	1695	1834
Q Serve(g_s), s	3.3	0.0	0.0	8.7	2.9	8.5	6.3	30.4	30.5	4.3	11.4	11.5
Cycle Q Clear(g_c), s	9.0	0.0	0.0	17.7	2.9	8.5	6.3	30.4	30.5	4.3	11.4	11.5
Prop In Lane	0.25		0.58	1.00		1.00	1.00		0.42	1.00		0.09
Lane Grp Cap(c), veh/h	300	0	0	266	338	287	127	1667	853	314	2094	1133
V/C Ratio(X)	0.42	0.00	0.00	0.63	0.16	0.44	0.75	0.68	0.68	0.24	0.32	0.32
Avail Cap(c_a), veh/h	385	0	0	344	450	382	251	1667	853	314	2094	1133
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	43.8	0.0	0.0	48.2	41.4	43.7	54.6	23.2	23.2	42.4	11.0	11.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	4.2	0.4	1.8	3.2	2.2	4.3	0.1	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.9	0.0	0.0	5.7	1.5	3.9	3.2	14.6	15.5	2.1	5.5	6.0
LnGrp Delay(d),s/veh	44.7	0.0	0.0	52.4	41.8	45.5	57.8	25.4	27.6	42.5	11.4	11.7
LnGrp LOS	D			D	D	D	E	C	C	D	B	B
Approach Vol, veh/h		127			347			1800			1117	
Approach Delay, s/veh		44.7			48.3			27.8			13.5	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.8	12.1	80.1		27.8	27.2	65.0
Change Period (Y+Rc), s		* 6	3.5	* 6		* 6	* 6	* 6
Max Green Setting (Gmax), s		* 29	17.0	* 59		* 29	* 14	* 59
Max Q Clear Time (g_c+I1), s		11.0	8.3	13.5		19.7	6.3	32.5
Green Ext Time (p_c), s		2.8	0.0	13.7		2.0	0.6	19.2

Intersection Summary	
HCM 2010 Ctrl Delay	25.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	10	560	270	250	680	40	440	20	420	40	30	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1900	1863	1900	1863	1900
Adj Flow Rate, veh/h	11	589	233	263	716	40	463	21	60	42	32	10
Adj No. of Lanes	1	2	0	1	2	0	2	0	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	12	804	317	308	1673	93	580	0	267	56	43	13
Arrive On Green	0.01	0.32	0.32	0.17	0.49	0.49	0.17	0.17	0.17	0.06	0.06	0.06
Sat Flow, veh/h	1774	2480	979	1774	3408	190	3442	0	1583	890	678	212
Grp Volume(v), veh/h	11	420	402	263	372	384	463	0	60	84	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1690	1774	1770	1829	1721	0	1583	1781	0	0
Q Serve(g_s), s	0.5	15.4	15.5	10.6	9.9	9.9	9.5	0.0	2.4	3.4	0.0	0.0
Cycle Q Clear(g_c), s	0.5	15.4	15.5	10.6	9.9	9.9	9.5	0.0	2.4	3.4	0.0	0.0
Prop In Lane	1.00		0.58	1.00		0.10	1.00		1.00	0.50		0.12
Lane Grp Cap(c), veh/h	12	573	548	308	869	898	580	0	267	112	0	0
V/C Ratio(X)	0.92	0.73	0.73	0.85	0.43	0.43	0.80	0.00	0.23	0.75	0.00	0.00
Avail Cap(c_a), veh/h	483	853	815	483	869	898	750	0	345	599	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.4	22.0	22.0	29.4	12.0	12.0	29.3	0.0	26.4	33.8	0.0	0.0
Incr Delay (d2), s/veh	55.3	0.7	0.7	5.1	0.1	0.1	4.7	0.0	0.4	3.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.4	7.6	7.3	5.6	4.9	5.0	4.9	0.0	1.1	1.8	0.0	0.0
LnGrp Delay(d),s/veh	91.8	22.7	22.7	34.6	12.2	12.2	34.0	0.0	26.8	37.6	0.0	0.0
LnGrp LOS	F	C	C	C	B	B	C		C	D		
Approach Vol, veh/h		833			1019			523			84	
Approach Delay, s/veh		23.6			17.9			33.2			37.6	
Approach LOS		C			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.4	17.7	29.4		9.9	5.5	41.6
Change Period (Y+Rc), s		4.0	5.0	* 5.6		5.3	5.0	* 5.6
Max Green Setting (Gmax), s		16.0	20.0	* 35		24.7	20.0	* 36
Max Q Clear Time (g_c+I1), s		11.5	12.6	17.5		5.4	2.5	11.9
Green Ext Time (p_c), s		0.9	0.2	6.3		0.2	0.0	7.5

Intersection Summary	
HCM 2010 Ctrl Delay	23.8
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

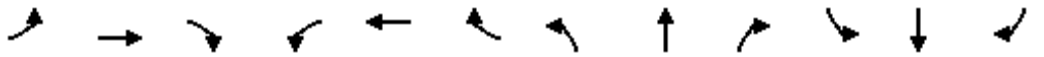
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	170	60	240	20	80	50	350	500	20	40	370	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	63	47	21	84	29	368	526	19	42	389	88
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	368	442	376	401	314	109	430	1534	55	51	650	146
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.44	0.44	0.03	0.23	0.23
Sat Flow, veh/h	1275	1863	1583	1278	1325	457	1774	3484	126	1774	2875	644
Grp Volume(v), veh/h	179	63	47	21	0	113	368	267	278	42	238	239
Grp Sat Flow(s),veh/h/ln	1275	1863	1583	1278	0	1782	1774	1770	1841	1774	1770	1749
Q Serve(g_s), s	7.3	1.5	1.3	0.7	0.0	2.8	10.9	5.4	5.5	1.3	6.6	6.7
Cycle Q Clear(g_c), s	10.1	1.5	1.3	2.2	0.0	2.8	10.9	5.4	5.5	1.3	6.6	6.7
Prop In Lane	1.00		1.00	1.00		0.26	1.00		0.07	1.00		0.37
Lane Grp Cap(c), veh/h	368	442	376	401	0	423	430	779	810	51	400	396
V/C Ratio(X)	0.49	0.14	0.13	0.05	0.00	0.27	0.86	0.34	0.34	0.83	0.59	0.60
Avail Cap(c_a), veh/h	775	1037	881	813	0	999	971	1305	1357	648	982	971
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	16.5	16.4	17.4	0.0	17.0	19.8	10.1	10.1	26.5	18.9	19.0
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.0	0.0	0.1	1.9	0.1	0.1	11.9	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	2.6	0.8	0.6	0.3	0.0	1.4	5.5	2.6	2.7	0.8	3.2	3.2
LnGrp Delay(d),s/veh	21.5	16.5	16.5	17.4	0.0	17.1	21.8	10.2	10.2	38.3	19.5	19.6
LnGrp LOS	C	B	B	B		B	C	B	B	D	B	B
Approach Vol, veh/h		289			134			913			519	
Approach Delay, s/veh		19.6			17.2			14.9			21.0	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	29.7		18.5	18.3	18.0		18.5
Change Period (Y+Rc), s	5.0	* 5.6		5.5	5.0	* 5.6		* 5.5
Max Green Setting (Gmax), s	20.0	* 40		30.5	30.0	* 30		* 31
Max Q Clear Time (g_c+I1), s	3.3	7.5		12.1	12.9	8.7		4.8
Green Ext Time (p_c), s	0.0	3.9		0.9	0.5	3.7		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	17.5
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	30	30	30	20	20	40	20	690	20	30	600	20
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	32	32	32	21	21	42	21	726	21	32	632	21
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	67	59	163	53	89	462	1023	30	401	1018	34
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	483	629	556	337	501	837	776	1801	52	711	1793	60
Grp Volume(v), veh/h	96	0	0	84	0	0	21	0	747	32	0	653
Grp Sat Flow(s),veh/h/ln	1667	0	0	1675	0	0	776	0	1854	711	0	1852
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	0.0	0.7	0.0	10.3	1.2	0.0	8.3
Cycle Q Clear(g_c), s	1.8	0.0	0.0	1.6	0.0	0.0	8.9	0.0	10.3	11.5	0.0	8.3
Prop In Lane	0.33		0.33	0.25		0.50	1.00		0.03	1.00		0.03
Lane Grp Cap(c), veh/h	313	0	0	305	0	0	462	0	1053	401	0	1052
V/C Ratio(X)	0.31	0.00	0.00	0.28	0.00	0.00	0.05	0.00	0.71	0.08	0.00	0.62
Avail Cap(c_a), veh/h	1723	0	0	1719	0	0	793	0	1841	703	0	1840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	0.0	14.8	0.0	0.0	8.1	0.0	5.5	9.7	0.0	5.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.9	0.0	0.0	0.8	0.0	0.0	0.1	0.0	5.1	0.2	0.0	4.2
LnGrp Delay(d),s/veh	15.1	0.0	0.0	15.0	0.0	0.0	8.1	0.0	5.8	9.7	0.0	5.3
LnGrp LOS	B			B			A		A	A		A
Approach Vol, veh/h		96			84			768			685	
Approach Delay, s/veh		15.1			15.0			5.9			5.5	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		26.0		9.2		26.0		9.2
Change Period (Y+Rc), s		6.0		5.5		6.0		5.5
Max Green Setting (Gmax), s		35.0		35.5		35.0		35.5
Max Q Clear Time (g_c+I1), s		13.5		3.8		12.3		3.6
Green Ext Time (p_c), s		6.5		0.7		6.6		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	140	330	100	230	300	120	100	740	140	50	520	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	147	347	105	242	316	126	105	779	147	53	547	126
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	767	229	400	1296	507	247	1105	208	167	1063	244
Arrive On Green	0.29	0.29	0.29	0.18	0.52	0.52	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	944	2689	802	1774	2488	973	762	2972	561	602	2860	656
Grp Volume(v), veh/h	147	227	225	242	223	219	105	464	462	53	338	335
Grp Sat Flow(s),veh/h/ln	944	1770	1721	1774	1770	1691	762	1770	1764	602	1770	1747
Q Serve(g_s), s	13.5	9.8	10.0	13.4	6.4	6.6	11.6	20.8	20.8	7.7	13.8	13.9
Cycle Q Clear(g_c), s	20.2	9.8	10.0	13.4	6.4	6.6	25.5	20.8	20.8	28.5	13.8	13.9
Prop In Lane	1.00		0.47	1.00		0.58	1.00		0.32	1.00		0.38
Lane Grp Cap(c), veh/h	279	505	491	0	922	881	247	658	655	167	658	649
V/C Ratio(X)	0.53	0.45	0.46	0.00	0.24	0.25	0.43	0.71	0.71	0.32	0.51	0.52
Avail Cap(c_a), veh/h	364	665	647	0	922	881	250	665	663	169	665	656
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	27.3	27.4	0.0	12.2	12.3	32.7	24.9	24.9	37.0	22.7	22.8
Incr Delay (d2), s/veh	3.3	1.3	1.4	0.0	0.3	0.3	2.5	4.3	4.3	2.3	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	3.8	5.0	5.0	0.0	3.2	3.2	2.6	11.0	10.9	1.4	7.0	7.0
LnGrp Delay(d),s/veh	37.3	28.6	28.8	0.0	12.5	12.6	35.2	29.2	29.2	39.4	24.1	24.2
LnGrp LOS	D	C	C		B	B	D	C	C	D	C	C
Approach Vol, veh/h		599			684			1031			726	
Approach Delay, s/veh		30.8			8.1			29.8			25.2	
Approach LOS		C			A			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		39.6	22.0	31.6		39.6		53.5
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0		5.0
Max Green Setting (Gmax), s		35.0	35.0	35.0		35.0		35.0
Max Q Clear Time (g_c+I1), s		27.5	15.4	22.2		30.5		8.6
Green Ext Time (p_c), s		6.7	1.5	4.4		4.2		12.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	950	220	360	1100	0	380	0	520	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.98		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1000	215	379	1158	0	400	0	311	0	0	0
Adj No. of Lanes	1	2	0	1	3	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	323	1587	340	514	3513	0	406	0	400	0	483	0
Arrive On Green	0.00	1.00	1.00	0.12	0.69	0.00	0.26	0.00	0.26	0.00	0.00	0.00
Sat Flow, veh/h	1774	2891	620	1774	5253	0	1379	0	1547	0	1863	0
Grp Volume(v), veh/h	0	611	604	379	1158	0	400	0	311	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1742	1774	1695	0	1379	0	1547	0	1863	0
Q Serve(g_s), s	0.0	0.0	0.0	10.6	10.9	0.0	31.0	0.0	22.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	10.6	10.9	0.0	31.0	0.0	22.4	0.0	0.0	0.0
Prop In Lane	1.00		0.36	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	323	972	956	514	3513	0	416	0	400	0	483	0
V/C Ratio(X)	0.00	0.63	0.63	0.74	0.33	0.00	0.96	0.00	0.78	0.00	0.00	0.00
Avail Cap(c_a), veh/h	484	972	956	632	3513	0	416	0	400	0	483	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.86	0.86	1.00	1.00	0.00	0.84	0.00	0.84	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	8.2	7.4	0.0	46.5	0.0	41.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.7	2.7	2.5	0.3	0.0	30.4	0.0	7.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	0.0	0.7	0.7	5.5	5.1	0.0	16.6	0.0	10.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	2.7	2.7	10.7	7.7	0.0	76.9	0.0	48.6	0.0	0.0	0.0
LnGrp LOS		A	A	B	A		E		D			
Approach Vol, veh/h		1215			1537			711			0	
Approach Delay, s/veh		2.7			8.4			64.6			0.0	
Approach LOS		A			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	0.0	85.9		34.1	17.0	68.9		34.1
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		* 5
Max Green Setting (Gmax), s	10.0	67.0		29.0	21.0	56.0		* 29
Max Q Clear Time (g_c+I1), s	0.0	12.9		0.0	12.6	2.0		33.0
Green Ext Time (p_c), s	0.0	16.5		0.0	0.4	16.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	17.9
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	110	960	40	60	1280	160	40	10	40	180	10	70
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1900	1863
Adj Flow Rate, veh/h	116	1011	42	63	1347	168	42	11	42	189	11	74
Adj No. of Lanes	1	2	0	1	3	0	0	1	0	1	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	2452	102	426	3188	398	148	48	121	302	0	289
Arrive On Green	0.04	0.71	0.70	0.06	1.00	1.00	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1774	3460	144	1774	4570	570	571	259	658	1335	0	1568
Grp Volume(v), veh/h	116	517	536	63	999	516	95	0	0	189	0	74
Grp Sat Flow(s),veh/h/ln	1774	1770	1834	1774	1695	1750	1489	0	0	1335	0	1568
Q Serve(g_s), s	2.2	14.4	14.5	1.2	0.0	0.0	3.8	0.0	0.0	10.1	0.0	4.8
Cycle Q Clear(g_c), s	2.2	14.4	14.5	1.2	0.0	0.0	6.4	0.0	0.0	16.5	0.0	4.8
Prop In Lane	1.00		0.08	1.00		0.33	0.44		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	373	1254	1300	426	2365	1221	317	0	0	302	0	289
V/C Ratio(X)	0.31	0.41	0.41	0.15	0.42	0.42	0.30	0.00	0.00	0.63	0.00	0.26
Avail Cap(c_a), veh/h	488	1254	1300	561	2365	1221	426	0	0	401	0	405
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.95	0.95	0.95	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.5	7.2	7.2	5.5	0.0	0.0	42.6	0.0	0.0	46.8	0.0	41.9
Incr Delay (d2), s/veh	0.2	1.0	1.0	0.1	0.5	1.0	0.2	0.0	0.0	0.8	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(0%),veh/ln	1.0	7.4	7.7	0.6	0.2	0.3	2.8	0.0	0.0	6.1	0.0	2.1
LnGrp Delay(d),s/veh	4.7	8.2	8.2	5.5	0.5	1.0	42.8	0.0	0.0	47.6	0.0	42.1
LnGrp LOS	A	A	A	A	A	A	D			D		D
Approach Vol, veh/h		1169			1578			95			263	
Approach Delay, s/veh		7.8			0.9			42.8			46.0	
Approach LOS		A			A			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	86.7		25.1	6.9	88.0		25.1
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	12.0	65.0		29.0	12.0	65.0		29.0
Max Q Clear Time (g_c+I1), s	4.2	2.0		8.4	3.2	16.5		18.5
Green Ext Time (p_c), s	0.1	18.5		0.8	0.0	17.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	8.6
HCM 2010 LOS	A

Existing Year (2015)

City of Westminster General Plan

Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

Intersection		EX-AM LOS	EX-AM Avg Del (sec)	EX-AM Crit V/C	EX-AM Avg Crit Del (sec)	EX-PM LOS	EX-PM Avg Del (sec)	EX-PM Crit V/C	EX-PM Avg Crit Del (sec)
#74	Beach Blvd & Bolsa Ave	D	24.2	0.884	27.0	C	22.3	0.768	22.8
#76	Beach Blvd & Edinger Ave	C	18.9	0.710	22.7	C	22.0	0.782	23.9
#86	Beach Blvd & SR-22 WB Off-Ramp	C	13.7	0.724	14.6	C	15.2	0.708	15.8
#87	Beach Blvd & SR-22 EB Off-Ramp	A	5.9	0.584	6.2	A	6.0	0.533	6.4
#88	Bolsa Chica Rd & Garden Grove Blvd	C	13.9	0.738	10.0	C	15.5	0.799	12.3
#95	Bolsa Ave & Newland St	D	27.5	0.856	30.6	E	40.6	0.982	45.5
#96	Brookhurst St & Edinger Ave	D	25.6	0.872	27.3	B	22.4	0.680	23.2
#97	Brookhurst St & Hazard Ave	C	22.0	0.711	21.6	C	23.7	0.718	24.2
#98	Bushard St & Edinger Ave	C	24.1	0.746	23.8	B	21.8	0.691	22.6
#99	Edinger Ave & Newland St	E	38.5	0.938	43.7	F	79.4	1.094	86.4
#100	Goldenwest St & McFadden Ave	C	24.6	0.725	27.6	C	25.8	0.751	26.0
#101	Hazard Ave & Newland St [Newland St]	B	20.7	0.621	25.3	C	23.6	0.781	27.0
#102	Magnolia St & Foxglove Ave	A	5.5	0.545	5.3	A	1.5	0.368	2.2
#103	Magnolia St & Heil Ave	C	17.1	0.737	18.8	A	13.7	0.549	14.0
#104	McFadden Ave & Gothard St/Vermont St	B	17.0	0.619	22.5	B	20.1	0.659	24.6
#105	Newland St & Heil Ave	A	20.9	0.527	22.5	A	20.2	0.541	24.6
#106	Newland St & Madison Ave	B	14.4	0.631	21.9	A	7.5	0.521	11.4
#107	Newland St & Trask Ave	A	20.3	0.527	18.5	A	21.7	0.563	21.1
#108	Westminster Blvd & Bushard St	B	16.1	0.671	22.1	C	18.4	0.747	25.1
#109	Westminster Blvd & Deodora Dr/Swan St	A	13.1	0.462	16.9	A	13.6	0.518	16.4

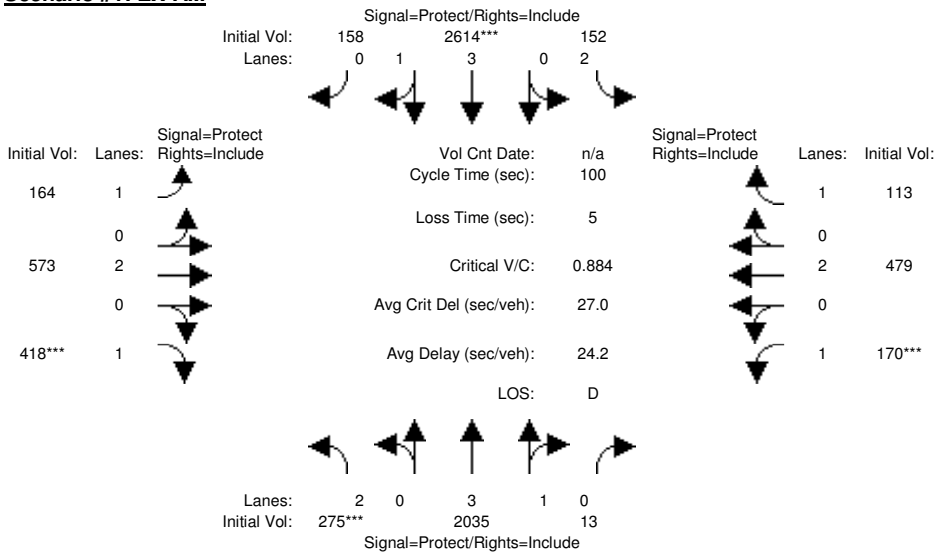
Existing Year (2015)

City of Westminster General Plan

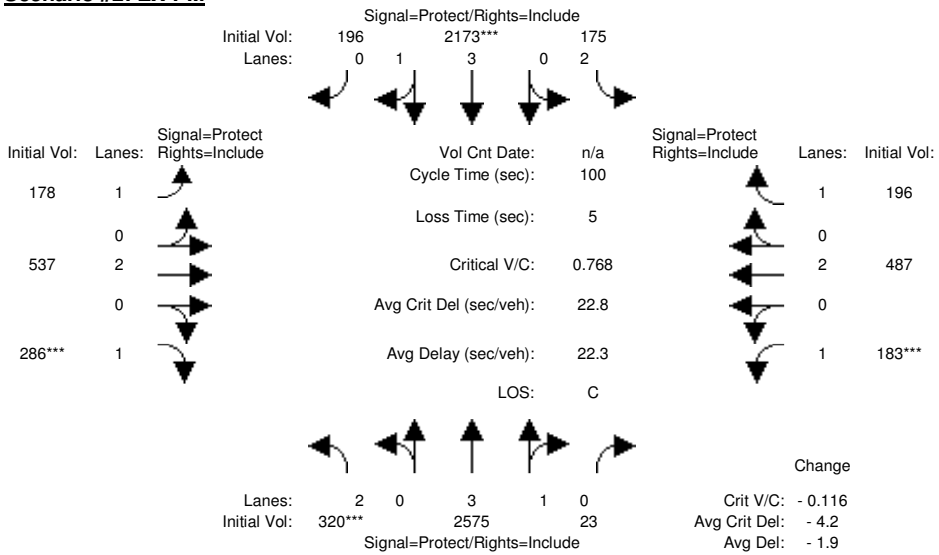
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #74: Beach Blvd & Bolsa Ave

Scenario #1: EX-AM



Scenario #2: EX-PM



	Change
Crit V/C:	- 0.116
Avg Crit Del:	- 4.2
Avg Del:	- 1.9

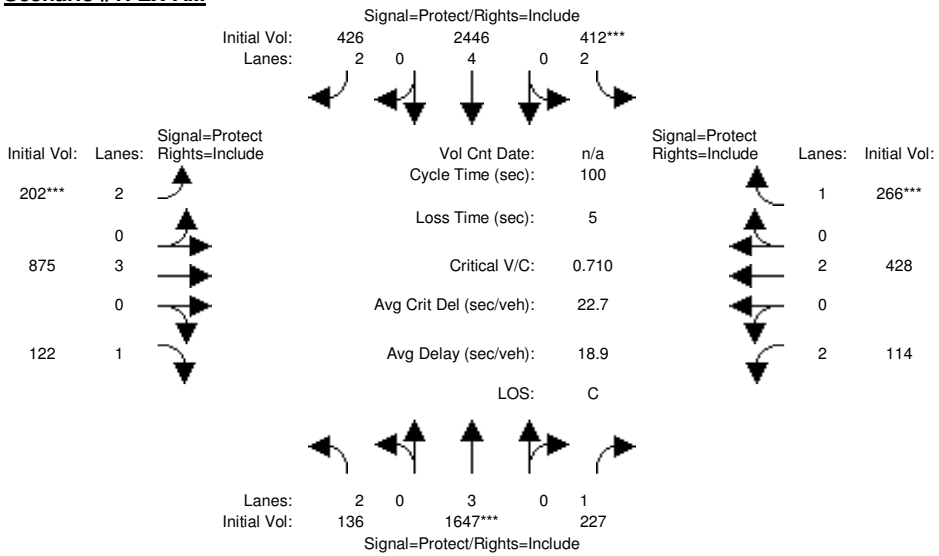
Existing Year (2015)

City of Westminster General Plan

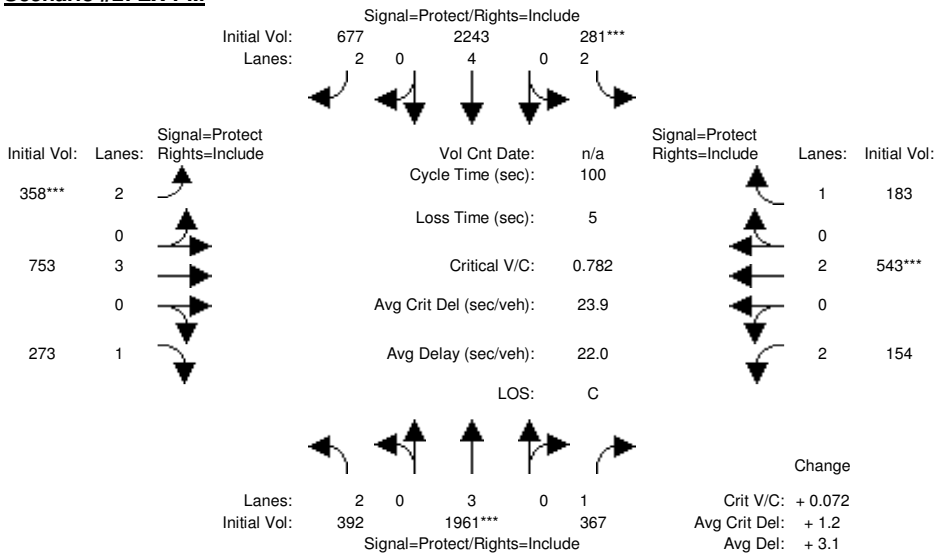
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #76: Beach Blvd & Edinger Ave

Scenario #1: EX-AM



Scenario #2: EX-PM



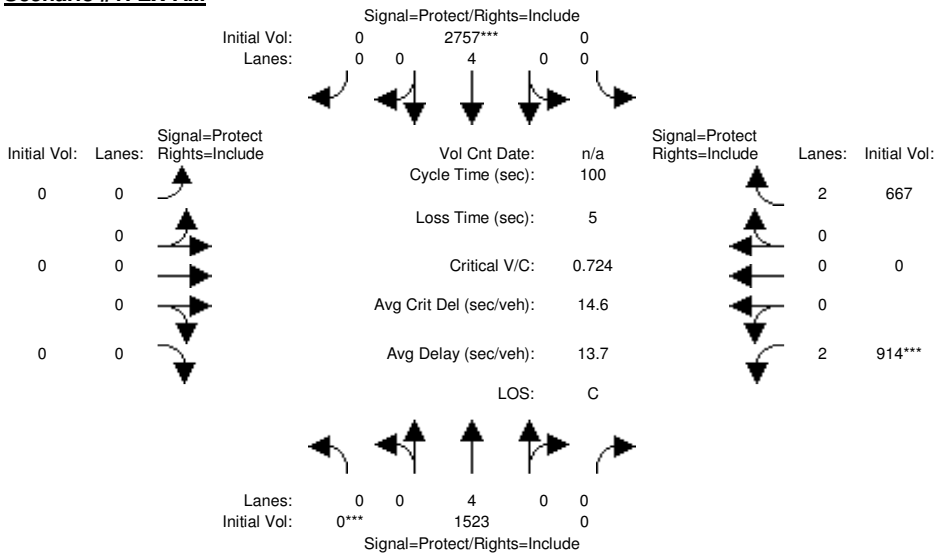
Existing Year (2015)

City of Westminster General Plan

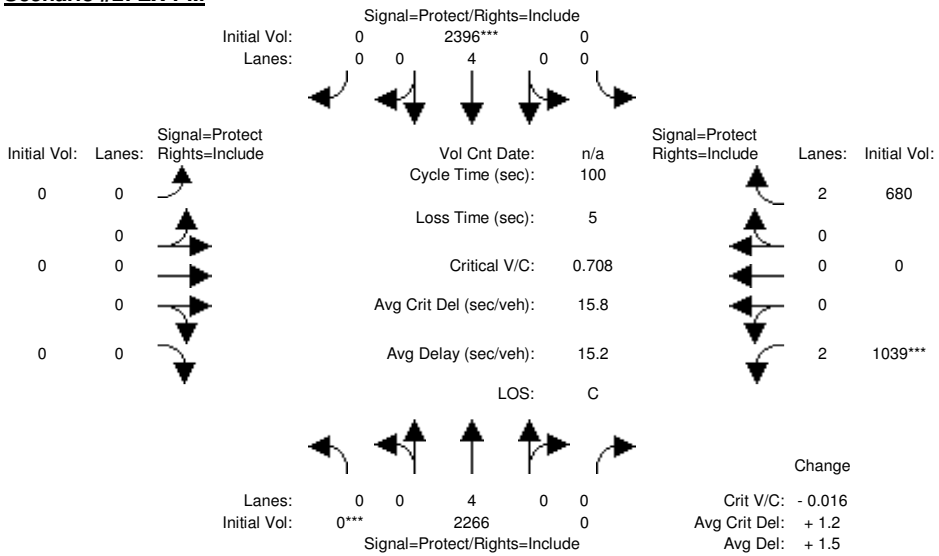
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #86: Beach Blvd & SR-22 WB Off-Ramp

Scenario #1: EX-AM



Scenario #2: EX-PM



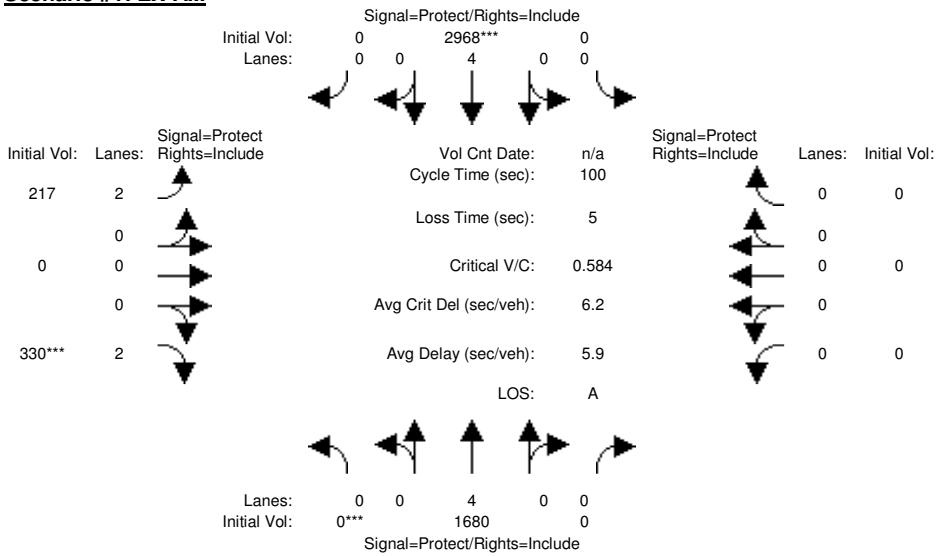
Existing Year (2015)

City of Westminster General Plan

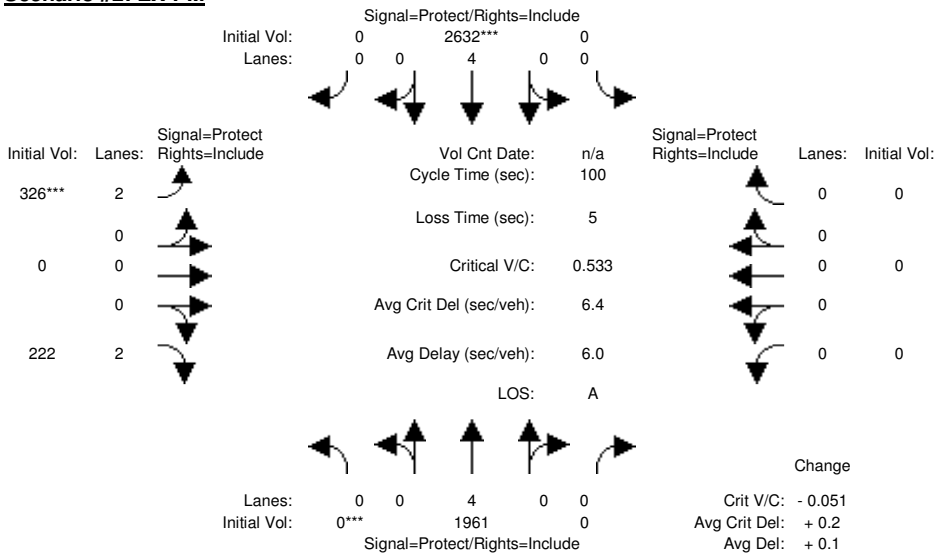
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #87: Beach Blvd & SR-22 EB Off-Ramp

Scenario #1: EX-AM



Scenario #2: EX-PM



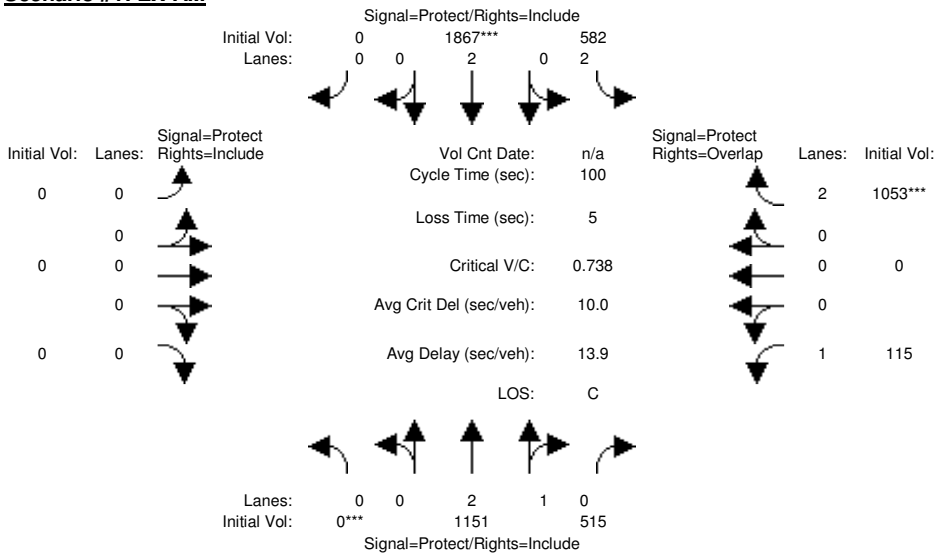
Existing Year (2015)

City of Westminster General Plan

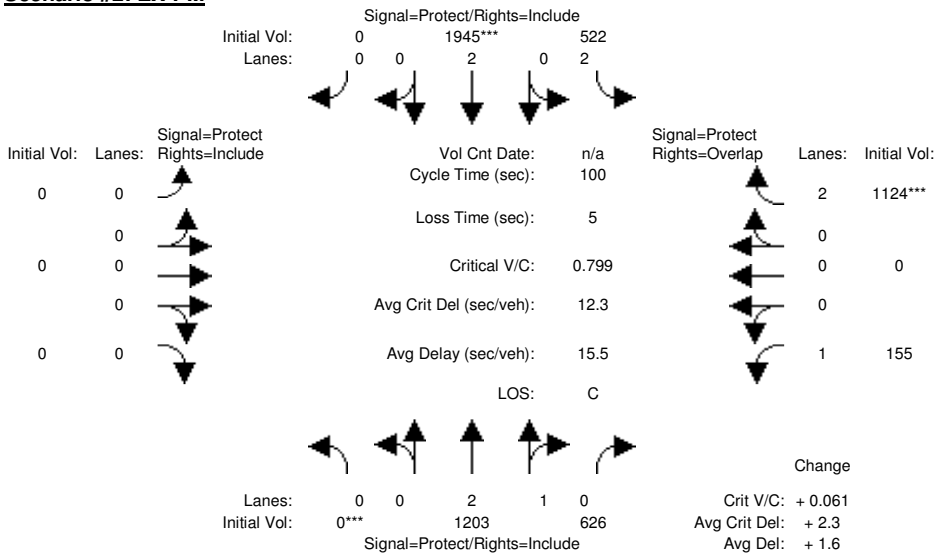
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #88: Bolsa Chica Rd & Garden Grove Blvd

Scenario #1: EX-AM



Scenario #2: EX-PM



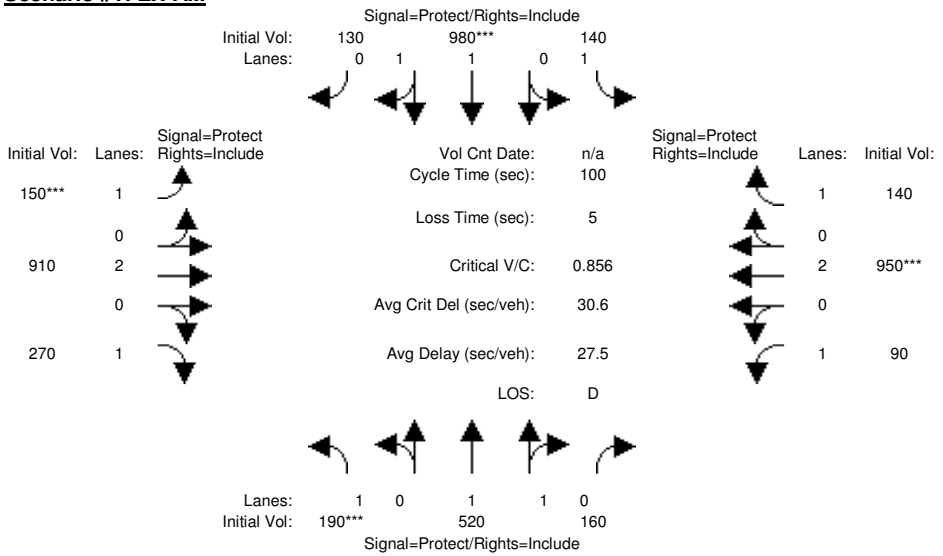
Existing Year (2015)

City of Westminster General Plan

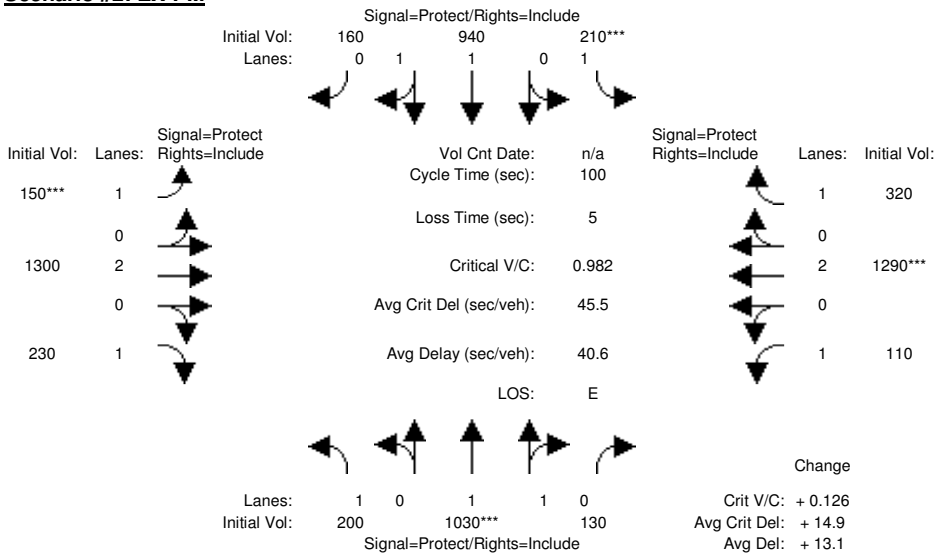
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #95: Bolsa Ave & Newland St

Scenario #1: EX-AM



Scenario #2: EX-PM



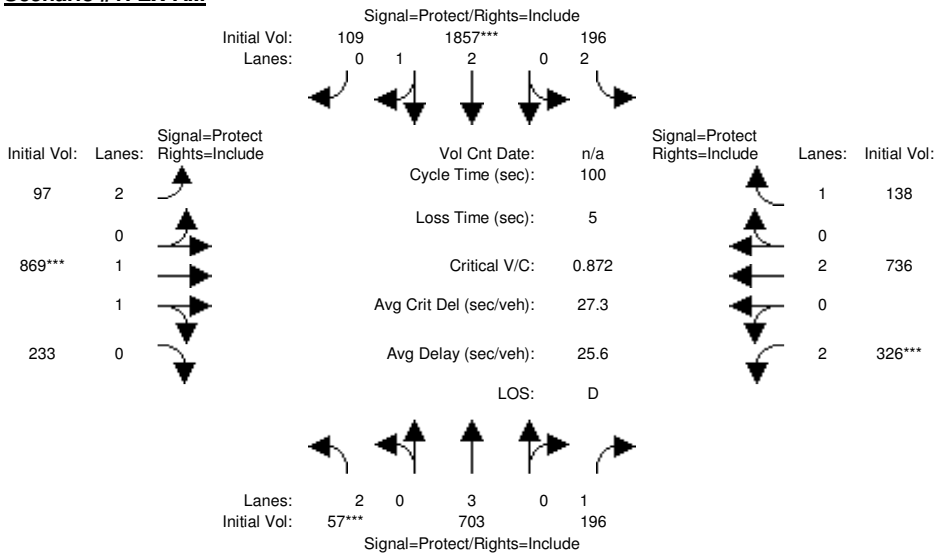
Existing Year (2015)

City of Westminster General Plan

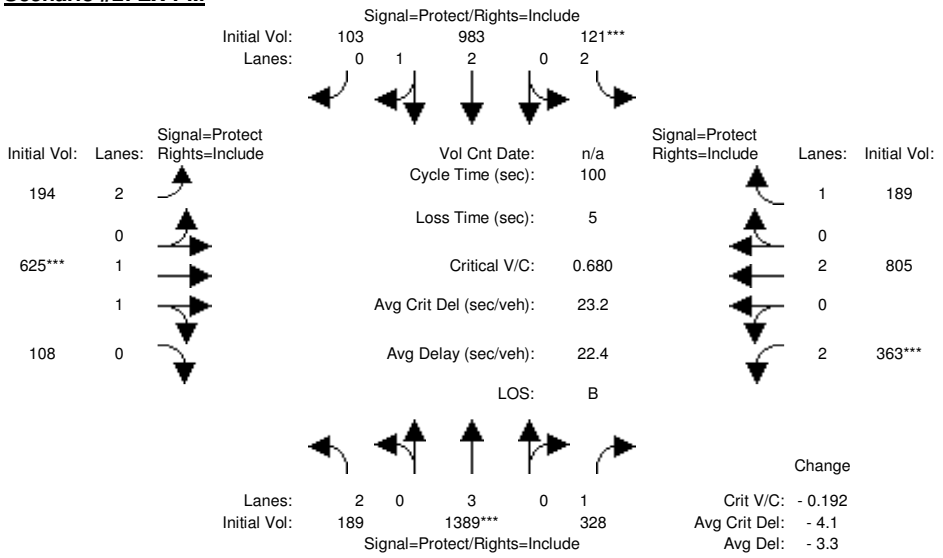
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #96: Brookhurst St & Edinger Ave

Scenario #1: EX-AM



Scenario #2: EX-PM



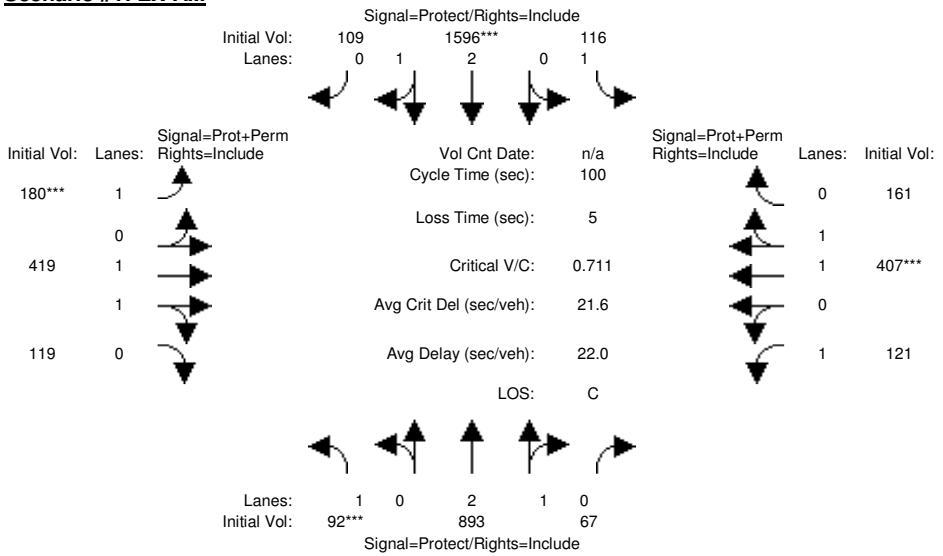
Existing Year (2015)

City of Westminster General Plan

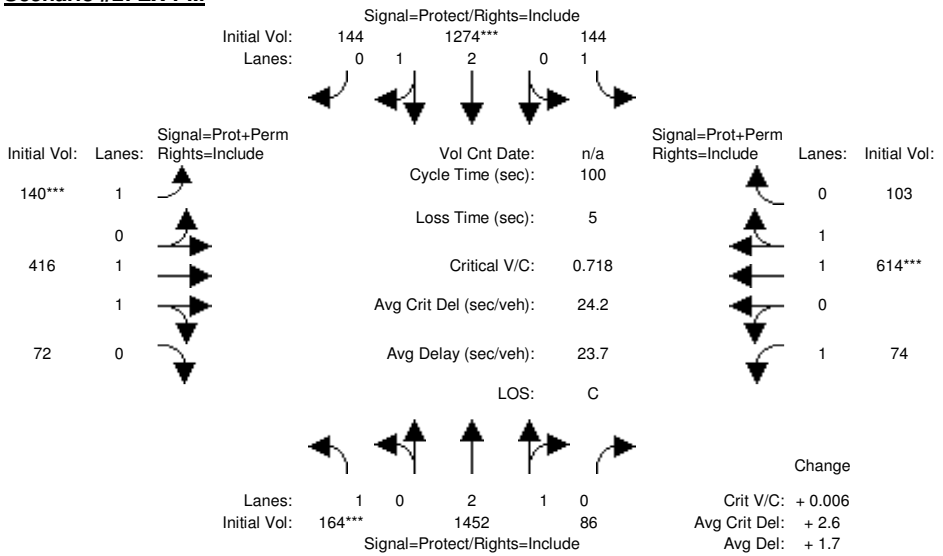
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #97: Brookhurst St & Hazard Ave

Scenario #1: EX-AM



Scenario #2: EX-PM



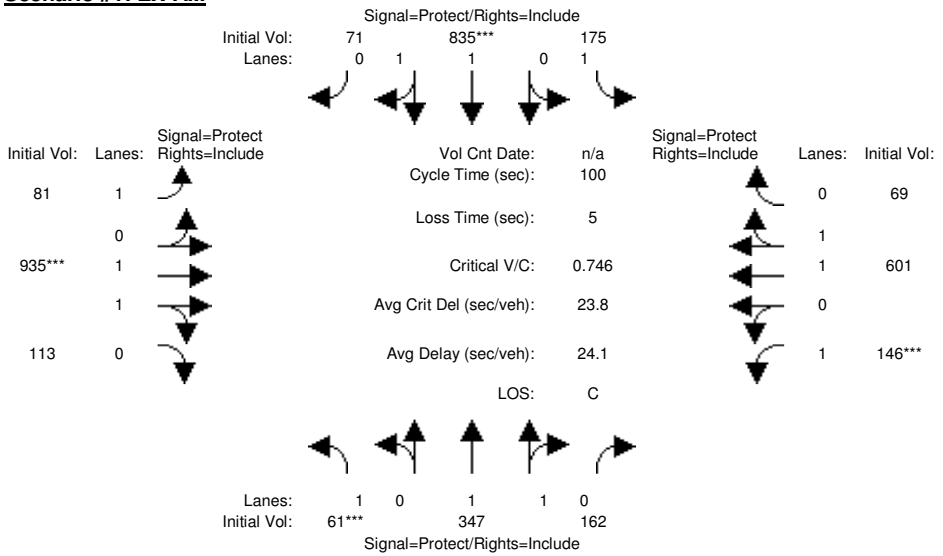
Existing Year (2015)

City of Westminster General Plan

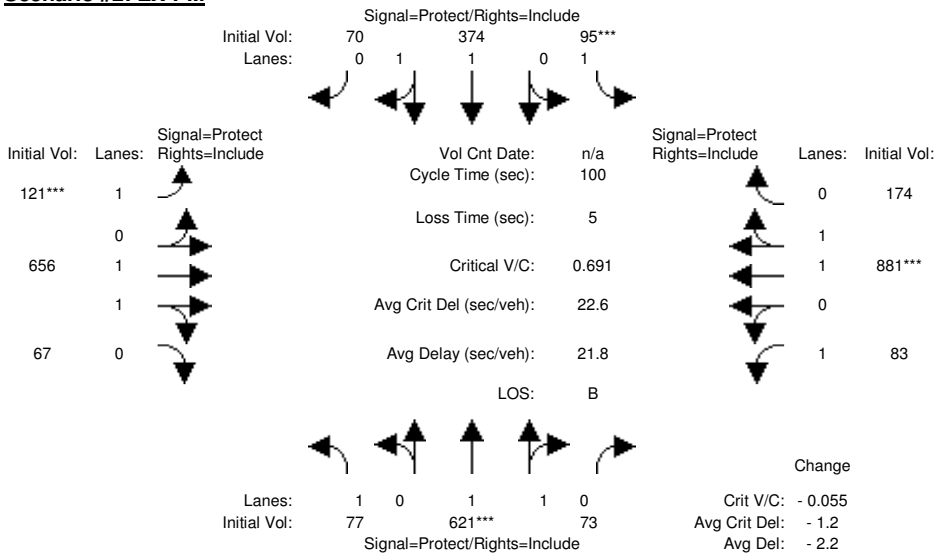
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #98: Bushard St & Edinger Ave

Scenario #1: EX-AM



Scenario #2: EX-PM



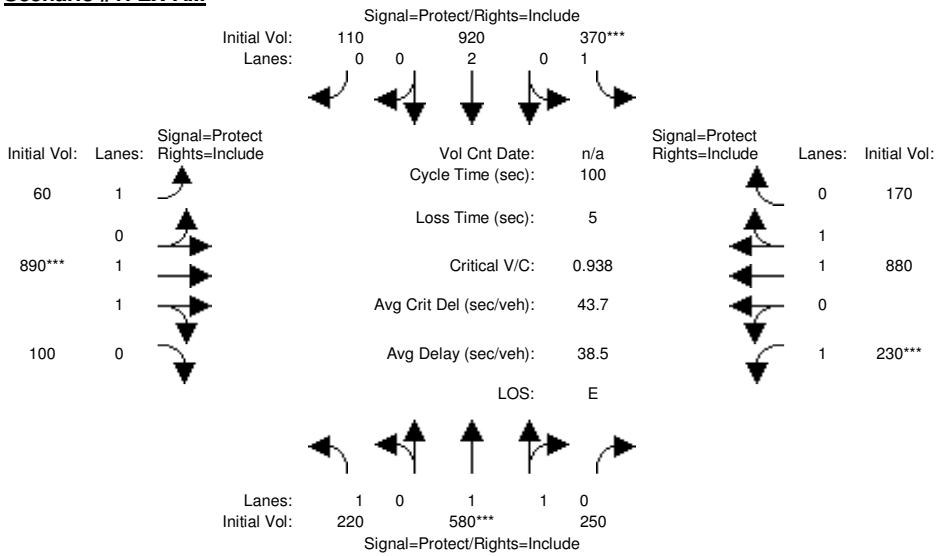
Existing Year (2015)

City of Westminster General Plan

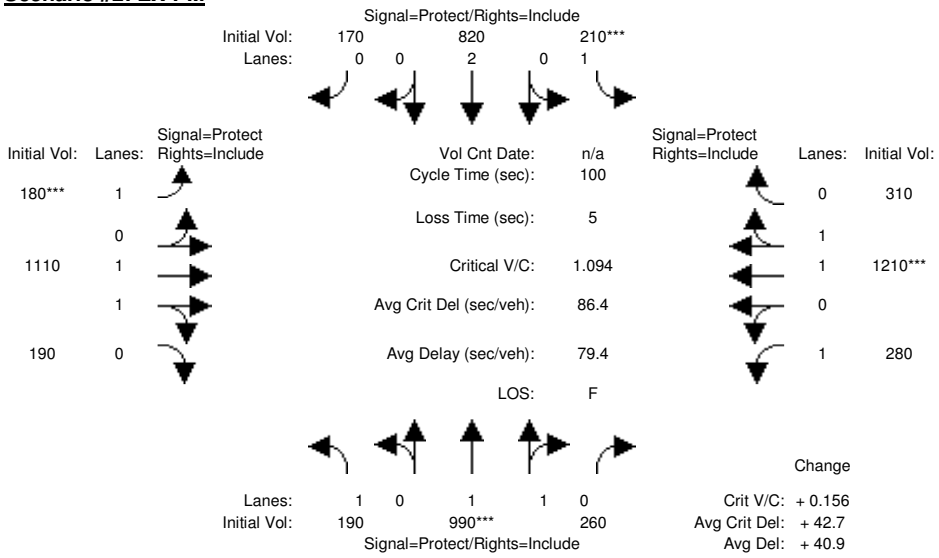
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #99: Edinger Ave & Newland St

Scenario #1: EX-AM



Scenario #2: EX-PM



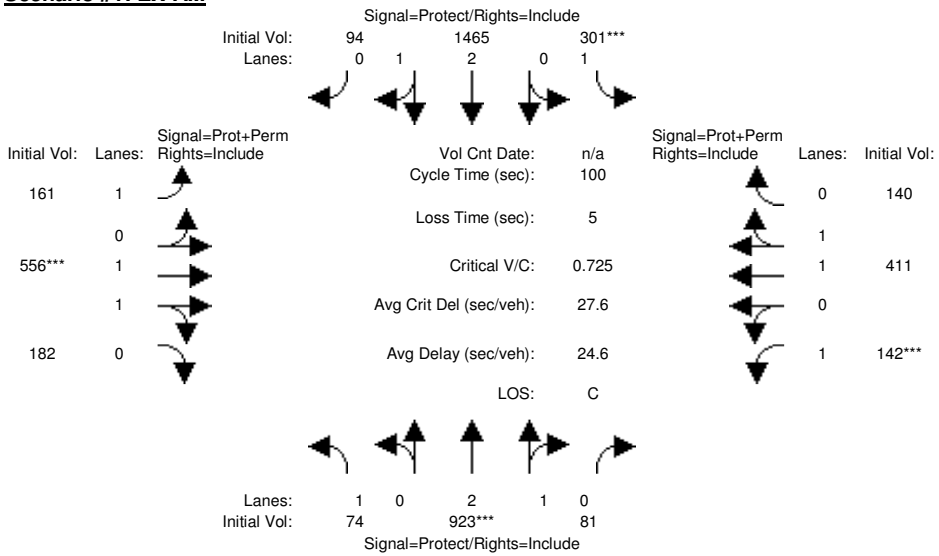
Existing Year (2015)

City of Westminster General Plan

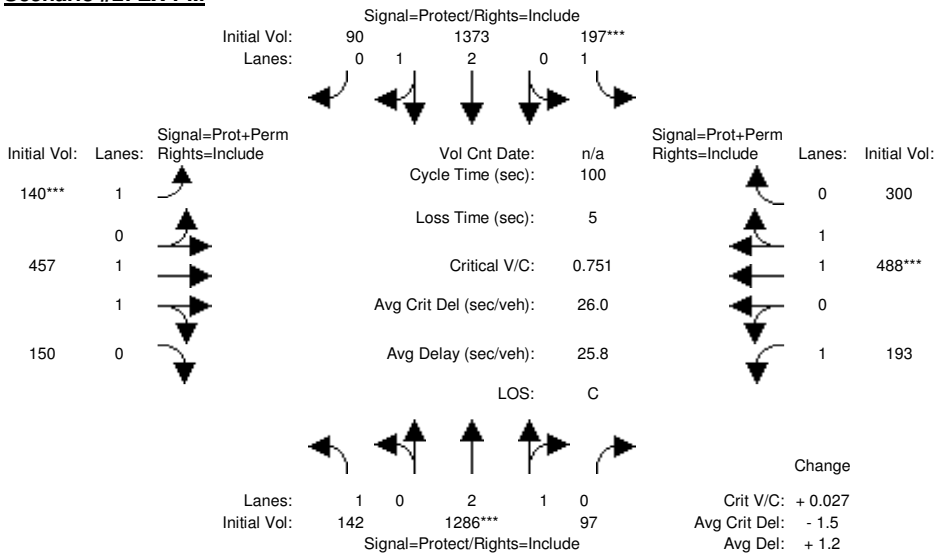
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #100: Goldenwest St & McFadden Ave

Scenario #1: EX-AM



Scenario #2: EX-PM



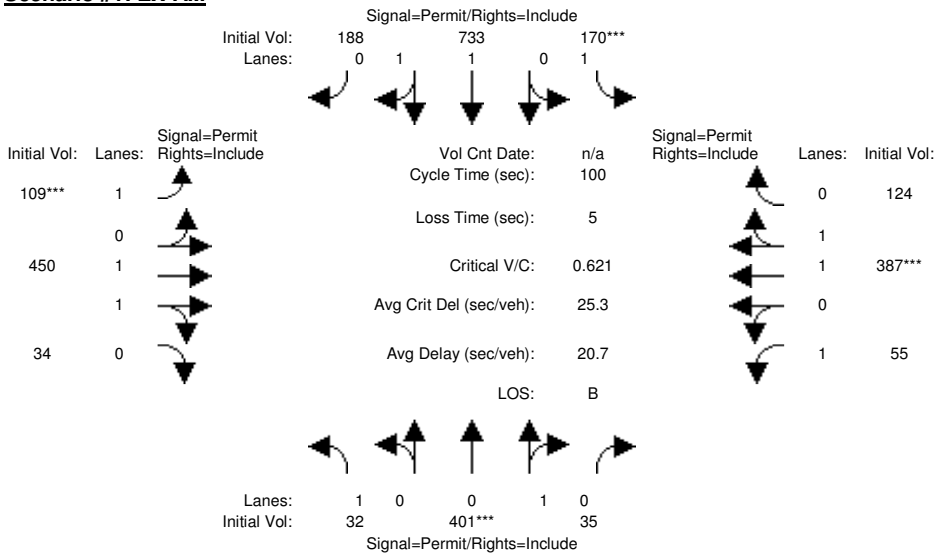
Existing Year (2015)

City of Westminster General Plan

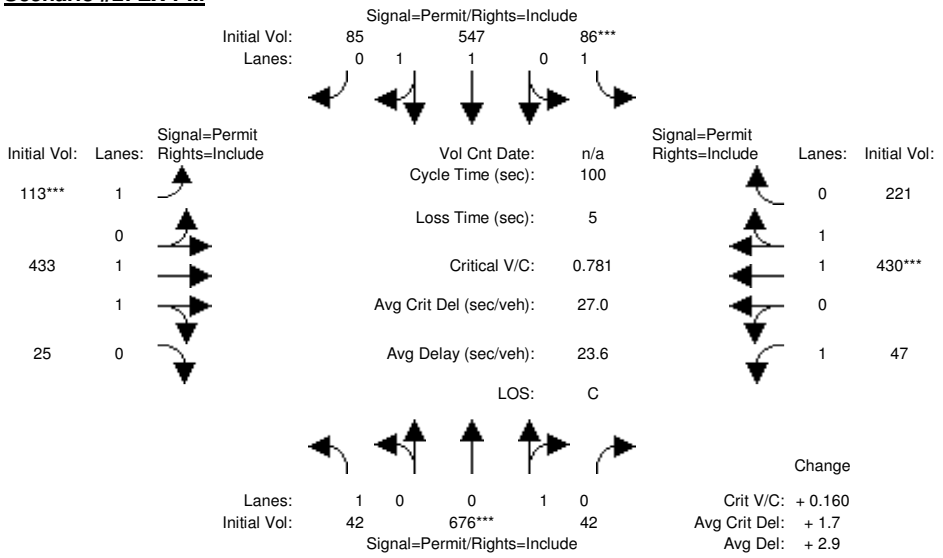
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #101: Hazard Ave & Newland St [Newland St]

Scenario #1: EX-AM



Scenario #2: EX-PM



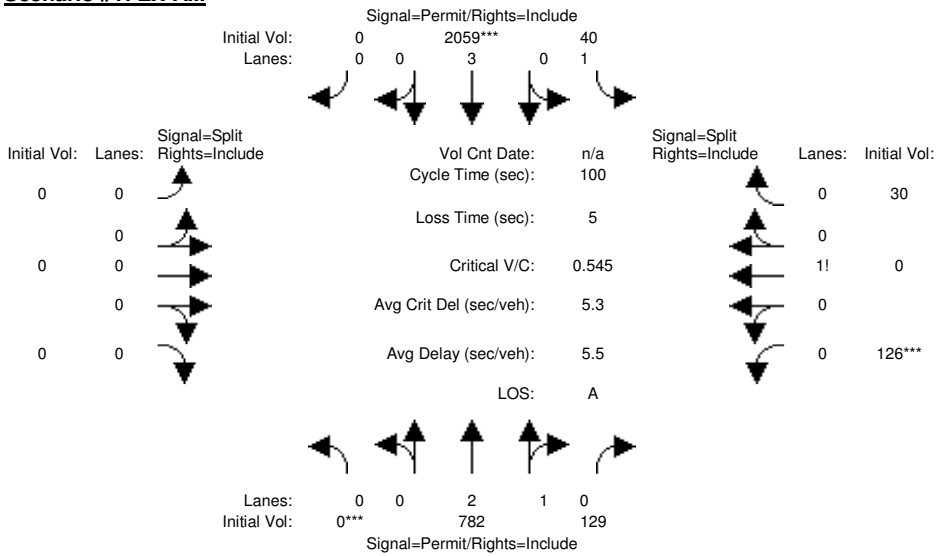
Existing Year (2015)

City of Westminster General Plan

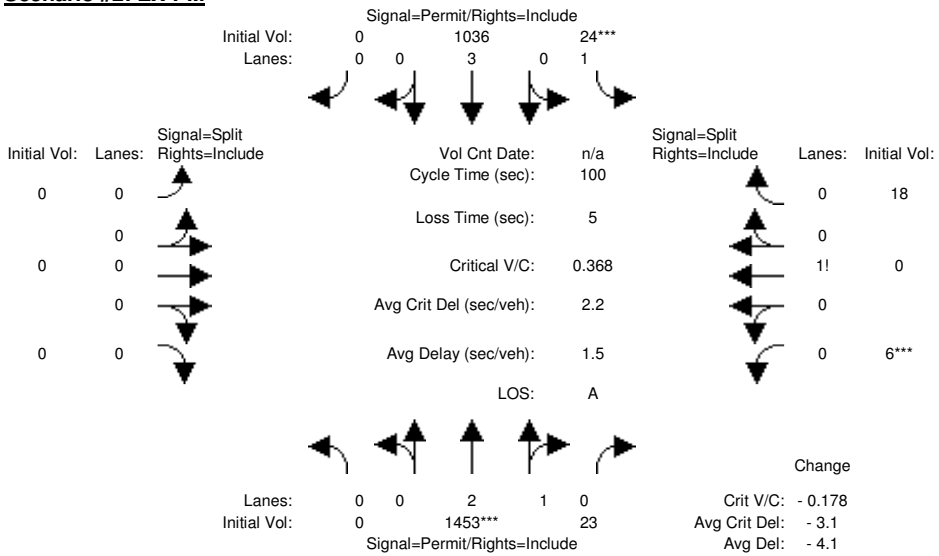
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #102: Magnolia St & Foxglove Ave

Scenario #1: EX-AM



Scenario #2: EX-PM



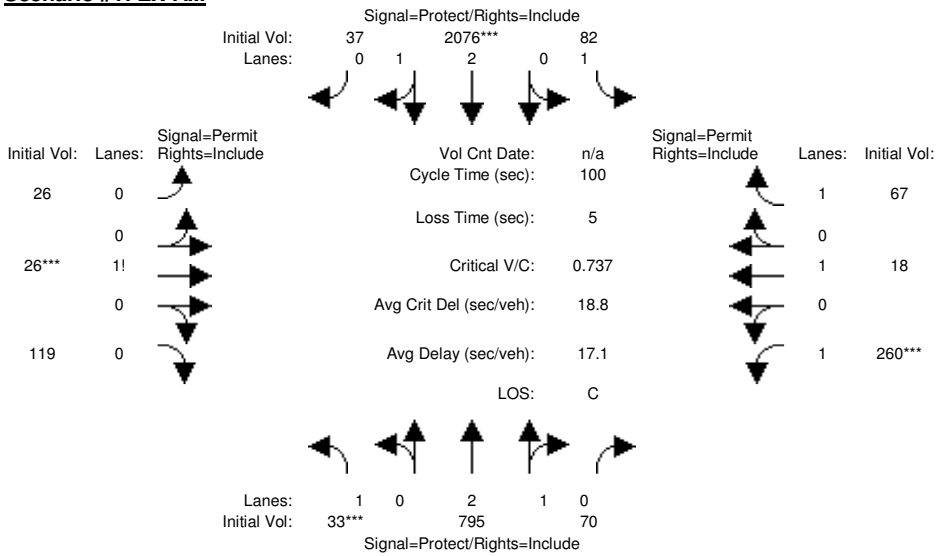
Existing Year (2015)

City of Westminster General Plan

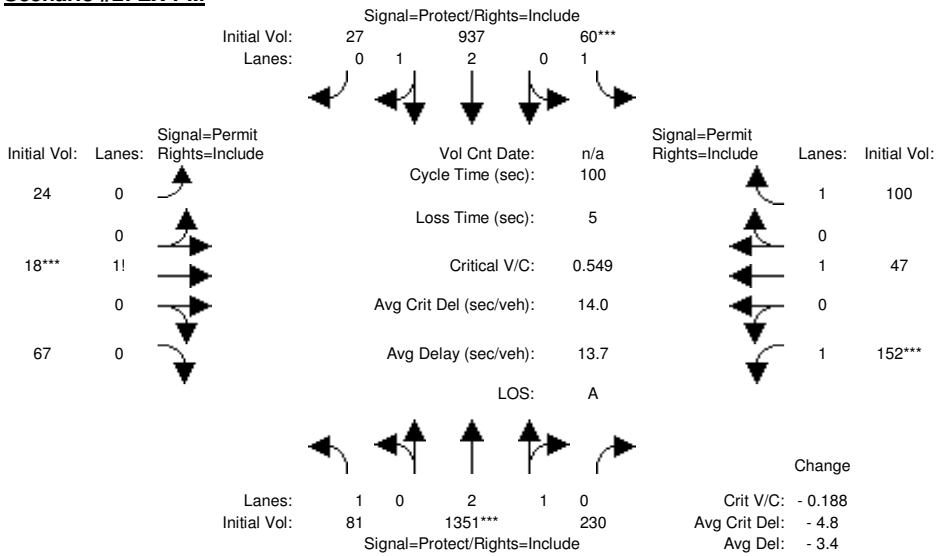
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #103: Magnolia St & Heil Ave

Scenario #1: EX-AM



Scenario #2: EX-PM



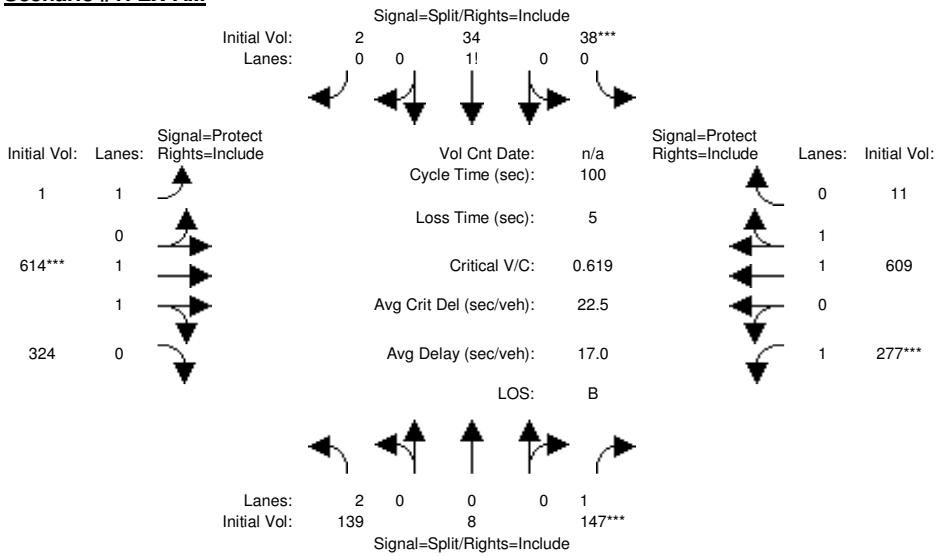
Existing Year (2015)

City of Westminster General Plan

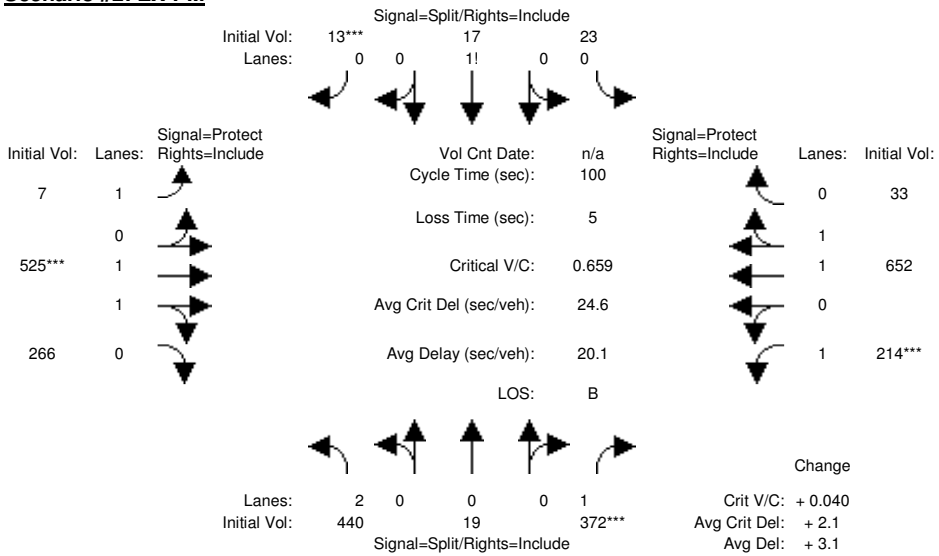
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #104: McFadden Ave & Gothard St/Vermont St

Scenario #1: EX-AM



Scenario #2: EX-PM



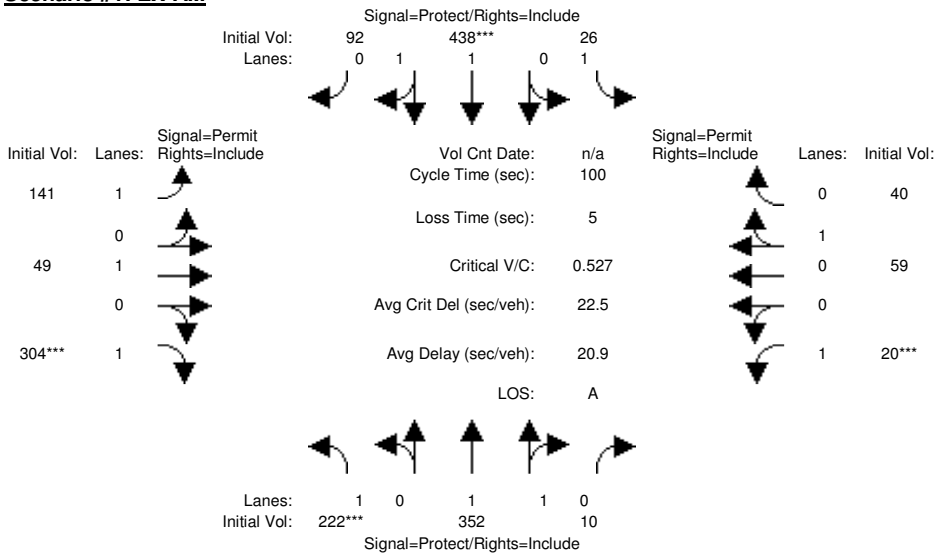
Existing Year (2015)

City of Westminster General Plan

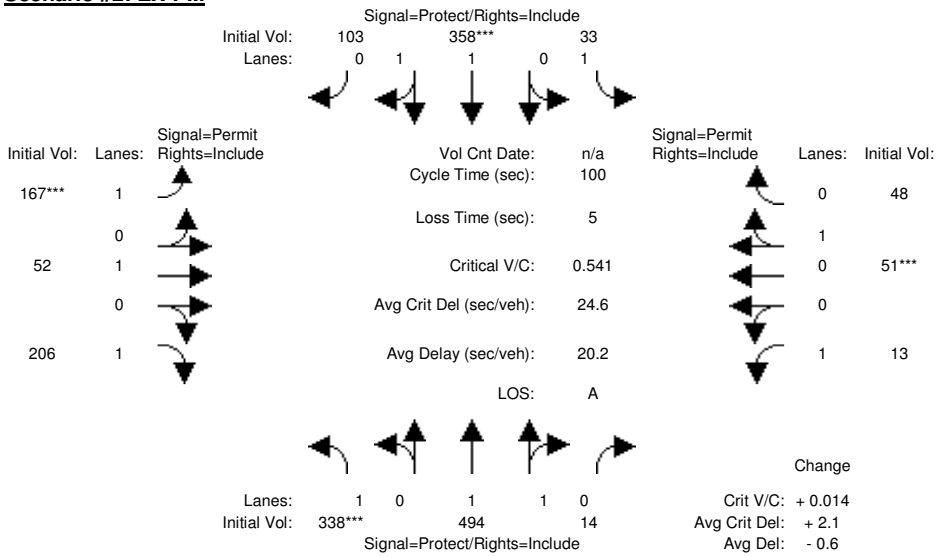
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #105: Newland St & Heil Ave

Scenario #1: EX-AM



Scenario #2: EX-PM



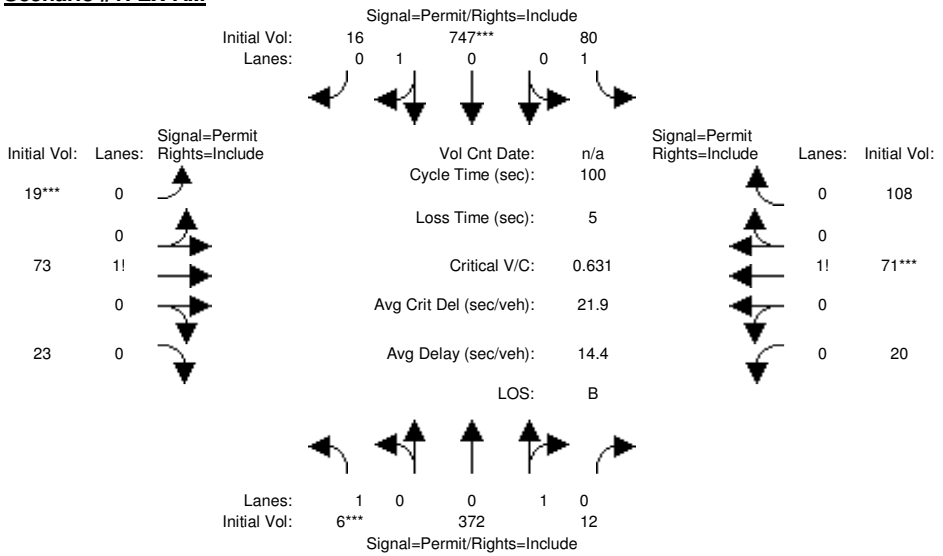
Existing Year (2015)

City of Westminster General Plan

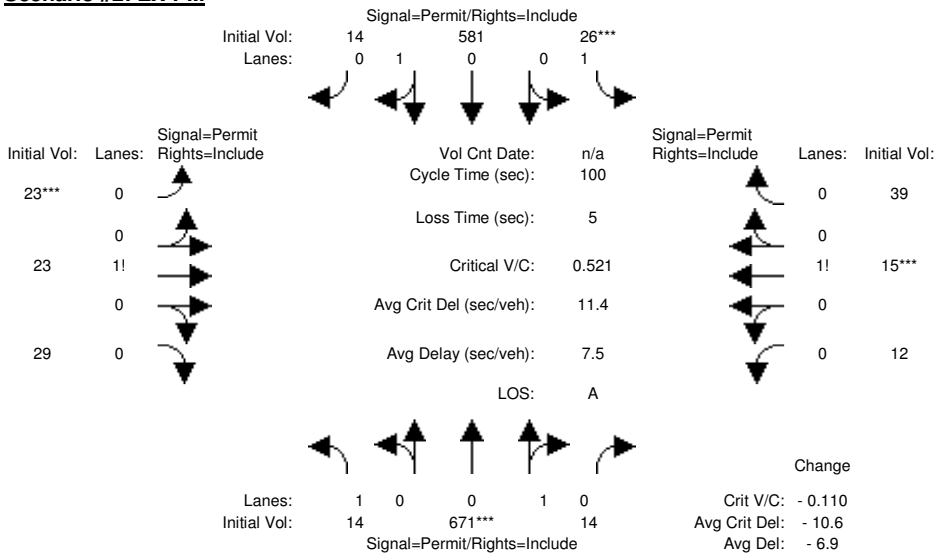
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #106: Newland St & Madison Ave

Scenario #1: EX-AM



Scenario #2: EX-PM



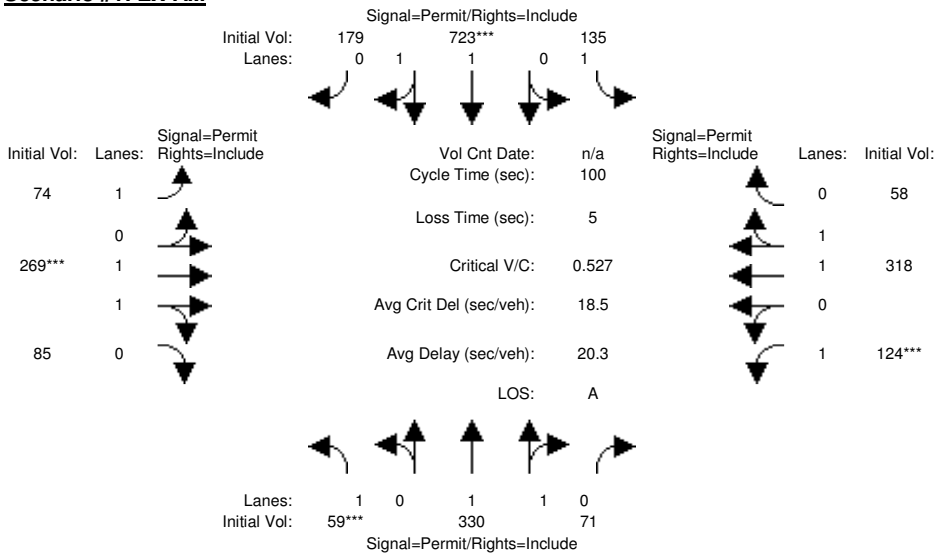
Existing Year (2015)

City of Westminster General Plan

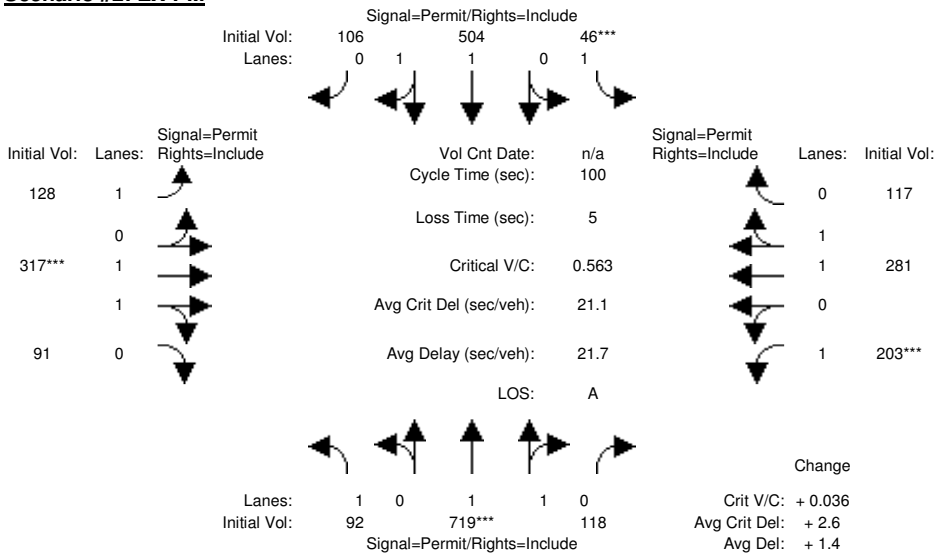
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #107: Newland St & Trask Ave

Scenario #1: EX-AM



Scenario #2: EX-PM



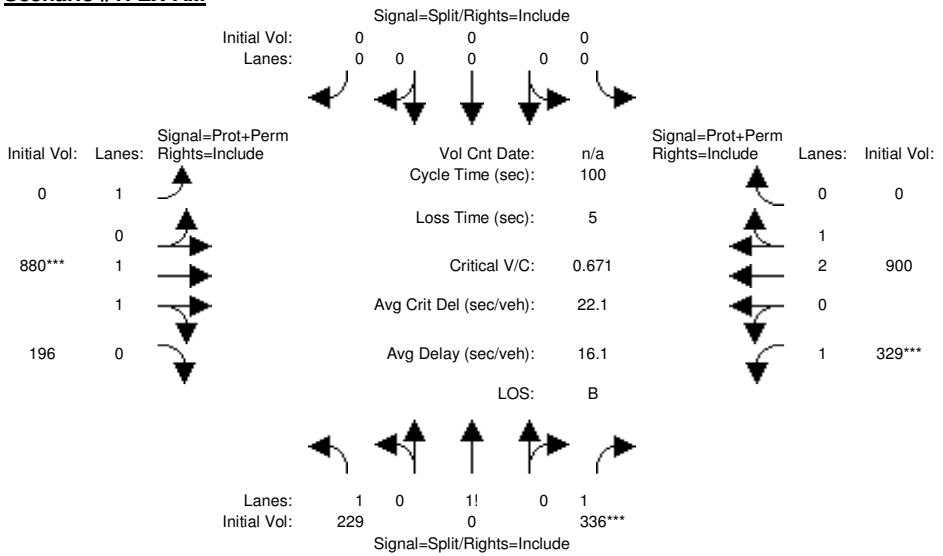
Existing Year (2015)

City of Westminster General Plan

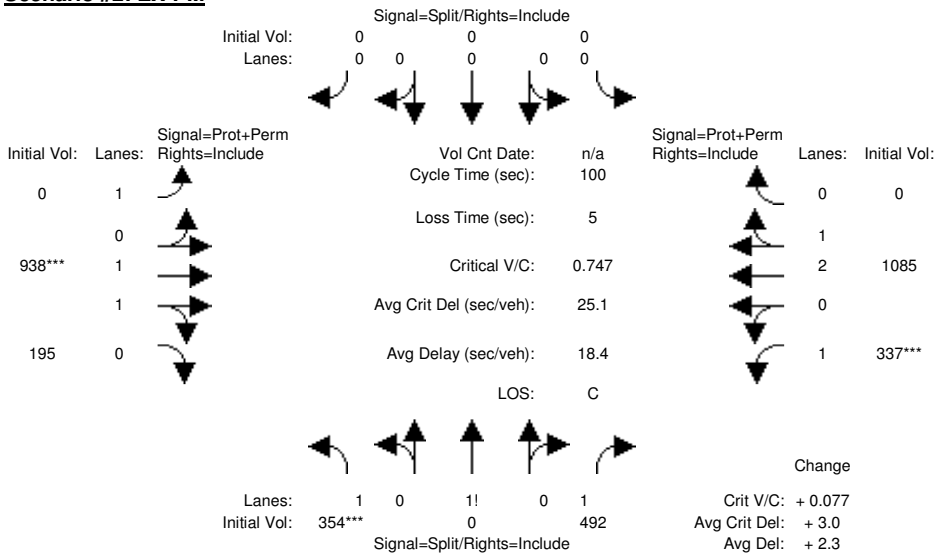
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #108: Westminster Blvd & Bushard St

Scenario #1: EX-AM



Scenario #2: EX-PM



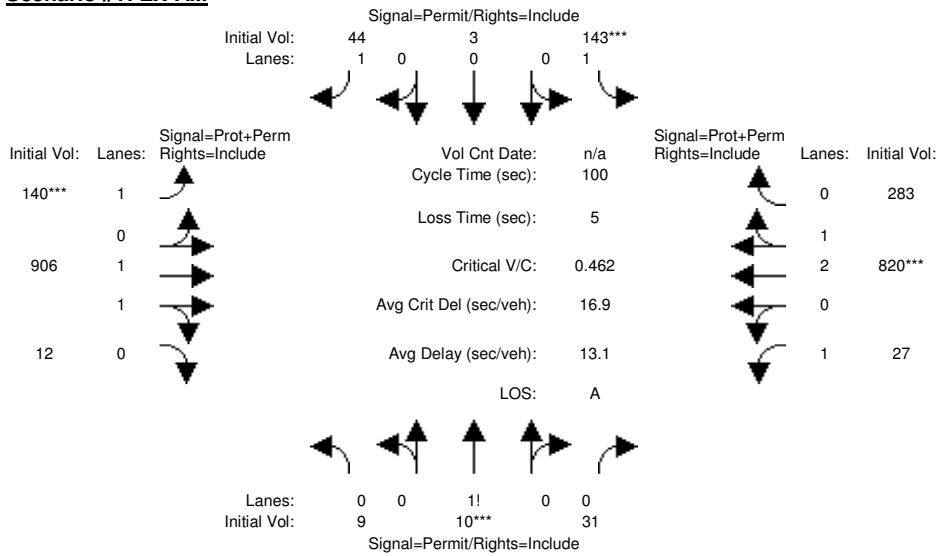
Existing Year (2015)

City of Westminster General Plan

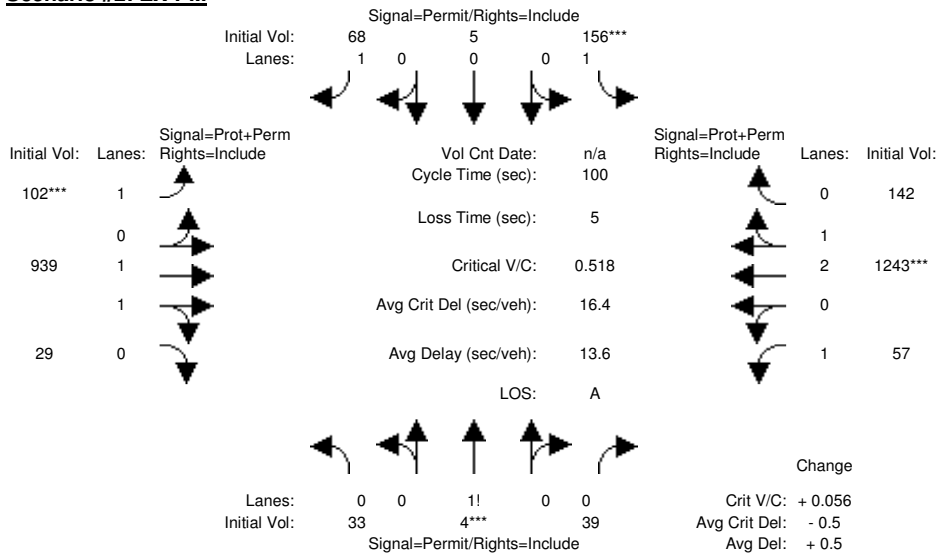
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #109: Westminster Blvd & Deodora Dr/Swan St

Scenario #1: EX-AM



Scenario #2: EX-PM



Cumulative Year (2035)

City of Westminster General Plan

Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

Intersection		CUMULNP-AM				CUMULNP-PM				CUMULPP-AM						CUMULPP-PM			
		LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Crit V/C Change	Avg Crit Del (sec)	Avg Crit Del Change	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)
#74	Beach Blvd & Bolsa Ave	E	25.4	0.904	28.6	C	23.3	0.784	21.1	E	25.6	0.906	+ 0.122	28.7	+ 7.5	C	23.6	0.794	24.2
#76	Beach Blvd & Edinger Ave	B	19.7	0.681	17.3	C	22.0	0.766	24.5	B	19.9	0.685	- 0.081	17.5	- 7.0	C	22.0	0.769	24.6
#86	Beach Blvd & SR-22 WB Off-Ramp	C	13.8	0.737	14.7	C	15.4	0.712	15.9	C	13.8	0.740	+ 0.028	14.8	- 1.2	C	15.4	0.718	16.0
#87	Beach Blvd & SR-22 EB Off-Ramp	B	6.1	0.601	6.4	A	6.2	0.538	6.6	B	6.4	0.612	+ 0.074	6.8	+ 0.1	A	6.2	0.543	6.6
#88	Bolsa Chica Rd & Garden Grove Blvd	C	13.6	0.771	10.3	D	15.8	0.838	13.6	C	13.9	0.779	- 0.059	10.5	- 3.1	D	16.1	0.841	13.8
#95	Bolsa Ave & Newland St	D	28.4	0.865	31.1	F	44.9	1.006	51.4	D	29.1	0.876	- 0.129	32.1	- 19.3	F	48.3	1.018	54.9
#96	Brookhurst St & Edinger Ave	D	26.3	0.885	28.3	B	22.7	0.687	23.5	D	26.5	0.888	+ 0.201	28.6	+ 5.1	B	22.9	0.695	23.8
#97	Brookhurst St & Hazard Ave	C	23.3	0.734	22.7	C	24.9	0.770	25.2	C	23.5	0.746	- 0.024	23.0	- 2.2	C	25.4	0.774	25.2
#98	Bushard St & Edinger Ave	C	24.8	0.765	24.6	C	22.5	0.715	23.3	C	24.9	0.768	+ 0.053	24.7	+ 1.4	C	22.6	0.721	23.4
#99	Edinger Ave & Newland St	E	39.2	0.956	46.7	F	42.4	1.009	55.2	E	39.8	0.962	- 0.047	47.8	- 7.4	F	46.5	1.026	60.9
#100	Goldenwest St & McFadden Ave	C	25.7	0.747	28.4	C	26.3	0.760	26.3	C	25.9	0.750	- 0.010	28.5	+ 2.2	C	26.6	0.775	26.9
#101	Hazard Ave & Newland St [Newland St]	B	21.7	0.656	26.5	D	25.4	0.815	29.2	B	22.0	0.671	- 0.144	26.9	- 2.3	D	26.8	0.841	31.3
#102	Magnolia St & Foxglove Ave	A	5.6	0.556	5.4	A	1.8	0.383	2.6	A	5.6	0.556	+ 0.173	5.4	+ 2.8	A	1.8	0.385	2.6
#103	Magnolia St & Heil Ave	C	18.2	0.758	19.8	A	14.7	0.570	15.0	C	18.2	0.758	+ 0.188	19.8	+ 4.8	A	14.6	0.574	15.0
#104	McFadden Ave & Gothard St/Vermont St	C	20.3	0.700	26.0	C	22.3	0.729	26.9	C	20.4	0.712	- 0.018	26.2	- 0.7	C	23.0	0.741	28.0
#105	Newland St & Heil Ave	A	21.4	0.559	23.0	A	21.0	0.565	25.3	A	21.4	0.559	- 0.006	23.0	- 2.2	A	21.3	0.574	25.5
#106	Newland St & Madison Ave	B	15.7	0.662	22.5	A	9.0	0.544	12.9	B	15.7	0.662	+ 0.118	22.5	+ 9.6	A	9.0	0.550	12.9
#107	Newland St & Trask Ave	A	20.9	0.553	19.2	A	22.5	0.588	22.1	A	21.1	0.559	- 0.029	19.5	- 2.6	A	22.5	0.600	22.0
#108	Westminster Blvd & Bushard St	B	16.9	0.698	23.1	C	19.2	0.770	25.7	C	17.6	0.721	- 0.049	24.0	- 1.6	C	19.6	0.782	26.5
#109	Westminster Blvd & Deodora Dr/Swan St	A	13.9	0.471	13.2	A	15.0	0.550	17.5	A	13.7	0.476	- 0.074	13.1	- 4.4	A	14.9	0.556	17.4

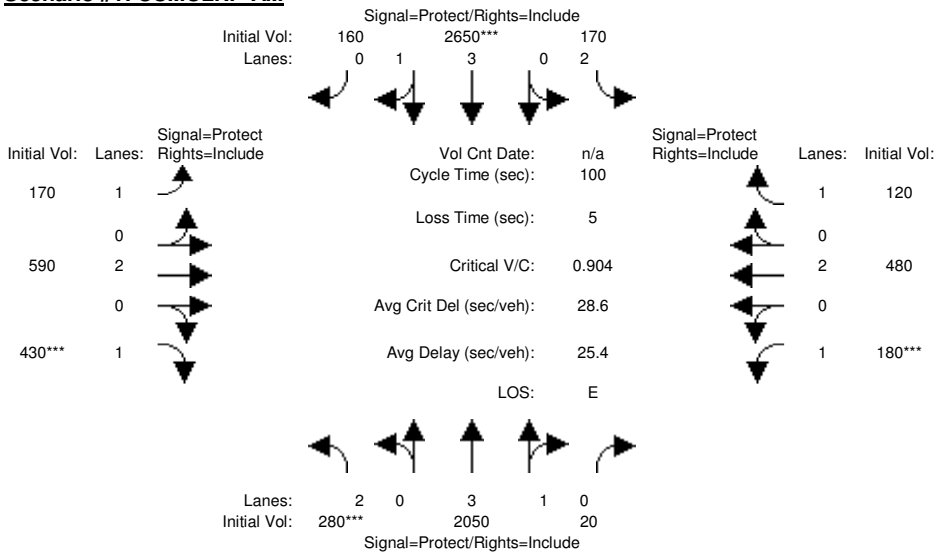
Cumulative Year (2035)

City of Westminster General Plan

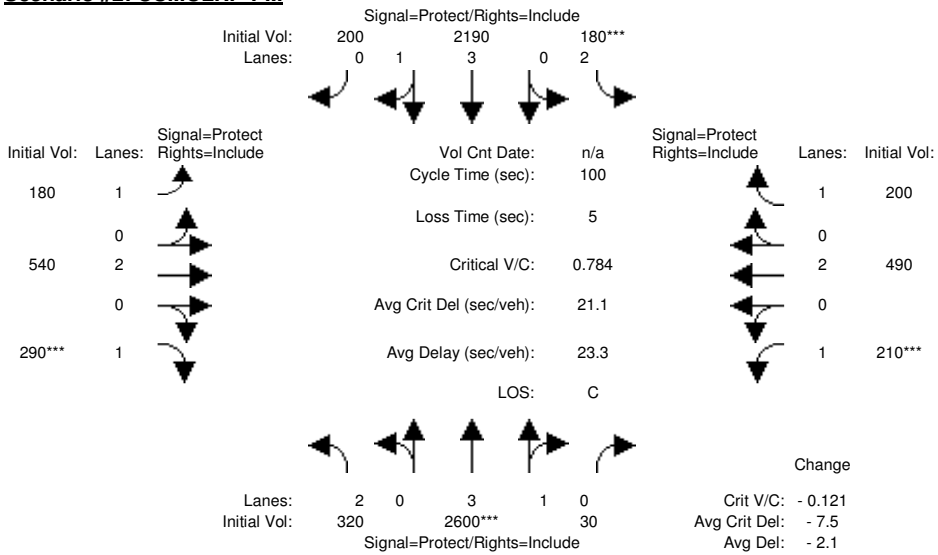
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #74: Beach Blvd & Bolsa Ave

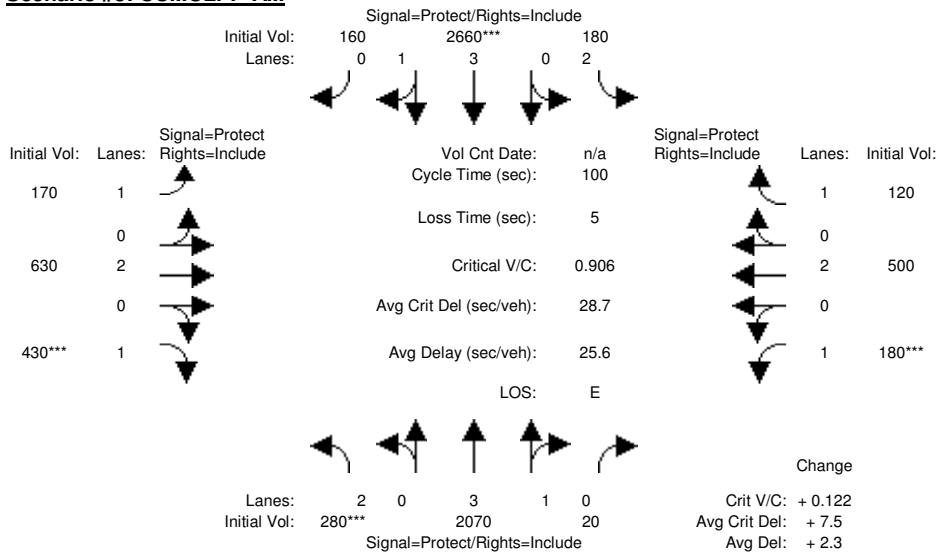
Scenario #1: CUMULNP-AM



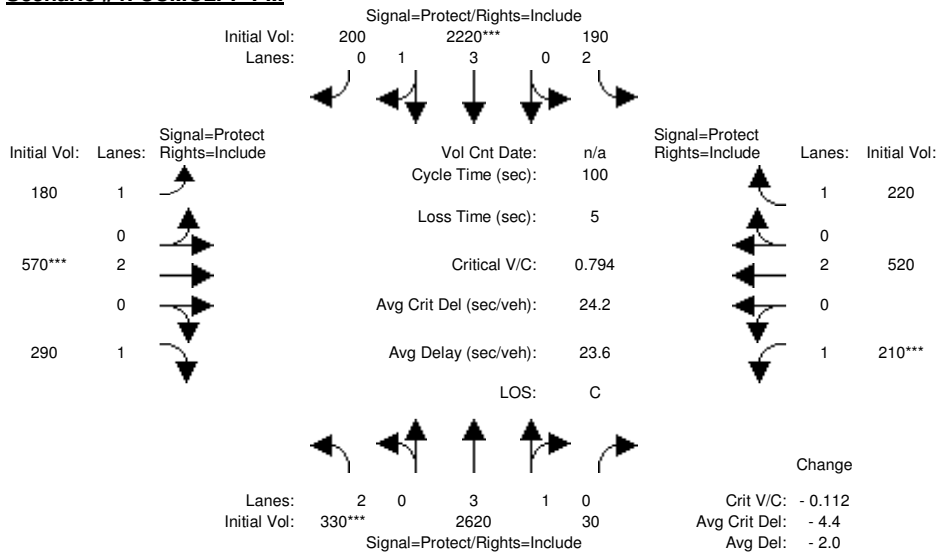
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



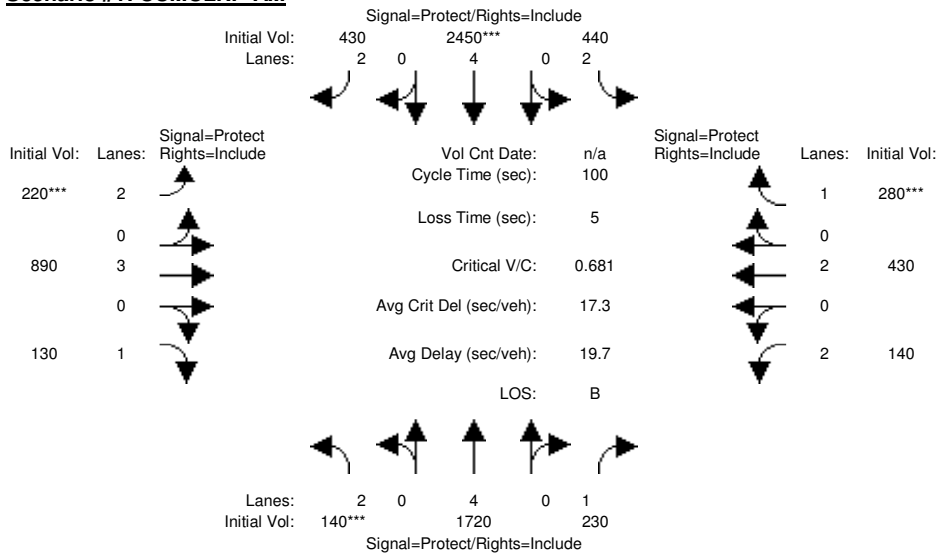
Cumulative Year (2035)

City of Westminster General Plan

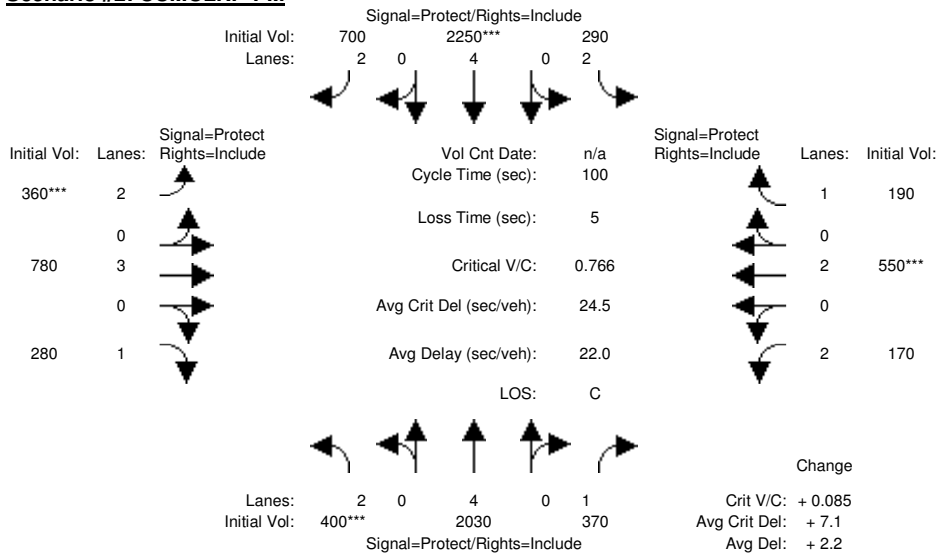
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #76: Beach Blvd & Edinger Ave

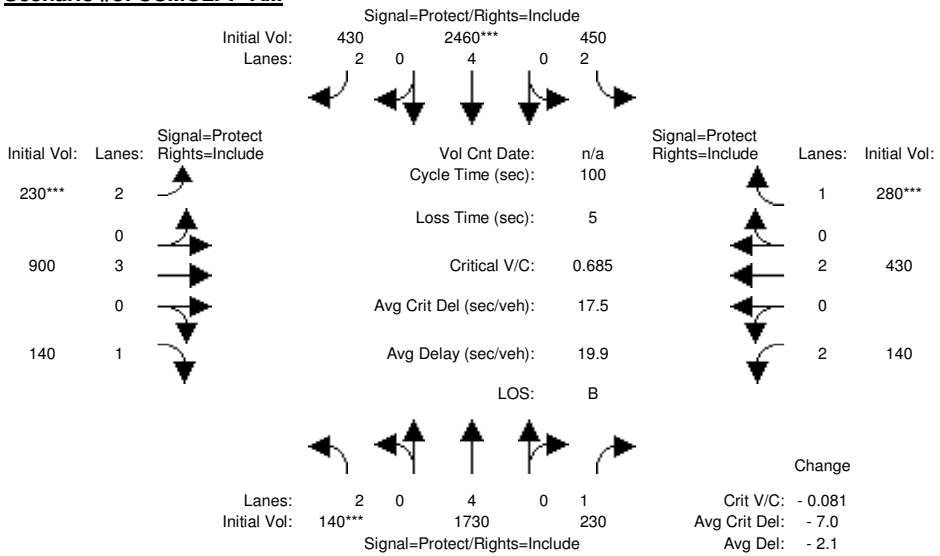
Scenario #1: CUMULNP-AM



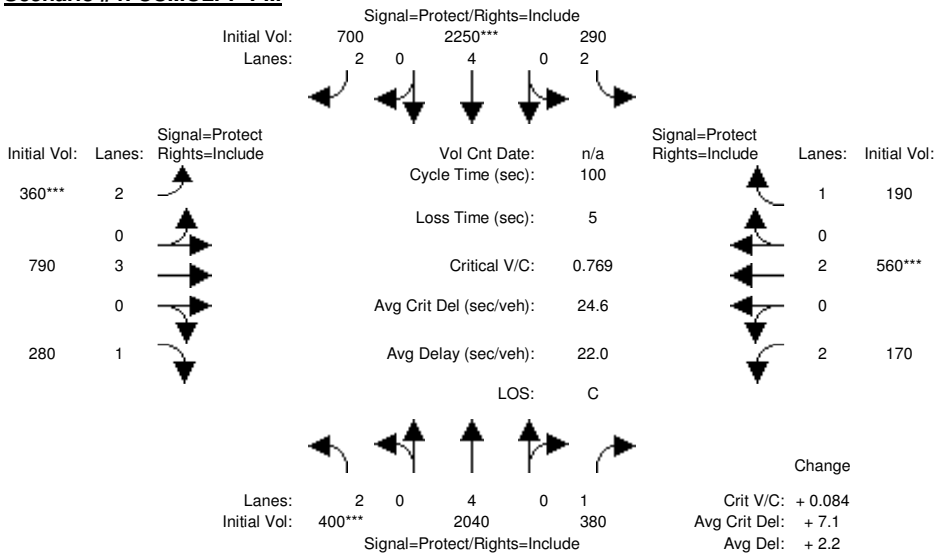
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



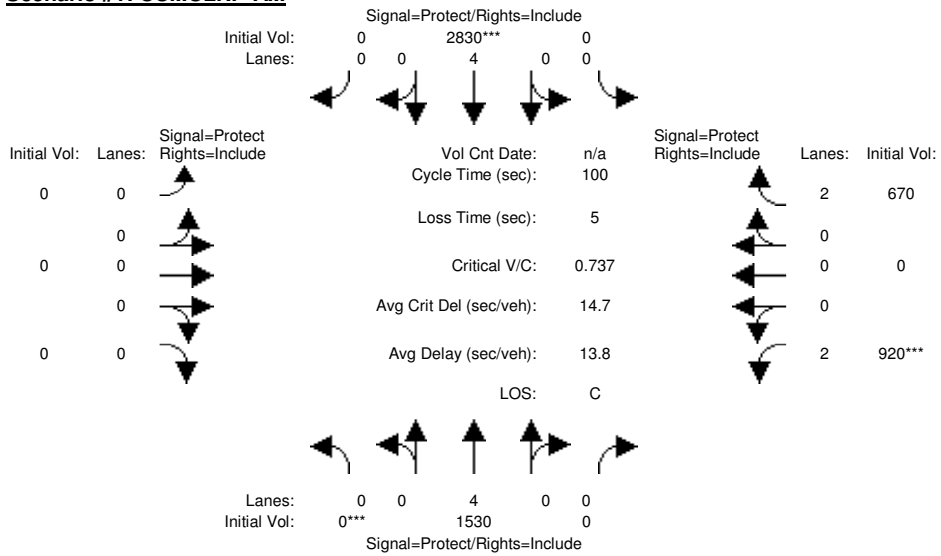
Cumulative Year (2035)

City of Westminster General Plan

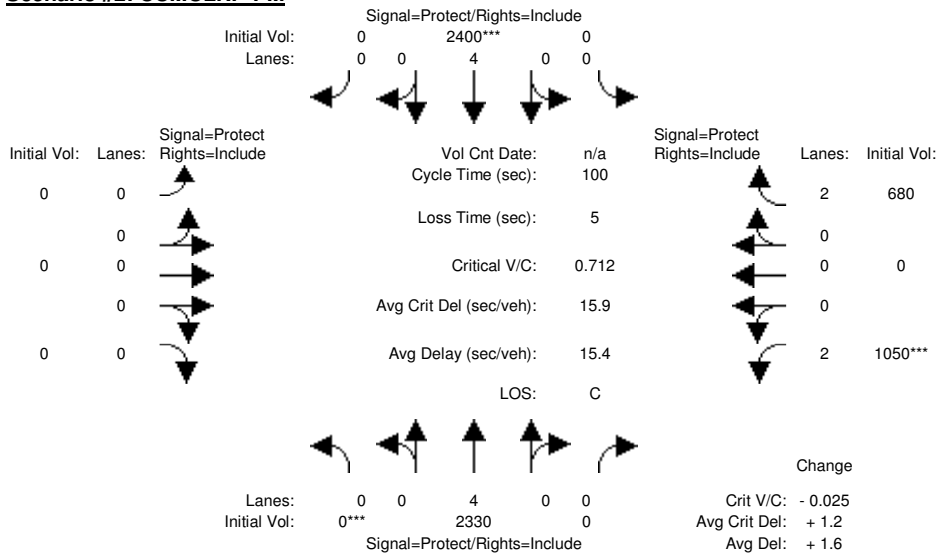
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #86: Beach Blvd & SR-22 WB Off-Ramp

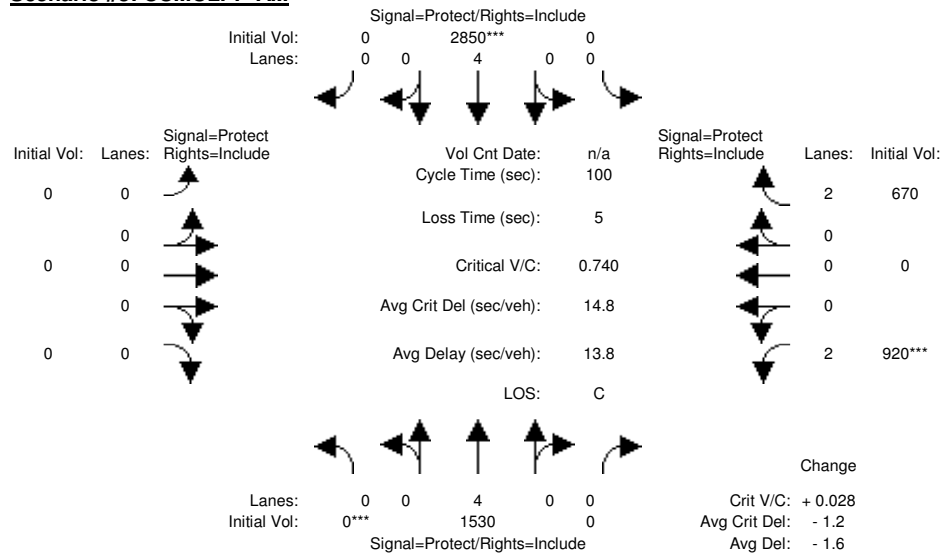
Scenario #1: CUMULNP-AM



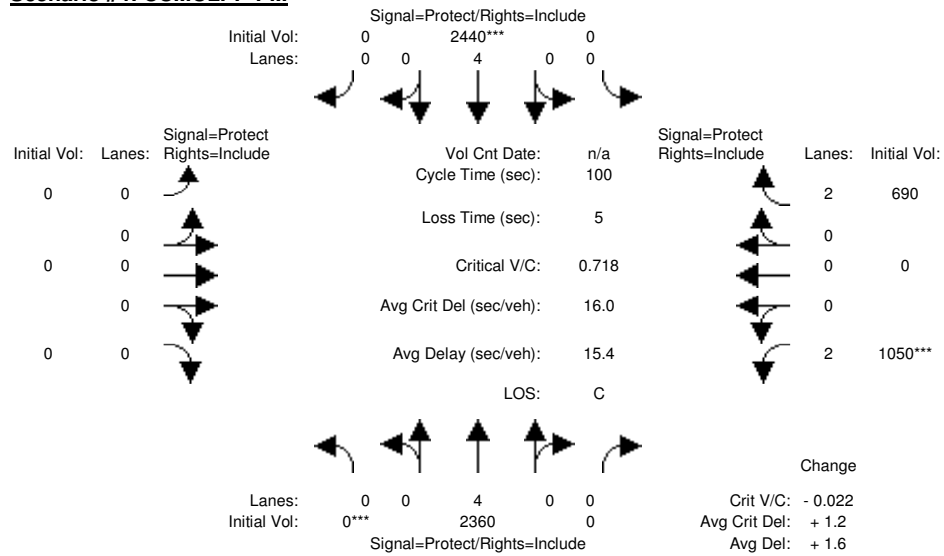
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



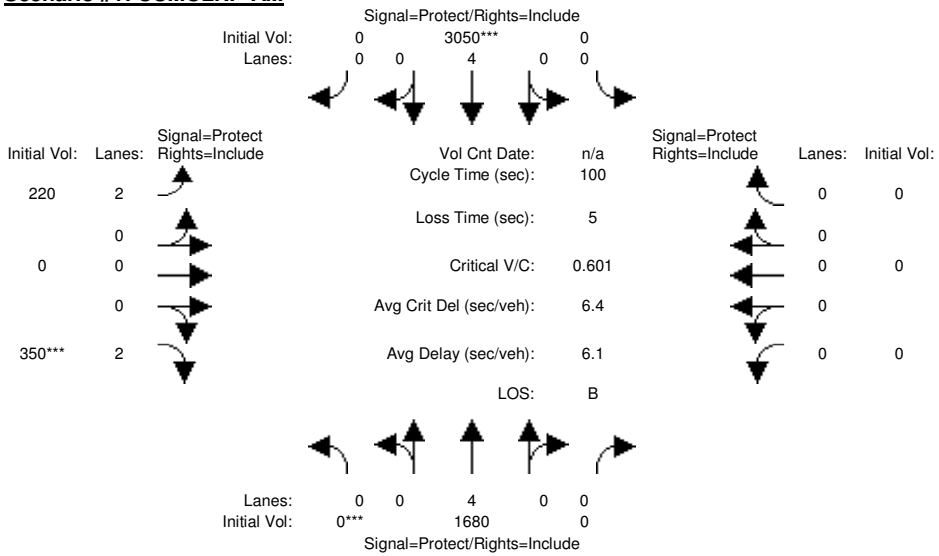
Cumulative Year (2035)

City of Westminster General Plan

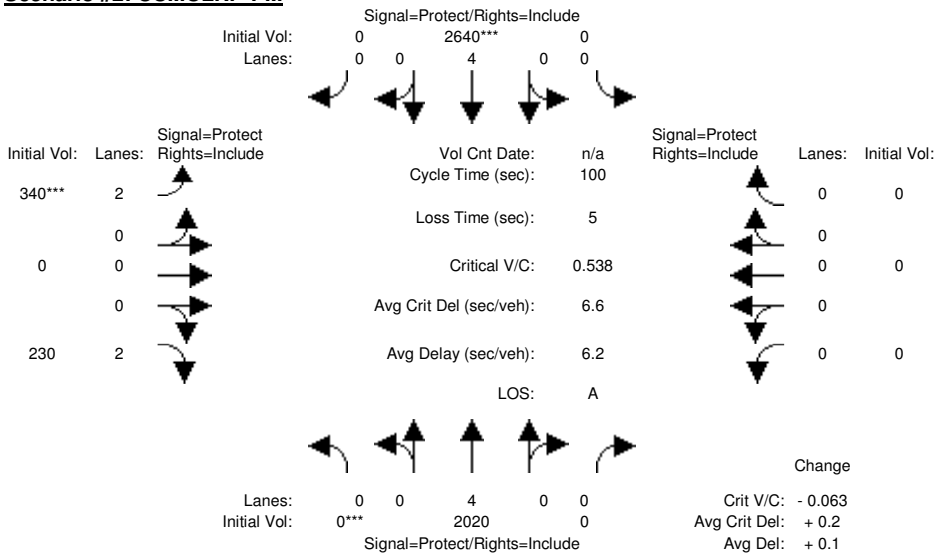
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #87: Beach Blvd & SR-22 EB Off-Ramp

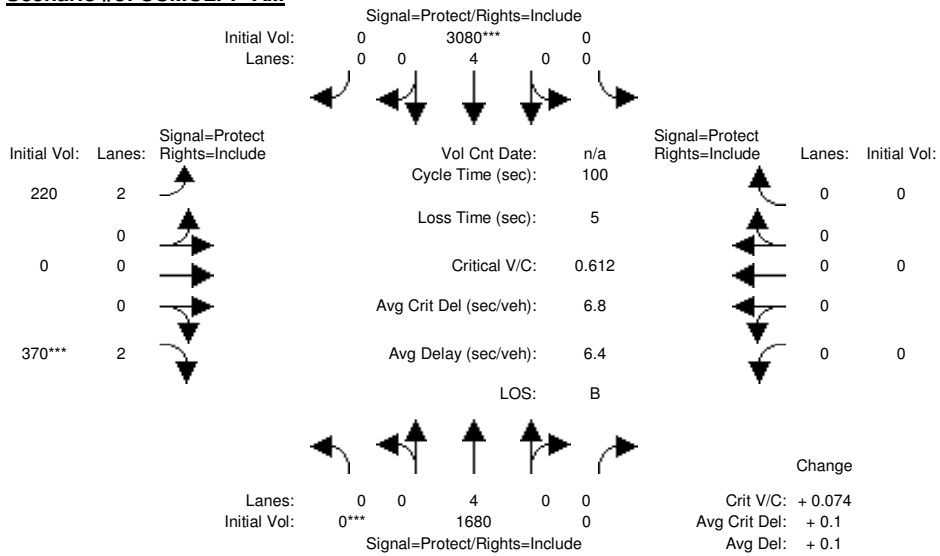
Scenario #1: CUMULNP-AM



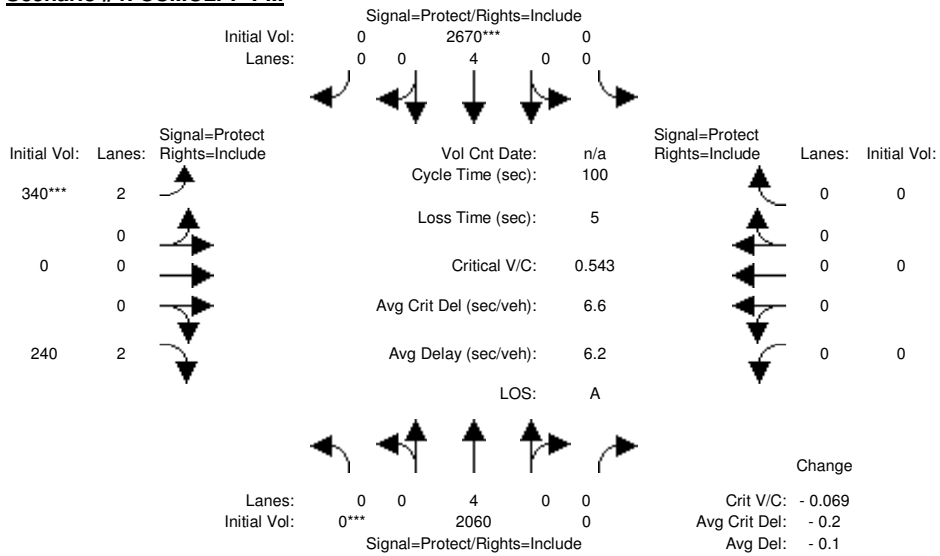
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



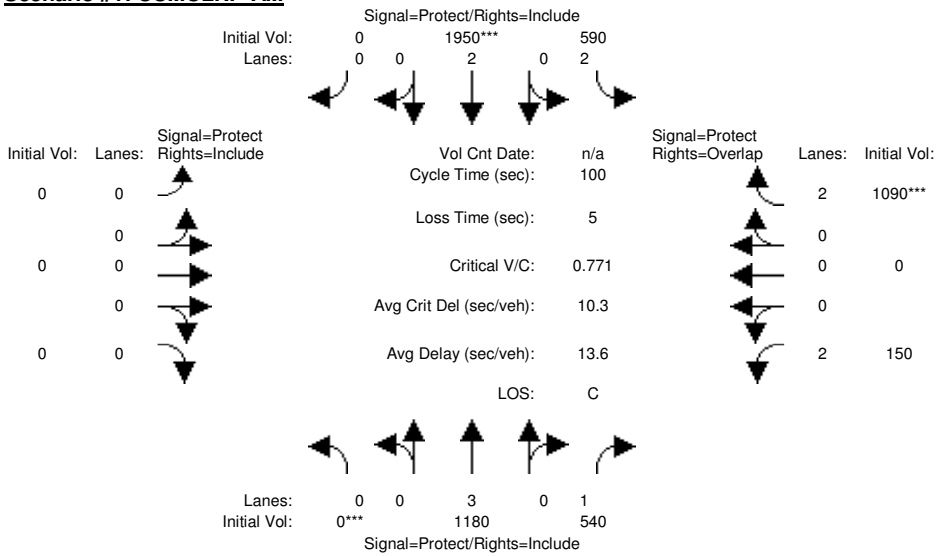
Cumulative Year (2035)

City of Westminster General Plan

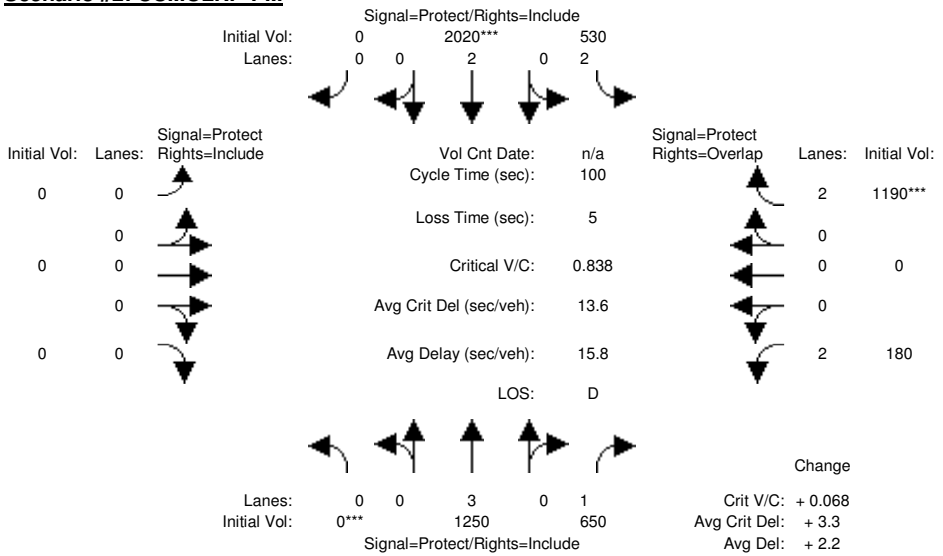
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #88: Bolsa Chica Rd & Garden Grove Blvd

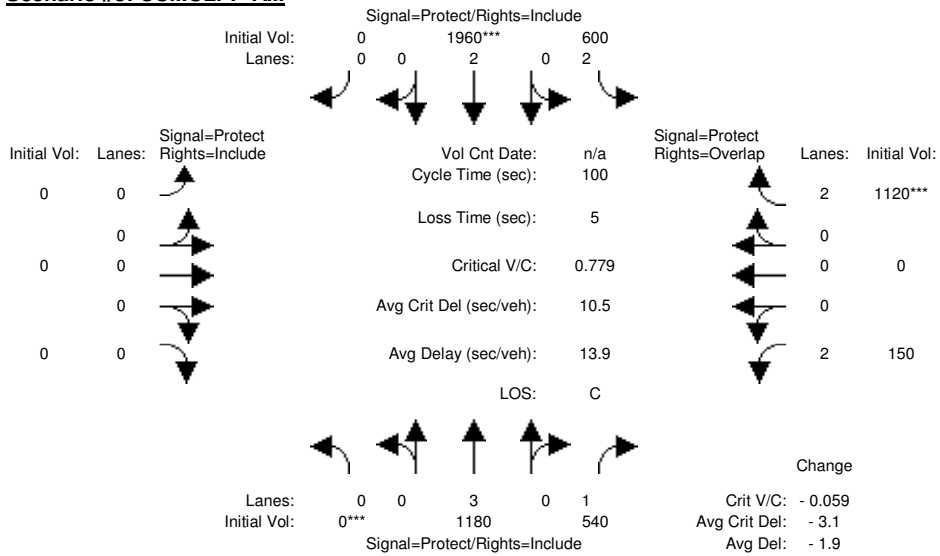
Scenario #1: CUMULNP-AM



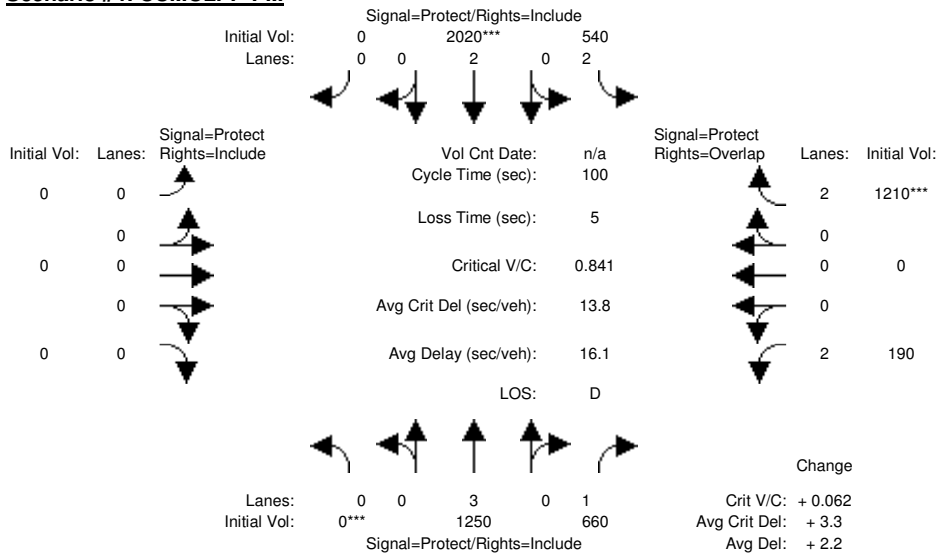
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



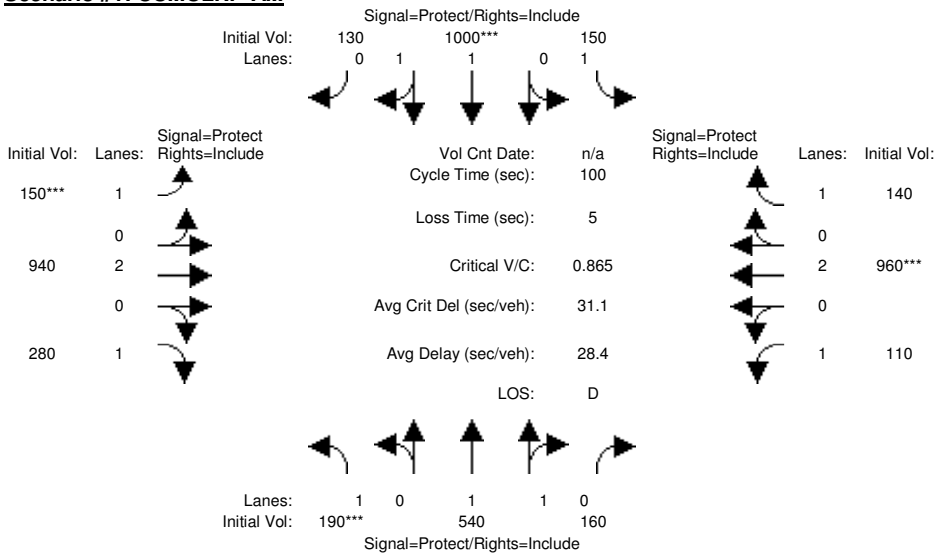
Cumulative Year (2035)

City of Westminster General Plan

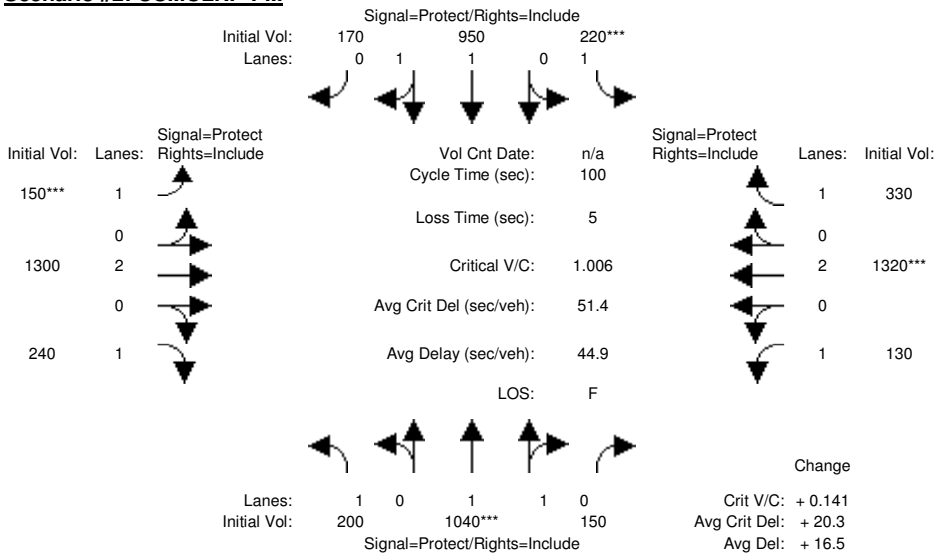
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #95: Bolsa Ave & Newland St

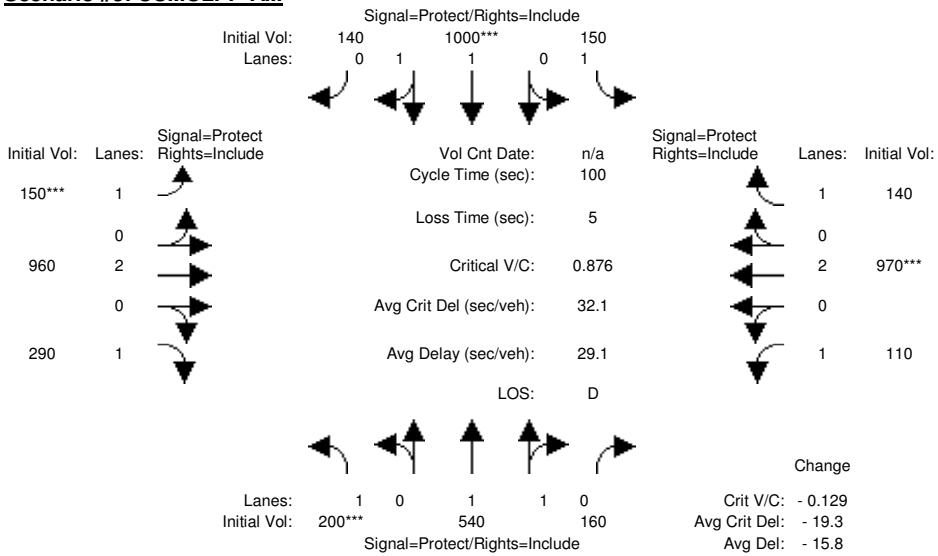
Scenario #1: CUMULNP-AM



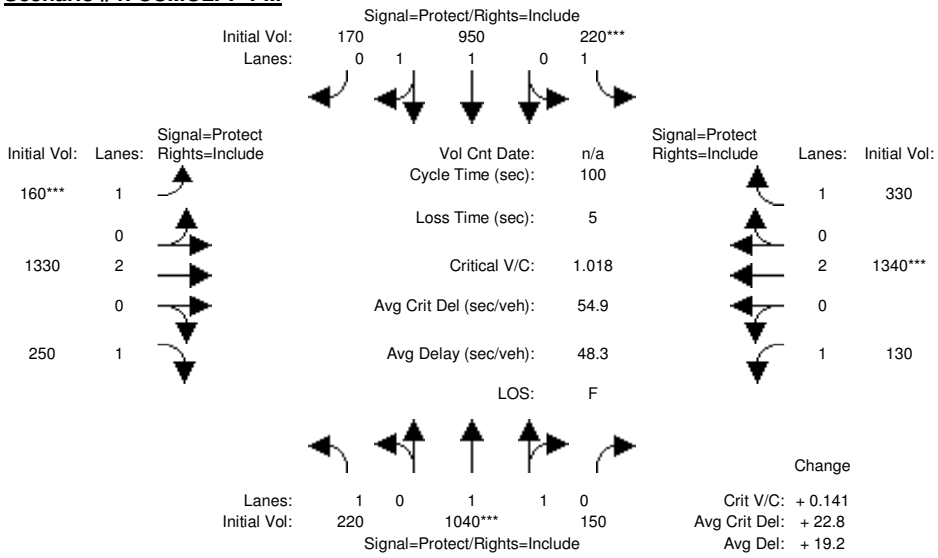
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



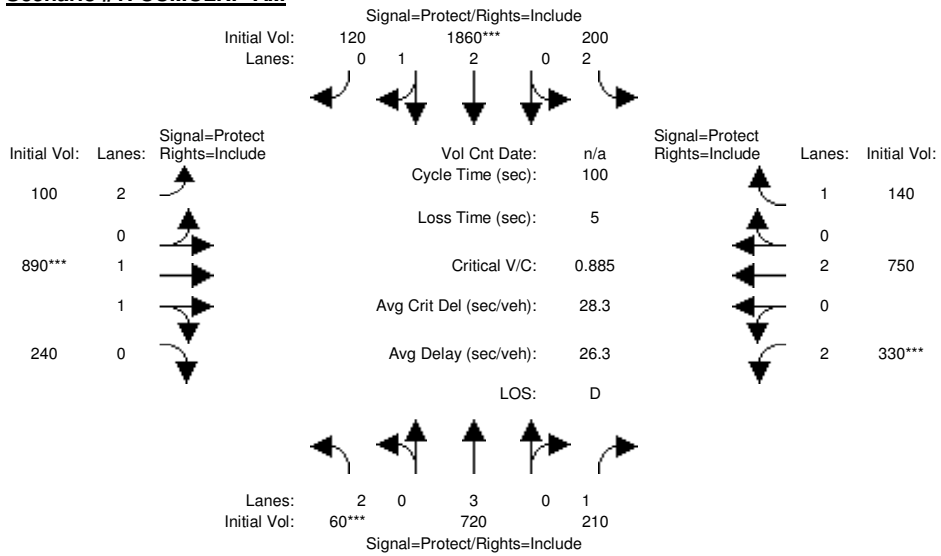
Cumulative Year (2035)

City of Westminster General Plan

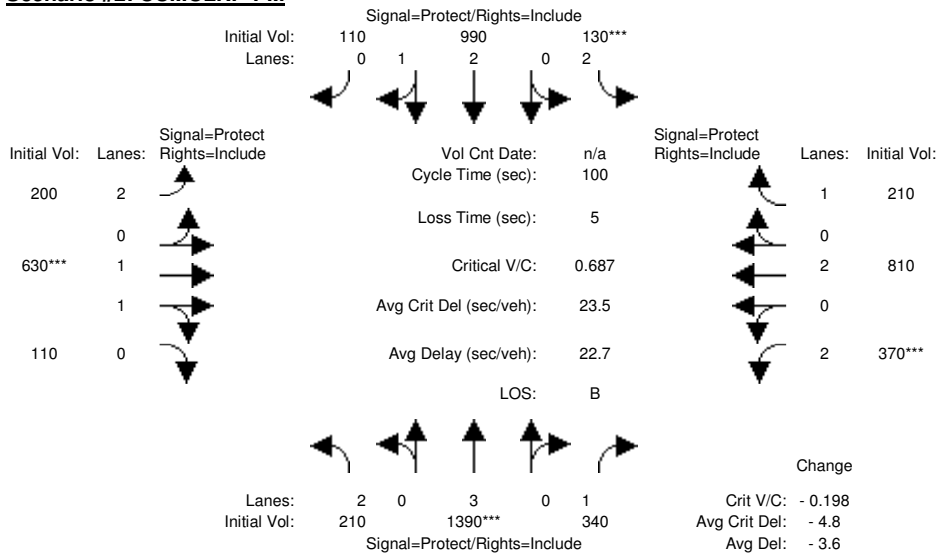
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #96: Brookhurst St & Edinger Ave

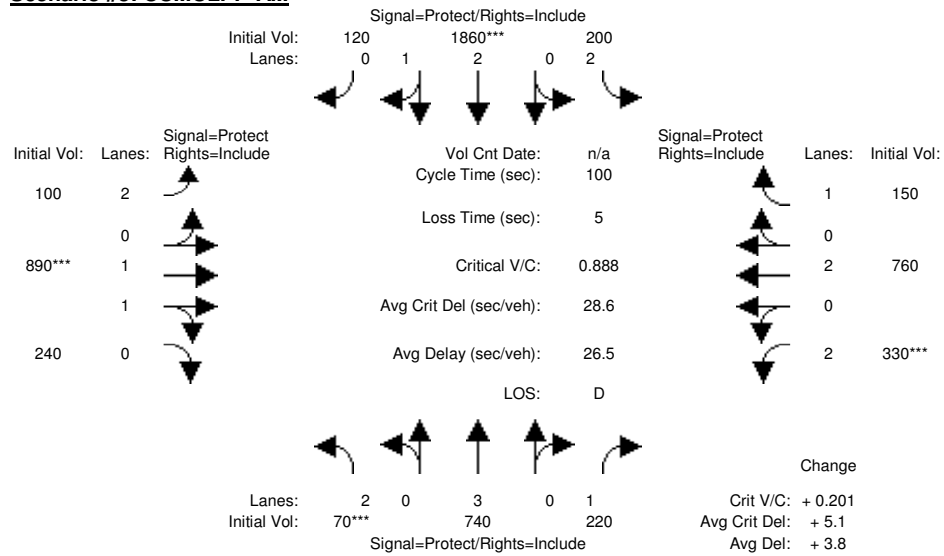
Scenario #1: CUMULNP-AM



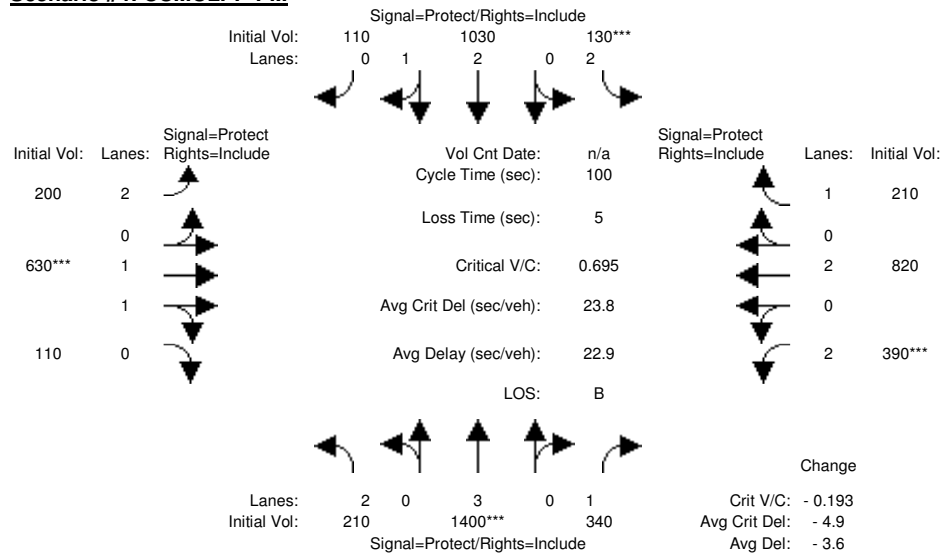
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



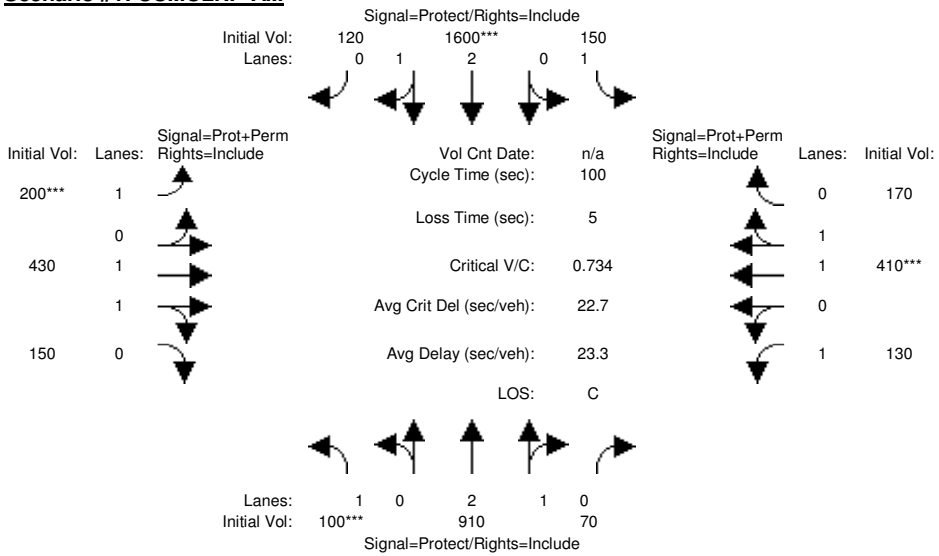
Cumulative Year (2035)

City of Westminster General Plan

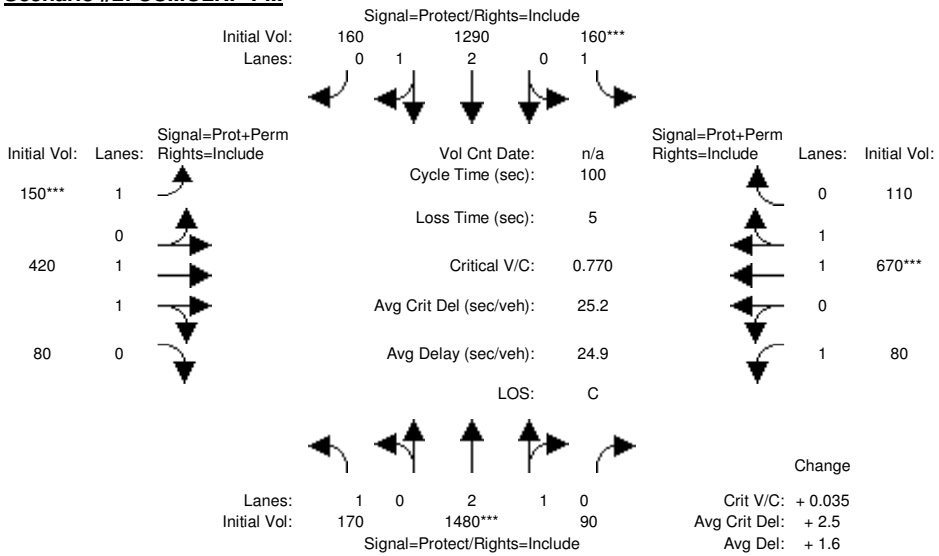
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #97: Brookhurst St & Hazard Ave

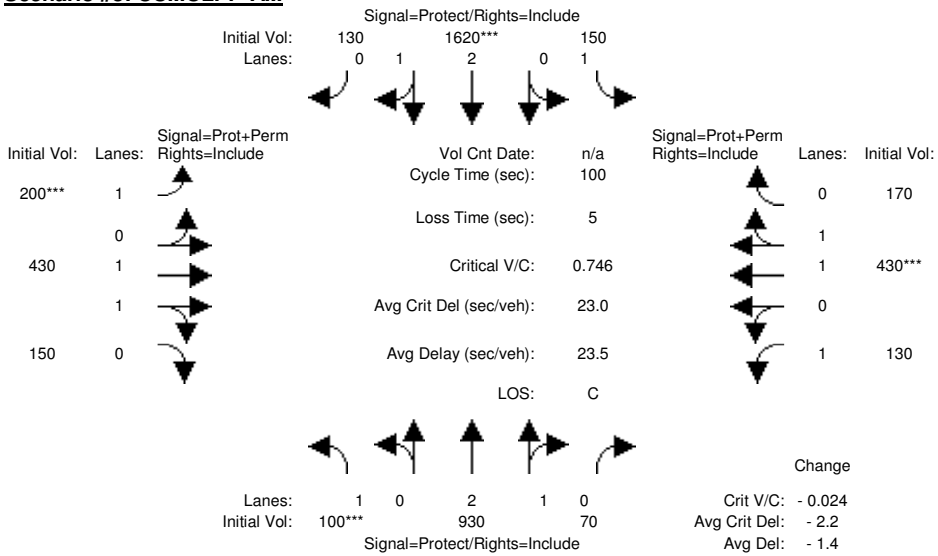
Scenario #1: CUMULNP-AM



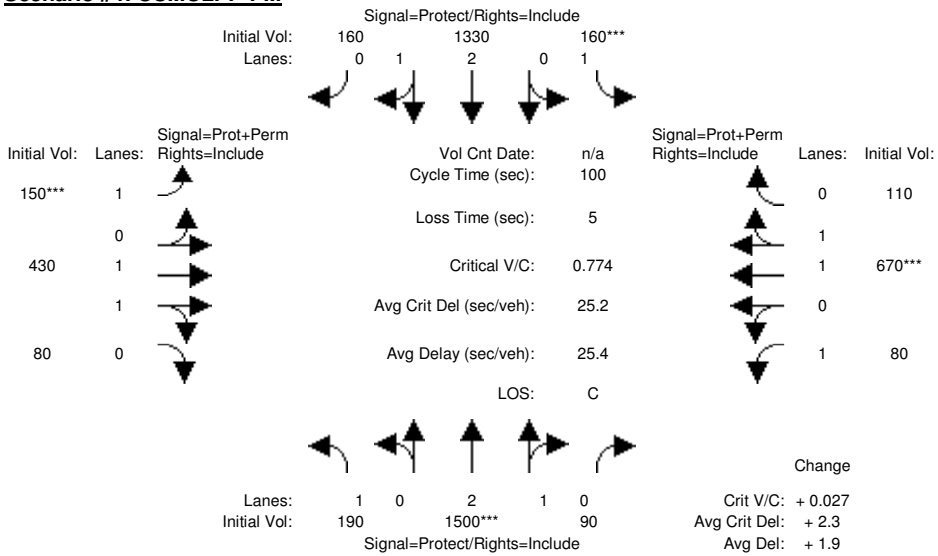
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



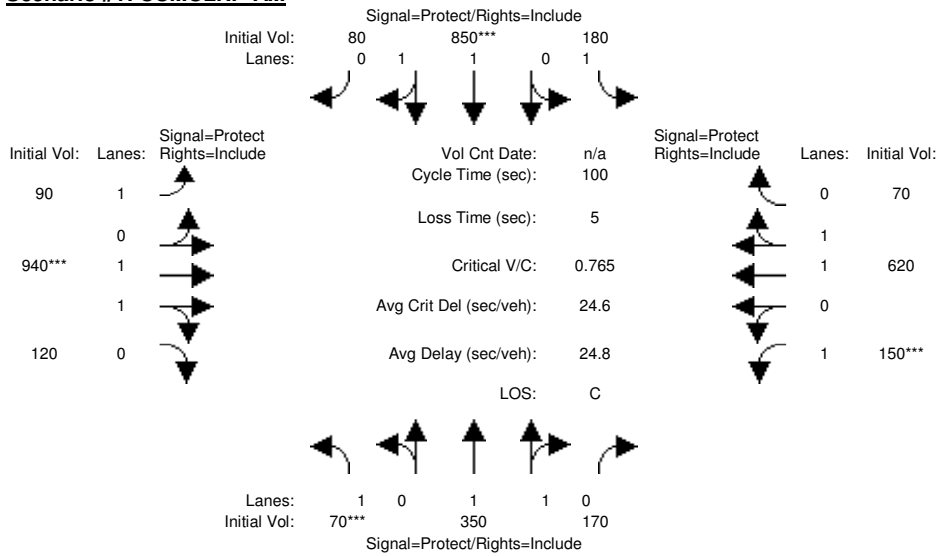
Cumulative Year (2035)

City of Westminster General Plan

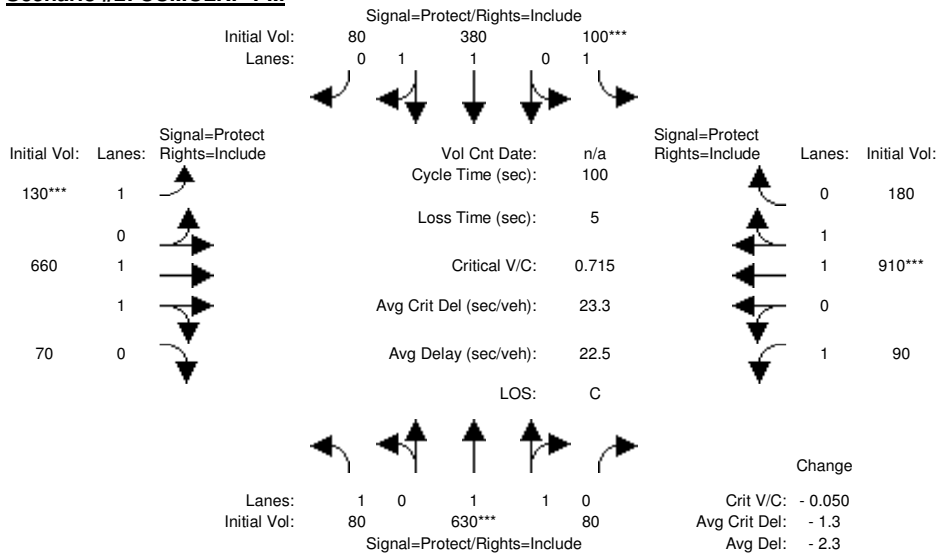
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #98: Bushard St & Edinger Ave

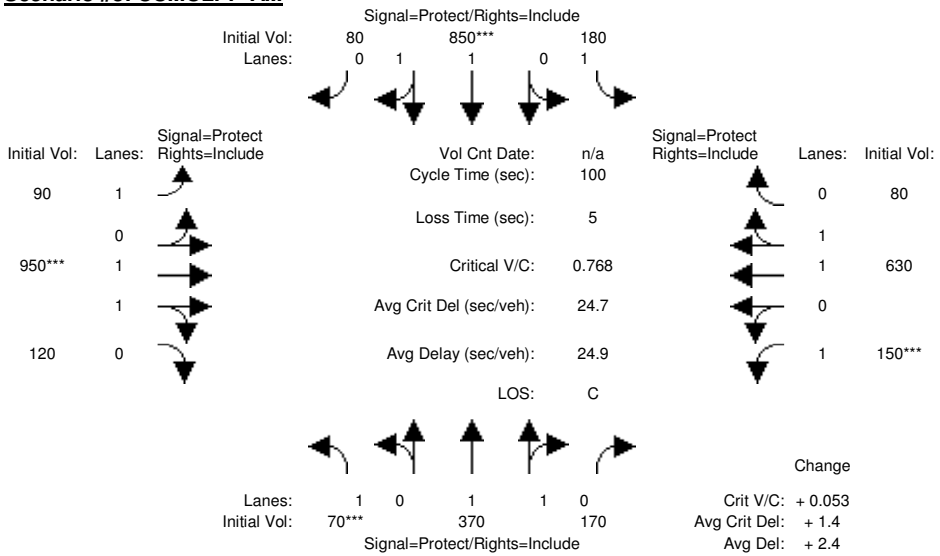
Scenario #1: CUMULNP-AM



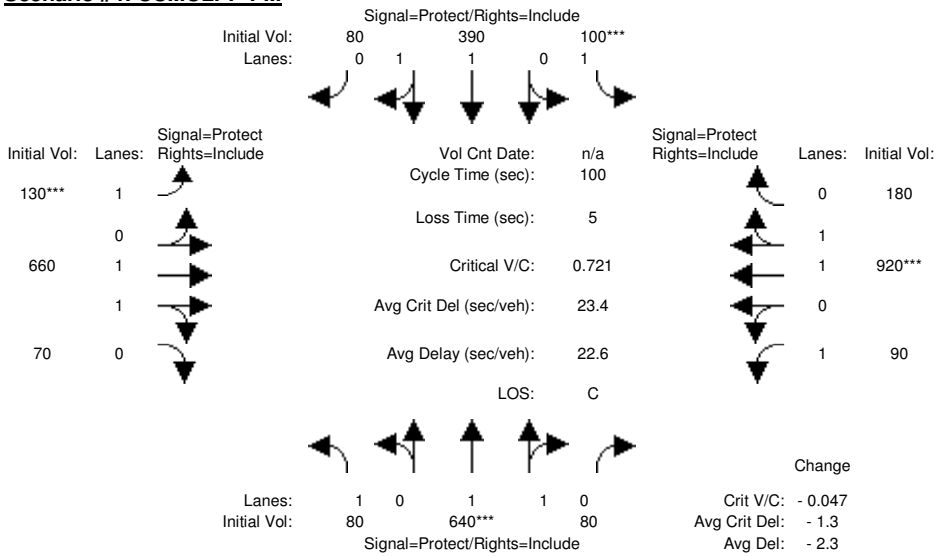
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



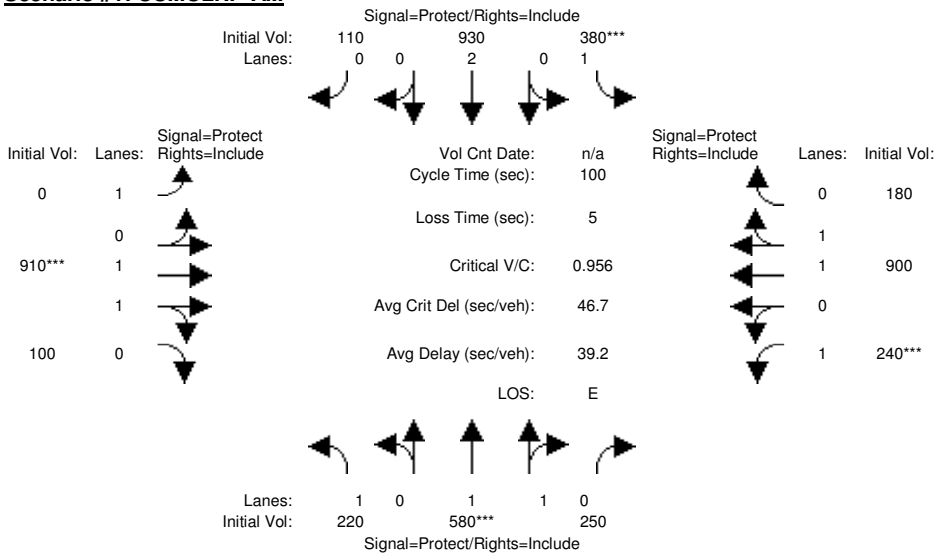
Cumulative Year (2035)

City of Westminster General Plan

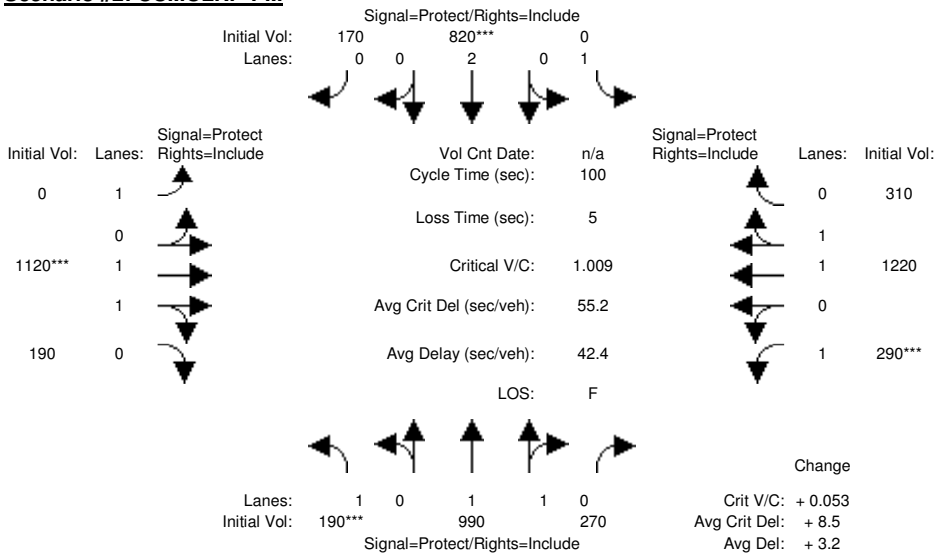
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #99: Edinger Ave & Newland St

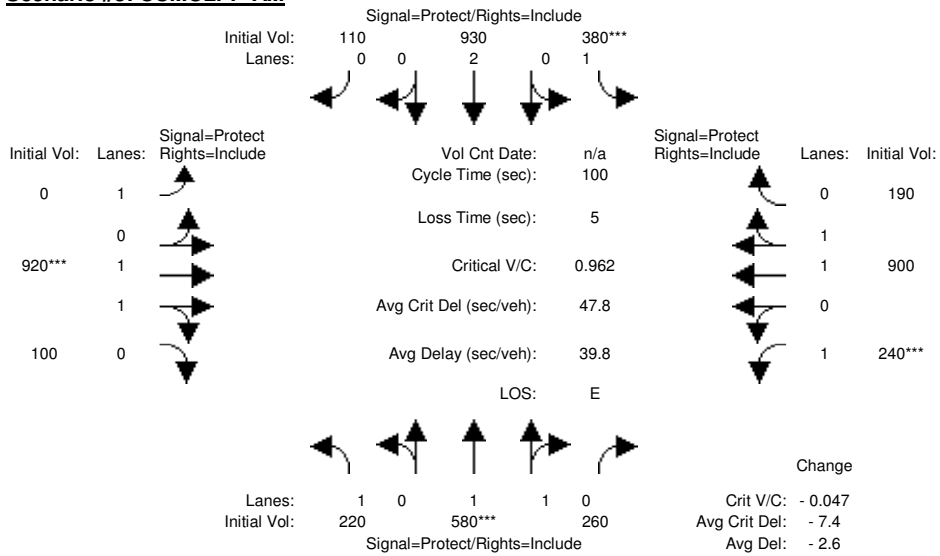
Scenario #1: CUMULNP-AM



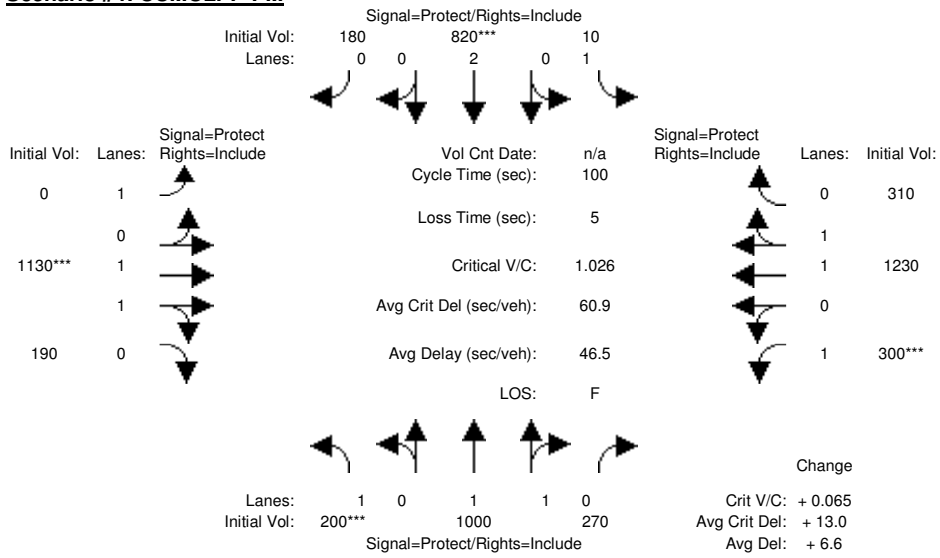
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



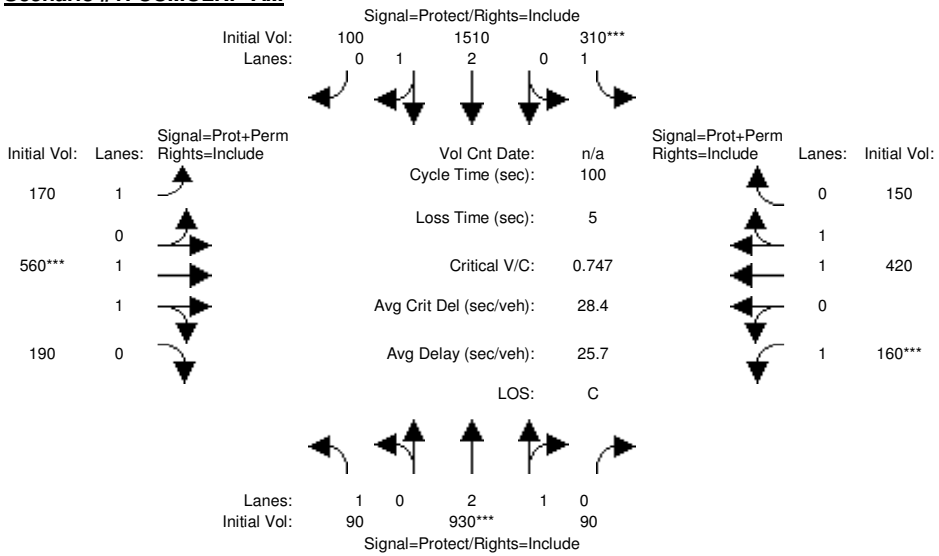
Cumulative Year (2035)

City of Westminster General Plan

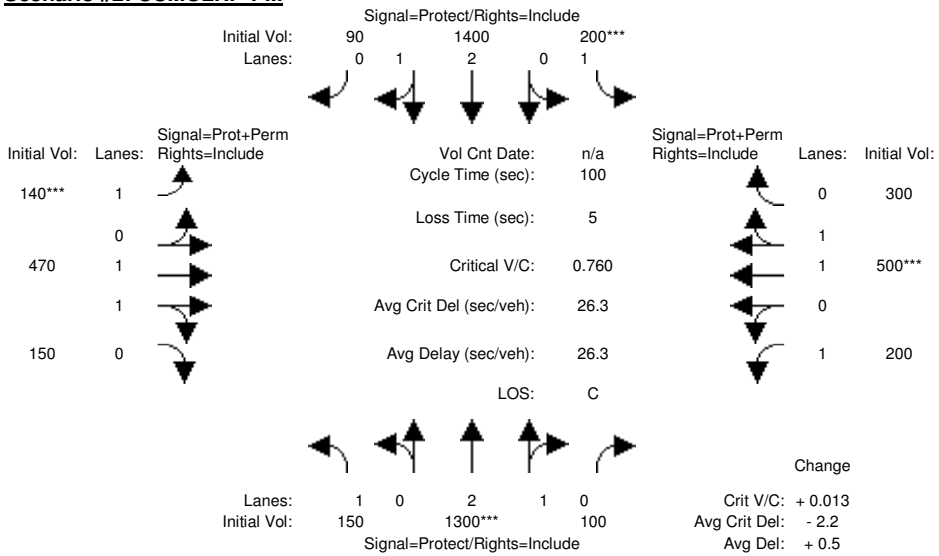
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #100: Goldenwest St & McFadden Ave

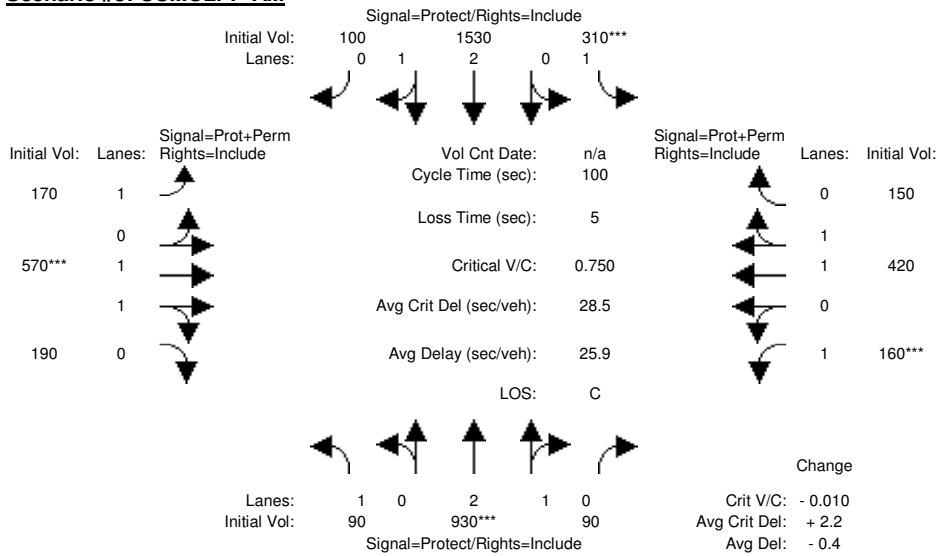
Scenario #1: CUMULNP-AM



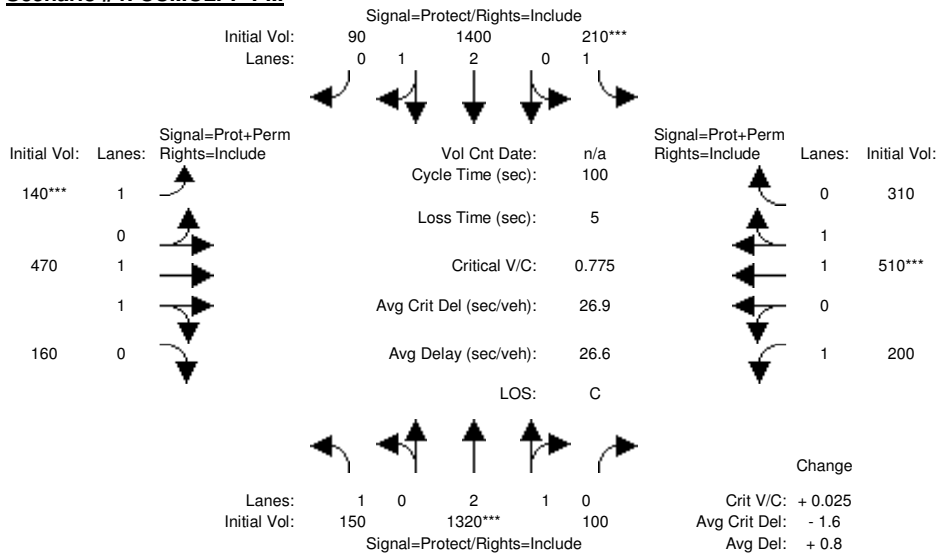
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



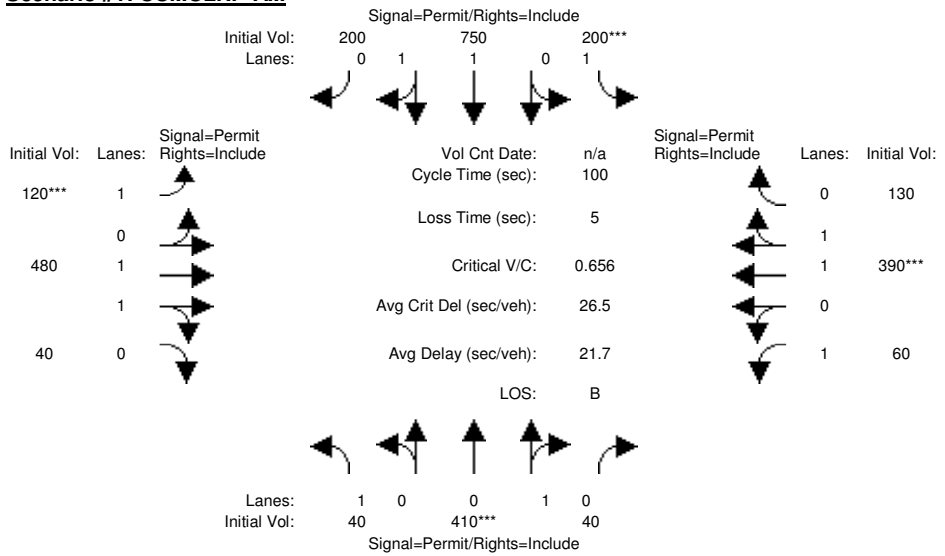
Cumulative Year (2035)

City of Westminster General Plan

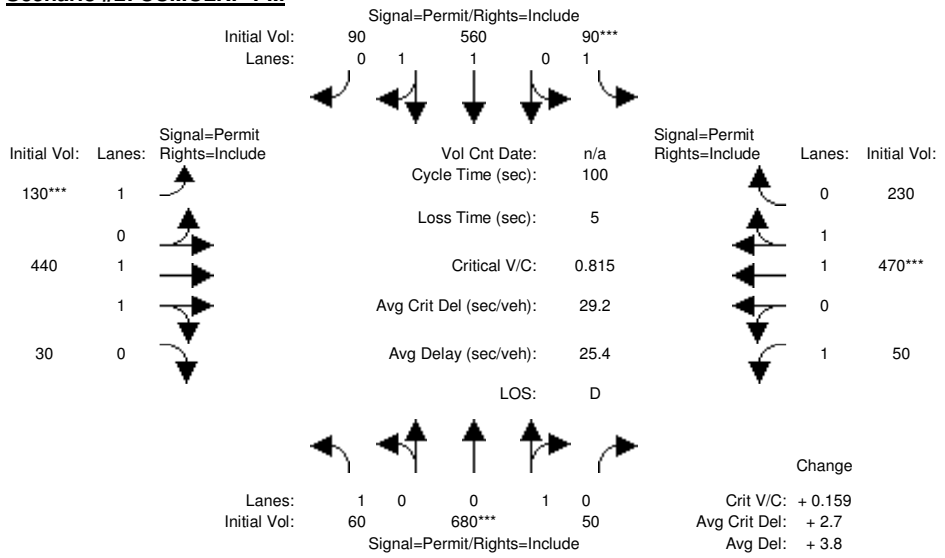
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #101: Hazard Ave & Newland St [Newland St]

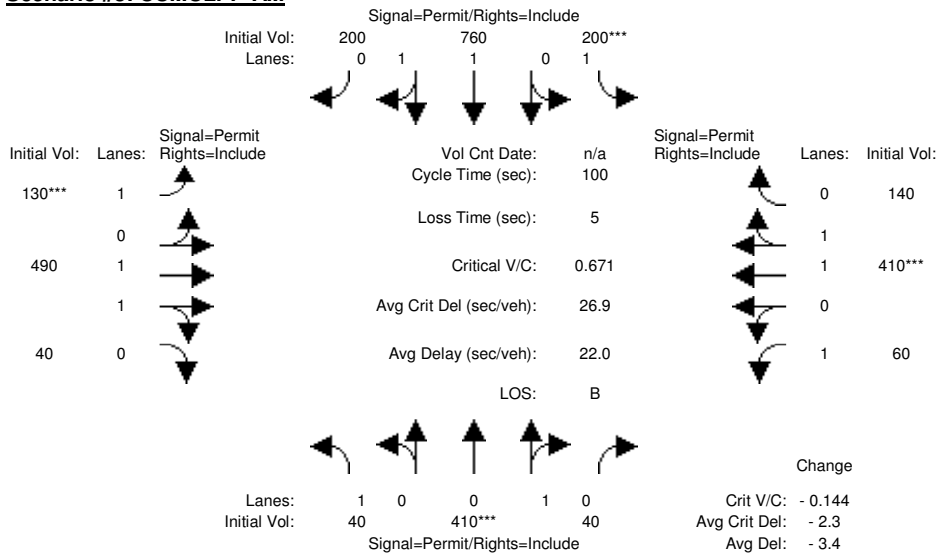
Scenario #1: CUMULNP-AM



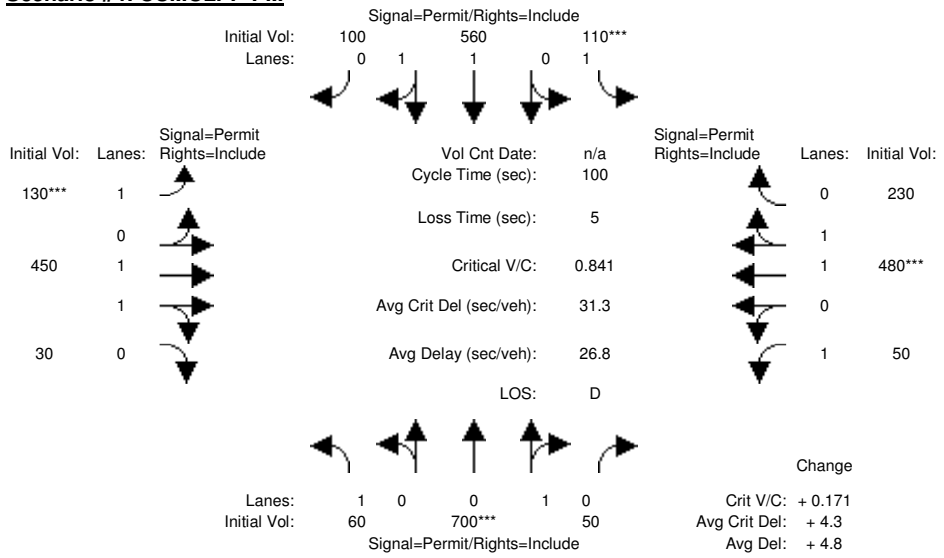
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



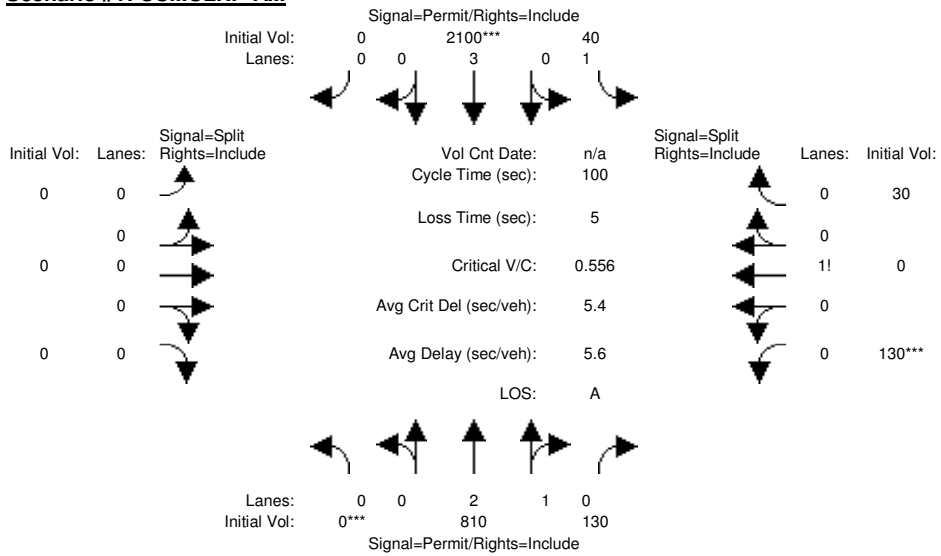
Cumulative Year (2035)

City of Westminster General Plan

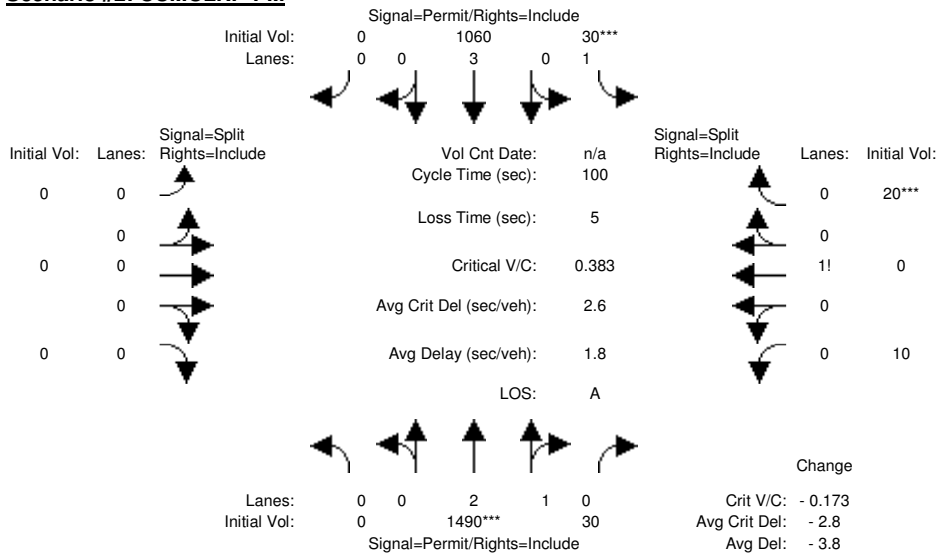
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #102: Magnolia St & Foxglove Ave

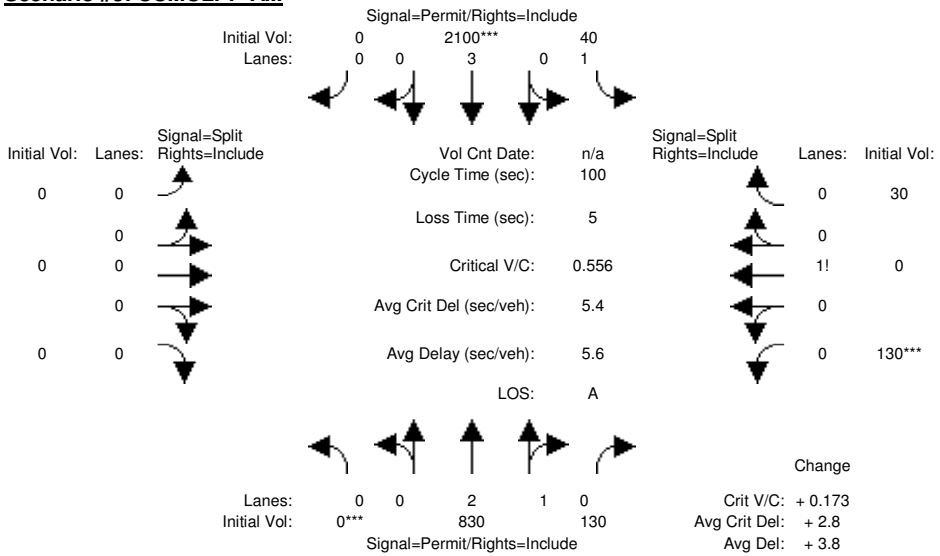
Scenario #1: CUMULNP-AM



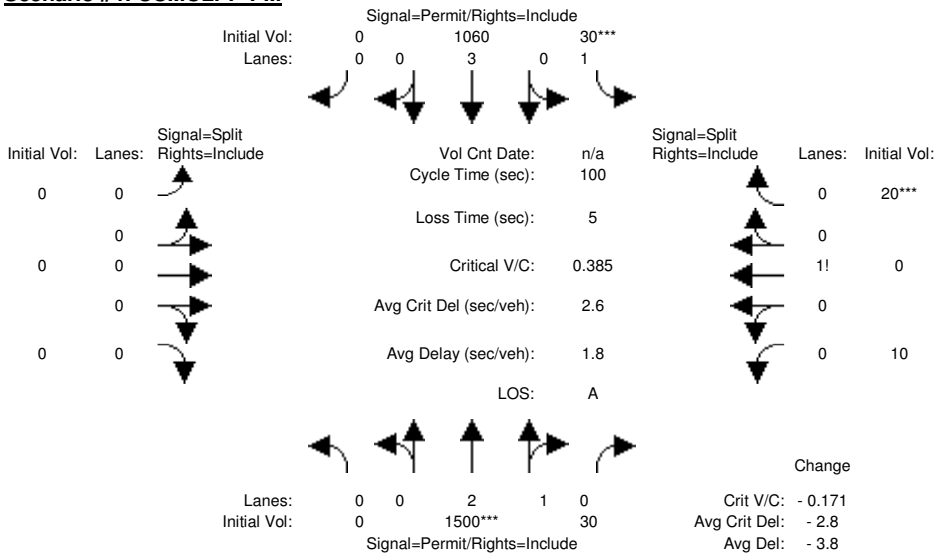
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



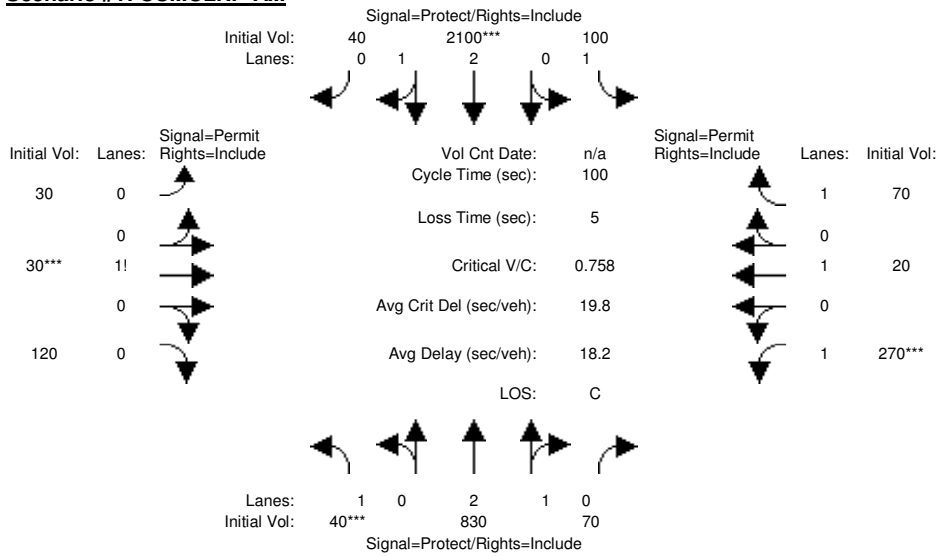
Cumulative Year (2035)

City of Westminster General Plan

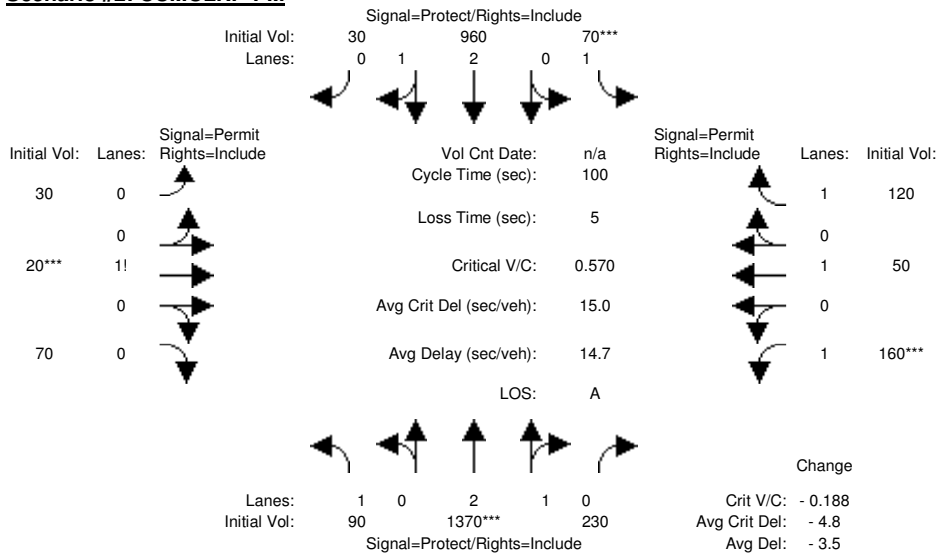
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #103: Magnolia St & Heil Ave

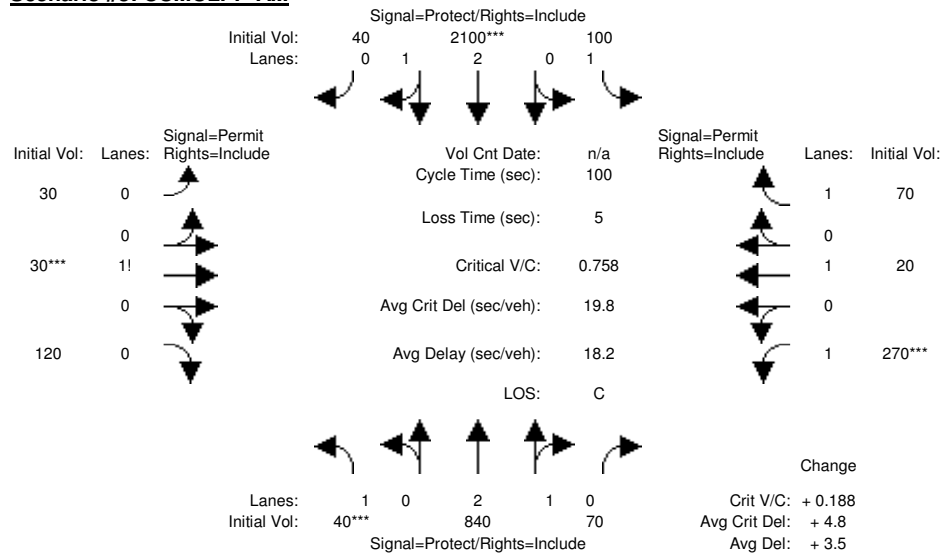
Scenario #1: CUMULNP-AM



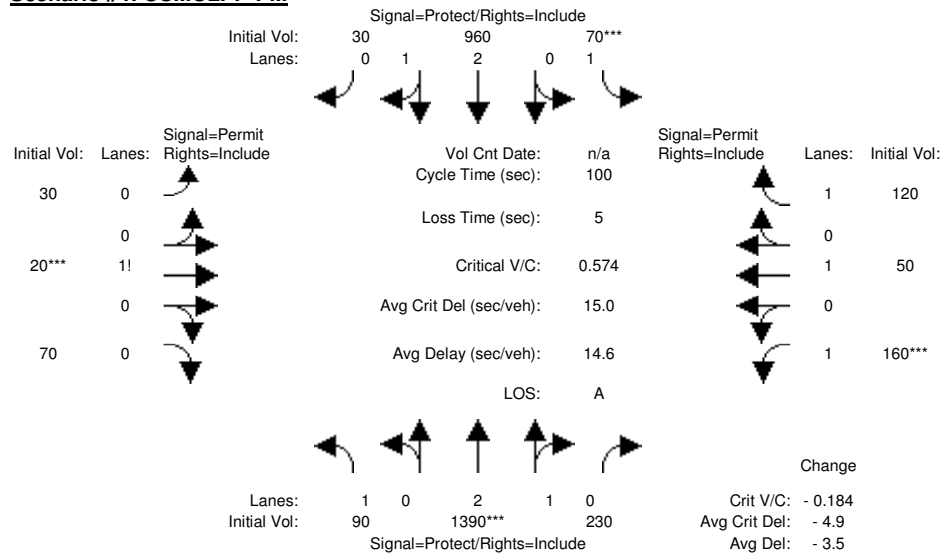
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



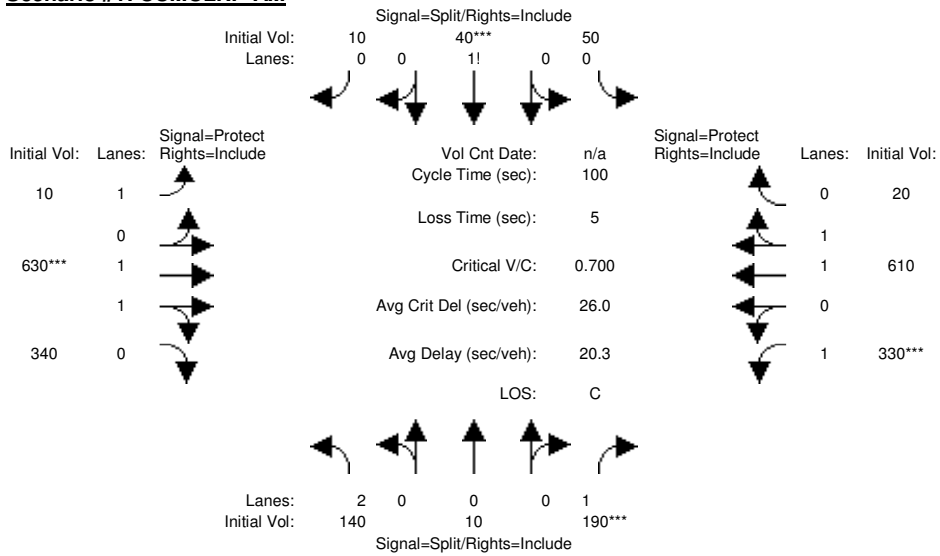
Cumulative Year (2035)

City of Westminster General Plan

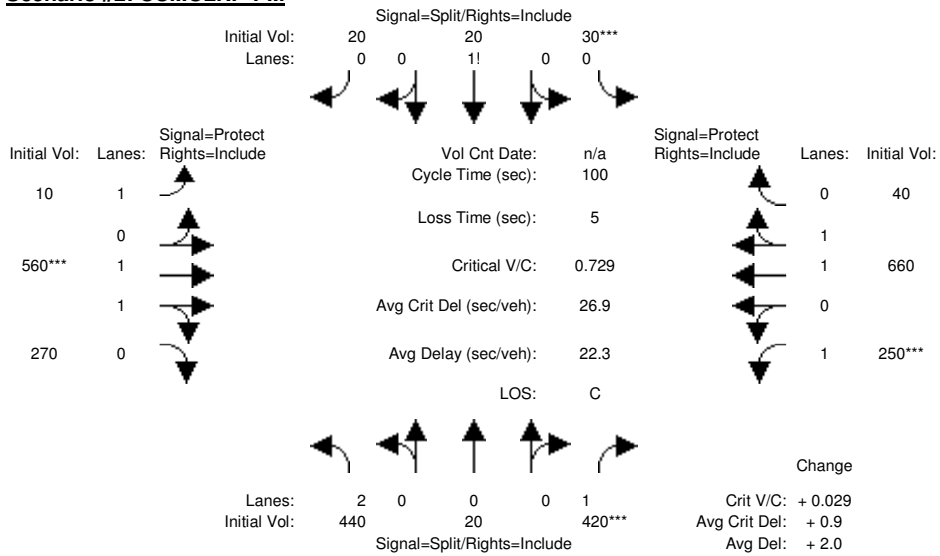
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #104: McFadden Ave & Gothard St/Vermont St

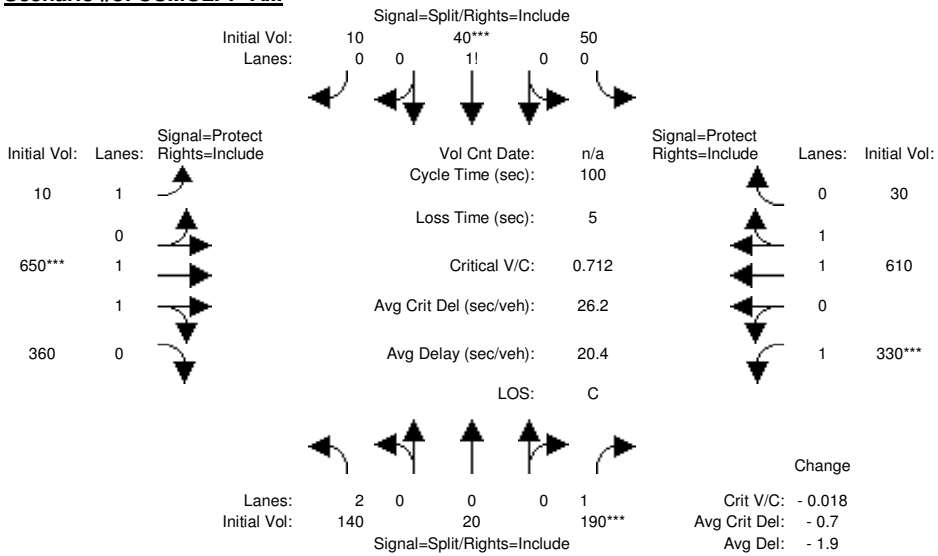
Scenario #1: CUMULNP-AM



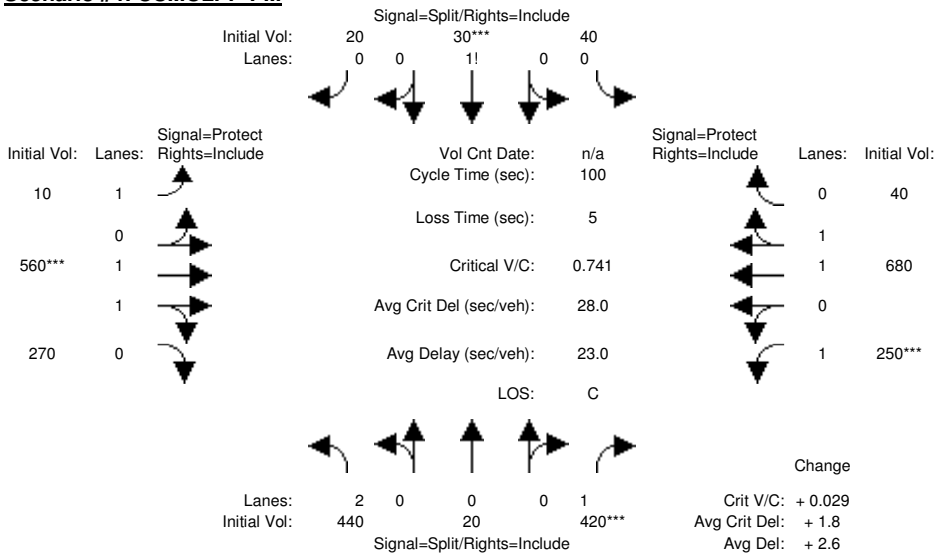
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



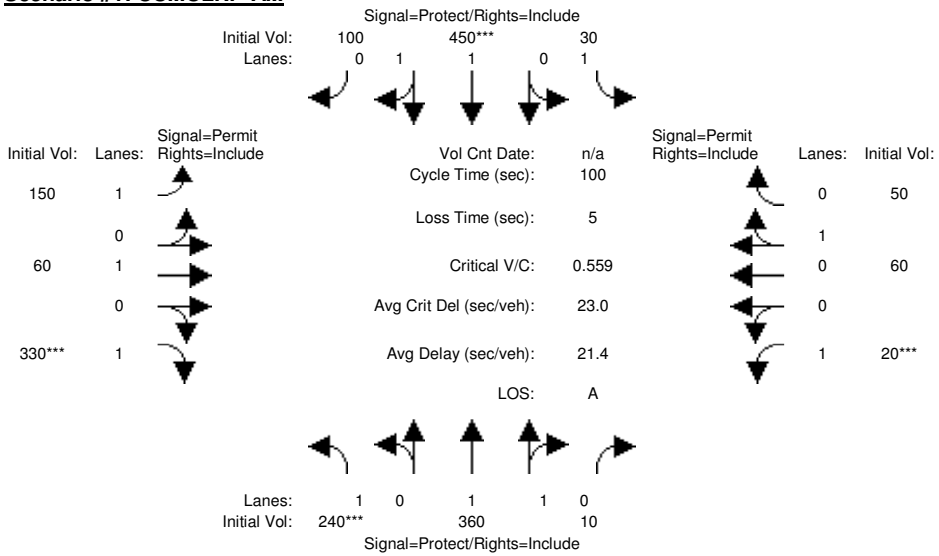
Cumulative Year (2035)

City of Westminster General Plan

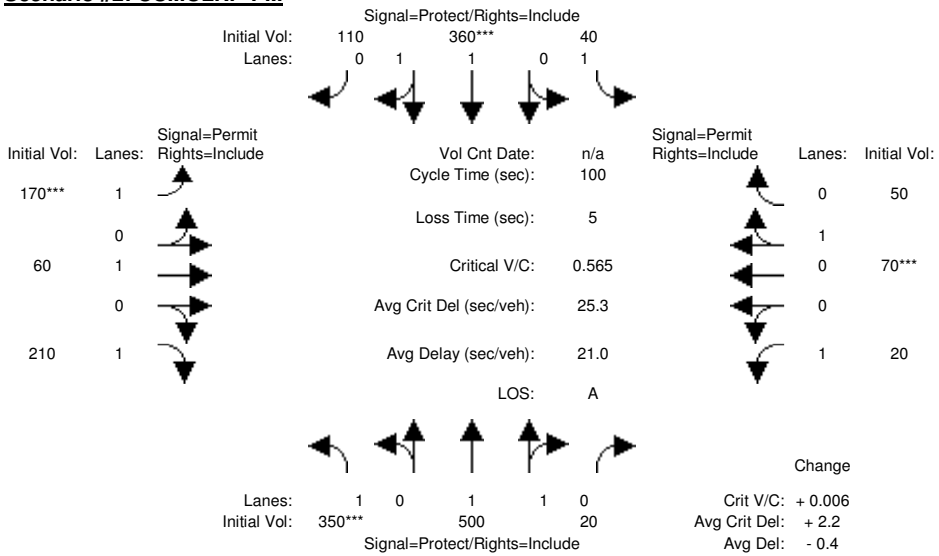
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #105: Newland St & Heil Ave

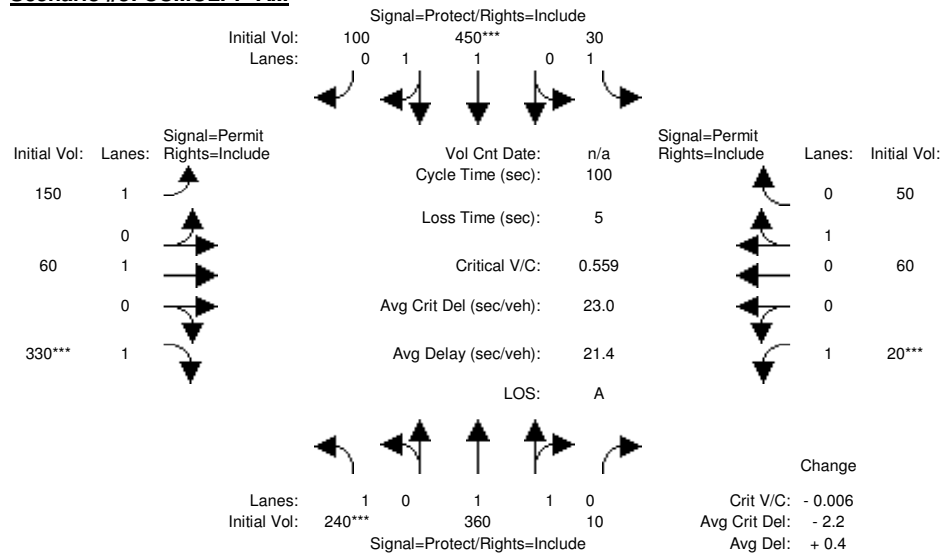
Scenario #1: CUMULNP-AM



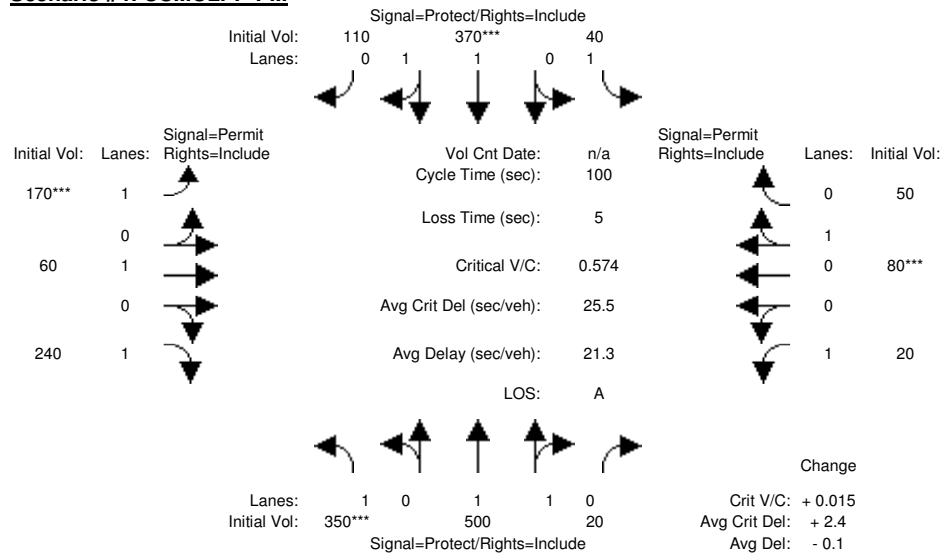
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



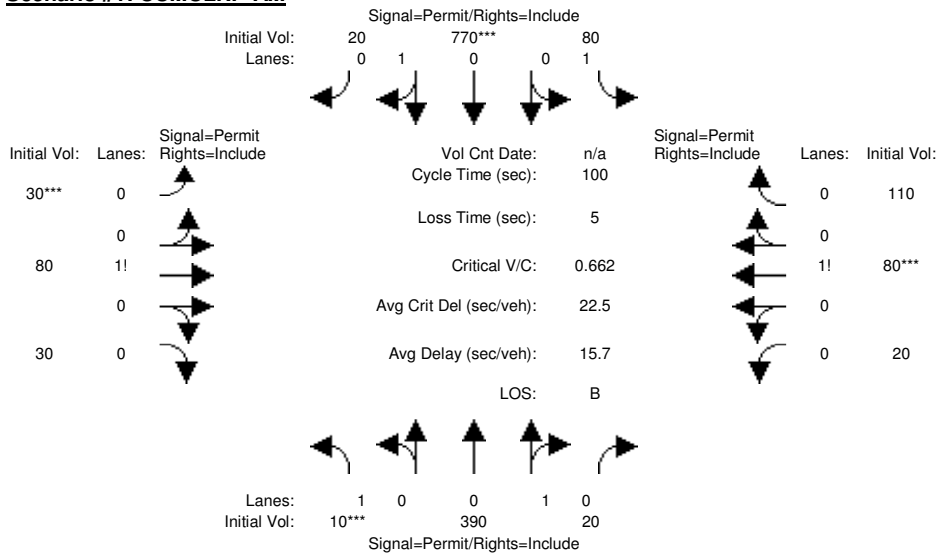
Cumulative Year (2035)

City of Westminster General Plan

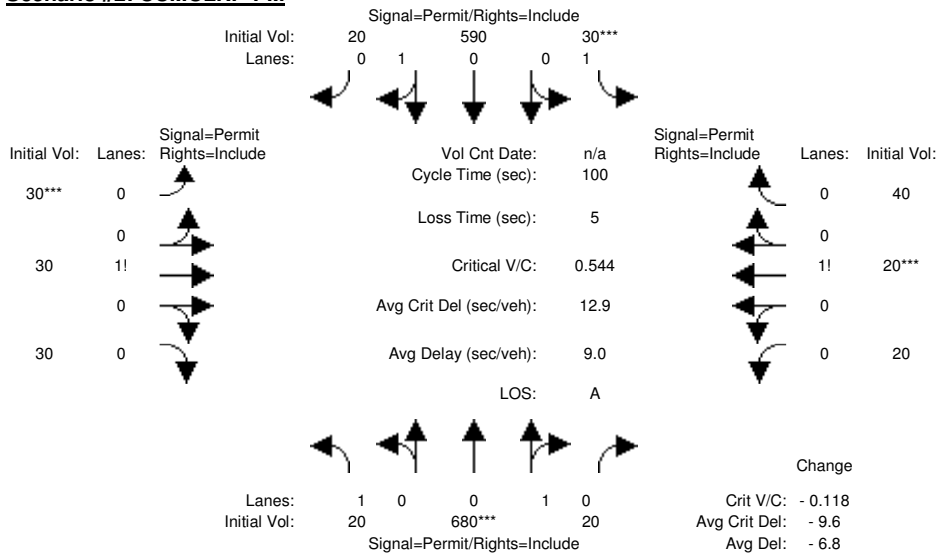
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #106: Newland St & Madison Ave

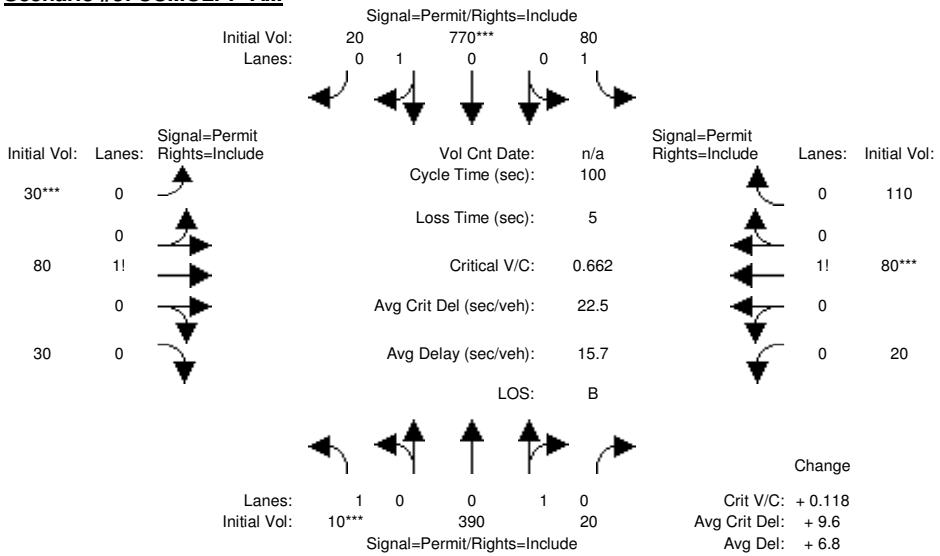
Scenario #1: CUMULNP-AM



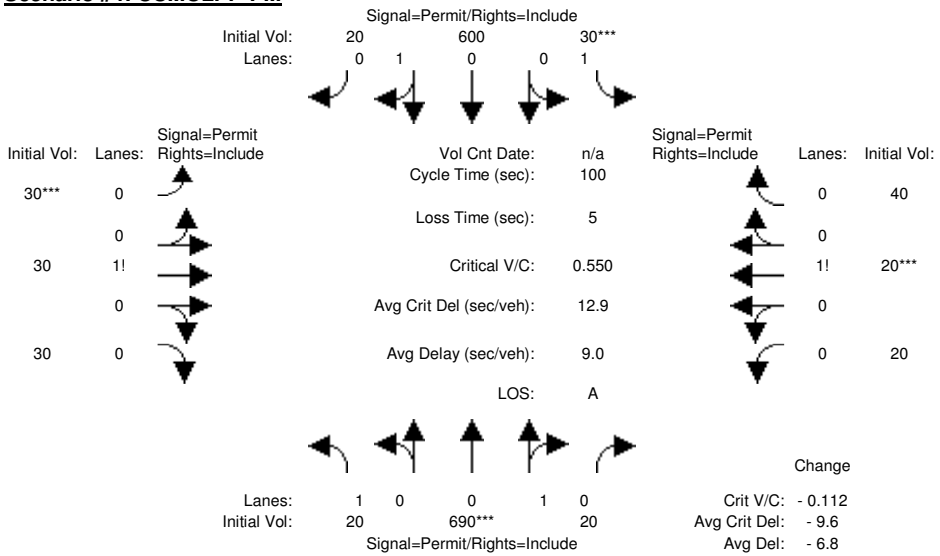
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



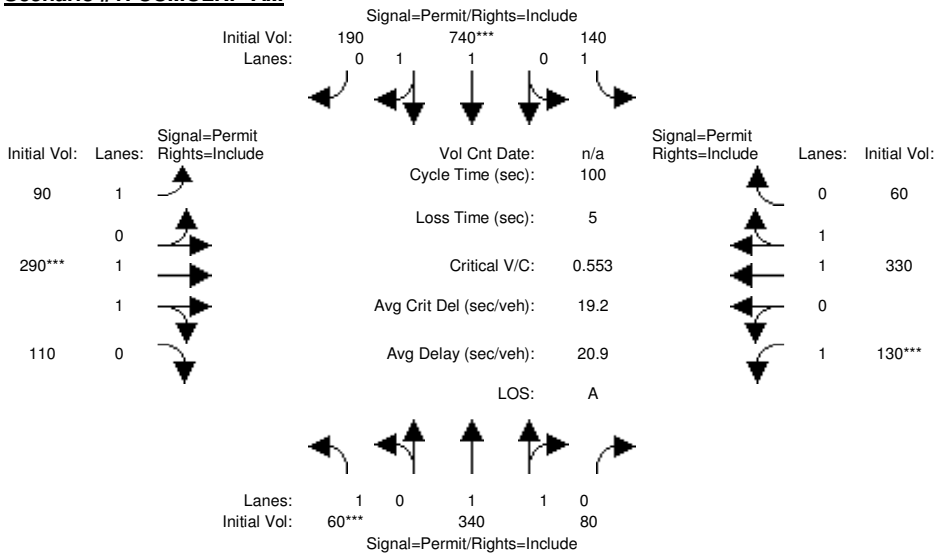
Cumulative Year (2035)

City of Westminster General Plan

Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #107: Newland St & Trask Ave

Scenario #1: CUMULNP-AM



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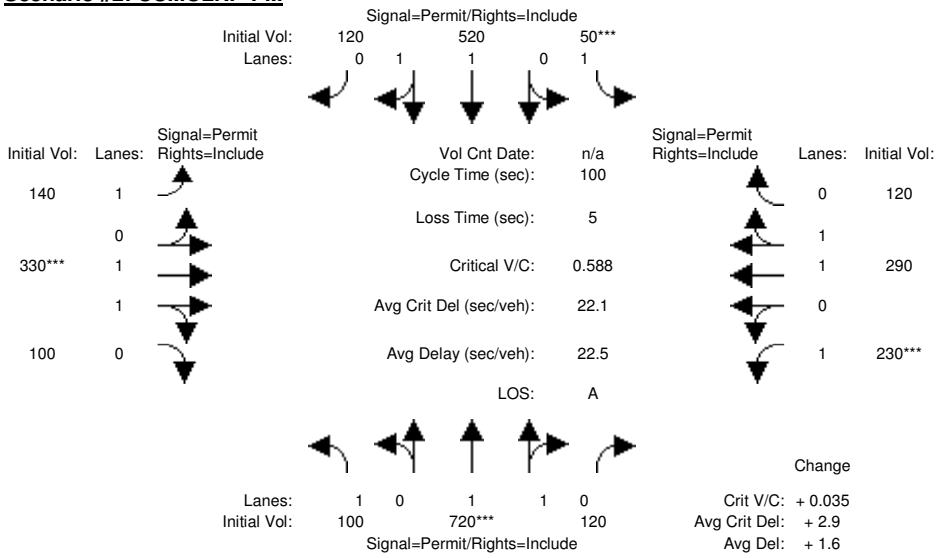
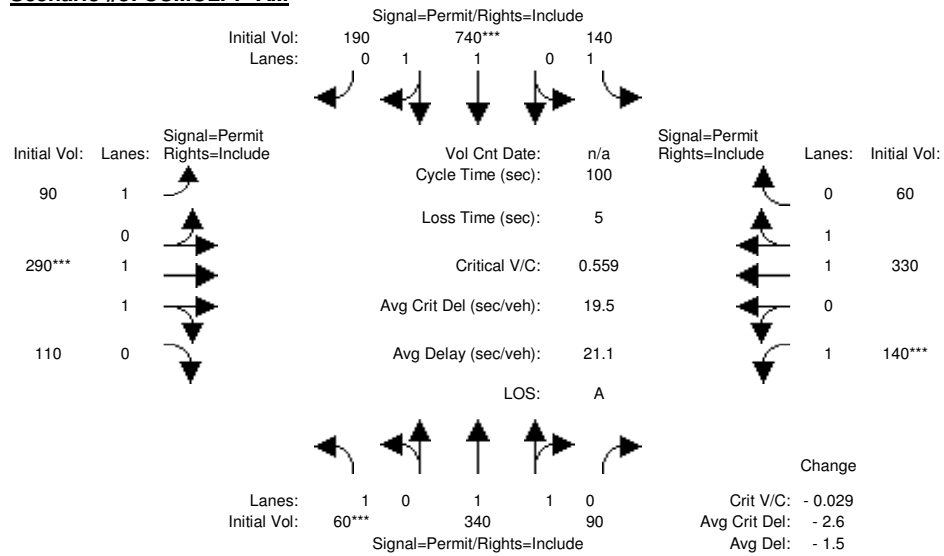
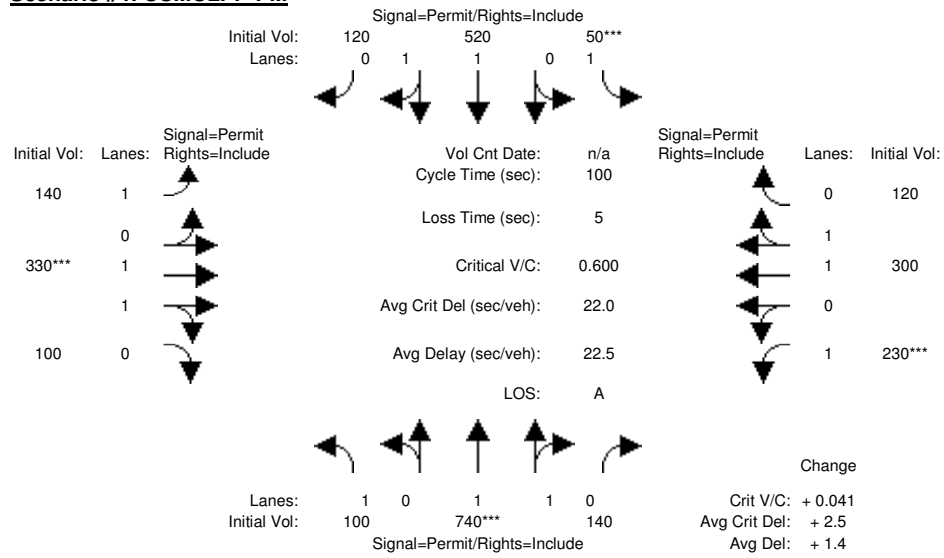


Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



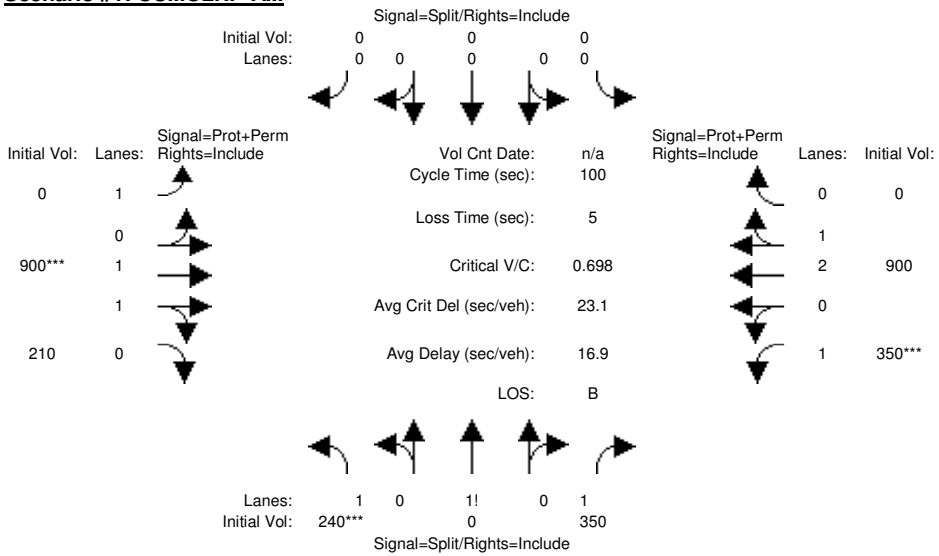
Cumulative Year (2035)

City of Westminster General Plan

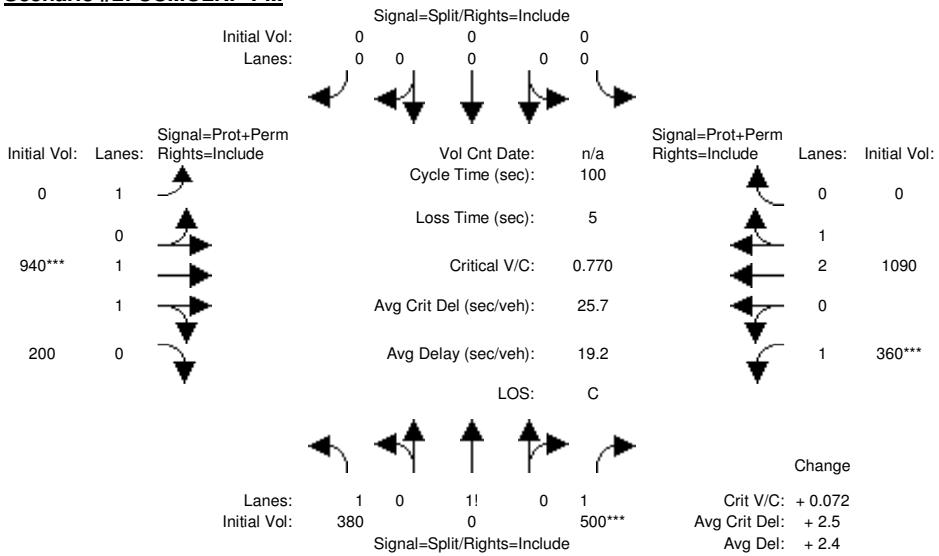
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #108: Westminster Blvd & Bushard St

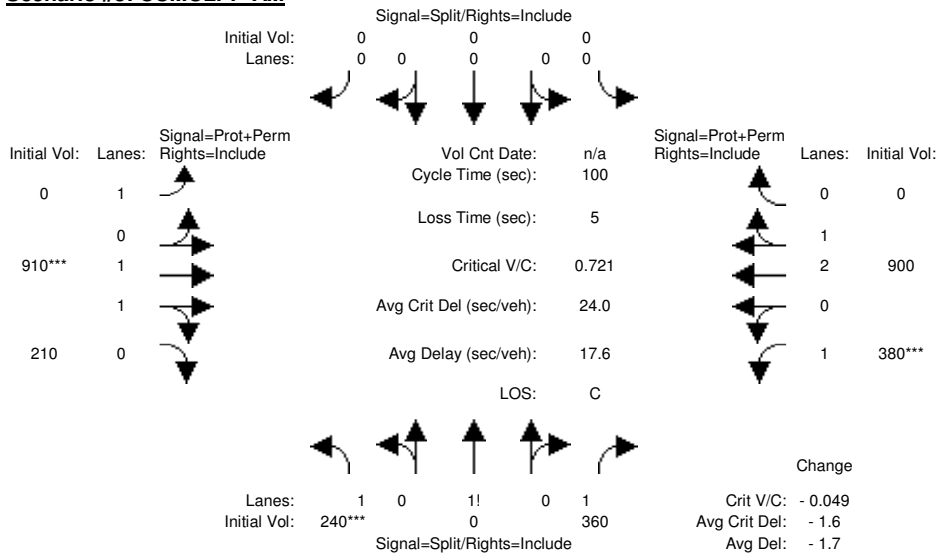
Scenario #1: CUMULNP-AM



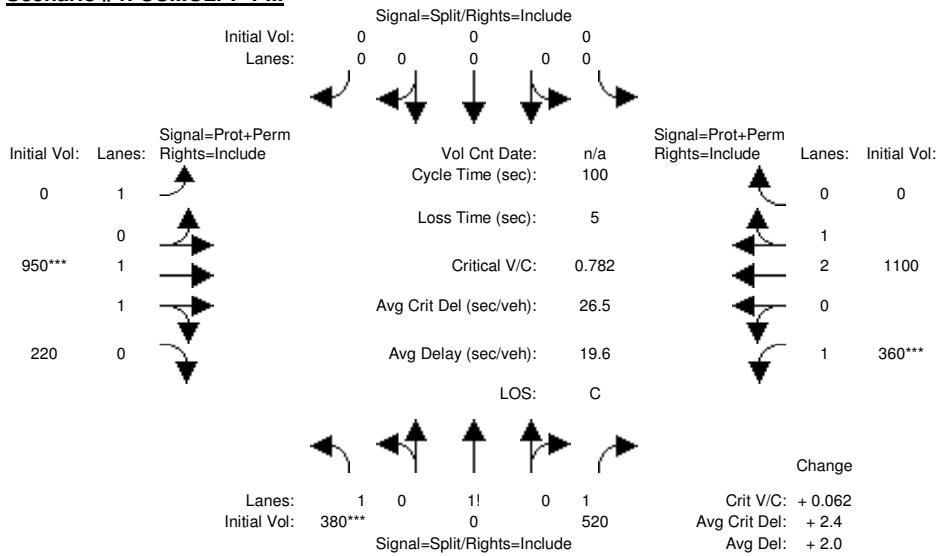
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



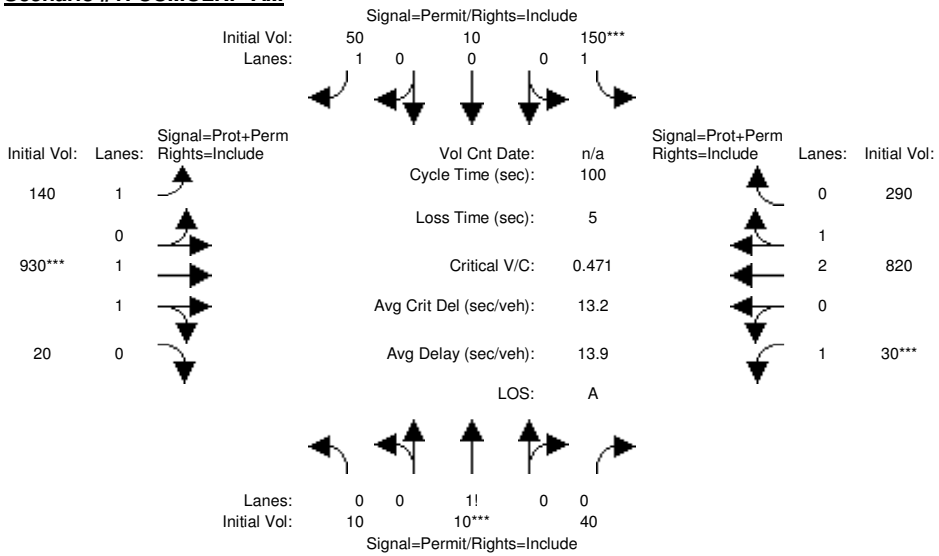
Cumulative Year (2035)

City of Westminster General Plan

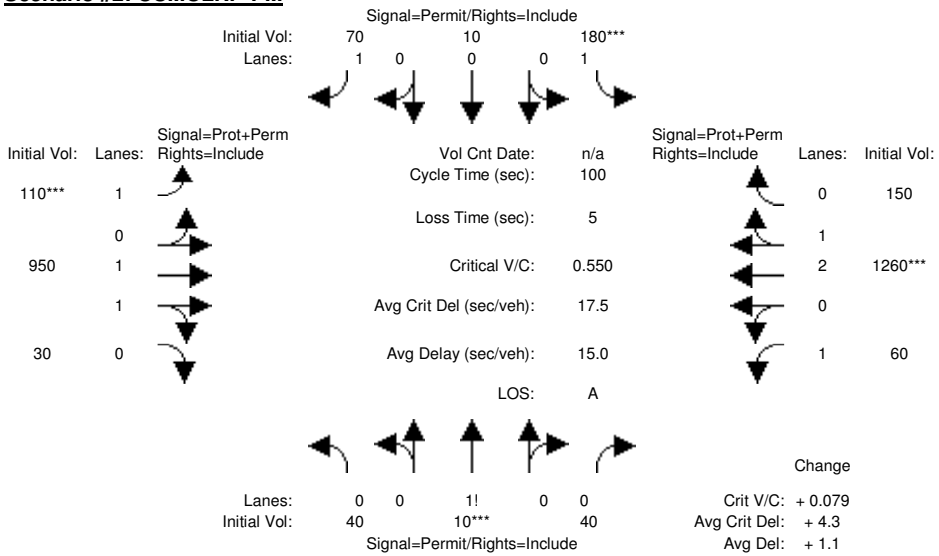
Detailed Scenario Comparison Report
ICU 1(Loss as Cycle Length %) (Future Volume Alternative)

Intersection #109: Westminster Blvd & Deodora Dr/Swan St

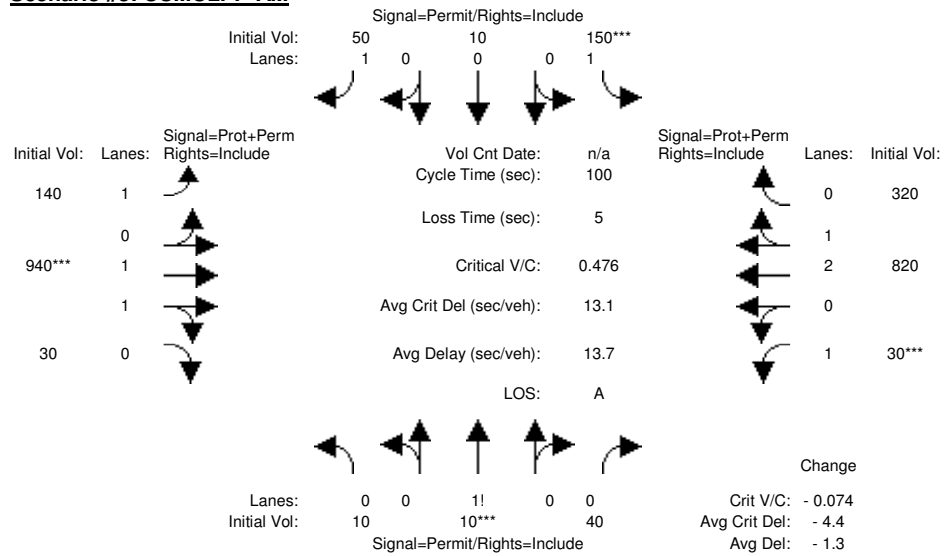
Scenario #1: CUMULNP-AM



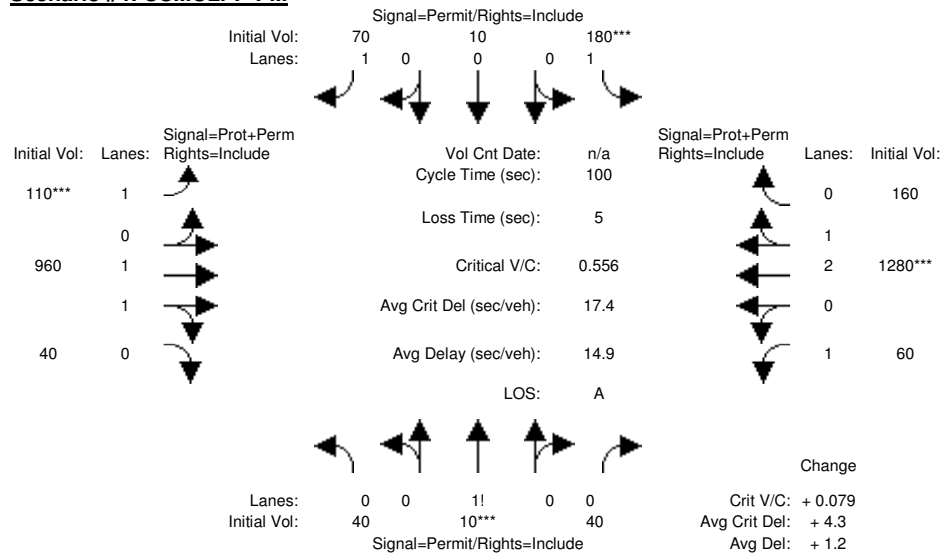
Scenario #2: CUMULNP-PM



Scenario #3: CUMULPP-AM



Scenario #4: CUMULPP-PM



APPENDIX C: FREEWAY REPORTS

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Euclid to Brookhurst St
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	5,573	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,467	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,969	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	64.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,194	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Brookhurst St to Warner Ave
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	6,439	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,694	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,896	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.3	mph
Calculated free-flow speed, FFS	68.1	mph
Measured free-flow speed, FFS	63.6	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,724	pcphpl
Average passenger-car speed, S	63.5	mph
Volume-to-capacity ratio, v/c	0.73	
Density, D	27.1	pcpmpl
Level of service, LOS	D	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Warner Ave to Magnolia Ave
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	5,645	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,486	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,046	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	63.7	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,511	pcphpl
Average passenger-car speed, S	64.8	mph
Volume-to-capacity ratio, v/c	0.64	
Density, D	23.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Magnolia Ave to Beach Blvd
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	6,120	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,611	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,555	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	63.2	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,639	pcphpl
Average passenger-car speed, S	64.2	mph
Volume-to-capacity ratio, v/c	0.70	
Density, D	25.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Beach Blvd to Bolsa Ave
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	6,547	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,723	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,012	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	59.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,753	pcphpl
Average passenger-car speed, S	63.2	mph
Volume-to-capacity ratio, v/c	0.75	
Density, D	27.7	pcpmpl
Level of service, LOS	D	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Ave to Westminster Blvd
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	6,018	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,584	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,445	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	61.2	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,611	pcphpl
Average passenger-car speed, S	64.4	mph
Volume-to-capacity ratio, v/c	0.69	
Density, D	25.0	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Westminster Blvd to Bolsa Chica Rd
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	5,557	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,462	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,952	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.5	mph
Calculated free-flow speed, FFS	70.9	mph
Measured free-flow speed, FFS	57.2	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,488	pcphpl
Average passenger-car speed, S	64.9	mph
Volume-to-capacity ratio, v/c	0.63	
Density, D	22.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Chica Rd to CA-22
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	4,817	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,268	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,159	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	48.5	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,290	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.55	
Density, D	19.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	CA-22 to Seal Beach Blvd
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	8,027	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,112	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	8,576	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	41.3	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,429	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.61	
Density, D	22.0	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Euclid to Brookhurst St
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	4,364	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,148	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,674	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	31.6	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	935	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.40	
Density, D	14.4	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Brookhurst St to Warner Ave
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,539	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,458	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,933	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.3	mph
Calculated free-flow speed, FFS	68.1	mph
Measured free-flow speed, FFS	40.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,483	pcphpl
Average passenger-car speed, S	64.9	mph
Volume-to-capacity ratio, v/c	0.63	
Density, D	22.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Warner Ave to Magnolia Ave
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	4,572	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,203	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,897	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	38.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,224	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Magnolia Ave to Beach Blvd
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,285	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,391	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,660	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	39.5	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,415	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.60	
Density, D	21.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Beach Blvd to Bolsa Ave
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,953	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,566	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,375	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	45.7	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,594	pcphpl
Average passenger-car speed, S	64.5	mph
Volume-to-capacity ratio, v/c	0.68	
Density, D	24.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Ave to Westminster Blvd
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,959	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,568	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,382	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	56.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,596	pcphpl
Average passenger-car speed, S	64.5	mph
Volume-to-capacity ratio, v/c	0.68	
Density, D	24.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Westminster Blvd to Bolsa Chica Rd
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,653	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,488	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,054	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.5	mph
Calculated free-flow speed, FFS	70.9	mph
Measured free-flow speed, FFS	56.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,514	pcphpl
Average passenger-car speed, S	64.8	mph
Volume-to-capacity ratio, v/c	0.64	
Density, D	23.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Chica Rd to CA-22
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	4,556	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,199	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,879	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	47.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,220	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	CA-22 to Seal Beach Blvd
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	8,350	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,197	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	8,921	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	46.1	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,487	pcphpl
Average passenger-car speed, S	64.9	mph
Volume-to-capacity ratio, v/c	0.63	
Density, D	22.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	6,822	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,795	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,289	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.0	mph
Calculated free-flow speed, FFS	70.4	mph
Measured free-flow speed, FFS	53.7	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,215	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	CA-22 to Bolsa Chica Rd
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	4,521	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,190	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,842	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	54.9	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,210	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Chica Rd to Westminster Blvd
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	3,260	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	858	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,491	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	39.2	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	873	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.37	
Density, D	13.4	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Westminster Blvd to Bolsa Ave
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	3,166	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	833	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,391	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	23.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	848	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.36	
Density, D	13.0	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Ave to Beach Blvd
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	2,684	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	706	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	2,875	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	19.7	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	719	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.31	
Density, D	11.1	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Beach Blvd to Magnolia St
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	2,853	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	751	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,056	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	30.2	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	764	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.33	
Density, D	11.8	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Magnolia Ave to Warner Ave
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	3,704	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	975	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,967	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	17.1	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	992	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.42	
Density, D	15.3	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Warner Ave to Brookhurst St
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	5,240	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,379	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,612	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	35.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,403	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.60	
Density, D	21.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Brookhurst St to Eucild
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	6,016	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,583	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,444	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	45.2	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,289	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.55	
Density, D	19.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	8,597	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,262	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	9,185	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.0	mph
Calculated free-flow speed, FFS	70.4	mph
Measured free-flow speed, FFS	52.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,531	pcphpl
Average passenger-car speed, S	64.8	mph
Volume-to-capacity ratio, v/c	0.65	
Density, D	23.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	CA-22 to Bolsa Chica Rd
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	4,608	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,213	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,935	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	50.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,234	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.53	
Density, D	19.0	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Chica Rd to Westminster Blvd
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,629	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,481	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,028	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	50.7	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,507	pcphpl
Average passenger-car speed, S	64.8	mph
Volume-to-capacity ratio, v/c	0.64	
Density, D	23.2	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Westminster Blvd to Bolsa Ave
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	4,922	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,295	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,272	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	38.2	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,318	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.56	
Density, D	20.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Ave to Beach Blvd
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,970	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,571	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,394	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	42.3	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,598	pcphpl
Average passenger-car speed, S	64.4	mph
Volume-to-capacity ratio, v/c	0.68	
Density, D	24.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Beach Blvd to Magnolia St
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	4,179	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,100	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,476	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	62.6	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,119	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.48	
Density, D	17.2	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Magnolia Ave to Warner Ave
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	6,542	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,722	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,007	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	58.4	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,752	pcphpl
Average passenger-car speed, S	63.2	mph
Volume-to-capacity ratio, v/c	0.75	
Density, D	27.7	pcpmpl
Level of service, LOS	D	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Warner Ave to Brookhurst St
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	6,454	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,698	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,912	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	55.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,728	pcphpl
Average passenger-car speed, S	63.5	mph
Volume-to-capacity ratio, v/c	0.74	
Density, D	27.2	pcpmpl
Level of service, LOS	D	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Brookhurst St to Eucild
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,680	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,495	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,084	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	65.5	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,217	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	7,817	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,057	veh
Trucks and buses	2.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.990	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	8,311	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	3.2	mph
Calculated free-flow speed, FFS	72.2	mph
Measured free-flow speed, FFS	53.7	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,385	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.59	
Density, D	21.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	I-405 Diverge to Valley View St
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	3,509	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	924	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,785	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	47.5	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,262	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.54	
Density, D	19.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Valley View St to Goldenwest St
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	3,381	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	890	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,646	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	51.5	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,215	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Goldenwest to Beach Blvd
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	2,809	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	739	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,030	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	49.9	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,010	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.43	
Density, D	15.5	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Beach Blvd to Magnolia St
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	5,187	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,365	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,594	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	49.2	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,399	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.60	
Density, D	21.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Magnolia St to Brookhurst St
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	4,332	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,140	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,671	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	22.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,168	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.50	
Density, D	18.0	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Brookhusrt St to Euclid St
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	4,562	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,201	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,920	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	25.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,230	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume	#VALUE!	pcph	#VALUE!	pcph	#VALUE!
On-ramp volume		pcph		pcph	
Off-ramp volume	694	pcph	2,100	pcph	No

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	8,597	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,262	veh
Trucks and buses	2.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.990	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	9,140	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	3.2	mph
Calculated free-flow speed, FFS	72.2	mph
Measured free-flow speed, FFS	52.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,523	pcphpl
Average passenger-car speed, S	64.8	mph
Volume-to-capacity ratio, v/c	0.65	
Density, D	23.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	I-405 Diverge to Valley View St
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	3,312	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	872	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,572	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	63.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,191	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Valley View St to Goldenwest St
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	3,406	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	896	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,673	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	63.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,224	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Goldenwest to Beach Blvd
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	2,996	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	788	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,231	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	62.7	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,077	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.46	
Density, D	16.6	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Beach Blvd to Magnolia St
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,671	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,492	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,116	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,529	pcphpl
Average passenger-car speed, S	64.8	mph
Volume-to-capacity ratio, v/c	0.65	
Density, D	23.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Magnolia St to Brookhurst St
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,009	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,318	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,402	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	61.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,351	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.57	
Density, D	20.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Brookhusrt St to Euclid St
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	4,928	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,297	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,315	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	25.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,329	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.57	
Density, D	20.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume	#VALUE!	pcph	#VALUE!	pcph	#VALUE!
On-ramp volume		pcph		pcph	
Off-ramp volume	694	pcph	2,100	pcph	No

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Euclid St to Brookhurst St
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	5,133	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,351	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,536	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	64.6	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,384	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.59	
Density, D	21.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Brookhurst St to Magnolia St
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	5,127	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,349	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,529	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	64.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,382	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.59	
Density, D	21.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Magnolia St to Beach Blvd
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	5,743	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,511	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,194	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.4	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,548	pcphpl
Average passenger-car speed, S	64.7	mph
Volume-to-capacity ratio, v/c	0.66	
Density, D	23.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Beach Blvd to Goldenwest St
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	3,826	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,007	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,126	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	44.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,375	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.59	
Density, D	21.2	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Goldenwest St to Valley View
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	4,732	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,245	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,103	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.5	mph
Calculated free-flow speed, FFS	70.9	mph
Measured free-flow speed, FFS	51.3	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,701	pcphpl
Average passenger-car speed, S	63.7	mph
Volume-to-capacity ratio, v/c	0.72	
Density, D	26.7	pcpmpl
Level of service, LOS	D	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Valley View to I-405
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	2,138	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	563	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	2,306	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	11.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.67	ramps/mi
Lane width adjustment, f_{LW}	1.9	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.0	mph
Calculated free-flow speed, FFS	68.5	mph
Measured free-flow speed, FFS	46.3	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	769	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.33	
Density, D	11.8	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	I-405 Merge to Seal Beach Blvd
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	8,027	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,112	veh
Trucks and buses	2.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.990	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	8,534	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	41.3	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,422	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.61	
Density, D	21.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	0
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph	0	pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	0
Alternative	Exisiting
Time period	2015 AM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Euclid St to Brookhurst St
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,387	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,418	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,809	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	59.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,452	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.62	
Density, D	22.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Brookhurst St to Magnolia St
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,382	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,416	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,805	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	61.3	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,451	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.62	
Density, D	22.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Magnolia St to Beach Blvd
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	5,661	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,490	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,105	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	62.1	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,526	pcphpl
Average passenger-car speed, S	64.8	mph
Volume-to-capacity ratio, v/c	0.65	
Density, D	23.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Beach Blvd to Goldenwest St
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	3,733	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	982	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,025	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	62.7	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,342	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.57	
Density, D	20.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Goldenwest St to Valley View
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	4,866	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,280	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,247	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.5	mph
Calculated free-flow speed, FFS	70.9	mph
Measured free-flow speed, FFS	36.3	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,749	pcphpl
Average passenger-car speed, S	63.3	mph
Volume-to-capacity ratio, v/c	0.74	
Density, D	27.6	pcpmpl
Level of service, LOS	D	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Valley View to I-405
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	1,948	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	513	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	2,101	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	11.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.67	ramps/mi
Lane width adjustment, f_{LW}	1.9	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.0	mph
Calculated free-flow speed, FFS	68.5	mph
Measured free-flow speed, FFS	35.1	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	700	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.30	
Density, D	10.8	pcpmpl
Level of service, LOS	A	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	I-405 Merge to Seal Beach Blvd
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	8,350	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,197	veh
Trucks and buses	2.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.990	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	8,877	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	46.1	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,480	pcphpl
Average passenger-car speed, S	64.9	mph
Volume-to-capacity ratio, v/c	0.63	
Density, D	22.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	0
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph	2,100	pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	0
Alternative	Exisiting
Time period	2015 PM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Euclid to Brookhurst St
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,740	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,511	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,148	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	68.9	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,025	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.44	
Density, D	15.8	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Brookhurst St to Warner Ave
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	6,770	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,782	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,251	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.3	mph
Calculated free-flow speed, FFS	68.1	mph
Measured free-flow speed, FFS	65.7	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,450	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.62	
Density, D	22.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Warner Ave to Magnolia Ave
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,970	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,571	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,394	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	64.7	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,279	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.54	
Density, D	19.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Magnolia Ave to Beach Blvd
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,920	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,558	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,340	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.7	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,268	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.54	
Density, D	19.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Beach Blvd to Bolsa Ave
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	7,180	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,889	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,690	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	59.3	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,538	pcphpl
Average passenger-car speed, S	64.7	mph
Volume-to-capacity ratio, v/c	0.65	
Density, D	23.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Ave to Westminster Blvd
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	6,720	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,768	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,197	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	64.5	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,439	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.61	
Density, D	22.2	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Westminster Blvd to Bolsa Chica Rd
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	6,380	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,679	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,833	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.5	mph
Calculated free-flow speed, FFS	70.9	mph
Measured free-flow speed, FFS	60.4	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,367	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.58	
Density, D	21.0	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Chica Rd to CA-22
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,460	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,437	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,848	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	0.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,170	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.50	
Density, D	18.0	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	CA-22 to Seal Beach Blvd
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	8,070	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,124	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	8,622	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	61.6	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,232	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Euclid to Brookhurst St
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	4,900	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,289	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,248	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	30.9	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	875	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.37	
Density, D	13.5	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Brookhurst St to Warner Ave
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,350	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,671	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,801	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.3	mph
Calculated free-flow speed, FFS	68.1	mph
Measured free-flow speed, FFS	44.3	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,360	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.58	
Density, D	20.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Warner Ave to Magnolia Ave
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,380	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,416	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,762	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	44.8	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,152	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.49	
Density, D	17.7	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Magnolia Ave to Beach Blvd
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,580	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,468	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,976	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	42.6	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,195	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Beach Blvd to Bolsa Ave
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,810	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,792	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,294	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	44.2	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,459	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.62	
Density, D	22.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Ave to Westminster Blvd
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	7,260	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,911	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,775	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	55.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,555	pcphpl
Average passenger-car speed, S	64.7	mph
Volume-to-capacity ratio, v/c	0.66	
Density, D	24.1	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Westminster Blvd to Bolsa Chica Rd
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,990	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,839	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,486	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.5	mph
Calculated free-flow speed, FFS	70.9	mph
Measured free-flow speed, FFS	55.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,497	pcphpl
Average passenger-car speed, S	64.9	mph
Volume-to-capacity ratio, v/c	0.64	
Density, D	23.1	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Chica Rd to CA-22
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,730	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,508	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,137	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	0.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,227	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	CA-22 to Seal Beach Blvd
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	8,970	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,361	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	9,584	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	49.1	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,369	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.58	
Density, D	21.1	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	8,090	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,129	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	8,644	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.0	mph
Calculated free-flow speed, FFS	70.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,235	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.53	
Density, D	19.0	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	CA-22 to Bolsa Chica Rd
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,600	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,474	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,998	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,200	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Chica Rd to Westminster Blvd
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,040	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,326	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,398	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,080	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.46	
Density, D	16.6	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Westminster Blvd to Bolsa Ave
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,570	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,203	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,895	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	979	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.42	
Density, D	15.1	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Ave to Beach Blvd
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	3,590	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	945	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,845	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	769	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.33	
Density, D	11.8	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Beach Blvd to Magnolia St
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,220	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,111	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,520	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	904	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.38	
Density, D	13.9	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Magnolia Ave to Warner Ave
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,670	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,229	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,002	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,000	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.43	
Density, D	15.4	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Warner Ave to Brookhurst St
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	6,180	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,626	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,619	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,324	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.56	
Density, D	20.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Brookhurst St to Eucild
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	6,760	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,779	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,240	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,207	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	8,600	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,263	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	9,188	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.0	mph
Calculated free-flow speed, FFS	70.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,313	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.56	
Density, D	20.2	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	CA-22 to Bolsa Chica Rd
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	4,900	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,289	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,248	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,050	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.45	
Density, D	16.1	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Chica Rd to Westminster Blvd
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,760	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,779	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,240	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,448	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.62	
Density, D	22.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Westminster Blvd to Bolsa Ave
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,630	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,482	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,030	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,206	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Ave to Beach Blvd
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,210	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,634	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,651	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,330	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.57	
Density, D	20.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Beach Blvd to Magnolia St
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	4,600	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,211	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,927	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	985	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.42	
Density, D	15.2	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Magnolia Ave to Warner Ave
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,740	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,774	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,219	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,444	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.61	
Density, D	22.2	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Warner Ave to Brookhurst St
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,670	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,755	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,144	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,429	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.61	
Density, D	22.0	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Brookhurst St to Eucild
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,750	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,513	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,159	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,026	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.44	
Density, D	15.8	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	9,080	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,389	veh
Trucks and buses	2.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.990	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	9,653	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	3.2	mph
Calculated free-flow speed, FFS	72.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,379	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.59	
Density, D	21.2	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	I-405 Diverge to Valley View St
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	3,930	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,034	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,238	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,413	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.60	
Density, D	21.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Valley View St to Goldenwest St
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	3,380	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	889	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,645	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,215	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Goldenwest to Beach Blvd
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	2,180	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	574	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	2,351	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	784	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.33	
Density, D	12.1	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Beach Blvd to Magnolia St
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,640	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,221	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,004	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,251	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.53	
Density, D	19.2	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Magnolia St to Brookhurst St
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	3,840	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,011	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,141	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,035	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.44	
Density, D	15.9	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Brookhusrt St to Euclid St
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,090	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,076	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,411	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,103	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.47	
Density, D	17.0	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume	#VALUE!	pcph	#VALUE!	pcph	#VALUE!
On-ramp volume		pcph		pcph	
Off-ramp volume	694	pcph	2,100	pcph	No

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	8,600	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,263	veh
Trucks and buses	2.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.990	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	9,143	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	3.2	mph
Calculated free-flow speed, FFS	72.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,306	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.56	
Density, D	20.1	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	I-405 Diverge to Valley View St
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	3,310	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	871	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,570	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,190	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Valley View St to Goldenwest St
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	3,400	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	895	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,667	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,222	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Goldenwest to Beach Blvd
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	3,030	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	797	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,268	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,089	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.46	
Density, D	16.8	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Beach Blvd to Magnolia St
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,610	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,476	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,050	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,512	pcphpl
Average passenger-car speed, S	64.8	mph
Volume-to-capacity ratio, v/c	0.64	
Density, D	23.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Magnolia St to Brookhurst St
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,090	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,339	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,489	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,372	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.58	
Density, D	21.1	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Brookhusrt St to Euclid St
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	4,970	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,308	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,360	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,340	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.57	
Density, D	20.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume	#VALUE!	pcph	#VALUE!	pcph	#VALUE!
On-ramp volume		pcph		pcph	
Off-ramp volume	694	pcph	2,100	pcph	No

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Cumulative
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Euclid St to Brookhurst St
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,240	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,379	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,651	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,413	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.60	
Density, D	21.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Brookhurst St to Magnolia St
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,090	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,339	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,489	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,372	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.58	
Density, D	21.1	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Magnolia St to Beach Blvd
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,670	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,492	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,115	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,529	pcphpl
Average passenger-car speed, S	64.8	mph
Volume-to-capacity ratio, v/c	0.65	
Density, D	23.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Beach Blvd to Goldenwest St
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	3,870	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,018	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,173	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,391	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.59	
Density, D	21.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Goldenwest St to Valley View
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,730	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,245	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,101	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.5	mph
Calculated free-flow speed, FFS	70.9	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,700	pcphpl
Average passenger-car speed, S	63.7	mph
Volume-to-capacity ratio, v/c	0.72	
Density, D	26.7	pcpmpl
Level of service, LOS	D	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Valley View to I-405
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	2,140	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	563	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	2,308	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	11.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.67	ramps/mi
Lane width adjustment, f_{LW}	1.9	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.0	mph
Calculated free-flow speed, FFS	68.5	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	769	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.33	
Density, D	11.8	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	I-405 Merge to Seal Beach Blvd
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	8,070	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,124	veh
Trucks and buses	2.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.990	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	8,580	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,226	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	0
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph	0	pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	0
Alternative	Cumulative
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Euclid St to Brookhurst St
Alternative	Cumualtive
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,320	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,400	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,737	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,434	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.61	
Density, D	22.1	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Brookhurst St to Magnolia St
Alternative	Cumualtive
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,190	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,366	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,597	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,399	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.60	
Density, D	21.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Magnolia St to Beach Blvd
Alternative	Cumualtive
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,300	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,395	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,716	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,429	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.61	
Density, D	22.0	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Beach Blvd to Goldenwest St
Alternative	Cumualtive
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	3,420	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	900	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,688	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,229	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Goldenwest St to Valley View
Alternative	Cumualtive
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	4,870	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,282	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,252	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.5	mph
Calculated free-flow speed, FFS	70.9	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,751	pcphpl
Average passenger-car speed, S	63.3	mph
Volume-to-capacity ratio, v/c	0.74	
Density, D	27.7	pcpmpl
Level of service, LOS	D	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Valley View to I-405
Alternative	Cumualtive
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	2,030	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	534	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	2,189	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	11.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.67	ramps/mi
Lane width adjustment, f_{LW}	1.9	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.0	mph
Calculated free-flow speed, FFS	68.5	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	730	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.31	
Density, D	11.2	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	I-405 Merge to Seal Beach Blvd
Alternative	Cumualtive
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	8,970	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,361	veh
Trucks and buses	2.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.990	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	9,537	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,362	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.58	
Density, D	21.0	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	0
Alternative	Cumualtive
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph	2,100	pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	0
Alternative	Cumualtive
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Euclid to Brookhurst St
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,860	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,542	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,276	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,046	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.45	
Density, D	16.1	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Brookhurst St to Warner Ave
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	6,880	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,811	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,368	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.3	mph
Calculated free-flow speed, FFS	68.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,474	pcphpl
Average passenger-car speed, S	64.9	mph
Volume-to-capacity ratio, v/c	0.63	
Density, D	22.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Warner Ave to Magnolia Ave
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	6,060	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,595	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,490	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,298	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.55	
Density, D	20.0	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Magnolia Ave to Beach Blvd
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,940	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,563	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,362	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,272	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.54	
Density, D	19.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Beach Blvd to Bolsa Ave
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	7,210	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,897	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,722	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,544	pcphpl
Average passenger-car speed, S	64.7	mph
Volume-to-capacity ratio, v/c	0.66	
Density, D	23.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Ave to Westminster Blvd
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	6,760	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,779	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,240	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,448	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.62	
Density, D	22.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Westminster Blvd to Bolsa Chica Rd
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	6,420	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,689	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,876	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.5	mph
Calculated free-flow speed, FFS	70.9	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,375	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.59	
Density, D	21.2	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Chica Rd to CA-22
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,480	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,442	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,869	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,174	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.50	
Density, D	18.1	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	CA-22 to Seal Beach Blvd
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	8,130	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,139	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	8,686	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,241	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.53	
Density, D	19.1	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Euclid to Brookhurst St
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	4,900	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,289	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,248	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	875	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.37	
Density, D	13.5	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Brookhurst St to Warner Ave
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,350	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,671	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,801	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.3	mph
Calculated free-flow speed, FFS	68.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,360	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.58	
Density, D	20.9	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Warner Ave to Magnolia Ave
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,380	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,416	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,762	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,152	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.49	
Density, D	17.7	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Magnolia Ave to Beach Blvd
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,580	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,468	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,976	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,195	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Beach Blvd to Bolsa Ave
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,870	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,808	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,358	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,472	pcphpl
Average passenger-car speed, S	64.9	mph
Volume-to-capacity ratio, v/c	0.63	
Density, D	22.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Ave to Westminster Blvd
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	7,310	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,924	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,829	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,566	pcphpl
Average passenger-car speed, S	64.6	mph
Volume-to-capacity ratio, v/c	0.67	
Density, D	24.2	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Westminster Blvd to Bolsa Chica Rd
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	7,050	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,855	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,551	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.5	mph
Calculated free-flow speed, FFS	70.9	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,510	pcphpl
Average passenger-car speed, S	64.8	mph
Volume-to-capacity ratio, v/c	0.64	
Density, D	23.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	Bolsa Chica Rd to CA-22
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,780	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,521	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,190	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,238	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.53	
Density, D	19.0	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Northbound I-405
Segment	CA-22 to Seal Beach Blvd
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	9,120	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,400	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	9,744	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,392	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.59	
Density, D	21.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Cumulative + P
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	8,210	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,161	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	8,772	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.0	mph
Calculated free-flow speed, FFS	70.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,253	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.53	
Density, D	19.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	CA-22 to Bolsa Chica Rd
Alternative	Cumulative + P
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,570	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,466	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,965	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,193	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Chica Rd to Westminster Blvd
Alternative	Cumulative + P
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,070	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,334	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,430	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,086	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.46	
Density, D	16.7	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Westminster Blvd to Bolsa Ave
Alternative	Cumulative + P
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,560	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,200	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,884	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	977	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.42	
Density, D	15.0	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Ave to Beach Blvd
Alternative	Cumulative + P
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	3,560	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	937	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,813	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	763	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.32	
Density, D	11.7	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Beach Blvd to Magnolia St
Alternative	Cumulative + P
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,190	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,103	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,488	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	898	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.38	
Density, D	13.8	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Magnolia Ave to Warner Ave
Alternative	Cumulative + P
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,660	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,226	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,991	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	998	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.42	
Density, D	15.4	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Warner Ave to Brookhurst St
Alternative	Cumulative + P
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	6,170	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,624	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,608	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,322	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.56	
Density, D	20.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Brookhurst St to Eucild
Alternative	Cumulative + P
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	6,750	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,776	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,230	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,205	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	8,720	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,295	veh
Trucks and buses	3.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.985	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	9,317	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.67	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.0	mph
Calculated free-flow speed, FFS	70.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,331	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.57	
Density, D	20.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	CA-22 to Bolsa Chica Rd
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	4,930	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,297	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,280	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,056	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.45	
Density, D	16.2	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Chica Rd to Westminster Blvd
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,830	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,797	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,315	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,463	pcphpl
Average passenger-car speed, S	64.9	mph
Volume-to-capacity ratio, v/c	0.62	
Density, D	22.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Westminster Blvd to Bolsa Ave
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,640	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,484	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,041	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,208	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Bolsa Ave to Beach Blvd
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,220	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,637	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,662	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,332	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.57	
Density, D	20.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Beach Blvd to Magnolia St
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	4,640	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,221	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,970	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	994	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.42	
Density, D	15.3	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Magnolia Ave to Warner Ave
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,780	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,784	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,262	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.7	mph
Calculated free-flow speed, FFS	67.7	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,452	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.62	
Density, D	22.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Warner Ave to Brookhurst St
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	6,700	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,763	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	7,176	pcph
Number of lanes, N	5	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	7.0	mph
Calculated free-flow speed, FFS	68.4	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,435	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.61	
Density, D	22.1	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Southbound I-405
Segment	Brookhurst St to Eucild
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,760	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,516	veh
Trucks and buses	3.5%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.983	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,169	pcph
Number of lanes, N	6	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,028	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.44	
Density, D	15.8	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	9,200	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,421	veh
Trucks and buses	2.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.990	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	9,781	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	3.2	mph
Calculated free-flow speed, FFS	72.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,397	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.59	
Density, D	21.5	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	I-405 Diverge to Valley View St
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	3,670	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	966	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,958	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,319	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.56	
Density, D	20.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Valley View St to Goldenwest St
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	3,910	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,029	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,217	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,406	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.60	
Density, D	21.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Goldenwest to Beach Blvd
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	2,250	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	592	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	2,426	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	809	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.34	
Density, D	12.4	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Beach Blvd to Magnolia St
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,640	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,221	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,004	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,251	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.53	
Density, D	19.2	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Magnolia St to Brookhurst St
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	3,820	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,005	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,120	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,030	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.44	
Density, D	15.8	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Brookhusrt St to Euclid St
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,080	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,074	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,400	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,100	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.47	
Density, D	16.9	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume	#VALUE!	pcph	#VALUE!	pcph	#VALUE!
On-ramp volume		pcph		pcph	
Off-ramp volume	694	pcph	2,100	pcph	No

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Seal Beach Blvd to I-405 Diverge
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	8,720	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	2,295	veh
Trucks and buses	2.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.990	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	9,271	pcph
Number of lanes, N	7	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	3.2	mph
Calculated free-flow speed, FFS	72.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,324	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.56	
Density, D	20.4	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	I-405 Diverge to Valley View St
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	3,310	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	871	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,570	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,190	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.51	
Density, D	18.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Valley View St to Goldenwest St
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	3,400	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	895	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,667	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.1	mph
Calculated free-flow speed, FFS	71.3	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,222	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.52	
Density, D	18.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Goldenwest to Beach Blvd
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	3,110	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	818	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	3,354	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,118	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.48	
Density, D	17.2	pcpmpl
Level of service, LOS	B	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Beach Blvd to Magnolia St
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,690	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,497	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,136	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.83	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.3	mph
Calculated free-flow speed, FFS	70.1	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,534	pcphpl
Average passenger-car speed, S	64.7	mph
Volume-to-capacity ratio, v/c	0.65	
Density, D	23.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Magnolia St to Brookhurst St
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,130	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,350	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,532	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.17	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.2	mph
Calculated free-flow speed, FFS	69.2	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,383	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.59	
Density, D	21.3	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	Brookhusrt St to Euclid St
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	5,010	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,318	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,403	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,351	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.57	
Density, D	20.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume	#VALUE!	pcph	#VALUE!	pcph	#VALUE!
On-ramp volume		pcph		pcph	
Off-ramp volume	694	pcph	2,100	pcph	No

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Eastbound CA-22
Segment	0
Alternative	Cumulative Plus Project
Time period	2035 PM

Flow Inputs and Adjustments

Volume, V	#VALUE!	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	#VALUE!	veh
Trucks and buses	6.0%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.971	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	#VALUE!	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width		ft
Right-side lateral clearance		ft
Total ramp density, TRD		ramps/mi
Lane width adjustment, f_{LW}		mph
Lateral clearance adjustment, f_{LC}		mph
TRD adjustment		mph
Calculated free-flow speed, FFS		mph
Measured free-flow speed, FFS		mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	#VALUE!	pcphpl
Average passenger-car speed, S	#VALUE!	mph
Volume-to-capacity ratio, v/c	#VALUE!	
Density, D	#VALUE!	pcpmpl
Level of service, LOS	#VALUE!	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Euclid St to Brookhurst St
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,260	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,384	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,672	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,418	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.60	
Density, D	21.8	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Brookhurst St to Magnolia St
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,070	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,334	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,468	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.33	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	6.6	mph
Calculated free-flow speed, FFS	68.8	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,367	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.58	
Density, D	21.0	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Magnolia St to Beach Blvd
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	5,700	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,500	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	6,147	pcph
Number of lanes, N	4	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,537	pcphpl
Average passenger-car speed, S	64.7	mph
Volume-to-capacity ratio, v/c	0.65	
Density, D	23.7	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Beach Blvd to Goldenwest St
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	3,900	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,026	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	4,206	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	2.00	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	5.8	mph
Calculated free-flow speed, FFS	69.6	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,402	pcphpl
Average passenger-car speed, S	65.0	mph
Volume-to-capacity ratio, v/c	0.60	
Density, D	21.6	pcpmpl
Level of service, LOS	C	

HCM 2010: Freeway Basic Segment

Basic Operational Analysis

Project	Westminster GP
Freeway	Westbound CA-22
Segment	Goldenwest St to Valley View
Alternative	Cumulative Plus Project
Time period	2035 AM

Flow Inputs and Adjustments

Volume, V	4,730	vph
Peak-hour factor, PHF	0.95	
Peak 15-min volume, v_{15}	1,245	veh
Trucks and buses	4.9%	
Recreational vehicles	0.0%	
Terrain type	Level	
Grade		
Length		mi
Trucks and buses PCE, E_T	1.5	
Recreational vehicle PCE, E_R	1.2	
Heavy vehicle adjustment, f_{HV}	0.976	
Driver popoulation factor, f_P	1.00	
Flow rate, v_p	5,101	pcph
Number of lanes, N	3	

Speed Inputs and Adjustments

Lane width	12.0	ft
Right-side lateral clearance	>6	ft
Total ramp density, TRD	1.50	ramps/mi
Lane width adjustment, f_{LW}	0.0	mph
Lateral clearance adjustment, f_{LC}	0.0	mph
TRD adjustment	4.5	mph
Calculated free-flow speed, FFS	70.9	mph
Measured free-flow speed, FFS	65.0	mph
Free-flow speed curve	65	mph

Capacity Checks for Segments with Ramps

	Actual		Maximum		Violation?
Entering freeway volume		pcph		pcph	
Exiting freeway volume		pcph		pcph	
On-ramp volume		pcph		pcph	
Off-ramp volume		pcph		pcph	

LOS and Performance Measures

Flow rate, v_p	1,700	pcphpl
Average passenger-car speed, S	63.7	mph
Volume-to-capacity ratio, v/c	0.72	
Density, D	26.7	pcpmpl
Level of service, LOS	D	

Appendix J Public Services and Utilities Correspondence

Appendices

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RESPONSES TO REQUEST FOR SERVICE PROVIDER INFORMATION

GARDEN GROVE UNIFIED SCHOOL DISTRICT

1. The Garden Grove Unified does, in fact, provide k-12 educational services to portions of the City of Westminster and unincorporated community of Midway City.
2. List of schools:

Elementary Schools

School	Address	Grades	2015-16 Enrollment
Hill Elementary	9681 11th St. Garden Grove	K-6	374
Murdy Elementary	14851 Donegal Dr. Garden Grove	K-6	425
Carrillo Elementary	15270 Bushard St. Westminster	K-6	641
Marshall Elementary	15791 Bushard St. Westminster	K-6	452
Post Elementary	14641 Ward St. Westminster	K-6	537
Anthony Elementary	15320 Pickford St. Westminster	K-6	465
Paine Elementary	15792 Ward St. Garden Grove	K-6	487

Intermediate Schools

School	Address	Grades	2015-16 Enrollment
Jordan Intermediate	9821 Woodbury Rd Garden Grove	7-8	726
McGarvin Intermediate	9802 Bishop Pl. Westminster	7-8	816
Irvine Intermediate	10552 Hazard Av. Garden Grove	7-8	848

High Schools

School	Address	Grades	2015-16 Enrollment
La Quinta High	10372 McFadden St. Westminster	9-12	2,136
Bolsa Grande High	9401 Westminster Av. Garden Grove	9-12	2,015

3. Capacity vs. Enrollment

School Level District-Wide	Capacity Permanent Buildings	Capacity Portable Buildings	Total Capacity	Current Enrollment
Elementary Schools	20,821	9,750	30,571	23,307
Intermediate Schools	6,483	1,566	8,049	7,177
High Schools	12,285	2,646	14,931	14,095

4. Portable classrooms are not considered an adequate long-term housing solution. They will need to be replaced by permanent construction where necessary.
5. Student generation factors, per the District's most recent School Fee Justification Study are:

Elementary	0.3042
Intermediate	0.0937
High	0.1840
Total	0.5819

6. Current impact fees are $3.36 per square foot for residential construction and $0.54 per square foot commercial/industrial construction. These fees are subject to increase every even-numbered year, and it is anticipated in May, 2016 that the fee will increase to $3.48 per square foot for residential construction and $0.56 per square foot for commercial/industrial construction.
7. Replacement of portable classrooms with permanent construction will be necessary to serve students from future development under the proposed General Plan Update.
8. The District is planning to replace portable classrooms with permanent construction at all sites where required, especially those sites impacted by new residential development. A combination of funding sources, including local bond funds, developer fees, and State funding (if available) will be used.
9. The District suggests that the City help to foster a spirit of cooperation by strongly encouraging developers of new residential projects to contact the District so that all parties can work together to ensure that adequate service is provided to future students and residents of the City.

Response Prepared By:

Tom Rizzuti — Facilities Consultant

Garden Grove Unified School District — February 22, 2016

If you would like to receive this questionnaire in MS Word format, please email Ryan Potter at rpotter@placeworks.com.

1. Please confirm that Huntington Beach Union High School District (HBUHSD) provides high school educational services to portions of the City of Westminster and unincorporated community of Midway City (collectively, the "project area"; see Figure 1, attached).

Yes

2. Please confirm or correct the following list of HBUHSD schools serving the project area that we obtained from the California Department of Education's California Public Schools Directory.

School	*Address*	*Grades*	*2014-2015 Enrollment*
High Schools			
Westminster High	14325 Goldenwest St. **Westminster**	9-12	2,688
Ocean View High	17071 Gothard St. Huntington Beach	9-12	1,549
Other School (if relevant):			

Source. http./Mww.cde.ca.govtre/sdlindex.asp.

Correct

3. Please provide any information available on total district-wide capacities and current enrollments at the high school level.

School Level District-Wide	*Capacity Permanent Buildings*	*Capacity Portable Buildings*	*Total Capacitv*	*Current Enrollment*
High Schools				

4. Are existing school facilities (classroom, athletic, recreational, or other facilities) adequate to serve HBUHSD's service area under current conditions?

Yes

5. Does HBUHSD use a student generation rate to assess the need for school services generated by new development (e.g., X students per dwelling unit)? If so, what is the rate?

Yes, average student generation factor is .2 for $9^{th} - 12^{th}$ grade.

6. What school impact fees does HBUHSD currently charge by land use (e.g., residential, commercial, office)?

Residential: $3.36 per square foot

Commercial: $.54 per square foot

7. Please summarize any additional resources (facilities, personnel) needed to serve future development under the proposed General Plan Update.

The proposed magnitude of future development would likely require additional classroom facilities, teachers and support staff.

8. Please describe any existing plans to expand school facilities that serve the project area, including. Please also describe the anticipated funding source for such improvements.

None at this time.

9. Please provide any additional comments and/or information regarding school service for this project under the proposed General Plan Update (attach additional pages as necessary).

Response Prepared By:

Carrie Delgado	Assistant Superintendent, Business Services
Name	Title
Huntington Beach Union High School District	February 19, 2016
Agency	Date

PLACEWORKS

February 10, 2016

Dr. Greg Plutko
Superintendent
Huntington Beach Union High School District
5832 Bolsa Avenue
Huntington Beach, CA 92649

Subject: Request for Service Provider Information for the City of Westminster General Plan Update Environmental Impact Report (CWE-11)

Dear Dr. Plutko:

PlaceWorks has been retained by the City of Westminster to prepare an Environmental Impact Report (EIR) for the City's update to its General Plan. Pursuant to the California Environmental Quality Act (CEQA), the EIR will analyze impacts of the General Plan Update on the environment, including provision of public services. The City of Westminster is requesting input from your agency to identify existing services and potential increases in service requirements that would be generated by implementation of the proposed project.

It is important that the City understands Huntington Beach Union High School District's ability to meet existing needs for school services and to serve the future needs of additional residents and businesses. Of particular interest is the relationship between existing and future school classroom capacity and student enrollment. This information is crucial in determining the magnitude of impact that the proposed General Plan Update would have on school services in Westminster and Midway City.

Project Location

The City of Westminster and its unincorporated islands (project area) encompass 10.8 square miles, or approximately 6,800 acres, in northern Orange County. The City's sphere of influence (SOI) includes the unincorporated community of Midway City, which consists of four County "islands."

General Plan Update

The proposed project is an update to the City of Westminster's General Plan and is intended to shape development in the City and its SOI over the next 30-plus years. A general plan is the principal long-range policy and planning document for guiding the physical development, conservation, and enhancement for California cities and counties. The General Plan Update contains, among other components: goals, policies, and a land use plan that designates land use categories for each parcel in the project area. The General Plan Update involves reorganization of the current General Plan into the following elements: Land Use; Mobility; Parks and Recreation; Public Services, Facilities, and Natural Resources; Public Health and Safety; Housing; Economic Development; and Community Design.

Proposed Land Use Designations

All California cities are required to identify development projections (i.e., a "buildout analysis") in their general plans. The analysis refers to the reasonable development and impacts associated with the land uses adopted in a general plan. It considers housing units, households, residents, jobs, and nonresidential square footage. A projection estimate is important for several reasons—in particular, it allows a city to adequately plan for roads, water service, parks, recreation, and other infrastructure and services. Tables 1 and 2, below, outline the land use designations proposed for the project area and outline buildout projections for dwelling units, residents, nonresidential building space, and employment under the General Plan Update. Proposed land use designations are also shown in Figure 1, *Proposed Land Use Designations* (attached).

PLACEWORKS

Table 1 - General Plan Update Buildout Summary

	Units	Population	Nonresidential Building Space (square feet)	Employees
Existing Conditions	29,672	92,167	12,744,948	23,237
General Plan Buildout	36,484	118,463	19,163,257	39,407
Difference	*6,812*	*26,296*	*6,418,309*	*16,170*

Under existing conditions, the project area contains approximately 29,672 dwelling units, 92,167 residents, 12.7 million square feet of nonresidential development, and 23,237 employees. As shown in Table 1, buildout of the General Plan Update would result in a total of approximately 36,484 dwelling units, 118,463 residents, 19.2 million square feet, and 39,407 employees in the project area. This would be an increase of 6,812 units, 26,296 residents, 6.4 million square feet, and 16,170 employees compared to existing conditions. These projections represent reasonable development based on average levels of density and intensity for each land use category.

Detailed buildout projections for the General Plan Update are shown below in Table 2.

Table 2 - Proposed Land Uses and Detailed Buildout Projections

Proposed Land Use Designation	Acres[1]	Assumed Density (du/ac)[2]	Assumed Intensity (FAR)[2]	Units	Population[3,4]	Nonresidential Building Space (square feet)	Employees[5]
City of Westminster							
Residential – Low (4–7 du/ac)	2,146	7	—	15,020	48,769	—	—
Residential – Medium (8–14 du/ac)	456	12	—	5,467	17,751	—	—
Residential – High (15–25 du/ac)	346	22	—	7,611	24,711	—	—
Neighborhood Commercial	109	—	0.33	—	—	1,588,574	3,177
Regional Commercial	272	—	0.40	—	—	4,800,417	12,001
Industrial	171	—	0.50	—	—	3,732,079	3,732
Urban Industrial	16	—	0.45	—	—	701,943	1,170
Mixed-Use Civic Center[6]	87	36	0.60	628	2,038	1,823,119	3,646
Mixed-Use Corridor[6]	45	30	0.40	407	1,321	551,201	1,102
Mixed-Use Little Saigon[6]	180	36	0.60	1,944	6,311	3,292,670	8,232
Mixed-Use Northwest District[6]	88	24	0.35	1,060	3,440	673,075	1,346
Mixed-Use Westminster Boulevard/Downtown[6]	79	24	0.35	951	3,088	604,110	1,510
Mixed-Use Westminster Mall[6]	92	30	0.50	824	2,676	1,396,070	3,490
Park/Open Space	119	—	—	—	—	—	—
Public/Semi Public	452	—	—	—	—	—	—
Public Utility Corridor	50	—	—	—	—	—	—
Flood Control Channel	110	—	—	—	—	—	—
Railroad ROW	25	—	—	—	—	—	—
Street ROW	1,595	—	—	—	—	—	—
Subtotal	**6,440**	—	—	**33,910**	**118,463**	**18,707,864**	**38,596**

PLACEWORKS

Table 2 - Proposed Land Uses and Detailed Buildout Projections

Proposed Land Use Designation	Acres[1]	Assumed Density (du/ac)[2]	Assumed Intensity (FAR)[2]	Units	Population[3,4]	Nonresidential Building Space (square feet)	Employees[5]
Sphere of Influence							
Residential – Low (4–7 du/ac)	188	7	—	1,313	4,264	—	—
Residential – Medium (8–14 du/ac)	56	12	—	674	2,187	—	—
Residential – High (15–25 du/ac)	27	22	—	587	1,906	—	—
Neighborhood Commercial	1	—	0.33	—	—	18,761	38
Regional Commercial	3	—	0.40	—	—	55,233	138
Urban Industrial	19	16	—	—	—	381,398	636
Park/Open Space	1	—	—	—	—	—	—
Street ROW	100	—	—	—	—	—	—
Subtotal	**396**	—	—	**2,574**	**8,358**	**455,392**	**811**
Total (City and SOI)[7]	**6,836**	—	—	**36,484**	**118,463**	**19,163,257**	**39,407**
Existing Conditions	6,836	—	—	29,672	92,167	12,744,948	23,237
Difference	—	—	—	6,812	26,296	6,418,309	16,170

FAR = Floor Area Ratio
ROW = Right of Way

1 Acres are given as adjusted gross acreages, which do not include the rights-of-way for major roadways, flood control facilities, or railroads.

2 Density/intensity includes both residential density, expressed as dwelling units per acre, and nonresidential intensity, expressed as floor-area-ratio (FAR), which is the amount of building square feet in relation to the size of the lot. Historically, citywide buildout levels do not achieve the maximum allowable density/intensity on every parcel and are, on average, lower than allowed by the general plan. Accordingly, the projections in this General Plan Update do not assume buildout at the maximum density or intensity and instead are adjusted downward to account of variations in development.

3 Estimates of population by land use designation are based on reasonable person-per-household factors identified by the 2013 5-Year American Community Survey.

4 A 4.5% vacancy rate was assumed for population based on the 2013 5-Year American Community Survey.

5 Estimates of jobs by land use designation are based on employment generation rates derived from the Longitudinal Employer-Household Dynamics (2013) Report.

6 Assumptions for the mix of land uses in each Mixed-Use designation that will be analyzed in the environmental impact report are listed in Table 4, below. While this mix should be used as a guideline for development, the ultimate composition of the Mixed-Use area may vary in response to market conditions.

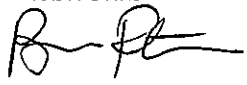
7 Westminster's General Plan Update projections refer to realistic long-term development expected under its land use plan over the next 30 to 40 years. The projections detailed on this sheet represent a likely amount of development over the long term based on average levels of density and intensity as properties transition over time.

Please provide your responses on the enclosed questionnaire. We also appreciate any additional information and/or comments you would like to provide. Use additional sheets if necessary. Note that your responses will become a part of the administrative record for this project and will be included in the appendices of the EIR.

Please respond to PlaceWorks no later than **February 22, 2016**. If you need additional time to respond, please notify me by phone or email. You can email your responses to me at rpotter@placeworks.com, or if you prefer, mail or fax the completed questionnaire to the address or number shown in the footer of this letter. If you have any questions or require further information regarding this project, please feel free to contact me at (714) 966-9220, extension 2309. Thank you for your prompt attention to this request.

Sincerely,

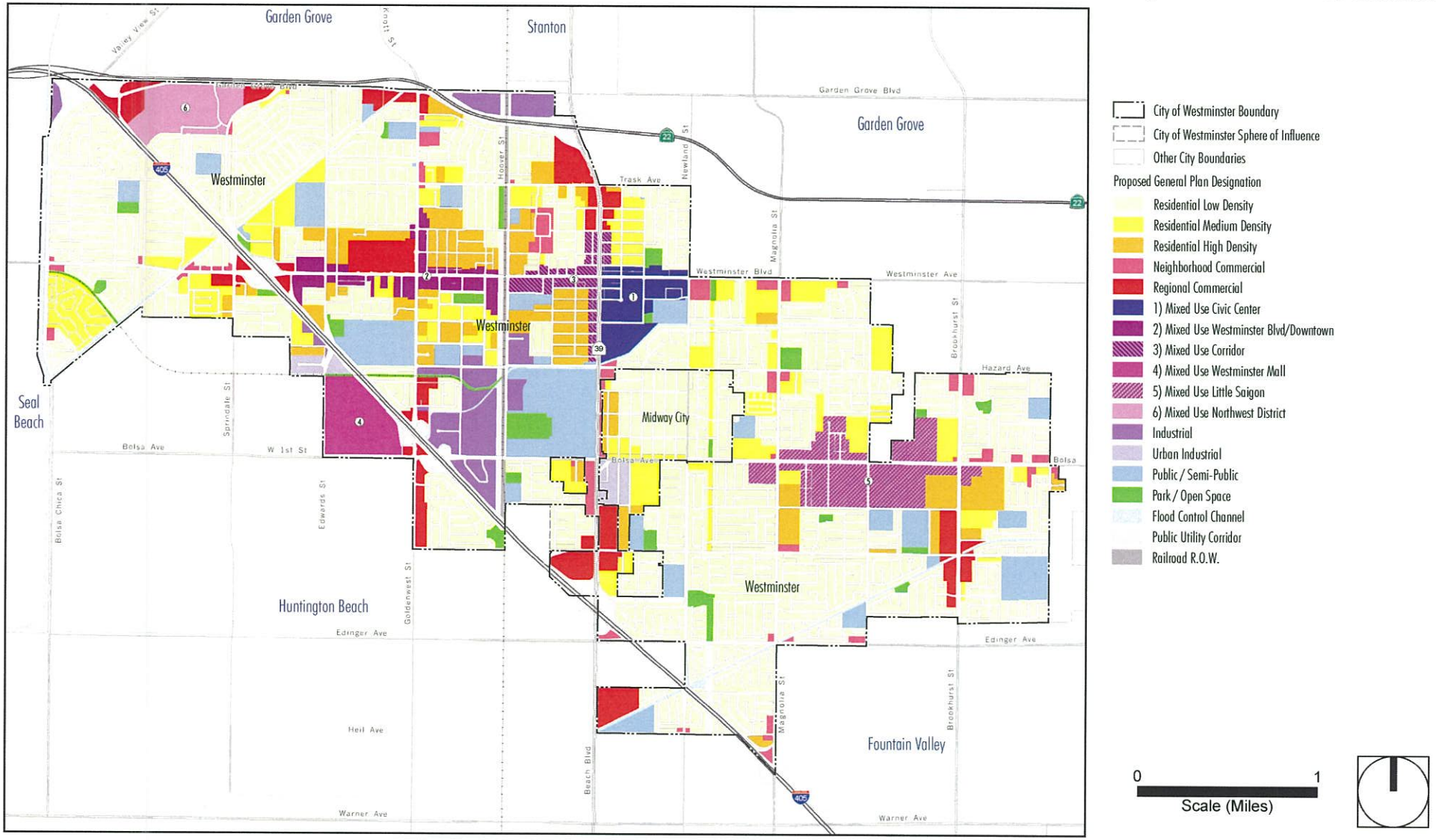
PLACEWORKS



Ryan Potter, AICP
Associate

Figure 1 - Proposed Land Use Designations

Request for Service Provider Information



Source: City of Westminster, 2014

04/21/16

Tamy with OCFA (voicemail)

Secured agreements with some cities either $600/unit or $600/equivalent unit

However, Westminster is a contract city – no such agreements because City has its own fire station

Might have other fees but would not come through OCFA

714-573-6199

PLACEWORKS

February 10, 2016

Michele Hernandez
Management Analyst, Strategic Services
Orange County Fire Authority
1 Fire Authority Road
Irvine, CA 92602

Subject: Request for Service Provider Information for the City of Westminster General Plan Update Environmental Impact Report (CWE-11)

Dear Ms. Hernandez:

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Because fire protection and emergency services in Westminster are provided by the Orange County Fire Authority (OCFA), it is important that the City understands OCFA's ability to meet existing fire protection needs and to serve the future needs of additional residents and businesses. Of particular interest are current response times to fire emergencies in the project area and any future plans to expand or enhance fire protection services in the area. This information is crucial in determining the magnitude of impact that the proposed General Plan Update would have on emergency services in Westminster and Midway City.

Project Location

The City of Westminster and its unincorporated islands (project area) encompass 10.8 square miles, or approximately 6,800 acres, in northern Orange County. The City's sphere of influence (SOI) includes the unincorporated community of Midway City, which consists of four County "islands."

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Public/Semi Public	452	—	—	—	—	—	—
Public Utility Corridor	50	—	—	—	—	—	—
Flood Control Channel	110	—	—	—	—	—	—
Railroad ROW	25	—	—	—	—	—	—
Street ROW	1,595	—	—	—	—	—	—
Subtotal	**6,440**	—	—	**33,910**	**118,463**	**18,707,864**	**38,596**

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[6] Assumptions for the mix of land uses in each Mixed-Use designation that will be analyzed in the environmental impact report are listed in Table 4, below. While this mix should be used as a guideline for development, the ultimate composition of the Mixed-Use area may vary in response to market conditions.

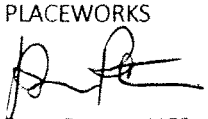
[7] Westminster's General Plan Update projections refer to realistic long-term development expected under its land use plan over the next 30 to 40 years. The projections detailed on this sheet represent a likely amount of development over the long term based on average levels of density and intensity as properties transition over time.

Please provide your responses on the enclosed questionnaire. We also appreciate any additional information and/or comments you would like to provide. Use additional sheets if necessary. Note that your responses will become a part of the administrative record for this project and will be included in the appendices of the EIR.

Please respond to PlaceWorks no later than **February 22, 2016**. If you need additional time to respond, please notify me by phone or email. You can email your responses to me at **rpotter@placeworks.com**, or if you prefer, mail or fax the completed questionnaire to the address or number shown in the footer of this letter. If you have any questions or require further information regarding this project, please feel free to contact me at (714) 966-9220, extension 2309. Thank you for your prompt attention to this request.

Sincerely,

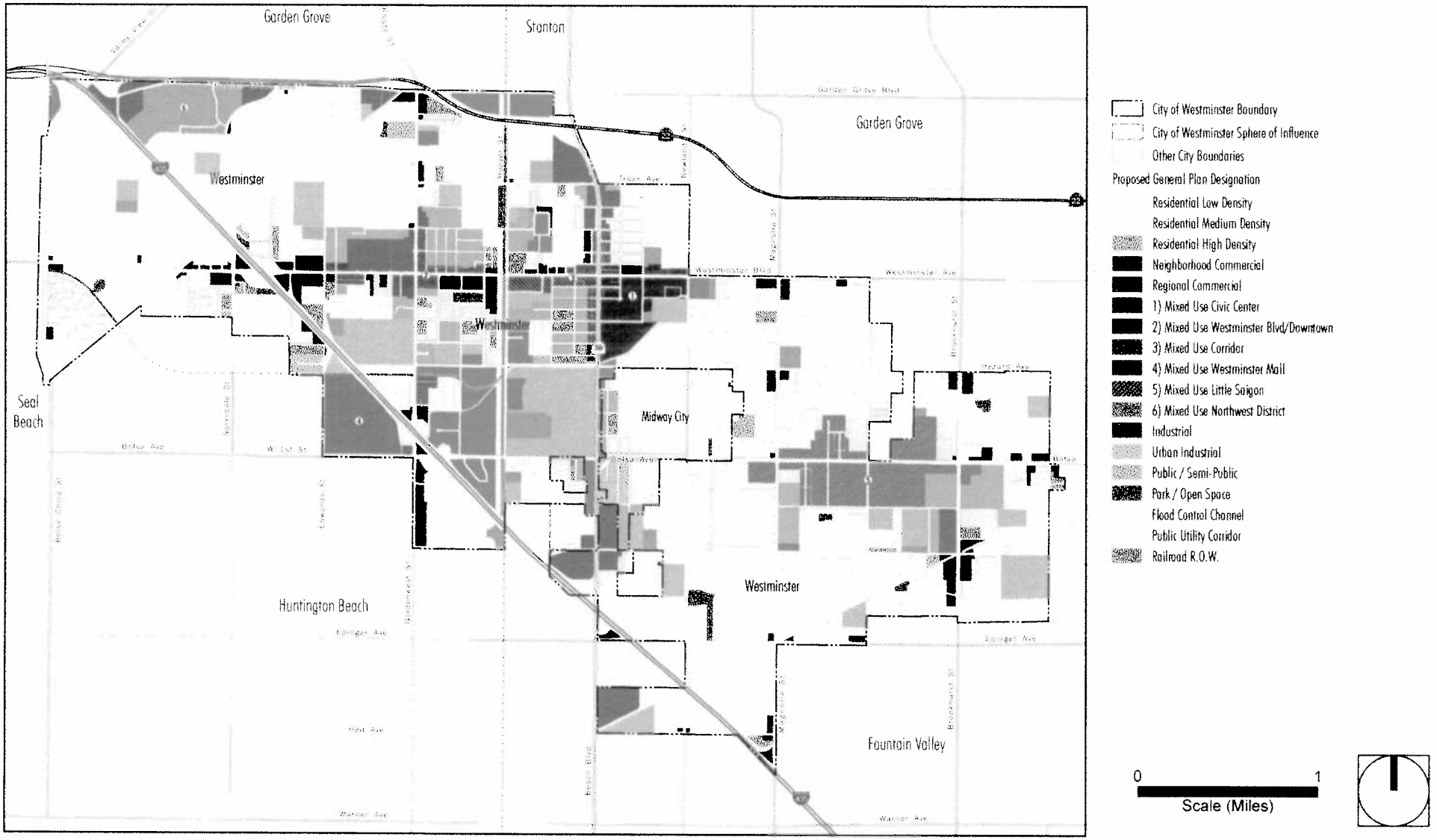
PLACEWORKS



Ryan Potter, AICP
Associate

Figure 1 - Proposed Land Use Designations

Request for Service Provider Information



Source: City of Westminster, 2014

WESTMINSTER GENERAL PLAN UPDATE DRAFT EIR
Fire Service Questionnaire – Orange County Fire Authority

If you would like to receive this questionnaire in MS Word format, please email Ryan Potter at **rpotter@placeworks.com**.

1. Please confirm that OCFA's service area includes all areas of the City of Westminster and the unincorporated community of Midway City as shown in attached Figure 1.

This is correct

2. Please confirm, correct, or supplement the information below regarding the equipment and daily staffing for each of the existing fire stations that serve the project area.

Station	Location	Equipment	Daily Staffing
OCFA Fire Station #25	8171 Bolsa Ave. Midway City, CA 92655	1 PAU Engine	1 ~~3~~ Fire Captains 1 ~~3~~ Fire Apparatus Engineers 1 ~~3~~ Firefighters
OCFA Station #64	7351 Westminster Blvd. Westminster, CA	1 Ambulance 1 Battalion 1 PM Engine 1 Truck 1 Division	1 ~~3~~ Battalion Chiefs 2 ~~8~~ Fire Captains 2~~8~~ Fire Apparatus Engineers 3 ~~9~~ Firefighters 2 ~~8~~ ETTs 1 Division Chief
OCFA Station #65	6061 Hefley Street Westminster, CA 92683	1 Medic Engine	1 ~~3~~ Fire Captains 1 ~~3~~ Fire Apparatus Engineers 2 ~~8~~ Firefighters
OCFA Station #66	15601 Moran Street Westminster, CA 92683	1 Ambulance 1 PM Engine	1 ~~3~~ Fire Captains 1 ~~3~~ Apparatus Engineers 2 ~~8~~ Firefighters 2 ~~8~~ ETTs
Other Station: (if relevant)			

Source: http://www.ocfa.org/AboutUs/Departments/OperationsDirectory/Division1.aspx

* Station Staffing differs from Daily Staffing. Station Staffing equals three shifts of staffing. Daily Staffing is equal to one shift of staffing. Daily Staffing counts should be divided by 3.

3. Were the following recommended performance standards identified in OCFA's 2014 Standards of Coverage and Deployment Plan (all for the ~~90~~ 80th percentile) officially adopted by OCFA?

• Dispatch call processing time:	60 seconds from receipt of call
• Turnout time:	90 seconds from notification
• Total response time for first arriving unit at a core incident (urban areas):	7 minutes, ~~30~~ 20 seconds from receipt of call 7 min, 20 seconds
• Total response time for first ALS response unit at a core medical incident (urban areas):	10 minutes from receipt of call
• Response time for arrival at a moderate risk structure fire or moderate risk rescue incident:	12 minutes, ~~30~~ seconds from receipt of call 12 min.

Source: http://www.ocfa.org/Uploads/Orange%20County%20Fire%20Authority%20SOC_FINAL.pdf

If not, what are OCFA's current performance standards?

The 2014 Standards of Cover was not adopted by OCFA. OCFA follows Standards of Cover adopted in 2006.

Adopted Responses are for 80th percentile

4. Please confirm that the response time at the 90th percentile for the City of Westminster identified in the 2014 Standards of Coverage and Deployment Plan (8 minutes, 13 seconds) is the most recent response time rate for the City. If not, please identify the most recent response time statistic.

OCFA does meet current standard response time in Westminster

5. Are existing resources (personnel and equipment) adequate to serve the City of Westminster and community of Midway City under current conditions?

Yes

6. Please summarize any additional resources (facilities, equipment, personnel) needed to serve future development under the General Plan Update.

As a Regional Fire Department, OCFA has the benefit of utilizing equipment and resources within and outside of Westminster's jurisdiction. As growth occurs within a jurisdiction emergency response needs will increase. These needs could include added personnel to create apparatus that is able to perform with greater capabilities

7. How would the proposed General Plan Update affect OCFA's ability to provide services? Please comment on any area of specific concern.

Residential Unit and Population growth may require equipment and personnel needs to be re-evaluated.

Response Prepared By:

Tamera Rivers — Management Analyst
Name — **Title**

Orange County Fire Authority — 3/7/16
Agency — **Date**

If you would like to receive this questionnaire in MS Word format, please email Ryan Potter at **rpotter@placeworks.com**.

1. Please confirm that Ocean View School District (OVSD) provides K-8 educational services to portions of the City of Westminster and the unincorporated community of Midway City (collectively, the "project area").

   Yes, OVSD does provide K-8 educational services in addition to Preschool (PS) and Transitional Kindergarten (TK) programs.

2. Please confirm or correct the following list of active OVSD public schools serving the project area that we obtained from the California Department of Education's California Public Schools Directory.

School	***Address***	***Grades***	***2015-2016 Enrollment***
Elementary Schools			
Sun View Elementary	7721 Juliette Low Dr. Huntington Beach	K-5	279
Westmont Elementary	8251 Heil Ave. Westminster	K-5	358
Star View Elementary	8411 Worthy Dr. Midway City	K-5	573
Other school (if relevant):			
Middle Schools			
Vista View Middle	16250 Hickory St.	6-8	667
Other school (if relevant):			

Source: http://www.cde.ca.gov/re/sd/index.asp.

If any schools listed do not serve the project area (Westminster and Midway City), please note this. If any schools were omitted, please list them in the space provided

No schools were omitted.

3. Please provide any information available on total district-wide capacities and current enrollments at the elementary and middle school levels.

School Level District-Wide	***Capacity Permanent Buildings***	***Capacity Portable Buildings***	***Total Capacity***	***Current Enrollment***
Elementary Schools				
Middle Schools				

Please see attached sheet with details.

4. Are existing school facilities (classroom, athletic, recreational, or other facilities) adequate to serve OVSD's service area under current conditions?

Yes, OVSD has room to accommodate a growing population and expanded housing in the area. We welcome the student population.

5. Does OVSD use a student generation rate to assess the need for school services generated by new development (e.g., X students per dwelling unit)? If so, what is the rate?

At this time, I am unaware of the student generation factor. I believe in the past OVSD has used the 2.2 formula. Based on the housing prices, and the dense housing units, our generation factor will be much higher. We are in the process of hiring a demographer.

6. What school impact fees does OVSD currently charge by land use (e.g., residential, commercial, office)?

Currently, and for the past two years, OVSD has not charged any land use fees including those governed by the Civic Center Act. However, OVSD is in the process of evaluating and proposing new land use fees based on the allowable costs regulated in the Civic Center Act.

7. Please summarize any additional resources (facilities, personnel) needed to serve future development under the proposed General Plan Update.

The district is currently assessing our educational facilities needs through a master planning process. In addition, the district is identifying strategies to competitively win back students transferring to neighboring districts. At this time, it is challenging to state for certain our specific needs. We do foresee additional custodial, M&O, and facilities staff in addition to teaching staff members.

8. Please describe any existing plans to expand school facilities. Please also describe the anticipated funding source for such improvements.

OVSD is currently in the process of developing a facilities master plan that will identify our facilities needs and growth / expansion opportunities. The funding sources for achieving the implementation of the master plan will be through a local General Obligation Bond, which has yet to be determined or approved.

9. Please provide any additional comments and/or information regarding school service for this project under the proposed General Plan Update (attach additional pages as necessary).

No additional comments at this time. As OVSD progressing in the master planning process and information is revealed, we would like the chance to amend our responses as they may change as a result of the planning process. Thank you for your consideration.

Response Prepared By:

Julie Williams	Senior Facilities Planner
Name	**Title**
Ocean View School District	March 15, 2016
Agency	**Date**

2015-16 School & Site Information

Current / Operating School Sites

School	Address	Number Permanent Classrooms*	Permanent Classroom Sq Ft	Number Portable Classrooms**	Portable Classroom Sq Ft	Total Classroom Sq Ft	Site Bldg Sq Ft	Covered Walkway Area	Total Sq Ft	Acerage	Year(s) Built	Capacity	ADA	Difference
Circle View	6261 Hooker Dr. HB 92647	27	40,380	3	6,192	46,572	46,662	Yes	52,000	13.59	1963		678	-678
College View	6582 Lennox Dr. HB 92647	28	41,961	3	3,096	45,057	49,259	Yes	62,000	13.72	1965		445	-445
Golden View	17251 Golden View Ln. HB 92647	25	6,939	3	4,128	11,067	34,954	No	36,000	10.28	1971		466	-466
Harbour View	4343 Pickwick Cir. HB 92649	35	27,900	2	6,192	34,092	52,625	N/A	59,000	12.98	1967		770	-770
Hope View	17622 Flinstone Ln. HB 92647	23	25,024	6	7,224	32,248	37,586	Yes	37,586	13.76	1967		618	-618
Lake View	17451 Zeider Ln. HB 92647	20	17,280	6	5,160	33,402	33,402	No	40,000	13.67	1967		253	-253
Marine View	5682 Tilburg HB 92649	21	19,840	10	11,352	31,192	39,417	N/A	78,000	13.67	1967		795	-795
Mesa View	17601 Avilla Ln. HB 92647	24	40,380	5	5,160	45,540	47,468	No	67,500	12.09	1970		811	-811
Oak View	17241 Oak Ln. HB 92647	23	17,100	11	15,480	32,580	37,623	No	57,000	13.1	1967		668	-668
Oak Preschool	17131 Emerald Ln. HB 92647		0	11			12,000	N/A		2.07	2001		188	
Pleasant View / OVPP	16692 Landau Ln. HB 92647	18		0			25,572	N/A	28,000	10.9	1961		246	
Spring View	16662 Trudy Ln. HB 92647	25	25,110	6	6,192	31,272	48,818	No	78,000	14	1965		797	-797
Star View	8411 Worthy Ln. Midway City 92655	18	18,432	9	8,256	26,688	31,106	No	41,000	13.15	1965		573	-573
Sun View	7721 Juliette Low Dr. HB 92647	17	14,280	7	7,224	21,504	28,579	Yes	32,000	13.88	1964		279	-279
Village View	5361 Sisson Dr. HB 92649	23	N/A	6	6,192	N/A	43,333	N/A	49,000	13.01	1961		548	-548
Vista View	16250 Hickory Ln. Fountain Valley 92708	24	26,970	7	7,224	34,194	41,362	No	57,000	13.59	1970		667	-667
Westmont	8251 Heil Westminster 92683	24	20,480	9	11,352	31,832	47,893	Yes	52,000	14.25	1962		358	-358
District Totals		**375**	**342,076**	**104**	**110,424**	**457,240**	**657,659**		**826,086**				**9160**	**-9160**

Other District Owned/Occupied Sites

School	Address	Number Permanent Classrooms	Permanent Classroom Sq Ft	Number Portable Classrooms	Portable Classroom Sq Ft	Total Classroom Sq Ft	Site Bldg Sq Ft	Covered Walkway Area	Total Sq Ft	Acerage	Year(s) Built
District Office	17200 Pinehurst Lane HB 92647	N/A	N/A	N/A	N/A	N/A	38,545	Yes	30,000	13.67	1972
MOF - Facilities	8291 Warner Avenue HB 92647	N/A	N/A	N/A	N/A	N/A	N/A	No	13,000	4.66	1966
Transportation									6,300		1966
Warehouse									11,200		1966

Closed / Leased Sites

School	Address	Number Permanent Classrooms	Permanent Classroom Sq Ft	Number Portable Classrooms	Portable Classroom Sq Ft	Total Classroom Sq Ft	Site Bldg Sq Ft	Covered Walkway Area	Total Sq Ft	Acerage	Year(s) Built
Haven View	16081 Waikiki Lane HB 92649 LePort Montessori School	20	27,543.00	0	0	0	27,543	5,196	28,000	14.5	1964
Robinwood	5172 McFadden Street HB 92647	27	35,776.00	0	0	0	35,776	N/A		10.06	1961
Meadow View	5702 Clark Drive HB 92649	24	44,478.00	0	0	0	44,478	N/A	48,000	13.04	1962
Glen View	6621 Glen Drive HB 92647	14	20,011.00	0	0	0	20,011	N/A	21,000	13.79	1968
Park View	16666 Tunstall Lane HB 92647	16	42,177	2	1,920	44,097	44,907	N/A	46,000	11.45	1968
						0					
District Leased Totals		**101**	**169,985**	**2**	**1920**	**1922**	**172,715**		**143,000**	**62.84**	
	Need data for these school facilities										

*classrooms refer to Teaching stations not libraries or specialized spaces

**Portable classrooms refer to actual space not individual units - refer to modular inventory for total number of units

If you would like to receive this questionnaire in MS Word format, please email Ryan Potter at **rpotter@placeworks.com**.

1. Please confirm that the Westminster Police Department's (WPD's) service area includes all areas of the City of Westminster and that WPD does not serve the unincorporated community of Midway City.

   This is correct.

2. What is WPD's performance standard for responding to emergency and non-emergency calls within the service area (i.e., minutes to reach the call location)?

   - **Priority 1 calls (the most serious calls requiring immediate action) under 5:00 mins**
   - **Priority 2 calls (report calls and calls less serious in nature) under 10:00 mins.**

   There are always circumstances that affect these times, but there are the standard we want to achieve.

3. Does the Department have a performance standard (or goal) for the number of officers per capita?

   The Department does not have a published standard of number of officers per capita.

4. What are the current numbers of sworn officers and civilian employees serving the community?

   - **87 Sworn Police Officers**
   - **57 civilian employees (full and part time)**

5. What is the current average response time (in minutes) for emergency and non-emergency calls?

   - **Priority 1 response was: 4.77 mins**
   - **Priority 2 and lower: 10.4 mins**

6. What is the standard estimate for determining the number of police calls generated by new residential and nonresidential development (e.g., calls per residential unit/square foot of nonresidential development)?

   I am not aware of what standard has been used to determine the number of calls generated by a residential and nonresidential development. Currently, we do not track our calls for service in this manner.

7. Are the existing resources (personnel, equipment, and facilities) adequate to serve the City under current conditions?

   The existing resources are "adequate" to the City under current conditions.

8. Please summarize any additional resources (stations, equipment, personnel) needed to serve future development under the General Plan Update.

   The Westminster Police Department recently had an outside service provide a Strategic Patrol Staffing Plan for the next five years. This plan recommended an increase in sworn police officers by 23 positions. This plan was completed without considering the current General Plan Update.

   b. What factors are used to project these needs?

   The factors considered for this plan included:
   - **Calls for Service**
   - **Self-initiated vs. Administrative Time**
   - **Response Time**
   - **Immediate Availability**
   - **Visibility**
   - **Weights for Performance Objectives**
   - **Leave Percentage**

9. Please provide any additional comments and/or information regarding provision of police protection services under the proposed General Plan Update (attach additional pages as necessary).

   None

Response Prepared By:

Dan Schoonmaker	Deputy Chief of Police
Name	**Title**
Westminster Police Department	March 3, 2016
Agency	**Date**

If you would like to receive this questionnaire in MS Word format, please email Ryan Potter at **rpotter@placeworks.com**.

1. Please confirm that Westminster School District (WSD) provides K-8 educational services to portions of the City of Westminster and the unincorporated community of Midway City (collectively, the "project area").

The Westminster School District does provide K8 educational services to portions of the Westminster and portions of Midway City.

2. Please confirm or correct the following list of active WSD public schools that we obtained from the California Department of Education's California Public Schools Directory.

All information is accurate

School	***Address***	***Grades***	***2014-2015 Enrollment***
Elementary Schools			
Anderson Elementary	8902 Hewitt Pl. Garden Grove	K-6	643
Clegg Elementary	6311 Larchwood Dr. Huntington Beach	K-5	558
DeMille Elementary	15400 Van Buren Midway City	K-6	434
Eastwood Elementary	13552 University Westminster	K-6	520
Finley Elementary	13521 Edwards St. Westminster	K-5	407
Fryberger Elementary	6952 Hood Dr. Westminster	K-5	468
Hayden Elementary	14782 Eden St. Midway City	K-5	876
John F. Land Preschool	15151 Temple St. Westminster	Preschool	—
Meairs Elementary	8441 Trask Ave. Garden Grove	K-5	632
Schroeder Elementary	15151 Columbia Ln. Westminster	K-6	636
Schmitt Elementary	7200 Trask Ave. Westminster	K-5	532
Sequoia Elementary	5900 Iroquois Rd. Westminster	K-6	401
Webber Elementary	14142 Hoover St. Westminster	K-6	348
Willmore Elementary	7122 Maple St. Westminster	K-5	322
		Subtotal	**6,777**

School	*Address*	*Grades*	*2014-2015 Enrollment*
Middle Schools			
Johnson Middle	13603 Edwards St. Westminster	6-8	735
Stacey Middle	6311 Larchwood Dr. Westminster	6-8	907
Warner Middle	14171 Newland St. Westminster	6-8	1,074
		Subtotal	**2,716**
		Total	**9,493**[1]

Source: http://www.cde.ca.gov/re/sd/index.asp.
[1] The above source shows a district-wide total enrollment of 9,503 students.

3. Please provide any information available on total district-wide capacities and current enrollments at the elementary and middle school levels.

School Level District-Wide	*Capacity Permanent Buildings*	*Capacity Portable Buildings*	*Total Capacity*	*Current Enrollment*
Elementary Schools	245	168	9280	6263
Middle Schools	116	3	3118	2572

4. Are existing school facilities (classroom, athletic, recreational, or other facilities) adequate to serve WSD's service area under current conditions?

All of our existing facilities are being current needs.

5. Does WSD use a student generation rate to assess the need for school services generated by new development (e.g., X students per dwelling unit)? If so, what is the rate?

Westminster School District currently utilizes a consultant "DecisionInsite" to project our enrollment projections.

6. What school impact fees does WSD currently charge by land use (e.g., residential, commercial, office)?

Local Developer fees

7. Please summarize any additional resources (facilities, personnel) needed to serve future development under the proposed General Plan Update.

The Westminster School District requires no additional resources at this time.

8. Please describe any existing plans to expand school facilities. Please also describe the anticipated funding source for such improvements.

The Westminster school district currently has no plans for to expand our existing facilities at this time.

9. Please provide any additional comments and/or information regarding school service for this project under the proposed General Plan Update (attach additional pages as necessary).

No comments at this time

Response Prepared By:

Brian Johnson	Executive Director of Facilities Planning & MOT
Name	**Title**
Westminster School District	2/19/2016
Agency	**Date**