Appendix C

LITHIUM VALLEY SPECIFIC PLAN
LOCAL MOBILITY ANALYSIS

County of Imperial, CA

RICK Job No. 19628-AP
Second Submittal: September 16, 2025

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LITHIUM VALLEY SPECIFIC PLAN
LOCAL MOBILITY ANALYSIS

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Prepared for:

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TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY 9

1.1 Project Trip Generation 9

1.2 Intersection Operations Analysis Findings 10

1.3 Roadway Segment Analysis Findings 10

1.4 Recommended Improvements 11

1.4.1 Recommended Specific Plan Phase One Intersection Improvements 11

1.4.2 Recommended Specific Plan Phase One Roadway Segment Improvements 13

1.4.3 Recommended Specific Plan Phase Two Intersection Improvements 14

1.4.4 Recommended Specific Plan Phase Two Roadway Segment Improvements 15

1.4.5 Recommended Specific Plan Phase Three (Buildout) Intersection Improvements 16

1.4.6 Recommended Specific Plan Phase Three (Buildout) Roadway Segment Improvements 18

1.4.7 Recommended Specific Plan Phase Three (Buildout) With Reduced Alternative Intersection Improvements 18

1.4.8 Recommended Specific Plan Phase Three (Buildout) With Reduced Alternative Roadway Segment Improvements 21

1.5 Intersection Queuing Analysis Findings With Recommended Improvements 21

1.5.1 Specific Plan Phase One Queuing Analysis Findings With Recommended Improvements 21

1.5.2 Specific Plan Phase Two Queuing Analysis Findings With Recommended Improvements 22

1.5.3 Specific Plan Phase Three (Buildout) Queuing Analysis Findings With Recommended Improvements 22

1.5.4 Specific Plan Phase Three (Buildout) With Reduced Alternative Queuing Analysis Findings With Recommended Improvements 23

1.6 Turn Bay Lengths Needed With Recommended Improvements 24

1.6.1 Specific Plan Phase One Turn Bay Length Needs With Recommended Improvements 24

1.6.2 Specific Plan Phase Two Turn Bay Length Needs With Recommended Improvements 24

1.6.3 Specific Plan Phase Three (Buildout) Turn Bay Length Needs With Recommended Improvements 25

1.6.4 Specific Plan Phase Three (Buildout) With Reduced Alternative Turn Bay Length Needs With Recommended Improvements 25

2.0 INTRODUCTION 26

3.0 PROJECT DESCRIPTION 26

4.0 STUDY AREA AND ANALYSIS METHODOLOGY 32

4.1 Project Study Area 32

4.2 Analysis Methodology 36

4.2.1 Intersection Analysis Methodology 36
4.2.2 Roadway Segment Analysis Methodology 38

5.0 EXISTING CONDITIONS 39
5.1 Existing conditions Roadway Network 39
5.2 Existing Conditions Traffic Volumes 44
5.3 Existing conditions Intersection LOS Analysis 49
5.4 Existing Conditions Roadway Segment Analysis 50

6.0 PROJECT TRIP GENERATION 53

7.0 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT 61

8.0 FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE TRANSPORTATION CONDITIONS 82
8.1 Future Year 2035 With Specific Plan Phase One Conditions Roadway Network 82
8.2 Future Year 2035 With Specific Plan Phase One Conditions Traffic Volumes 82
8.3 Future Year 2035 With Specific Plan Phase One Conditions Intersection Operations 86
8.4 Future Year 2035 With Specific Plan Phase One Conditions Roadway Segment Analysis 88
8.5 Future Year 2035 With Specific Plan Phase One Recommended Improvements 91
8.5.1 Recommended Intersection Improvements 91
8.5.2 Recommended Roadway Segment Improvements 94
8.5.3 Intersection LOS With Recommended Improvements 97
8.5.4 Intersection Queuing Analysis With Recommended Improvements 98
8.5.5 Roadway Segment LOS With Recommended Improvements 98

9.0 FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO TRANSPORTATION CONDITIONS 101
9.1 Future Year 2050 With Specific Plan Phase Two Conditions Roadway Network 101
9.2 Future Year 2050 With Specific Plan Phase Two Conditions Traffic Volumes 101
9.3 Future Year 2050 With Specific Plan Phase Two Conditions Intersection Operations 105
9.4 Future Year 2050 With Specific Plan Phase Two Conditions Roadway Segment Analysis 108
9.5 Future Year 2050 With Specific Plan Phase Two Recommended Improvements 111
9.5.1 Recommended Intersection Improvements 111
9.5.2 Recommended Roadway Segment Improvements 113
9.5.3 Intersection LOS With Recommended Improvements 116
9.5.4 Intersection Queuing Analysis With Recommended Improvements 117
9.5.5 Roadway Segment LOS With Recommended Improvements 117

10.0 FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT) TRANSPORTATION CONDITIONS 120

10.1 Future Year 2050 With Specific Plan Phase Three (Buildout) Conditions Roadway Network 120
10.2 Future Year 2050 With Specific Plan Phase Three (Buildout) Conditions Traffic Volumes 120
10.3 Future Year 2050 With Specific Plan Phase Three (Buildout) Conditions Intersection Operations 124
10.4 Future Year 2050 With Specific Plan Phase Three (Buildout) Conditions Roadway Segment Analysis 127
10.5 Future Year 2050 With Specific Plan Phase Three (Buildout) Recommended Improvements 130
9.5.1 Recommended Intersection Improvements 130
10.5.2 Recommended Roadway Segment Improvements 133
10.5.3 Intersection LOS With Recommended Improvements 136
10.5.4 Intersection Queuing Analysis With Recommended Improvements 137
10.5.5 Roadway Segment LOS With Recommended Improvements 138

11.0 FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT) WITH REDUCED ALTERNATIVE TRANSPORTATION CONDITIONS 141

11.1 Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Conditions Roadway Network 141
11.2 Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Conditions Traffic Volumes 141
11.3 Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Conditions Intersection Operations 145
11.4 Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Conditions Roadway Segment Analysis 147
11.5 Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Recommended Improvements 150
11.5.1 Recommended Intersection Improvements 150
11.5.2 Recommended Roadway Segment Improvements 153
11.5.3 Intersection LOS With Recommended Improvements 156
11.5.4 Intersection Queuing Analysis With Recommended Improvements 157

12.0 ACTIVE TRANSPORTATION AND PUBLIC TRANSIT ASSESSMENT 159

12.1 Proposed Bicycle and Pedestrian Network 159
12.2 Proposed Transit Network 161

13.0 BRIDGES ASSESSMENT 164

13.1 Existing Bridges Assessment 164
13.2 Existing Bridges Assessment Findings 169
13.3 Recommendations 170
13.3.1 Specific Plan Phase One Recommended Bridge Improvements 170
13.3.2 Specific Plan Phase Two Recommended Bridge Improvements 172
13.3.3 Specific Plan Phase Three Recommended Bridge Improvements 172

14.0 CONCLUSIONS AND RECOMMENDATIONS 175

14.1 Intersection Operations Analysis Findings 175

14.2 Roadway Segment Analysis Findings 175

14.3 Recommended Improvements 176

14.3.1 Recommended Specific Plan Phase One Intersection Improvements 176

14.3.2 Recommended Specific Plan Phase One Roadway Segment Improvements 178

14.3.3 Recommended Specific Plan Phase Two Intersection Improvements 179

14.3.4 Recommended Specific Plan Phase Two Roadway Segment Improvements 180

14.3.5 Recommended Specific Plan Phase Three (Buildout) Intersection Improvements 181

14.3.6 Recommended Specific Plan Phase Three (Buildout) Roadway Segment Improvements 183

14.3.7 Recommended Specific Plan Phase Three (Buildout) With Reduced Alternative Intersection Improvements 184

14.3.8 Recommended Specific Plan Phase Three (Buildout) With Reduced Alternative Roadway Segment Improvements 186

14.4 Intersection Queuing Analysis Findings With Recommended Improvements 187

14.4.1 Specific Plan Phase One Queuing Analysis Findings With Recommended Improvements 187

14.4.2 Specific Plan Phase Two Queuing Analysis Findings With Recommended Improvements 187

14.4.3 Specific Plan Phase Three (Buildout) Queuing Analysis Findings With Recommended Improvements 188

14.4.4 Specific Plan Phase Three (Buildout) With Reduced Alternative Queuing Analysis Findings With Recommended Improvements 189

14.5 Turn Bay Lengths Needed With Recommended Improvements 189

14.5.1 Specific Plan Phase One Turn Bay Length Needs With Recommended Improvements 190

14.5.2 Specific Plan Phase Two Turn Bay Length Needs With Recommended Improvements 190

14.5.3 Specific Plan Phase Three (Buildout) Turn Bay Length Needs With Recommended Improvements 193

14.5.4 Specific Plan Phase Three (Buildout) With Reduced Alternative Turn Bay Length Needs With Recommended Improvements 195

15.0 REFERENCES 197

LIST OF EXHIBITS

Exhibit 1: Project Vicinity Map 27
Exhibit 2: Lithium Valley Specific Plan Land Use and Phasing Plan 31
Exhibit 3A: Project Study Area (North) 34
Exhibit 3B: Project Study Area (South) 35
Exhibit 4A: Existing Transportation Conditions – North Study Area 42
Exhibit 4B: Existing Transportation Conditions – South Study Area 43
Exhibit 5A: Existing Peak Hour Intersection Traffic Volumes – North Study Area 46
Exhibit 5B: Existing Peak Hour Intersection Traffic Volumes – South Study Area 47
Exhibit 6: Existing Daily Traffic Volumes (North Study Area Only) 48
Exhibit 7A: Specific Plan Phase One Trip Distribution Map – North Study Area 62
Exhibit 7B: Specific Plan Phase One Trip Distribution Map – South Study Area 63
Exhibit 8A: Specific Plan Phase Two Trip Distribution Map – North Study Area 64
Exhibit 8B: Specific Plan Phase Two Trip Distribution Map – South Study Area 65
Exhibit 9A: Specific Plan Phase Three (Buildout) Trip Distribution Map – North Study Area 66
Exhibit 9B: Specific Plan Phase Three (Buildout) Trip Distribution Map – South Study Area 67
Exhibit 10A: Specific Plan Phase Three (Buildout) with Reduced Alternative Trip Distribution Map – North Study Area 68
Exhibit 10B: Specific Plan 2050 Phase Three (Buildout) with Reduced Alternative Trip Distribution Map – South Study Area 69
Exhibit 11A: Specific Plan Phase One Peak Hour Project Trips – North Study Area 70
Exhibit 11B: Specific Plan Phase One Peak Hour Project Trips – South Study Area 71
Exhibit 12: Specific Plan Phase One Daily Project Trips (North Study Area Only) 72
Exhibit 13A: Specific Plan Phase Two Peak Hour Project Trips – North Study Area 73
Exhibit 13B: Specific Plan Phase Two Peak Hour Project Trips – South Study Area 74
Exhibit 14: Specific Plan Phase Two Daily Project Trips (North Study Area Only) 75
Exhibit 15A: Specific Plan Phase Three (Buildout) Peak Hour Project Trips – North Study Area 76
Exhibit 15B: Specific Plan Phase Three (Buildout) Peak Hour Project Trips – South Study Area 77
Exhibit 16: Specific Plan Phase Three (Buildout) Daily Project Trips (North Study Area Only) 78
Exhibit 17A: Specific Plan Phase Three (Buildout) With Reduced Alternative Peak Hour Project Trips – North Study Area 79
Exhibit 17B: Specific Plan Phase Three (Buildout) With Reduced Alternative Peak Hour Project Trips – South Study Area 80
Exhibit 18: Specific Plan Phase Three (Buildout) With Reduced Alternative Daily Project Trips (North Study Area Only) 81
Exhibit 19A: Future Year 2035 With Specific Plan Phase One Peak Hour Intersection Traffic Volumes – North Study Area 83
Exhibit 19B: Future Year 2035 With Specific Plan Phase One Peak Hour Intersection Traffic Volumes – South Study Area 84
Exhibit 20: Future Year 2035 With Specific Plan Phase One Daily Traffic Volumes (North Study Area Only) 85

Exhibit 21A: Future Year 2035 With Specific Plan Phase One Recommended Improvements – North Study Area 95
Exhibit 21B: Future Year 2035 With Specific Plan Phase One Recommended Improvements – South Study Area 96
Exhibit 22A: Future Year 2050 With Specific Plan Phase Two Peak Hour Intersection Traffic Volumes – North Study Area 102
Exhibit 22B: Future Year 2050 With Specific Plan Phase Two Peak Hour Intersection Traffic Volumes – South Study Area 103
Exhibit 23: Future Year 2050 With Specific Plan Phase Two Daily Traffic Volumes (North Study Area Only) 104
Exhibit 24A: Future Year 2050 With Specific Plan Phase Two Recommended Improvements (North Study Area Only) 114
Exhibit 24B: Future Year 2050 With Specific Plan Phase Two Recommended Improvements (North Study Area Only) 115
Exhibit 25A: Future Year 2050 With Specific Plan Phase Three (Buildout) Peak Hour Intersection Traffic Volumes – North Study Area 121
Exhibit 25B: Future Year 2050 With Specific Plan Phase Three (Buildout) Peak Hour Intersection Traffic Volumes – South Study Area 122
Exhibit 26: Future Year 2050 With Specific Plan Phase Three (Buildout) Daily Traffic Volumes (North Study Area Only) 123
Exhibit 27A: Future Year 2050 With Specific Plan Phase Three (Buildout) Recommended Improvements – North Study Area 134
Exhibit 27B: Future Year 2050 With Specific Plan Phase Three (Buildout) Recommended Improvements – South Study Area 135
Exhibit 28A: Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Peak Hour Intersection Traffic Volumes – North Study Area 142
Exhibit 28B: Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Peak Hour Intersection Traffic Volumes – South Study Area 143
Exhibit 29: Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Daily Traffic Volumes (North Study Area Only) 144
Exhibit 30A: Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Recommended Improvements – North Study Area 154
Exhibit 30B: Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Recommended Improvements – South Study Area 155
Exhibit 31: Proposed Bicycle and Pedestrian Network 160
Exhibit 32: Proposed Transit Network 163
Exhibit 33: Existing Bridges in Specific Plan Study Area 165
Exhibit 34: Recommended Bridges To Be Improved Or Replaced In Specific Plan Phase One 171
Exhibit 35: Recommended Bridges To Be Improved Or Replaced In Specific Plan Phase Two 173
Exhibit 36: Recommended Bridges To Be Improved Or Replaced In Specific Plan Phase Three 174

RICK

LIST OF TABLES

Table 1: LOS CRITERIA FOR INTERSECTIONS 37
Table 2: LOS CRITERIA FOR ROADWAY SEGMENTS 38
Table 3: EXISTING CONDITIONS PEAK HOUR INTERSECTION OPERATIONS 49
Table 4: EXISTING CONDITIONS ROADWAY SEGMENT ANALYSIS SUMMARY 51
Table 5: LITHIUM VALLEY SPECIFIC PLAN PHASE ONE TRIP GENERATION 55
Table 6: LITHIUM VALLEY SPECIFIC PLAN PHASE TWO TRIP GENERATION 56
Table 7: LITHIUM VALLEY SPECIFIC PLAN PHASE THREE (BUILDOUT) TRIP GENERATION 57
Table 8: LITHIUM VALLEY SPECIFIC PLAN PHASE THREE (BUILDOUT) TRIP GENERATION WITH REDUCED ALTERNATIVE 58
Table 9: PHASE ONE COMMUNITY OPPORTUNITY AREAS TRIP GENERATION 59
Table 10: PHASE TWO COMMUNITY OPPORTUNITY AREAS TRIP GENERATION 60
Table 11: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE INTERSECTION OPERATIONS 86
Table 12: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE ROADWAY SEGMENT ANALYSIS 89
Table 13: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE INTERSECTION OPERATIONS WITH RECOMMENDED IMPROVEMENTS 97
Table 14: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE INTERSECTION QUEUING ANALYSIS WITH RECOMMENDED IMPROVEMENTS 99
Table 15: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE ROADWAY SEGMENT ANALYSIS WITH RECOMMENDED IMPROVEMENTS 100
Table 16: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO INTERSECTION OPERATIONS 105
Table 17: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO ROADWAY SEGMENT ANALYSIS 109
Table 18: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO INTERSECTION OPERATIONS WITH RECOMMENDED IMPROVEMENTS 116
Table 19: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO INTERSECTION QUEUING ANALYSIS WITH RECOMMENDED IMPROVEMENTS 118
Table 20: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO ROADWAY SEGMENT ANALYSIS WITH RECOMMENDED IMPROVEMENTS 119
Table 21: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE INTERSECTION OPERATIONS 124
Table 22: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE ROADWAY SEGMENT ANALYSIS 128
Table 23: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE INTERSECTION OPERATIONS WITH RECOMMENDED IMPROVEMENTS 136

Table 24: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE INTERSECTION QUEUING ANALYSIS WITH RECOMMENDED IMPROVEMENTS 139
Table 25: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE ROADWAY SEGMENT ANALYSIS WITH RECOMMENDED IMPROVEMENTS 140
Table 26: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE INTERSECTION OPERATIONS 145
Table 27: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE ROADWAY SEGMENT ANALYSIS 148
Table 28: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE INTERSECTION OPERATIONS WITH RECOMMENDED IMPROVEMENTS 156
Table 29: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE INTERSECTION QUEUING ANALYSIS WITH RECOMMENDED IMPROVEMENTS .. 158
Table 30: EXISTING BRIDGES INVENTORY AND CONDITIONS 167
Table 31: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE TURN BAY STORAGE LENGTHS WITH RECOMMENDED IMPROVEMENTS 191
Table 32: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO TURN BAY STORAGE LENGTHS WITH RECOMMENDED IMPROVEMENTS 192
Table 33: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE TURN BAY STORAGE LENGTHS WITH RECOMMENDED IMPROVEMENTS 194
Table 34: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE TURN BAY STORAGE LENGTHS WITH RECOMMENDED IMPROVEMENTS 196

APPENDICES

Appendix A Existing Traffic Volume Counts
Appendix B Intersection LOS Analysis Worksheets
Appendix C ITE 11th Edition Trip Rate Sheets / Internal Capture Calculation Worksheets
Appendix D SCAG Model Trip Distribution Percentage Plots
Appendix E Intersection LOS Analysis Worksheets With Recommended Improvements
Appendix F SimTraffic Queuing Analysis Worksheets With Recommended Improvements
Appendix G Bridge Locations and Data in Specific Plan Study Area

1.0 EXECUTIVE SUMMARY

The following Local Mobility Analysis has been prepared for the Lithium Valley Specific Plan project in accordance with the County of Imperial *Traffic Study and Report Policy* (June 29, 2007) for consistency with the County of Imperial *General Plan Circulation and Scenic Highways Element* (January 29, 2008). The study evaluates the potential level of service (LOS) deficiencies and transportation improvements that may need to be considered in association with the traffic generated by the proposed Lithium Valley Specific Plan project. An Active Transportation and Public Transit Assessment is also evaluated in this study. The Lithium Valley Specific Plan site is located along the eastern shoreline of the Salton Sea and west of State Route 111 (SR-111), north of the New River and the City of Calipatria, and west and north of the unincorporated community of Niland.

The Lithium Valley Specific Plan covers approximately 51,622 acres, which would allow for the development of up to 18,950 acres of Green Industrial uses, 8,140 acres of Conservation uses, 7,355 acres of Logistics uses, 6,657 acres of Playas Renewable uses, 5,817 acres of Manufacturing uses, 2,017 acres of Playas Restoration uses, 1,768 acres of Solar uses, 1,643 acres of Community Opportunity Areas, and 1,643 acres of Floodway uses.

The Specific Plan would be developed in up to three (3) phases based on the long-range future market/industry-driven needs. Phase One is intended for initial development stemming from existing infrastructure and geothermal plants, and is anticipated to occur during the first 10 years from 2025 to 2035. Phase Two extends outward from the first phase into areas with less established infrastructure, and is anticipated to occur between 2035 and 2050. Phase Three includes areas within the Playas Restoration and Interim Agriculture land use designation that are intended to remain as useable agriculture until there is a need to transition these lands to industry-driven uses that have expanded outside of their initial land use designated areas. It is anticipated that Phase Three would occur beyond 2050. Under the Reduced Alternative, an overall reduction of intensity of development by approximately 50% would be achieved with a 50% reduced density of development proposed on developed land uses.

1.1 Project Trip Generation

The trip generation of the Lithium Valley Specific Plan project was calculated based on the published Institute of Transportation Engineers (ITE) 11th Edition Trip Generation Manual (September 2021) trip rates where applicable. The ITE 11th Edition Trip Generation Manual does not provide trip generation rates for a few unique land use designations within the Specific Plan. Therefore, custom trip generation rates were developed for the proposed “Green Industrial” and “Playas Renewables” land use designations.

Phase One of the Specific Plan is estimated to generate a total of 47,055 trips per day, with a total of 3,979 trips occurring during the AM peak hour (2,859 IN, 1,120 OUT) and a total of 5,354 trips occurring during the PM peak hour (1,873 IN, 3,481 OUT).

Phase Two of the Specific Plan is estimated to generate a total of 80,243 trips per day, with a total of 6,515 trips occurring during the AM peak hour (4,796 IN, 1,719 OUT) and a total of 9,341 trips occurring during the PM peak hour (3,264 IN, 6,077 OUT).

Phase Three (Buildout) of the Specific Plan is estimated to generate a total of 92,933 trips per day, with a total of 8,300 trips occurring during the AM peak hour (6,215 IN, 2,085 OUT) and a total of 11,822 trips occurring during the PM peak hour (3,974 IN, 7,848 OUT).

The proposed land uses for Phase Three (Buildout) with the Reduced Alternative are forecast to generate a total of 34,747 trips per day, with a total of 2,736 trips occurring during the AM peak hour (2,045 IN, 691 OUT) and a total of 3,904 trips occurring during the PM peak hour (1,339 IN, 2,565 OUT).

1.2 Intersection Operations Analysis Findings

The results of the Existing Conditions intersection analysis showed that a total of four (4) study intersections currently operate at a deficient LOS D or worse during the peak hours.

The Future Year 2035 conditions with Specific Plan Phase One intersection analysis results showed that a total of 17 study intersections are forecast to operate at a deficient LOS D or worse during the peak hours.

The results of the Future Year 2050 conditions with Specific Plan Phase Two intersection analysis showed that a total of 17 study intersections are forecast to operate at a deficient LOS D or worse during the peak hours.

The Future Year 2050 conditions with Specific Plan Phase Three (Buildout) intersection analysis results showed that a total of 23 study intersections are forecast to operate at a deficient LOS D or worse during the peak hours.

The results of the Future Year 2050 conditions with Specific Plan Phase Three (Buildout) With Reduced Alternative intersection analysis showed that a total of 13 study intersections are forecast to operate at a deficient LOS D or worse during the peak hours.

1.3 Roadway Segment Analysis Findings

The results of the Existing Conditions roadway segment operations analysis showed that all study roadway segments currently operate at an acceptable LOS C or better.

The Future Year 2035 conditions with Specific Plan Phase One roadway segment analysis results showed that a total of five (5) study roadway segments are forecast to operate at a deficient LOS D or worse.

The results of the Future Year 2050 conditions with Specific Plan Phase Two roadway segment analysis showed that a total of 12 study roadway segments are forecast to operate at a deficient LOS D or worse.

The Future Year 2050 conditions with Specific Plan Phase Three (Buildout) roadway segment analysis results showed that a total of five (5) study roadway segments are forecast to operate at a deficient LOS D or worse.

The results of the Future Year 2050 conditions with Specific Plan Phase Three (Buildout) With Reduced Alternative roadway segment analysis showed that all study roadway segments are forecast to operate at an acceptable LOS C or better.

1.4 Recommended Improvements

Improvements are recommended below for each Specific Plan development phase to improve operations at the deficient study intersections and roadway segments to acceptable levels of service. All study intersections along a State Highway where installation of traffic signals are recommended will be subject to an Intersection Safety and Operations Assessment Process (ISOAP) to determine the appropriate intersection control as required by Caltrans.

1.4.1 Recommended Specific Plan Phase One Intersection Improvements

SR-86 / 66th Avenue

- Modify existing traffic signal to provide a right-turn overlap on the westbound 66th Avenue approach

SR-111 / Davis Road

- Install a traffic signal
- Widen the southbound SR-111 approach to provide a dedicated right-turn lane
- Provide protected + permissive left-turn phasing on the northbound SR-111 approach

SR-111 / English Road

- Install a traffic signal
- Widen the eastbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound SR-111 approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the eastbound and westbound SR-111 approaches
- Provide permissive left-turn phasing on the northbound and southbound English Road approaches

SR-111 / Pound Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane and one shared through/right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound and westbound Pound Road approaches to provide one left-turn lane and one shared through/right-turn lane on each approach
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Pound Road approaches

SR-111 / Sinclair Road

- Install a traffic signal
- Widen the northbound and southbound SR-111 approaches to provide one left-turn lane, one through lane and one right-turn lane on each approach
- Widen the eastbound Sinclair Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Sinclair Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Sinclair Road approaches
- Provide a right-turn overlap phase on the eastbound Sinclair Road approach

SR-111 / Lindsey Road

- Install a traffic signal
- Widen the northbound and southbound SR-111 approaches to provide one left-turn lane, one through lane and one right-turn lane on each approach
- Widen the eastbound Lindsey Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Lindsey Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Lindsey Road approaches

SR-111 / Main Street (Calipatria)

- Install a traffic signal
- Restripe and reconstruct the center median on the north and south legs of the intersection to provide one left-turn lane, one through lane and one shared through/right-turn lane on the northbound and southbound SR-111 approaches
- Restripe and reconstruct the center median on the east and west legs of the intersection to provide one left-turn lane, one through lane and one right-turn lane on the eastbound and westbound Main Street approaches
- Provide protected left-turn phasing on the northbound and southbound SR-111 approaches
- Provide protected + permissive left-turn phasing on the eastbound and westbound Main Street approaches

SR-78 / Brandt Road

- Install a traffic signal
- Provide protected left-turn phasing on the eastbound and westbound SR-78 approaches
- Provide permissive left-turn phasing on the northbound and southbound Brandt Road approaches

SR-111 / SR-78 Westbound Ramps – Del Rio Place

- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound approaches (Westbound SR-78 off-ramp and Del Rio Place)

SR-86 / 1st Street-Main Street

- Restripe the eastbound SR-86 (Main Street) approach to provide one left-turn lane, one through lane and one right-turn lane
- Restripe the westbound Main Street approach to provide two left-turn lanes and one shared through/ right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the northbound and southbound SR-86/1st Street approaches
- Modify the existing traffic signal to provide a right-turn overlap on the eastbound SR-86 (Main Street) approach

SR-86 / Barioni Boulevard

- Restripe the eastbound and westbound Barioni Boulevard approaches to provide one left-turn lane, one through lane and one right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Barioni Boulevard approaches

SR-86 / Aten Road

- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Aten Road approaches
- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-86 approach

Cesar Chavez Boulevard / 2nd Street

- Modify the existing traffic signal to provide a right-turn overlap on the northbound approach (exiting the U.S./Mexico Port-of-Entry)
- Increase the traffic signal cycle length to 120 seconds during the AM peak hour, and 180 seconds during the PM peak hour

1.4.2 Recommended Specific Plan Phase One Roadway Segment Improvements

SR-111 between Main Street Calipatria and Ruegger Road

- Widen SR-111 from Bonita Street to Bowles Road to provide two travel lanes and a buffered Class II bike lane in each direction of travel to match the existing cross-section of SR-111 north of Bonita Street
- Widen SR-111 from Bowles Road to Ruegger Road to a four-lane Divided State Highway

Sinclair Road between Gentry Road and SR-111

- Widen Sinclair Road from Gentry Road to SR-111 to two-lane Major Industrial Collector standards

1.4.3 Recommended Specific Plan Phase Two Intersection Improvements

SR-86 / 66th Avenue

- Widen the eastbound and westbound 66th Avenue approaches to provide one dedicated left-turn lane on each approach
- Provide protected + permissive left-turn phasing on the eastbound and westbound 66th Avenue approaches

SR-111 / Davis Road

- Widen the eastbound Davis Road approach to provide one left-turn lane and one shared left-turn/right-turn lane
- Widen the north leg of the intersection to provide a second northbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to one northbound lane

SR-111 / English Road

- Widen the westbound SR-111 approach to provide a dedicated right-turn lane
- Widen the northbound and southbound English Road approaches to provide a dedicated left-turn lane on each approach

SR-111 / Sinclair Road

- Widen the northbound SR-111 approach to provide a second left-turn lane
- Widen the southbound SR-111 approach to provide a second through lane
- Provide protected left-turn phasing on the northbound and southbound SR-111 approaches

SR-111 / Lindsey Road

- Widen the north and south legs of the intersection to provide a second through lane on SR-111 on the northbound and southbound approaches of the intersection
- Widen the westbound Lindsey Road approach to provide a dedicated right-turn lane

SR-111 / Main Street (Calipatria)

- Widen the northbound SR-111 approach to provide a dedicated right-turn lane
- Widen the southbound SR-111 approach to provide a dedicated right-turn lane
- Provide right-turn overlap phases on all approaches of the intersection

SR-78/86 / Center Street (Forrester Road)

- Restripe the southbound Center Street approach to provide a dedicated right-turn lane
- Modify the existing traffic signal to provide a right-turn overlap on the southbound approach

SR-111 / SR-78 Westbound Ramps – Del Rio Place

- Restripe the eastbound approach (Westbound SR-78 off-ramp) to provide one left-turn lane, one shared left-turn/through lane and one right-turn lane
- Modify the existing traffic signal to provide split phasing on the eastbound and westbound approaches

SR-86 / Kalin Road

- Install a traffic signal
- Widen the SR-86 center median and the eastbound SR-86 bridge over the Westside Main Canal to provide one eastbound left-turn lane
- Widen the southbound Kalin Road approach to provide one left-turn lane, one shared left-turn/through lane and one right-turn lane
- Provide protected + permissive left-turn phasing on the eastbound and westbound SR-86 approaches
- Provide split phasing on the northbound and southbound Kalin Road approaches

SR-86 / I-8 Westbound Ramps

- Restripe the westbound I-8 off-ramp approach to provide one shared left-turn/through/ right lane and two right-turn lanes
- Restripe the center median north of the intersection to provide a third northbound receiving lane on SR-86 to accommodate three westbound right-turn lanes from the westbound I-8 off-ramp

1.4.4 Recommended Specific Plan Phase Two Roadway Segment Improvements

SR-111 between Sinclair Road and Lindsey Road

- Widen SR-111 from Sinclair Road to Lindsey Road to a four-lane Divided State Highway

SR-111 between Lindsey Road and Main Street Calipatria

- Widen SR-111 from Lindsey Road to Young Road a four-lane Divided State Highway
- Widen SR-111 from Young Road to Barbara Street to provide two travel lanes and a buffered Class II bike lane in each direction of travel to match the existing cross-section of SR-111 south of Barbara Street

SR-111 between Ruegger Road and SR-78

- Widen SR-111 from Ruegger Road to SR-78 Westbound Ramps-Del Rio Place to a four-lane Divided State Highway

Gentry Road between Sinclair Road and Lindsey Road

- Widen Gentry Road from Sinclair Road to Lindsey Road to two-lane Major Industrial Collector standards

Sinclair Road between Gentry Road and SR-111

- Widen Sinclair Road from Gentry Road to SR-111 to four-lane Major Industrial Collector standards

Lindsey Road between English Road and SR-111

- Widen Lindsey Road from English Road to SR-111 to two-lane Major Industrial Collector standards

Lindsey Road between SR-111 and Specific Plan East Boundary

- Widen Lindsey Road from SR-111 to Specific Plan East Boundary to two-lane Major Industrial Collector standards

1.4.5 Recommended Specific Plan Phase Three (Buildout) Intersection Improvements

SR-111 / Lincoln Street

- Widen and restripe the northbound SR-111 approach to provide a second left-turn lane
- Widen and restripe the north leg to accommodate the realigned northbound through lane at the intersection
- Remove the existing southbound "pork-chop" island and reconfigure southbound approach to remove the free right-turn and provide a standard right-turn lane
- Restripe the west leg of the intersection to provide two westbound receiving lanes

SR-86 / 66th Avenue

- Widen within the SR-86 center median to provide a second southbound left-turn lane
- Widen the westbound 66th Avenue approach to provide a second right-turn lane
- Widen the east leg of the intersection to provide a second eastbound receiving lane on 66th Avenue for a minimum distance of 300 feet before transitioning back to one eastbound lane

SR-111 / Davis Road

- Widen the northbound SR-111 approach to provide a second through lane*

*The recommended second northbound through lane will be aligned with the second northbound receiving lane that was recommended for Phase Two of the Specific Plan.

SR-111 / English Road

- Restripe the northbound English Road approach to provide one left-turn and one shared left/through/right-turn lane
- Widen the southbound English Road approach to provide a dedicated right-turn lane
- Widen the west leg of the intersection to provide a second westbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to one westbound lane

SR-111 / Main Street (Niland)

- Install a traffic signal
- Provide protected left-turn phasing on the southbound SR-111 approach

SR-111 / Sinclair Road

- Widen the eastbound Sinclair Road approach to provide a second right-turn lane

SR-111 / Lindsey Road

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

SR-78/86 / Lack Road

- Install a traffic signal
- Provide protected left-turn phasing on the eastbound and westbound SR-78/86 approaches
- Provide permissive left-turn phasing on the northbound and southbound Lack Road approaches

SR-78/86 / Center Street (Forrester Road)

- Widen the SR-78/86 westbound approach to provide a dedicated right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the northbound and southbound Center Street approaches

SR-78 / Brandt Road*

- Widen the southbound Brandt Road approach to provide one left-turn lane, one shared left-turn/through lane and one right-turn lane
- Provide split phasing on the northbound and southbound Brandt Road approaches

SR-111 / SR-78 Westbound Ramps – Del Rio Place

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111, and extend the third southbound lane to connect with the southbound right-turn lane at the SR-111 / SR-78 Eastbound Ramps – Shank Road intersection*

*A second southbound through lane is recommended at the SR-111 / SR-78 Eastbound Ramps – Shank Road intersection, and the third southbound lane from the SR-111 / SR-78 Westbound Ramps – Del Rio Place intersection would transition to the southbound right-turn lane for the SR-78 Eastbound Ramps.

SR-111 / SR-78 Eastbound Ramps – Shank Road

- Widen the southbound SR-111 approach to provide a second through lane
- Widen the south leg of the intersection to provide a second southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to one southbound lane

SR-111 / Ben Hulse Highway

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

SR-111 / Worthington Road

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

SR-111 / Aten Road

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

SR-111 / 2nd Street

- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-111 approach

1.4.6 Recommended Specific Plan Phase Three (Buildout) Roadway Segment Improvements

Gentry Road between Sinclair Road and Lindsey Road

- Widen Gentry Road from Sinclair Road to Lindsey Road to four-lane Major Industrial Collector standards

Gentry Road between Lindsey Road and Eddins Road

- Widen Gentry Road from Sinclair Road to Lindsey Road to two-lane Major Industrial Collector standards

Pound Road between Davis Road and SR-111

- Widen Pound Road from Davis Road to SR-111 to two-lane Major Industrial Collector standards

Eddins Road between English Road and SR-111

- Widen Eddins Road from English Road to SR-111 to two-lane Major Industrial Collector standards

1.4.7 Recommended Specific Plan Phase Three (Buildout) With Reduced Alternative Intersection Improvements

SR-86 / 66th Avenue

- Widen the eastbound and westbound 66th Avenue approaches to provide one dedicated left-turn lane on each approach
- Modify existing traffic signal to provide a right-turn overlap on the westbound 66th Avenue approach

SR-111 / Davis Road

- Install a traffic signal
- Widen the southbound SR-111 approach to provide a dedicated right-turn lane
- Provide protected + permissive left-turn phasing on the northbound SR-111 approach

SR-111 / English Road

- Install a traffic signal
- Widen the eastbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the northbound and southbound English Road approaches to provide a dedicated left-turn lane on each approach
- Provide protected + permissive left-turn phasing on the eastbound and westbound SR-111 approaches
- Provide permissive left-turn phasing on the northbound and southbound English Road approaches

SR-111 / Pound Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane and one shared through/right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound and westbound Pound Road approaches to provide one left-turn lane and one shared through/right-turn lane on each approach
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Pound Road approaches

SR-111 / Sinclair Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound Sinclair Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Sinclair Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Sinclair Road approaches

SR-111 / Lindsey Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound Lindsey Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Lindsey Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Lindsey Road approaches

SR-111 / Main Street (Calipatria)

- Install a traffic signal
- Restripe and reconstruct the center median on the north and south legs of the intersection to provide one left-turn lane, one through lane and one shared through/right-turn lane on the northbound and southbound SR-111 approaches
- Restripe and reconstruct the center median on the east and west legs of the intersection to provide one left-turn lane, one through lane and one right-turn lane on the eastbound and westbound Main Street approaches
- Provide protected left-turn phasing on the northbound and southbound SR-111 approaches
- Provide protected + permissive left-turn phasing on the eastbound and westbound Main Street approaches

SR-86 / 1st Street-Main Street

- Restripe the eastbound SR-86 (Main Street) approach to provide one left-turn lane, one through lane and one right-turn lane
- Restripe the westbound Main Street approach to provide two left-turn lanes and one shared through/ right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the northbound and southbound SR-86/1st Street approaches
- Modify the existing traffic signal to provide a right-turn overlap on the eastbound SR-86 (Main Street) approach

SR-86 / Barioni Boulevard

- Restripe the eastbound and westbound Barioni Boulevard approaches to provide one left-turn lane, one through lane and one right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Barioni Boulevard approaches

SR-86 / Aten Road

- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Aten Road approaches
- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-86 approach

SR-86 / I-8 Westbound Ramps

- Restripe the westbound I-8 off-ramp approach to provide one shared left-turn/through/ right lane and two right-turn lanes
- Restripe the center median north of the intersection to provide a third northbound receiving lane on SR-86 to accommodate three westbound right-turn lanes from the westbound I-8 off-ramp

Cesar Chavez Boulevard / 2nd Street

- Modify the existing traffic signal to provide a right-turn overlap on the northbound approach (exiting the U.S./Mexico Port-of-Entry)
- Increase the traffic signal cycle length to 120 seconds during the AM peak hour, and 180 seconds during the PM peak hour

SR-111 / 2nd Street

- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-111 approach

1.4.8 Recommended Specific Plan Phase Three (Buildout) With Reduced Alternative Roadway Segment Improvements

All study roadway segments are forecast to operate at an acceptable LOS C or better under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions. Therefore, no additional improvements are required on the study area roadway segments.

1.5 Intersection Queuing Analysis Findings With Recommended Improvements

1.5.1 Specific Plan Phase One Queuing Analysis Findings With Recommended Improvements

The results of the queuing analysis under Future Year 2035 With Specific Plan Phase One conditions with the recommended improvements showed that the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections except for at the following study intersections:

SR-86 / 1st Street-Main Street

- Northbound Left-Turn Lane (AM/PM)

SR-86 / Aten Road

- Eastbound Left-Turn Lane (PM)
- Westbound Left-Turn Lane (PM)

1.5.2 Specific Plan Phase Two Queuing Analysis Findings With Recommended Improvements

The results of the queuing analysis under Future Year 2050 With Specific Plan Phase Two conditions with the recommended improvements showed that the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections except for at the following study intersections:

SR-78/86 / Center Street
- Northbound Left-Turn Lane (AM)
- Southbound Left-Turn Lane (PM)
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (PM)

SR-86 / Kalin Road
- Southbound Right-Turn Lane (AM/PM)

SR-86 / 1st Street-Main Street
- Southbound Left-Turn Lane (AM/PM)
- Eastbound Left-Turn Lane (PM)
- Westbound Left-Turn Lane (PM)

SR-86 / Aten Road
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / I-8 Westbound Ramps
- Southbound Right-Turn Lane (PM)

1.5.3 Specific Plan Phase Three (Buildout) Queuing Analysis Findings With Recommended Improvements

The results of the queuing analysis under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions with the recommended improvements showed that the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections except for at the following study intersections:

SR-111 / Sinclair Road
- Northbound Left-Turn Lane (AM/PM)

SR-78/86 / Lack Road
- Southbound Right-Turn Lane (PM)

SR-78/86 / Center Street
- Southbound Left-Turn Lane (PM)
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (PM)

SR-86 / Kalin Road
- Southbound Right-Turn Lane (AM/PM)

SR-86 / 1st Street-Main Street
- Southbound Left-Turn Lane (AM/PM)
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / Aten Road
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / I-8 Westbound Ramps
- Southbound Right-Turn Lane (AM/PM)

In addition, the queuing analysis results under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions with the recommended improvements showed that that excessive queue lengths exceeding 1,000 feet are anticipated on the recommended future left-turn and right-turn lanes at the following intersections:

SR-111 / Main Street Calipatria
- Eastbound Right-Turn Lane (PM)

SR-86 / 1st Street-Main Street
- Northbound Right-Turn Lane (AM/PM)
- Eastbound Right-Turn Lane (PM)
- Westbound Shared Through/Right-Turn Lane (PM)

1.5.4 Specific Plan Phase Three (Buildout) With Reduced Alternative Queuing Analysis Findings With Recommended Improvements

The results of the queuing analysis under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions with the recommended improvements showed that the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections except for at the following study intersections:

SR-86 / 1st Street-Main Street
- Southbound Left-Turn Lane (AM/PM)
- Eastbound Left-Turn Lane (PM)

SR-86 / Aten Road
- Eastbound Left-Turn Lane (PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / I-8 Westbound Ramps
- Southbound Right-Turn Lane (PM)

1.6 Turn Bay Lengths Needed With Recommended Improvements

The results of the queuing analysis were used to determine the storage lengths that would be needed for the existing and future left-turn and right-turn lanes at the study intersections with the recommended improvements for each Specific Plan development phase.

1.6.1 Specific Plan Phase One Turn Bay Length Needs With Recommended Improvements

The recommended turn bay lengths under Future Year 2035 With Specific Plan Phase One conditions with the recommended improvements would accommodate the 95th percentile queue lengths during the peak hours except for at the following study intersections:

SR-111 / Main Street Calipatria

- Northbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection

SR-86 / 1st Street – Main Street

- Eastbound Left-Turn Lane: Turn bay length constrained by upstream intersection

Accommodating the 95th percentile queue lengths for the above-listed left-turn lanes is not feasible due to the distances to the next upstream intersections that limit the turn bay lengths that can be provided at these intersections.

1.6.2 Specific Plan Phase Two Turn Bay Length Needs With Recommended Improvements

The recommended turn bay lengths under Future Year 2050 With Specific Plan Phase Two conditions with the recommended improvements would accommodate the 95th percentile queue lengths during the peak hours except for at the following study intersections:

SR-111 / Main Street Calipatria

- Northbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Northbound Right-Turn Lane: Turn bay length constrained by adjacent development
- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Southbound Right-Turn Lane: Turn bay length constrained by adjacent development

SR-86 / 1st Street – Main Street

- Northbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Eastbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Westbound Left-Turn Lanes (Dual): Turn bay length constrained by upstream intersection

Accommodating the 95th percentile queue lengths for the above-listed left-turn and right-turn lanes is not feasible due to the distances to the next upstream intersections and the adjacent development that limit the turn bay lengths that can be provided at these intersections.

1.6.3 Specific Plan Phase Three (Buildout) Turn Bay Length Needs With Recommended Improvements

The recommended turn bay lengths under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions with the recommended improvements would accommodate the 95th percentile queue lengths during the peak hours except for at the following study intersections:

SR-111 / Main Street Calipatria

- Northbound Left-Turn Lane: Turn bay length constrained by upstream intersection, dual left-turn lanes not feasible due to adjacent development
- Northbound Right-Turn Lane: Turn bay length constrained by adjacent development
- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection, dual left-turn lanes not feasible due to adjacent development
- Southbound Right-Turn Lane: Turn bay length constrained by adjacent development, excessive queue length due to intersection delay
- Eastbound Left-Turn Lane: Excessive queue length due to intersection delay, dual left-turn lanes not feasible due to adjacent development
- Eastbound Right-Turn Lane: Excessive queue length due to intersection delay

SR-86 / 1st Street – Main Street

- Northbound Left-Turn Lane: Turn bay length constrained by upstream intersection, dual left-turn lanes not feasible due to adjacent development
- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Eastbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Westbound Left-Turn Lanes (Dual): Turn bay length constrained by upstream intersection; excessive queue length due to intersection delay

Accommodating the 95th percentile queue lengths for the above-listed left-turn and right-turn lanes is not feasible due to the distances to the next upstream intersections and the adjacent development that limit the turn bay lengths that can be provided at these intersections.

1.6.4 Specific Plan Phase Three (Buildout) With Reduced Alternative Turn Bay Length Needs With Recommended Improvements

The recommended turn bay lengths under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions with the recommended improvements would accommodate the 95th percentile queue lengths during the peak hours except for at the following study intersections:

SR-86 / 1st Street – Main Street

- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Eastbound Left-Turn Lane: Turn bay length constrained by upstream intersection

Accommodating the 95th percentile queue lengths for the above-listed left-turn lanes is not feasible due to the distances to the next upstream intersections that limit the turn bay lengths that can be provided at these intersections.

2.0 INTRODUCTION

The following Local Mobility Analysis has been prepared for the Lithium Valley Specific Plan project in accordance with the County of Imperial *Traffic Study and Report Policy* (June 29, 2007) for consistency with the County of Imperial *General Plan Circulation and Scenic Highways Element* (January 29, 2008). The study evaluates the potential level of service (LOS) deficiencies and transportation improvements that may need to be considered in association with the traffic generated by the proposed Lithium Valley Specific Plan project. An Active Transportation and Public Transit Assessment is also evaluated in this study. The Lithium Valley Specific Plan site is located along the eastern shoreline of the Salton Sea and west of State Route 111 (SR-111), north of the New River and the City of Calipatria, and west and north of the unincorporated community of Niland. **Exhibit 1** shows the project vicinity map.

3.0 PROJECT DESCRIPTION

The Lithium Valley Specific Plan covers approximately 51,622 acres, which would allow for the development of up to 18,950 acres of Green Industrial uses, 8,140 acres of Conservation uses, 7,355 acres of Logistics uses, 6,657 acres of Playas Renewable uses, 5,817 acres of Manufacturing uses, 2,017 acres of Playas Restoration uses, 1,768 acres of Solar uses, 1,643 acres of Community Opportunity Areas, and 1,643 acres of Floodway uses. Below are descriptions of each of the proposed land uses within the Specific Plan:

- Green Industrial: Promotes industrial operations that decarbonize the energy and mineral recovery industries, with a focus on geothermal energy production and mineral recovery operations.
- Manufacturing: Supports the assembly of clean energy products and accommodates industrial, office, and warehouse space for manufacturers, including geothermal energy and mineral recovery operations.
- Logistics: Facilitates the efficient movement of goods, accommodating warehousing, management, and distribution activities, with a preference for geothermal energy and mineral recovery operations.
- Playas Renewables: Promotes uses similar to Green Industrial, with restrictions to ensure compatibility with the environmental conditions of the Salton Sea and the exposed playas, requiring dust suppression measures.
- Community Opportunity Area: Addresses community needs of nearby residential areas, allowing for commercial hubs, social gathering areas, recreational uses, healthcare services, and childcare services, planned in collaboration with neighboring communities.
- Interim Agriculture: Retains large agricultural areas until they are needed for industry-driven uses, including existing agricultural lands and other agriculture-related uses, transitioning to industrial uses in later phases.
- Solar: Supports the development of large-scale solar power generation facilities, transitioning to other uses like Logistics or Manufacturing after their lifespans end.

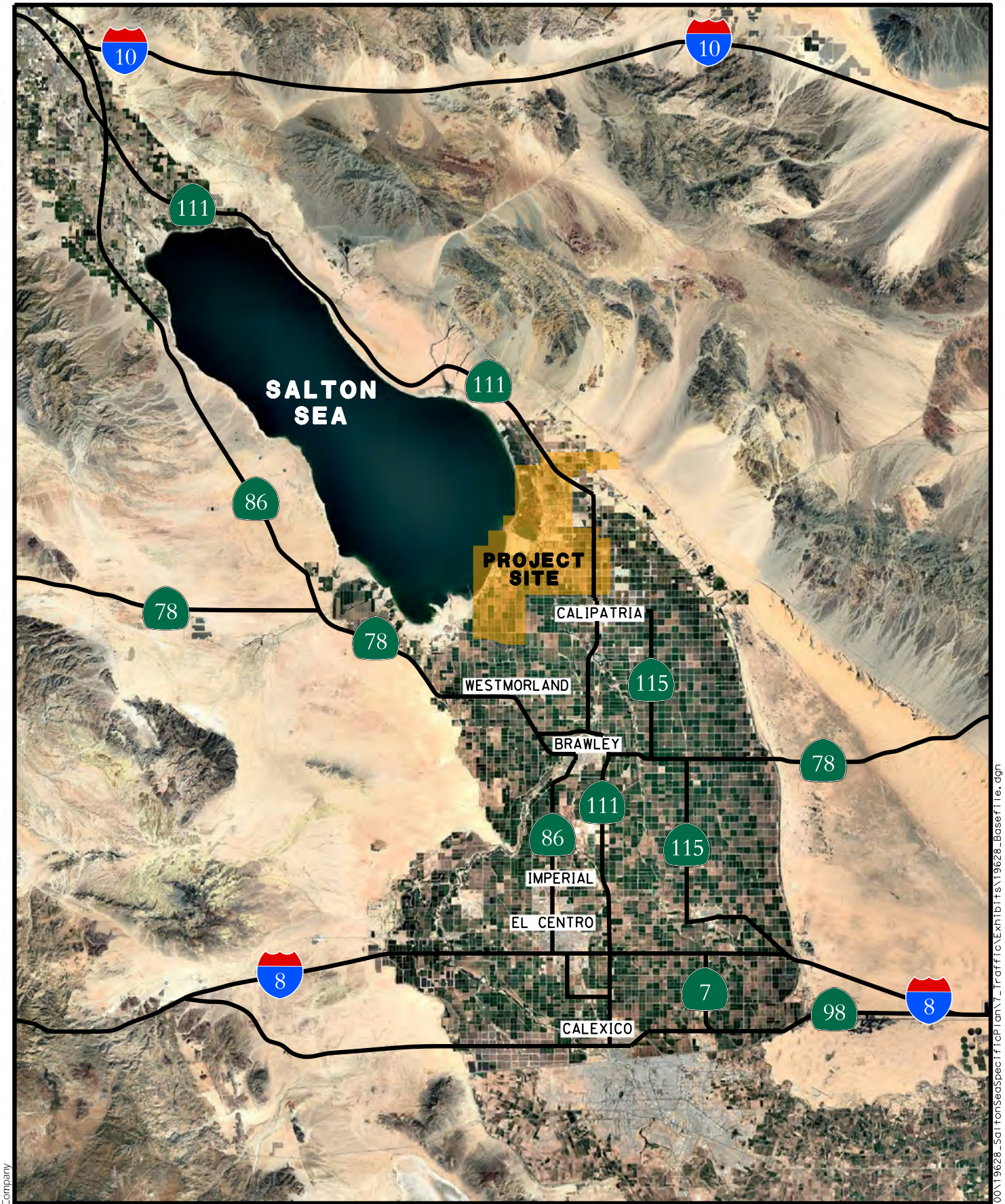


EXHIBIT 1

PROJECT VICINITY MAP

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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- Playas Restoration: Supports Salton Sea restoration, habitat creation, and dust suppression while allowing subsurface geothermal activities, focusing on environmental restoration and mitigation activities.

- Floodplain Drainage Basin: Maintains and enhances the Alamo River and New River drainage basins, including a buffer zone to improve water quality and environmental health while reducing flooding impacts.

- Conservation: Protects areas of environmental, cultural, and tribal significance, retaining areas for restoration and mitigation projects, including those under contract for restoration efforts and new areas for Salton Sea rehabilitation projects.

The Specific Plan will also include commercial nodes, public transportation hubs, an intermodal rail yard, and a recreation easement to the Salton Sea with a pedestrian pathway, which are described below:

- Conceptual Commercial Node: A developed area, generally 5-20 acres, that serves as a hub for retail, office, dining, and service-oriented businesses. Located near local communities and employment hubs, commercial nodes could cater to both nearby residents and Lithium Valley employees.

- Conceptual Public Transportation Hub**:** A central place where multiple modes of transportation converge, designed to facilitate seamless transfers, improve accessibility, and reduce travel time for commuters. The locations of the public transportation hubs on the Land Use Map are intended to connect the communities of Niland and Calipatria with the employment hub in the heart of the Specific Plan Area.

- Conceptual Intermodal Rail Yard: A specialized facility where freight is transferred between different modes of transportation, such as trains, trucks, and ships. These yards streamline the movement of goods by integrating rail and truck transport, improving efficiency in supply chains. Key features include container storage, loading docks and equipment, connections to major transportation networks, rail switching yards, and staging areas for trucks.

- Conceptual Pedestrian Pathway: The conceptual pedestrian pathways would by bounded by a recreation easement that legally designates an area to be preserved for public recreational use, such a trails, parks, or open spaces. The intent of the conceptual pedestrian pathways on the Land Use Map is to ensure long-term access to the Salton Sea and the river corridors for the nearby community members.

The Specific Plan would be developed in up to three (3) phases based on the long-range future market/industry-driven needs. Below is a description of the Specific Plan development phases:

- Phase One: Phase One is intended for initial development stemming from existing infrastructure and geothermal plants. Phase 1 is reflective of foreseeable development projects that can aid the installation of essential infrastructure. Phase 1 land use designations include Conservation, River Corridor, Solar; and parts of Green Industrial, Playas Renewables, Manufacturing, Logistics, and Community Opportunity Areas. Phase One is anticipated to occur during the first 10 years from 2025 to 2035.

- Phase Two: Phase Two extends outward from the first phase into areas with less established infrastructure, and includes parts of Green Industrial, Playas Renewables, Manufacturing, Logistics, and Community Opportunity Areas. Phase 2 is anticipated to occur between 2035 and 2050.

- Phase Three: Phase Three includes areas within the Playas Restoration and Interim Agriculture land use designation that are intended to remain as useable agriculture until there is a need to transition these lands to industry-driven uses that have expanded outside of their initial land use designated areas. It is anticipated that Phase Three would occur beyond 2050.

- Phase Three Reduced Alternative: Under this alternative, an overall reduction of intensity of development by approximately 50% would be achieved with a 50% reduced density of development proposed on developed land uses excluding Green Industrial, an increase in areas designated as Conservation, reduced agricultural land converted to non-agricultural uses, preserving those areas of the proposed project designated as agricultural overlay, to remain agricultural only.

Where applicable, below is a breakdown of the estimated building areas in square-feet for the land use types per phase within the Lithium Valley Specific Plan:

Phase 1 Uses/Building Area	
• Green Industrial:	14,479,452 SF
• Logistics:	4,363,253 SF
• Manufacturing:	2,876,292 SF
• Playas Renewables	1,511,362 SF
• Solar	50,000 SF
• Temporary Construction Housing	904 DU
• Community Opportunity Areas:	532,793 SF

Phase 2 Uses/Building Area	
• Green Industrial:	2,267,870 SF
• Logistics:	5,524,473 SF
• Manufacturing:	1,437,035 SF
• Playas Renewables:	2,838,429 SF
• Temporary Construction Housing	502 DU
• Community Opportunity Areas:	1,010,135 SF

Phase 3 Uses/Building Area	
• Green Industrial:	4,677,629 SF
• Logistics:	793,539 SF
• Manufacturing:	2,726,928 SF
• Temporary Construction Housing	314 DU

Total Buildout Uses/Building Area (Phases 1-3 Combined)	
• Green Industrial:	21,016,543 SF
• Logistics:	10,532,526 SF
• Playas Renewables:	4,349,791 SF
• Manufacturing:	7,034,031 SF
• Solar	50,000 SF
• Community Opportunity Areas:	1,542,928 SF

Reduced Alternative Buildout (Phases 1-3 Combined) Uses/Building Area	
• Green Industrial:	12,998,705 SF
• Logistics:	2,607,709 SF
• Playas Renewables:	5,926,611 SF
• Manufacturing:	1,777,983 SF
• Solar	50,000 SF
• Community Opportunity Areas:	589,857 SF

Primary access to the Lithium Valley Specific Plan would be provided from SR-111, Davis Road, English Road, Pound Road, Sinclair Road, Lindsey Road, Eddins Road, and Gentry Road. Regional access would be provided from SR-111, Forrester Road, SR-86 and SR-78.

Exhibit 2 shows the Lithium Valley Specific Plan land use and phasing plan.

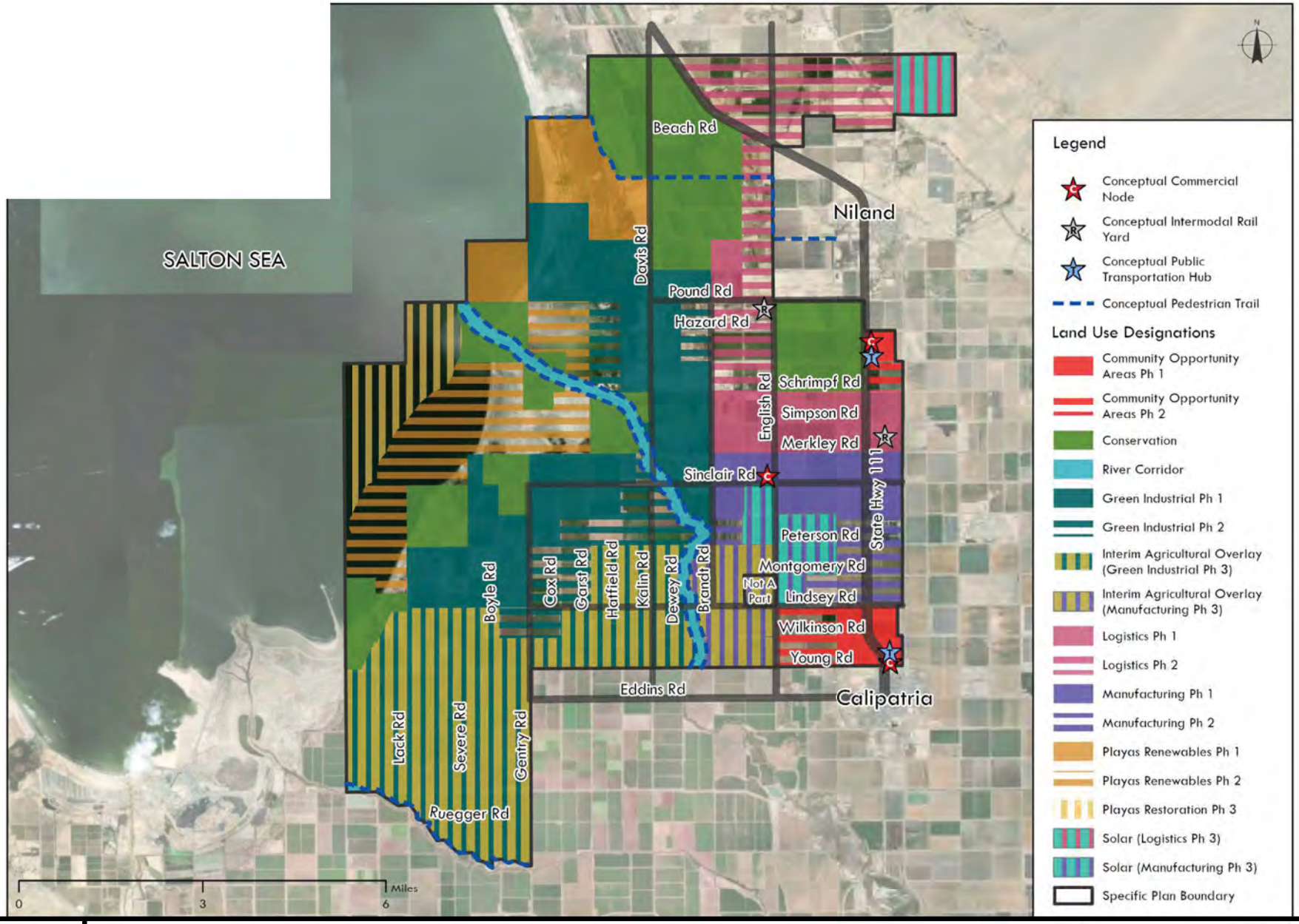


EXHIBIT 2

LITHIUM VALLEY SPECIFIC PLAN LAND USE AND PHASING PLAN

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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4.0 STUDY AREA AND ANALYSIS METHODOLOGY

4.1 Project Study Area

As agreed upon with the County of Imperial Department of Public Works and Caltrans District 11 staff, and to determine the roadway capacities needed on the roadways within the Specific Plan, the following intersections and roadway segments are included in the project study area, which are also illustrated in **Exhibits 3A** and **3B**:

Study Intersections

1. SR-111 / Lincoln Street (located in County of Riverside)
2. SR-86 / 66th Avenue (located in County of Riverside)
3. SR-111 / Davis Road
4. SR-111 / English Road
5. SR-111 / Main Street (in Niland)
6. SR-111 / Pound Road
7. SR-111 / Sinclair Road
8. SR-111 / Lindsey Road
9. SR-111 / Main Street (in Calipatria)
10. SR-86 / SR-78 (west)
11. SR-78/86 / Lack Road
12. SR-78/86 / Center Street (Forrester Road)
13. SR-86 / SR-78 (east)
14. SR-78 / Brandt Road
15. SR-111 / SR-78 Westbound Ramps
16. SR-111 / SR-78 Eastbound Ramps
17. SR-86 / Kalin Road
18. SR-86 / 1st Street-Main Street
19. SR-111 / Ben Hulse Highway
20. SR-86 / Barioni Boulevard
21. SR-111 / Worthington Road
22. SR-86 / Aten Road
23. SR-111 / Aten Road
24. SR-86 / Adams Avenue
25. SR-111 / Evan Hewes Highway
26. Forrester Road / I-8 Westbound Ramps
27. Forrester Road / I-8 Eastbound Ramps
28. SR-86 / I-8 Westbound Ramps
29. SR-86 / I-8 Eastbound Ramps
30. SR-111 / Heber Road
31. Cesar Chavez Boulevard / Highway 98 (Birch Street)
32. SR-111 / Highway 98 (Birch Street)
33. Cesar Chavez Boulevard / 2nd Street
34. SR-111 / 2nd Street
35. SR-7 / I-8 Westbound Ramps
36. SR-7 / I-8 Eastbound Ramps
37. SR-7 / SR-98
38. SR-7 / Maggio Road

Study Roadway Segments

1. SR-111, north of Davis Road
2. SR-111, between Davis Road and English Road
3. SR-111, between English Road and Main Street Niland
4. SR-111, between Main Street Niland and Pound Road
5. SR-111, between Pound Road and Sinclair Road
6. SR-111, between Sinclair Road and Lindsey Road
7. SR-111, between Lindsey Road and Main Street Calipatria
8. SR-111, between Main Street Calipatria and Ruegger Road
9. SR-111, between Ruegger Road and SR-78
10. SR-115, between Northeast Avenue and Blair Road
11. SR-78/86, between Lack Road and Martin Road
12. English Road, between Gillespie Road and SR-111
13. English Road, between SR-111 and Pound Road
14. English Road, between Pound Road and Sinclair Road
15. English Road, between Sinclair Road and Lindsey Road
16. English Road, between Lindsey Road and Eddins Road
17. Brandt Road, between Pound Road and Sinclair Road
18. Brandt Road, between Sinclair Road and Lindsey Road
19. Brandt Road, between Lindsey Road and Eddins Road
20. Davis Road, between SR-111 and Pound Road
21. Kalin Road, between Sinclair Road and Lindsey Road
22. Kalin Road, between Lindsey Road and Eddins Road
23. Gentry Road, between Sinclair Road and Lindsey Road
24. Gentry Road, between Lindsey Road and Eddins Road
25. Lack Road, between Lindsey Road and Vail Road
26. Pound Road, between Davis Road and Brandt Road
27. Pound Road, between Brandt Road and English Road
28. Pound Road, between English Road and SR-111
29. Sinclair Road, between Gentry Road and Kalin Road
30. Sinclair Road, between Kalin Road and Brandt Road
31. Sinclair Road, between Brandt Road and English Road
32. Sinclair Road, between English Road and SR-111
33. Sinclair Road, between SR-111 and Specific Plan Boundary
34. Lindsey Road, between Gentry Road and Kalin Road
35. Lindsey Road, between Kalin Road and Brandt Road
36. Lindsey Road, between Brandt Road and English Road
37. Lindsey Road, between English Road and SR-111
38. Lindsey Road, between SR-111 and Specific Plan Boundary
39. Eddins Road, between Gentry Road and Kalin Road
40. Eddins Road, between Kalin Road and Brandt Road
41. Eddins Road, between Brandt Road and English Road
42. Eddins Road, between English Road and SR-111

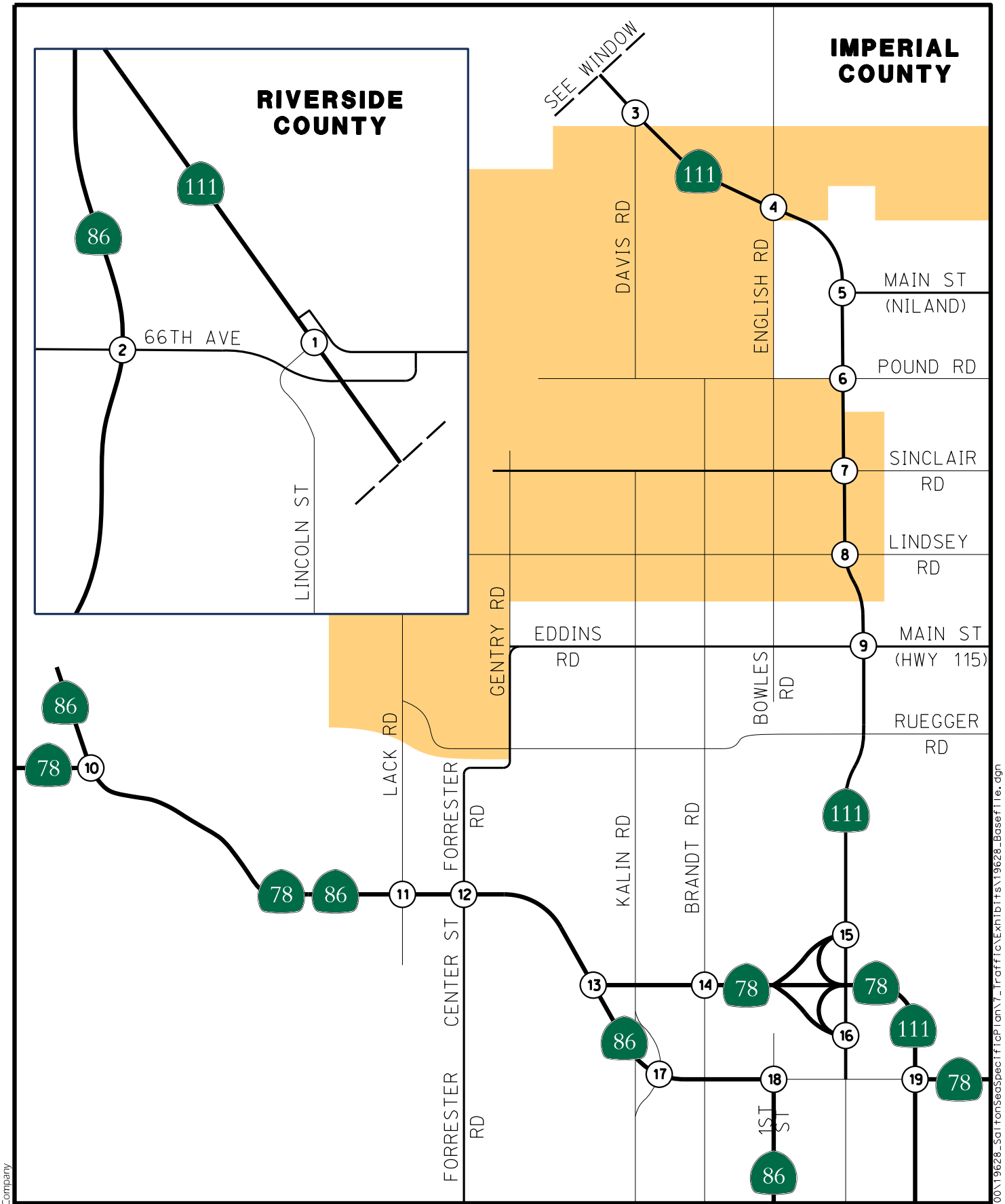


EXHIBIT 3A

PROJECT STUDY AREA (NORTH)

LEGEND

X =STUDY INTERSECTION

=SPECIFIC PLAN SITE

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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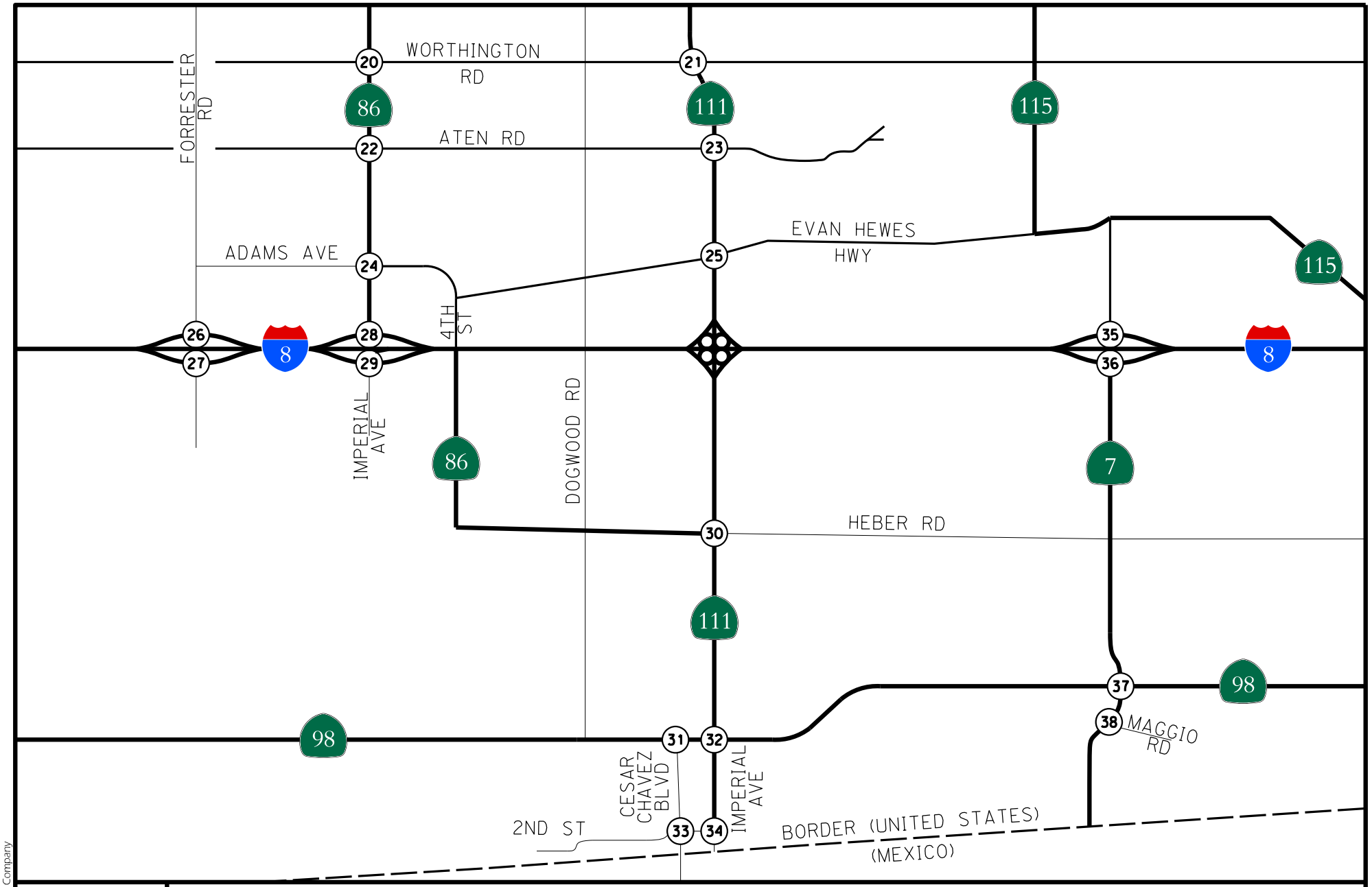


EXHIBIT 3B

PROJECT STUDY AREA (SOUTH)

LEGEND (X) =STUDY INTERSECTION

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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4.2 Analysis Methodology

As agreed upon with the County of Imperial Department of Public Works and Caltrans District 11 staff, the following scenarios were evaluated in this Local Mobility Analysis:

- **Existing (Year 2025) Conditions:** This scenario reflects the conditions on the ground at the time the traffic count data was obtained (February 2025).
- **Future Year 2035 With Specific Plan Phase One Conditions:** This scenario reflects the Future Year 2035 traffic volumes with Phase One of the Lithium Valley Specific Plan project, based on the model volumes generated by the Southern California Association of Governments (SCAG) regional travel demand model with the proposed Specific Plan land uses.
- **Future Year 2050 With Specific Plan Phase Two Conditions:** This scenario reflects the Future Year 2050 traffic volumes with Phase Two of the Lithium Valley Specific Plan project, based on the model volumes generated by the SCAG regional travel demand model with the proposed Specific Plan land uses.
- **Future Year 2050 With Specific Plan Buildout (Phase Three) Conditions:** This scenario reflects the Future Year 2050 traffic volumes with the buildout of the Lithium Valley Specific Plan project, based on the model volumes generated by the SCAG regional travel demand model with the proposed Specific Plan land uses.
- **Future Year 2050 With Specific Plan Buildout (Phase Three Reduced Alternative) Conditions:** This scenario reflects the Future Year 2050 traffic volumes with the buildout of the Lithium Valley Specific Plan project with a 50% reduction in the land use intensities for Phases One, Two and Three, based on the model volumes generated by the SCAG regional travel demand model with the proposed Specific Plan land uses.

4.2.1 Intersection Analysis Methodology

Intersection operations were determined at the study area intersections for the weekday AM and PM peak hours. The AM peak hour intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 7:00 AM and 9:00 AM. The PM peak hour intersection analysis evaluates LOS during the hour with the highest vehicular traffic between 4:00 PM and 6:00 PM.

The Level of Service (LOS) for signalized intersections was analyzed using the methodologies described in Chapter 19 of the 7th Edition Highway Capacity Manual (HCM-7). The LOS for signalized intersections is defined in terms of control delay, which is made up of several factors that relate to right- of-way control, geometrics and traffic volumes. The signalized intersection analysis also considers intersection spacing and coordination.

The LOS for two-way and all-way stop controlled intersections was calculated using the methodologies described in Chapters 20 and 21 of the 7th Edition HCM. The LOS for a two-way stop controlled intersection is determined by the computed control delay for each minor street movement and major street left-turns, and not for the intersection as a whole. The LOS reported reflects the highest delay and associated LOS for an individual movement, typically occurring on the stop controlled approach.

The computerized analysis of signalized and unsignalized intersection operations was performed utilizing the *Synchro 12* traffic analysis software. The *Synchro 12* software supports the HCM-7 methodologies for signalized and stop controlled intersections and was utilized to produce the analysis results.

Signal timing data and parameters such as cycle lengths, splits, clearance intervals, etc. were obtained from the current signal timing sheets provided by the County of Imperial and Caltrans District 11, and input into the Synchro software. Synchro reports delays, which correspond to a particular LOS, to describe the overall operation of an intersection.

The criteria for the LOS grade designations are provided in **Table 1**. LOS provides a quick overview of how well an intersection is performing. Within the County of Imperial and within the Eastern Coachella Valley Area Plan of the County of Riverside, LOS C or better is considered acceptable for all signalized and unsignalized intersections during the peak hours.

TABLE 1: LOS CRITERIA FOR INTERSECTIONS

CONTROL DELAY (SEC/VEH)			DESCRIPTION
LOS	SIGNALIZED INTERSECTIONS	UNSIGNALIZED INTERSECTIONS	
A	≤10 seconds	≤10 seconds	Operations with very low delay and most vehicles do not stop.
B	>10 and ≤20 seconds	>10 and ≤15 seconds	Operations with good progression but with some restricted movements.
C	>20 and ≤35 seconds	>15 and ≤25 seconds	Operations where a significant number of vehicles are stopping with some backup and light congestion.
D	>35 and ≤55 seconds	>25 and ≤35 seconds	Operations where congestion is noticeable, longer delays occur, and many vehicles stop. The proportion of vehicles not stopping declines.
E	>55 and ≤80 seconds	>35 and ≤50 seconds	Operations where there is significant delay, extensive queuing, and poor progression.
F	>80 seconds	>50 seconds	Operations that are unacceptable to most drivers, when the arrival rates exceed the capacity of the intersection.

Source: *7th Edition Highway Capacity Manual.*

4.2.2 Roadway Segment Analysis Methodology

Roadway segments were analyzed based on the County's daily LOS capacity thresholds per Table 5 of the County of Imperial *General Plan Circulation and Scenic Highways Element* (January 29, 2008). The analysis results provide a planning-level assessment of whether a segment is under, approaching, or over capacity, where LOS E represents capacity. The County of Imperial considers LOS C or better to be acceptable for daily roadway segment operations. Table 2 (LOS Criteria for Roadway Segments) presents the roadway segment capacity and LOS thresholds utilized by the County of Imperial.

TABLE 2: LOS CRITERIA FOR ROADWAY SEGMENTS

Roadway Classification	Number of Lanes	Cross-Section	Daily Volume Threshold				
			LOS A	LOS B	LOS C	LOS D	LOS E
County of Imperial Roadway Classifications							
Expressway	6	154'/210'	30,000	42,000	60,000	70,000	80,000
Prime Arterial	6	106'/136'	22,200	37,000	44,600	50,000	57,000
Minor Arterial	4	82'/102'	14,800	24,700	29,600	33,400	37,000
Major Collector (Collector)	4	64'/84'	13,700	22,800	27,400	30,800	34,200
Minor Collector (Local Collector)	2	40'/70'	1,900	4,100	7,100	10,900	16,200
Local County (Residential)	2	40'/60'	*	*	<1,500	*	*
Local County (Residential Cul-de- Sac or Loop Street)	2	40'/60'	*	*	<200	*	*
County of Imperial / Lithium Valley Specific Plan Industrial Roadway Classifications							
Major Industrial Collector	4 + TWLTL	70'/130'	7,500	15,000	20,000	25,000	30,000
Major Industrial Collector	2 + TWLTL	58'/118'	3,800	7,500	10,500	12,800	15,000
Industrial Local	2	44'/104'	2,500	5,000	7,000	8,500	10,000
State Highway Roadway Classifications							
Divided State Highway	4	70'/varies	20,000	30,000	40,000	45,000	50,000
Undivided State Highway	2	32'/varies	10,000	15,000	20,000	22,500	25,000

Source: County of Imperial *General Plan Circulation and Scenic Highways Element* (January 29, 2008)

5.0 EXISTING CONDITIONS

This section summarizes the existing roadway network, peak hour volumes and operations at the study area intersections.

5.1 Existing conditions Roadway Network

State Route 78/86 (SR-78/86) is oriented in a general east-west direction along the segment that is shared by both highways. SR-78/86 is classified as a divided 6 Lane State Highway/Expressway and is currently built as a divided 4 Lane State Highway/ Expressway with a pavement width of 164 feet (including the 84 foot center median), except through Westmorland, where SR-78/86 is currently built as an undivided 4 lane roadway with a pavement width of 76 feet. Sidewalks are generally not provided except along several blocks in Westmorland. There are currently no bike lanes along SR-78/86, but a 4-6 foot shoulder is generally provided. On-street parking is prohibited on SR-78/86. The posted speed limit ranges from 35 mph through Westmorland to 65 mph between cities and communities. SR-78/86 is a major goods movement route and would provide regional access between the Specific Plan site and areas to the west and south of the Specific Plan.

State Route 86 (SR-86) is oriented in a general north-south direction to the north of SR-78 toward Riverside County, and to the south toward the U.S.-Mexico border. SR-86 is classified as a divided 6 Lane State Highway/Expressway. SR-86 is currently built as a divided 4 Lane State Highway/Expressway with a pavement width ranging from 100 feet to 164 feet including the center median outside of the cities and major communities. Within the City of Brawley, SR-86 is currently built as an undivided 4 lane roadway with a pavement width ranging from 66 feet to 98 feet. The 3.5-mile segment of SR-86 (Imperial Avenue) through the City of Imperial was relinquished by Caltrans to the City of Imperial in 2016, and is currently built as a divided 4 lane roadway with a pavement width ranging from 84 feet to 102 feet. Within the City of El Centro, SR-86 is currently built as a divided 4 lane roadway with a pavement width ranging from 76 feet to 116 feet, although a segment of SR-86 from Adams Avenue to Ross Avenue is currently built as an undivided 4 lane roadway. South of El Centro and Interstate 8, SR-86 narrows to a two-lane undivided roadway. There are currently no bike lanes along SR-86, but a 4-6 foot shoulder is generally provided. On-street parking is generally prohibited on SR-86 except for a one-mile segment within the City of El Centro. The posted speed limit ranges from 35 mph through cities and major communities to 65 mph between cities and communities.

State Route 111 (SR-111) is oriented in a general north-south direction, and is classified as a divided 6 Lane State Highway/Expressway. SR-111 is currently built as an undivided 2 lane State Highway facility in the area with a pavement width ranging from 32 feet to 54 feet, except for a 4-block segment in Calipatria where 4 lanes are currently provided with a pavement width of 76 feet. Sidewalks are generally not provided except along the east side of the roadway for several blocks in Calipatria. There are currently no bike lanes along SR-111, but a 4-6 foot shoulder is generally provided. On-street parking is prohibited on SR-111. The posted speed limit ranges from 40 mph through Calipatria, to 45 mph through Niland, to 65 mph between cities and communities. SR-111 serves as a major goods movement route in Imperial County and would provide primary regional access to and from the Study Area.

Main Street (Calipatria)/State Route 115 (SR-115) is oriented in a general east-west direction, and is classified as a 4 lane Major Collector from Lyerly Road to SR-111, and as a divided 6 Lane State Highway/Expressway along the SR-115 segment east of SR-111. Main Street is currently built as an undivided 2 lane roadway between Lyerly Road and Hornet Street (Calipatria High School). Main Street is currently built as a 4 lane roadway with between Hornet Street (Calipatria High School) and Park Avenue, with a pavement width of 76 feet. West Main Street between Park Avenue and SR-111 is currently built as an undivided 2 lane roadway with on-street angled parking, with a pavement width of 76 feet. East Main Street (SR-115) between SR-111 and Northeast/ Southeast Avenue is currently built as an undivided 4 lane roadway, with a pavement width ranging from 52 feet to 76 feet, and transitions to an undivided 2 lane roadway east of Northeast/ Southeast Avenue, with a pavement width ranging from 32 feet to 44 feet. Sidewalks are generally provided between Lyerly Road and Industrial Avenue. Bike lanes are not provided along Main Street/ SR-115. The posted speed limit on Main Street/Highway 115 ranges from 25 mph to 45 mph through Calipatria, and is 65 mph on SR-115 east of Northeast/ Southeast Avenue. West Main Street would provide access between SR-111 and the southern portion of the Study Area (via Eddins Road), whereas East Main Street/ SR-115 would provide regional access between the Study Area and areas to the southeast of the Specific Plan.

Lack Road is oriented in a general north-south direction, and is classified as a 2 lane Minor Local Collector. Lack Road is currently built as an undivided 2 lane roadway between Bowles Road and Baughman Road south of SR-78/86, with a pavement width ranging from 22 to 24 feet. Sidewalks and bike lanes are not provided on Lack Road, and on-street parking is prohibited. No posted speed limit sign was observed on Lack Road. Lack Road would provide access between SR-78/86 and the southern portion of the Study Area.

Gentry Road is oriented in a general north-south direction, and is classified as a 4 lane Major Collector. Gentry Road is currently built as an undivided 2 lane roadway between Sinclair Road and Walker Road, with a pavement width ranging from 22 to 24 feet. Sidewalks and bike lanes are not provided on Gentry Road, and on-street parking is prohibited. No posted speed limit sign was observed on Gentry Road. Gentry Road would provide access between SR-78/86 and the southern and central portions of the Study Area via Forrester Road (south of Walker Road). Access between SR-111 and the southern and central portions of the Study Area would also be provided from Gentry Road via Eddins Road.

Forrester Road/Center Street is oriented in a general north-south direction, and is classified as a 6 lane Prime Arterial. Forrester Road/Center Street is currently built as an undivided 2 lane roadway between Walker Road and Interstate 8, with a pavement width generally ranging from 24 to 26 feet. A half-mile section of Forrester Road becomes Center Street through Westmorland that is currently built as an undivided 2 lane roadway with a two-way left-turn lane and on-street parallel and angled parking, with a pavement width ranging from 48 to 72 feet. Sidewalks are generally not provided except along several blocks in Westmorland where Forrester Road becomes Center Street. A Class II bike lane is currently provided in each direction along a 2-block section of Center Street between 7th Street and 5th Street. The posted speed limit on Forrester Road ranges from 35 to 55 mph, except through Westmorland where the posted speed limit on Center Street is 25 mph. Forrester Road would provide access between SR-78/86 and the southern and central portions of the Study Area via Gentry Road (north of Walker Road).

Kalin Road is oriented in a general north-south direction, and is classified as a 4 lane Major Collector. Kalin Road is currently built as an undivided 2 lane roadway between Sinclair Road and Carter Road south of SR-86, with a pavement width ranging from 22 to 24 feet. Sidewalks and bike lanes are not provided on Kalin Road, and on-street parking is prohibited. No posted speed limit sign was observed on Kalin Road. Kalin Road would provide access between SR-86 and the southern and central portions of the Study Area. Access between SR-111 and the southern and central portions of the Study Area would also be provided from Kalin Road via Eddins Road.

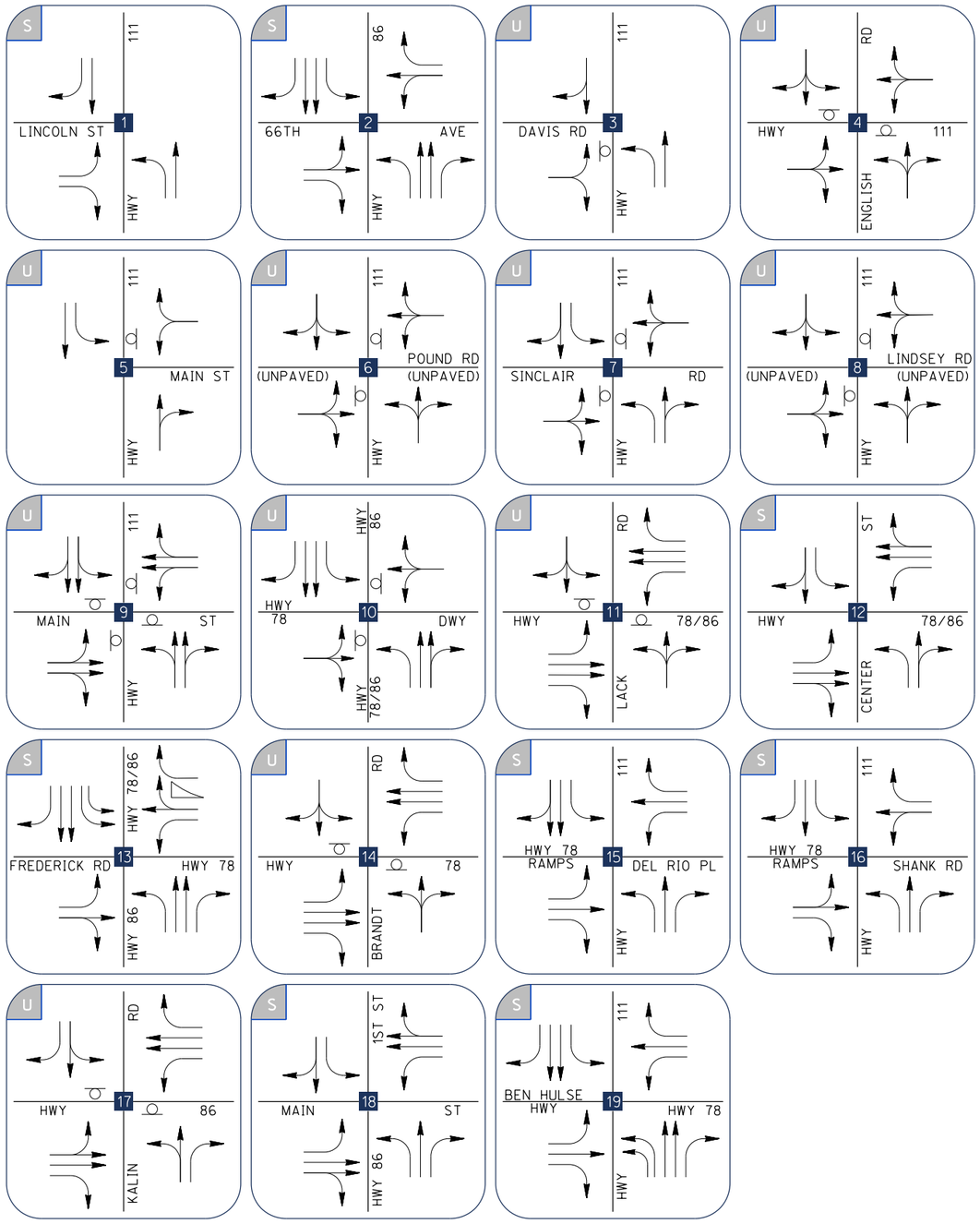
Brandt Road is oriented in a general north-south direction, and is classified as a 2 lane Minor Local Collector. Brandt Road is currently built as an undivided 2 lane roadway between Sinclair Road and Webster Road south of Highway 86, with a pavement width ranging from 22 to 24 feet. Sidewalks and bike lanes are not provided on Brandt Road, and on-street parking is prohibited. No posted speed limit sign was observed on Brandt Road. Brandt Road would provide access between SR-78 and the southern and central portions of the Study Area. Access between SR-111 and the southern and central portions of the Study Area would also be provided from Brandt Road via Eddins Road.

English Road is oriented in a general north-south direction, and is classified as a 2 lane Minor Local Collector. English Road extends from Coachella Canal Road to Bowles Road, and is currently unpaved between Coachella Canal Road and Wilkins Road, and between SR-111 and Sinclair Road. English Road is paved between Wilkins Road and SR-111, and between Sinclair Road and Bowles Road, and is built as an undivided 2 lane roadway with a pavement width ranging from 22 to 24 feet. Sidewalks and bike lanes are not provided on English Road, and on-street parking is prohibited. No posted speed limit sign was observed on English Road. English Road would provide access into the northeast corner of the Study Area.

Sinclair Road is oriented in a general east-west direction, and is classified as a 4 lane Major Collector. Sinclair Road is currently built as an undivided 2 lane roadway between Gentry Road and Wiest Road, with a pavement width ranging from 24 to 26 feet. Sidewalks and bike lanes are not provided on Sinclair Road, and on-street parking is prohibited. No posted speed limit sign was observed on Sinclair Road. Sinclair Road is located entirely within the Study Area and would provide access between SR-111 and the central portion of the Specific Plan.

Eddins Road is oriented in a general east-west direction, and is classified as a 4 lane Major Collector. Eddins Road is currently built as an undivided 2 lane roadway between Gentry Road and Lyerly Road, with a pavement width of 24 feet. Eddins Road transitions to Main Street east of Lyerly Road at the City of Calipatria western boundary. Sidewalks and bike lanes are not provided on Eddins Road, and on-street parking is prohibited. No posted speed limit sign was observed on Eddins Road. Eddins Road would provide access between SR-111 (via Main Street) and the southern portion of the Study Area.

Exhibits 4A and **4B** illustrate the existing roadway conditions and the lane configurations and traffic controls at the study intersections for the north and south study areas, respectively.



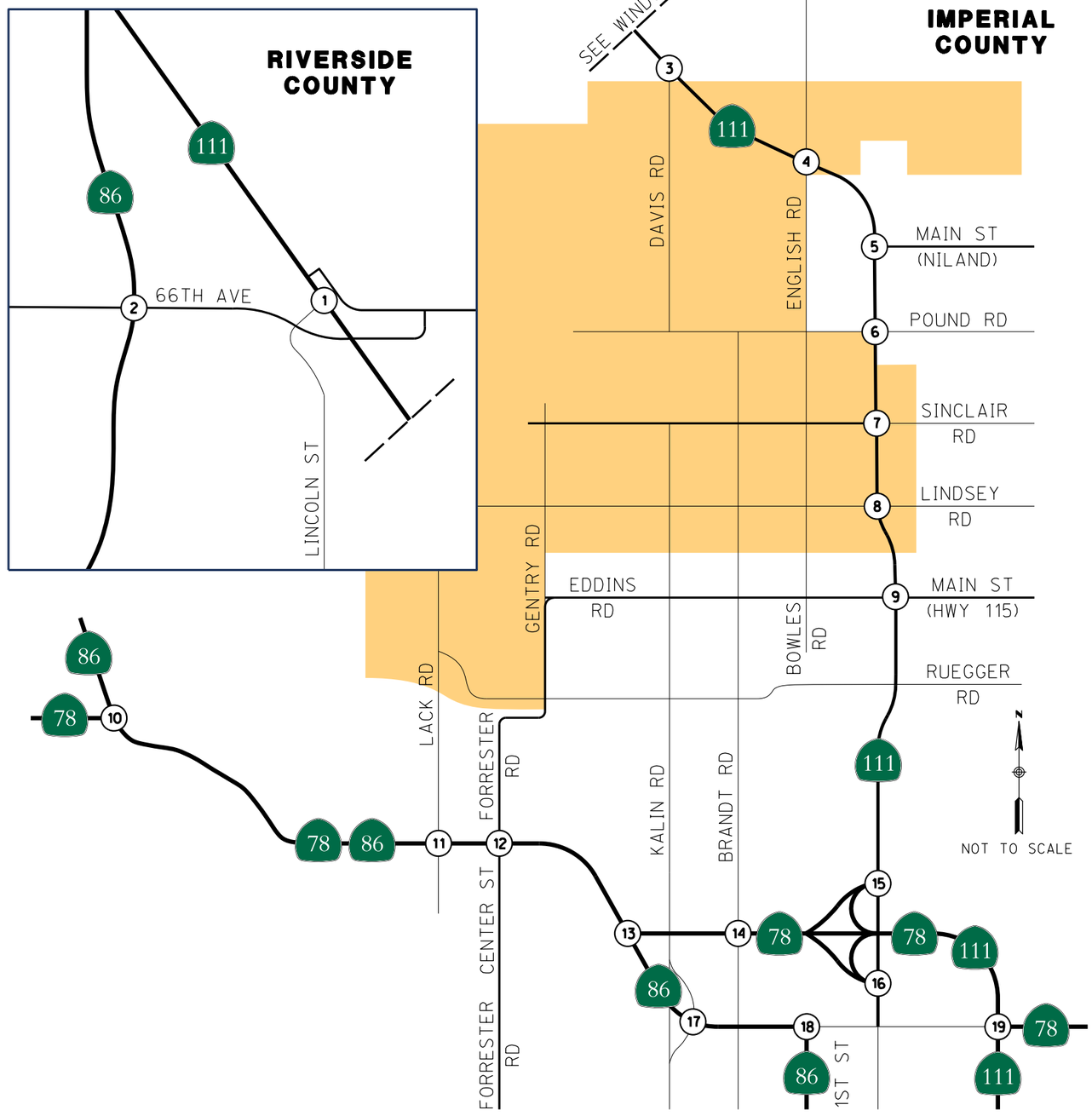


EXHIBIT 4A

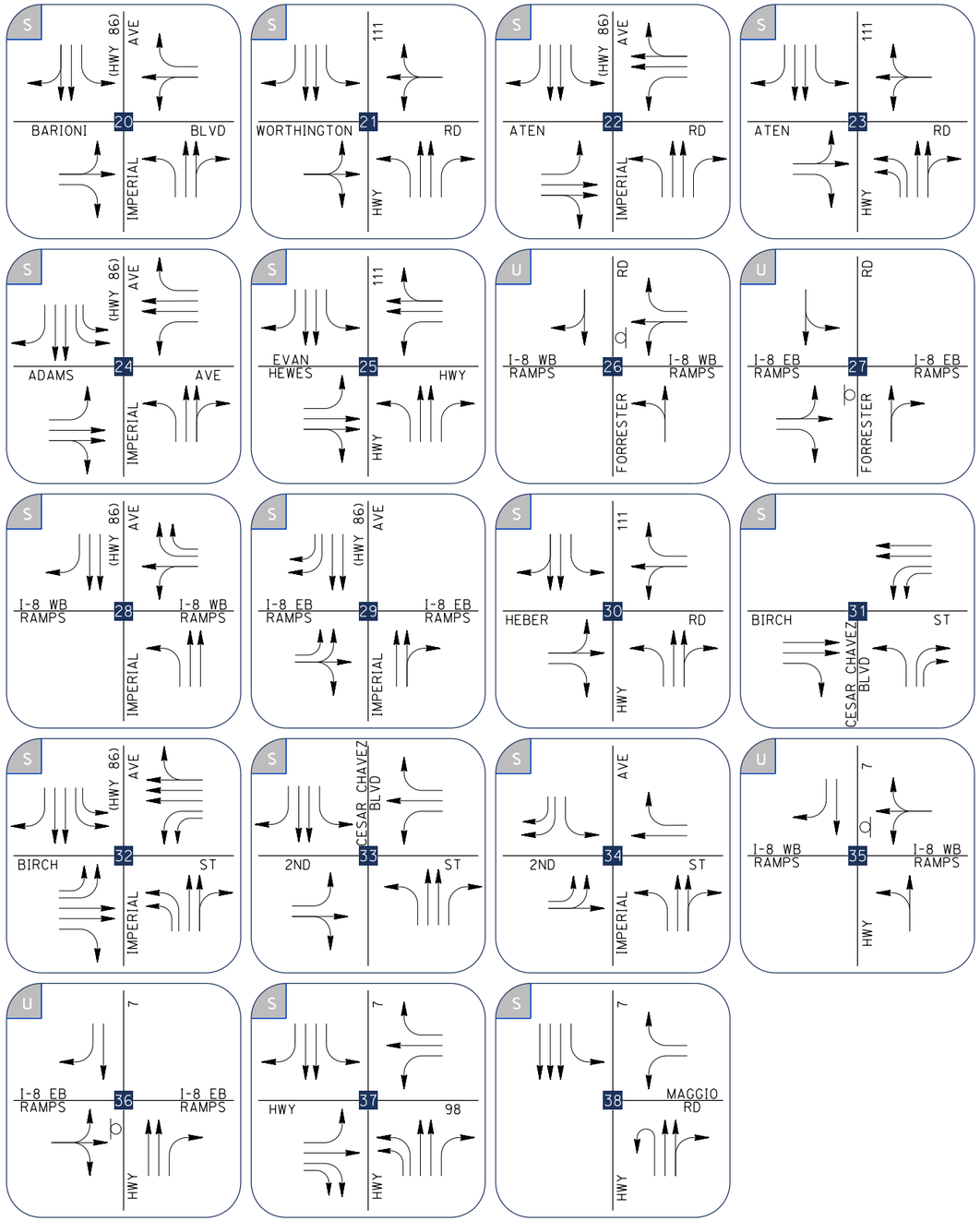
EXISTING TRANSPORTATION CONDITIONS - NORTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND: S =SIGNALIZED; U =UNSIGNALIZED; =STOP CONTROLLED; =EXISTING LANE GEOMETRY; =SPECIFIC PLAN SITE

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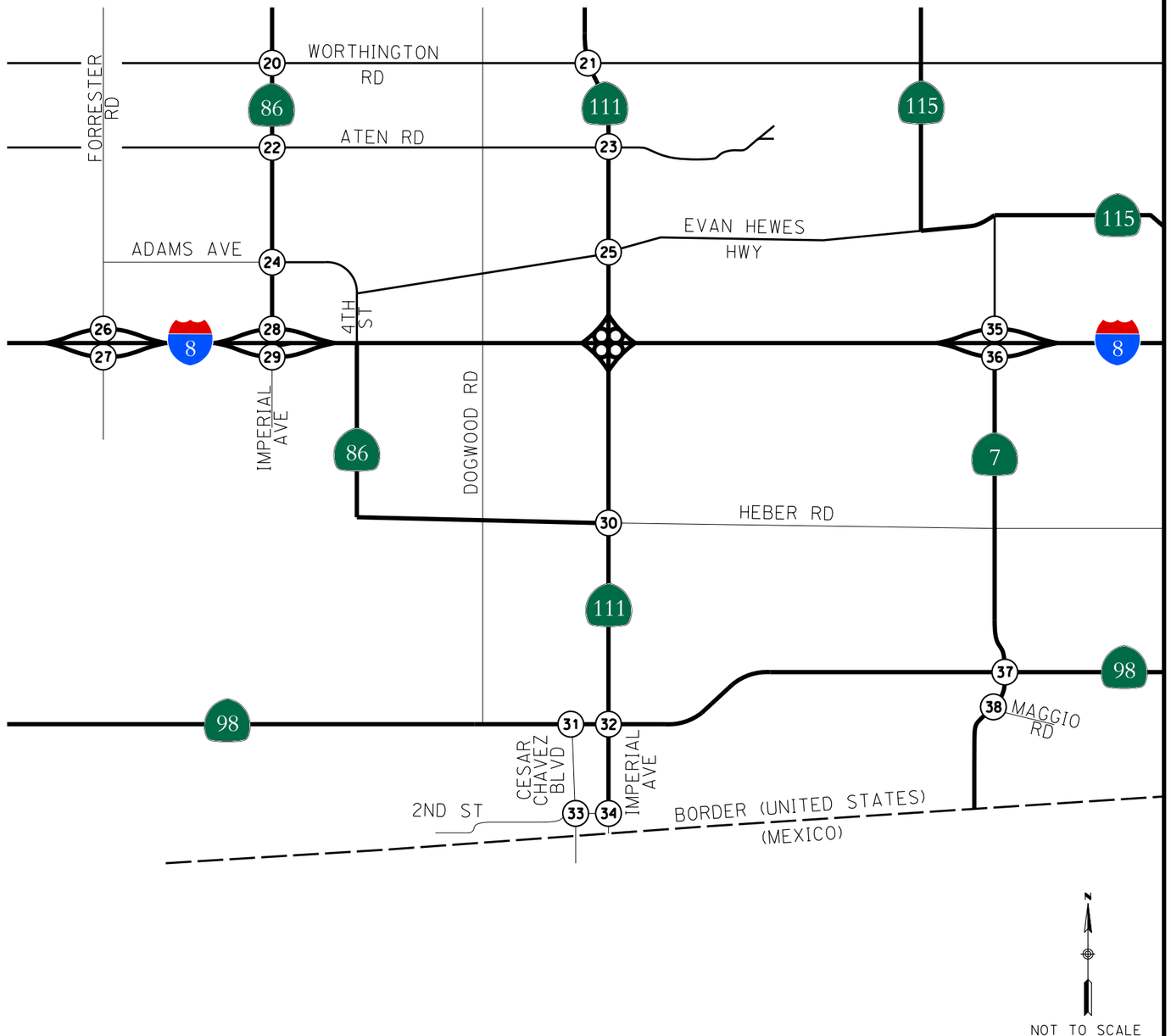


EXHIBIT 4B

EXISTING TRANSPORTATION CONDITIONS - SOUTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND
- S =SIGNALIZED
- U =UNSIGNALIZED
- =STOP CONTROLLED
- =EXISTING LANE GEOMETRY

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5.2 Existing Conditions Traffic Volumes

Intersection turning movement counts were collected during the AM peak period (7:00 AM to 9:00 AM) and PM peak period (4:00 PM to 6:00 PM) on Thursday, February 6, 2025 at 36 out of the 38 study intersections while local schools were in regular session:

1. SR-111 / Lincoln Street
2. SR-86 / 66th Avenue
3. SR-111 / Davis Road
4. SR-111 / English Road
5. SR-111 / Main Street (in Niland)
6. *SR-111 / Pound Road (no counts collected, Pound Road is currently unpaved)*
7. SR-111 / Sinclair Road
8. *SR-111 / Lindsey Road (no counts collected, Lindsey Road is currently unpaved)*
9. SR-111 / Main Street (in Calipatria)
10. SR-86 / SR-78 (west)
11. SR-78/86 / Lack Road
12. SR-78/86 / Center Street (Forrester Road)
13. SR-86 / SR-78 (east)
14. SR-78 / Brandt Road
15. SR-111 / SR-78 Westbound Ramps
16. SR-111 / SR-78 Eastbound Ramps
17. SR-86 / Kalin Road
18. SR-86 / 1st Street-Main Street
19. SR-111 / Ben Hulse Highway
20. SR-86 / Barioni Boulevard
21. SR-111 / Worthington Road
22. SR-86 / Aten Road
23. SR-111 / Aten Road
24. SR-86 / Adams Avenue
25. SR-111 / Evan Hewes Highway
26. Forrester Road / I-8 Westbound Ramps
27. Forrester Road / I-8 Eastbound Ramps
28. SR-86 / I-8 Westbound Ramps
29. SR-86 / I-8 Eastbound Ramps
30. SR-111 / Heber Road
31. Cesar Chavez Boulevard / Highway 98 (Birch Street)
32. SR-111 / Highway 98 (Birch Street)
33. Cesar Chavez Boulevard / 2nd Street
34. SR-111 / 2nd Street
35. SR-7 / I-8 Westbound Ramps
36. SR-7 / I-8 Eastbound Ramps
37. SR-7 / SR-98
38. SR-7 / Maggio Road

Additionally, machine counts were collected on Thursday, February 6, 2025 on the following study roadway segments listed below in order to document the daily vehicular traffic volumes for a 24-hour period:

1. SR-111, north of Davis Road
2. SR-111, between Davis Road and English Road
3. SR-111, between English Road and Main Street Niland
4. SR-111, between Main Street Niland and Pound Road
5. SR-111, between Pound Road and Sinclair Road
6. SR-111, between Sinclair Road and Lindsey Road
7. SR-111, between Lindsey Road and Main Street Calipatria
8. SR-111, between Main Street Calipatria and Ruegger Road
9. SR-111, between Ruegger Road and SR-78
10. SR-115, between Northeast Avenue and Blair Road
11. SR-78/86, between Lack Road and Martin Road

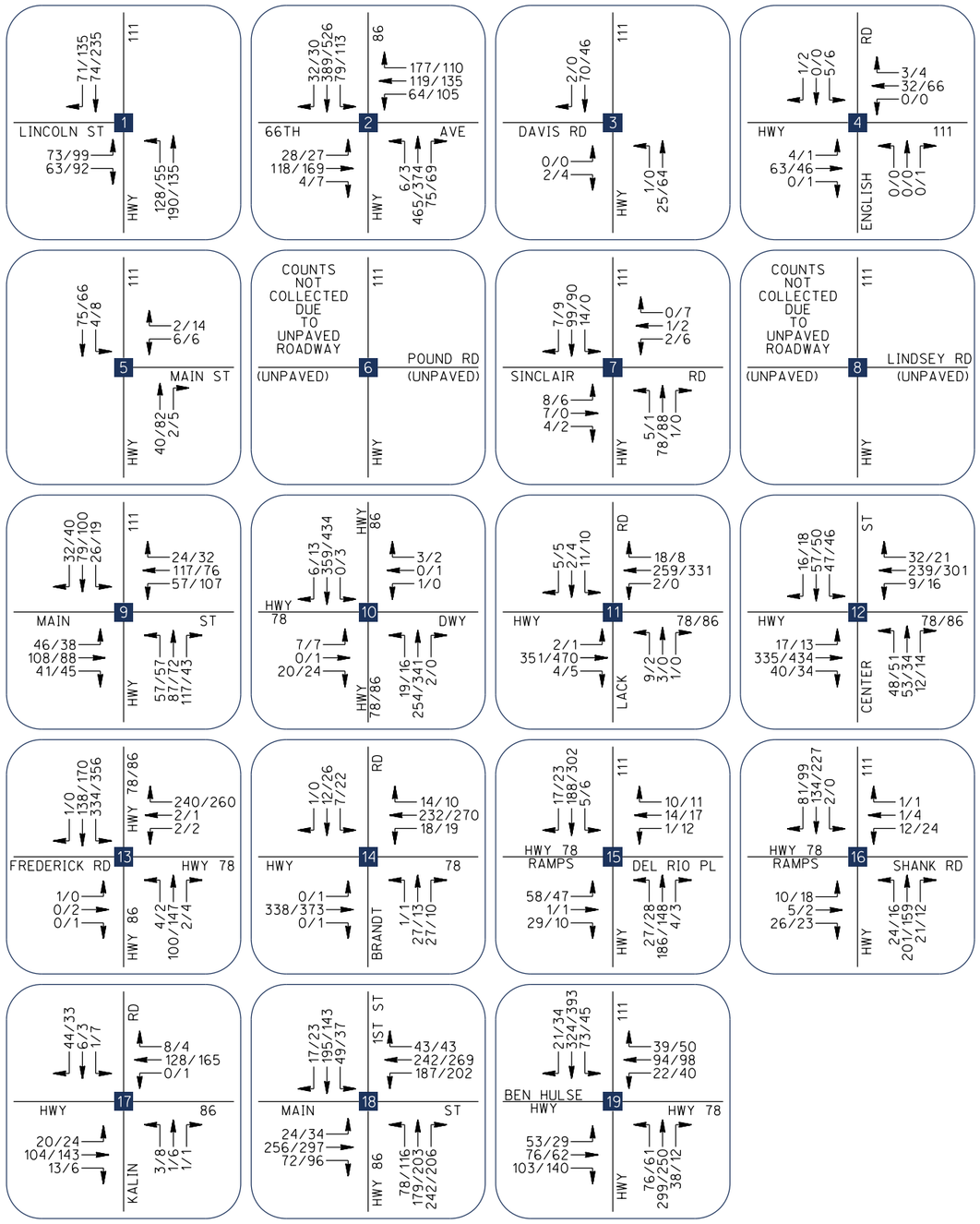
The following machine counts that were collected on Wednesday, November 9, 2022 on local roadways in the vicinity of the Specific Plan were used for the existing conditions analysis, as Imperial County indicated that there had not been any growth in the area since 2022:

1. Lack Road, between New River and Bannister Road
2. Gentry Road, between Sinclair Road and Eddins Road
3. Kalin Road, between Sinclair Road and Eddins Road
4. Brandt Road, between Eddins Road and Vail Road
5. English Road, between Gillespie Road and SR-111
6. Sinclair Road, between Brandt Road and English Road
7. Eddins Road, between Brandt Road and English Road

Exhibits 5A and **5B** illustrate the existing AM/PM peak hour intersection turning movement volumes within the north and south study areas, respectively.

Exhibit 6 illustrates the existing average daily traffic (ADT) volumes within the north study area.

Appendix A contains the count data sheets.



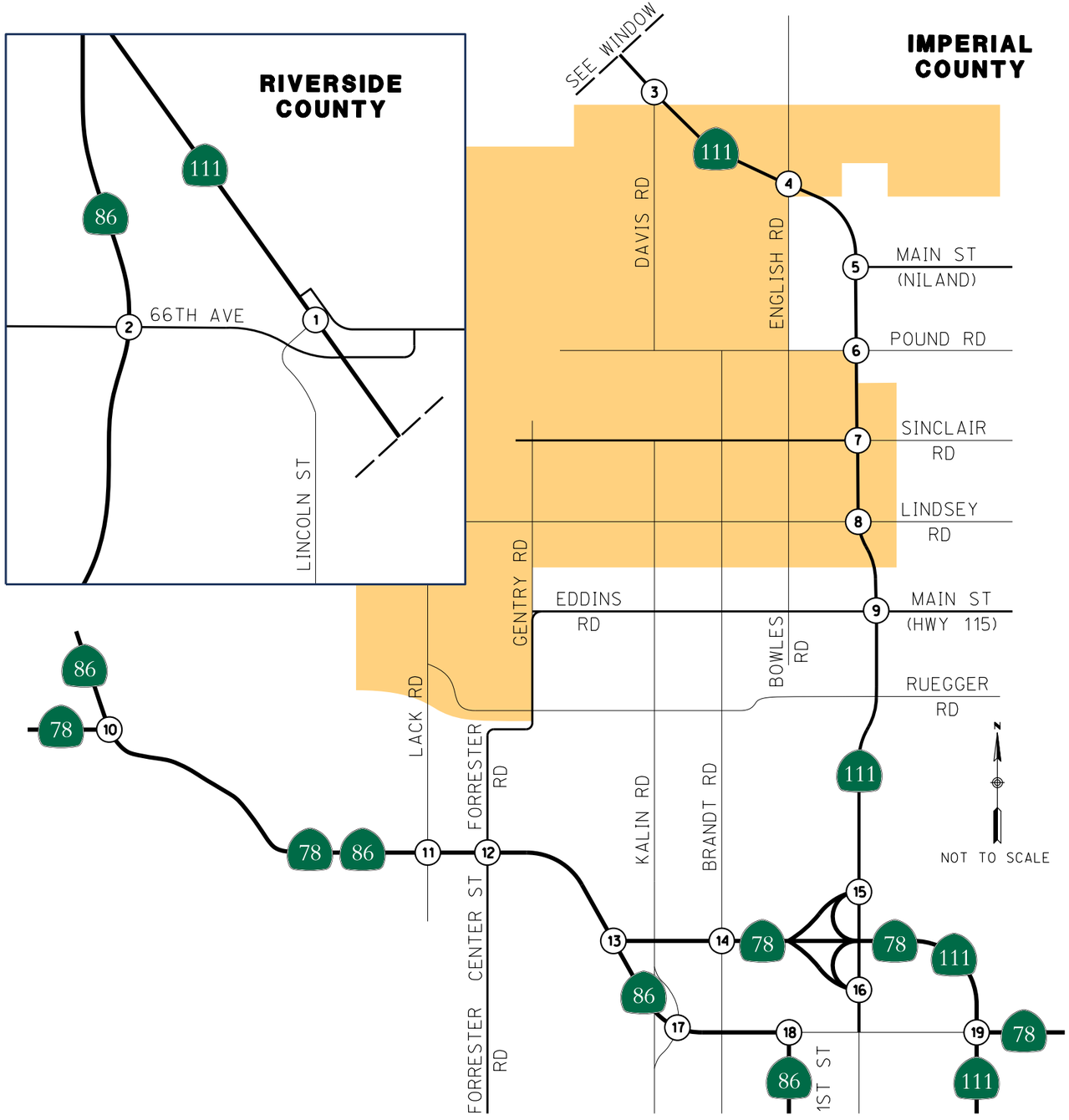


EXHIBIT 5A

EXISTING PEAK HOUR INTERSECTION TRAFFIC VOLUMES - NORTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

AM/PM=PEAK HOUR VOLUMES

=SPECIFIC PLAN SITE

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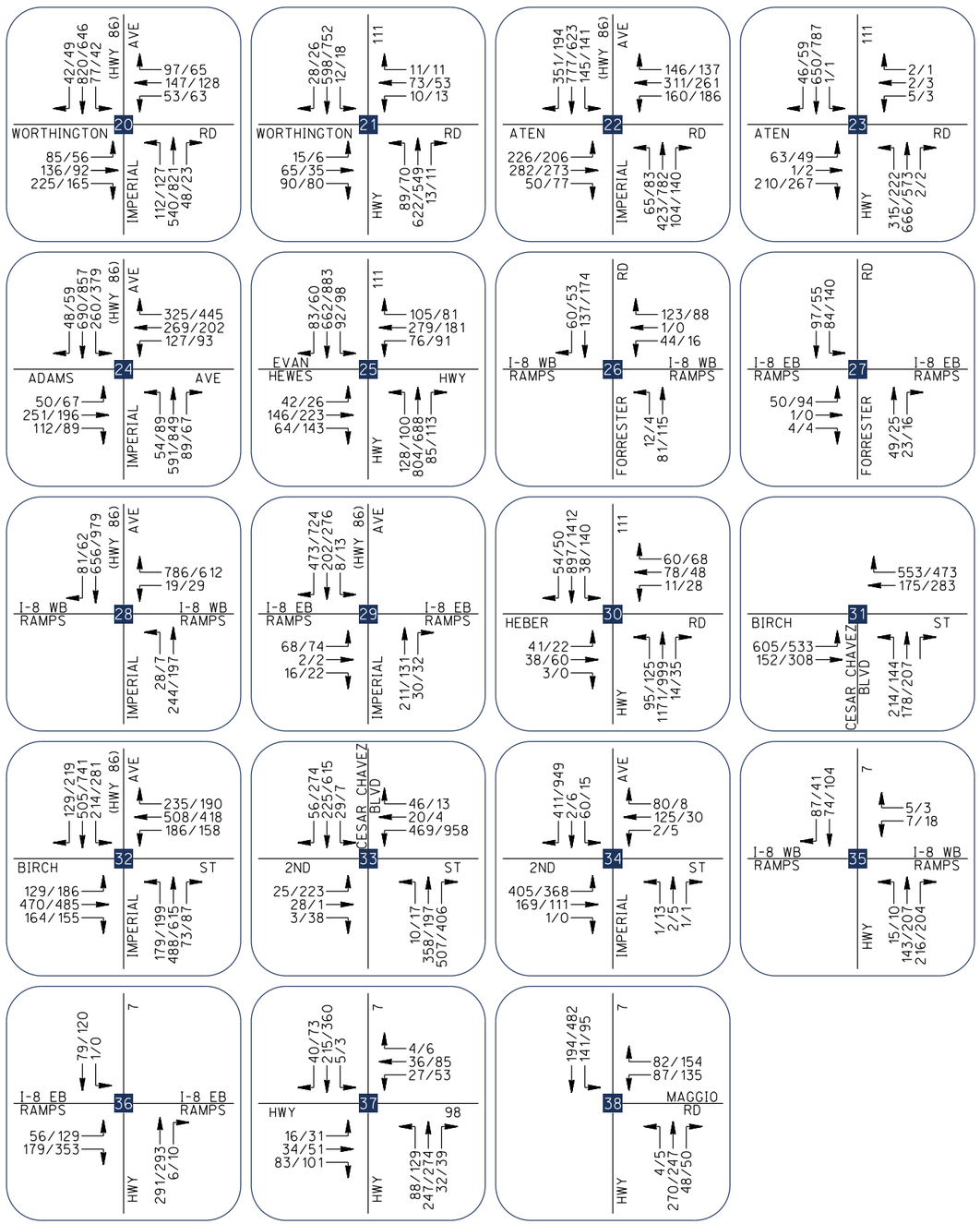


EXHIBIT 5B

EXISTING PEAK HOUR INTERSECTION TRAFFIC VOLUMES - SOUTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

AM/PM=PEAK HOUR VOLUMES

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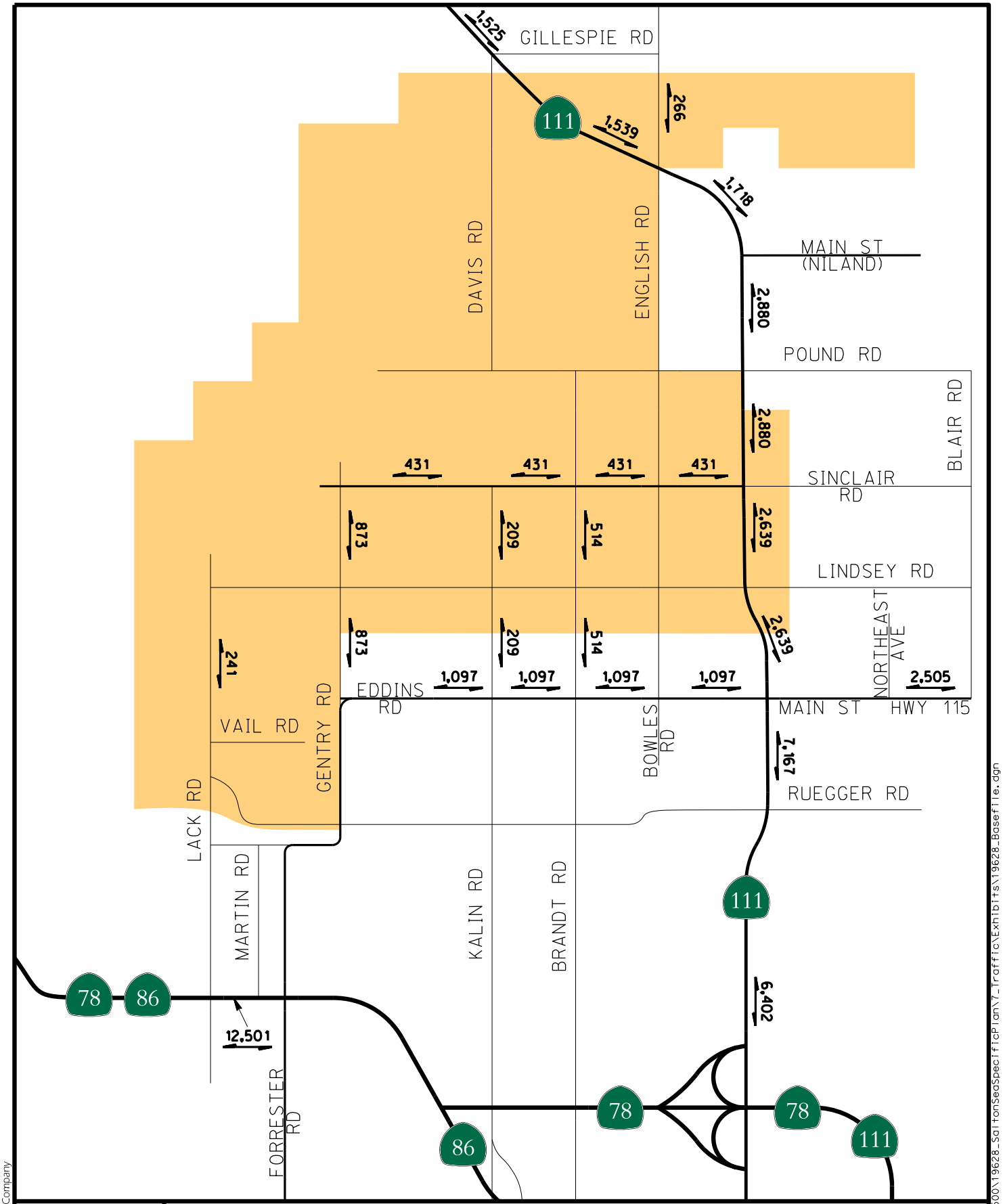


EXHIBIT 6

EXISTING DAILY TRAFFIC VOLUMES (NORTH STUDY AREA ONLY)

LEGEND

X,XXX =TWO-WAY ADT

=SPECIFIC PLAN SITE

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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5.3 Existing conditions Intersection LOS Analysis

Table 3 displays the LOS analysis results for the existing study intersection under Existing Conditions. **Appendix B** contains the intersection LOS worksheets.

TABLE 3: EXISTING CONDITIONS PEAK HOUR INTERSECTION OPERATIONS

#	Intersection	Control	Existing Conditions					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
1	SR-111 / Lincoln Street	(SIGNAL)	Overall	11.1	B	Overall	10.1	B
2	SR-86 / 66th Avenue	(SIGNAL)	Overall	29.0	C	Overall	33.1	C
3	SR-111 / Davis Road	(OWSC)	EB-L	8.8	A	EB-L	8.6	A
4	SR-111 / English Road	(TWSC)	SB-L	9.3	A	SB-L	9.3	A
5	SR-111 / Main Street (in Niland)	(OWSC)	WB-L	9.4	A	WB-L	9.2	A
6	SR-111 / Pound Road	(TWSC)	*Not analyzed under Existing Conditions*					
7	SR-111 / Sinclair Road	(TWSC)	WB-L	10.9	B	EB-L	9.8	A
8	SR-111 / Lindsey Road	(TWSC)	*Not analyzed under Existing Conditions*					
9	SR-111 / Main Street (in Calipatria)	(AWSC)	Overall	11.3	B	Overall	10.1	B
10	SR-86 / SR-78 (west)	(TWSC)	EB-L	10.7	B	EB-L	10.9	B
11	SR-78/86 / Lack Road	(TWSC)	NB-L	11.9	B	NB-L	13.5	B
12	SR-78/86 / Center Street (Forrester Road)	(SIGNAL)	Overall	19.7	B	Overall	21.1	C
13	SR-86 / SR-78 (east)	(SIGNAL)	Overall	16.0	B	Overall	16.1	B
14	SR-78 / Brandt Road	(TWSC)	NB-L	16.1	C	SB-L	16.7	C
15	SR-111 / SR-78 WB Ramps	(SIGNAL)	Overall	14.7	B	Overall	14.4	B
16	SR-111 / SR-78 EB Ramps	(SIGNAL)	Overall	10.7	B	Overall	8.0	A
17	SR-86 / Kalin Road	(TWSC)	SB-L	10.7	B	NB-L	10.8	B
18	SR-86 / 1st Street-Main Street	(SIGNAL)	Overall	23.5	C	Overall	23.7	C
19	SR-111 / Ben Hulse Highway	(SIGNAL)	Overall	24.5	C	Overall	23.6	C
20	SR-86 / Barioni Boulevard	(SIGNAL)	Overall	**48.1**	**D**	Overall	34.6	C
21	SR-111 / Worthington Road	(SIGNAL)	Overall	18.4	B	Overall	18.4	B
22	SR-86 / Aten Road	(SIGNAL)	Overall	**50.2**	**D**	Overall	**44.9**	**D**
23	SR-111 / Aten Road	(SIGNAL)	Overall	16.9	B	Overall	18.3	B
24	SR-86 / Adams Avenue	(SIGNAL)	Overall	30.1	C	Overall	27.1	C
25	SR-111 / Evan Hewes Highway	(SIGNAL)	Overall	**35.6**	**D**	Overall	**37.4**	**D**
26	Forrester Road / I-8 WB Ramps	(TWSC)	WB-L	11.0	B	WB-L	10.7	B
27	Forrester Road / I-8 EB Ramps	(TWSC)	EB-L	13.4	B	EB-L	13.0	B

TABLE 3 (CONTINUED): EXISTING CONDITIONS PEAK HOUR INTERSECTION LOS SUMMARY

#	Intersection	Control	Existing Conditions					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
28	SR-86 / I-8 WB Ramps	(SIGNAL)	Overall	34.6	C	Overall	23.1	C
29	SR-86 / I-8 EB Ramps	(SIGNAL)	Overall	4.5	A	Overall	7.6	A
30	SR-111 / Heber Road	(SIGNAL)	Overall	**44.2**	**D**	Overall	22.9	C
31	Cesar Chavez Boulevard / SR-98 (Birch Street)	(SIGNAL)	Overall	9.0	A	Overall	8.7	A
32	SR-111 / SR-98 (Birch Street)	(SIGNAL)	Overall	26.6	C	Overall	33.6	C
33	Cesar Chavez Boulevard / 2nd Street	(SIGNAL)	Overall	**76.7**	**E**	Overall	**87.8**	**F**
34	SR-111 / 2nd Street	(SIGNAL)	Overall	20.1	C	Overall	23.7	C
35	SR-7 / I-8 WB Ramps	(TWSC)	WB-L	9.9	A	WB-L	10.8	B
36	SR-7 / I-8 EB Ramps	(TWSC)	EB-L	10.8	B	EB-L	11.7	B
37	SR-7 / SR-98	(SIGNAL)	Overall	21.5	C	Overall	25.4	C
38	SR-7 / Maggio Road	(SIGNAL)	Overall	23.8	C	Overall	20.7	C

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 7th edition of the HCM.
1) Delay is measured in seconds per vehicle.
2) Level of Service
(AWSC) = All-Way Stop Controlled; (TWSC) = Two-Way Stop Controlled; (OWSC) = One-Way Stop Controlled
NB=Northbound, WB=Westbound, etc.
L=Left-turn movement, R= Right-turn movement, LT=Left-Through lane, LTR=Left-Through-Right lane, etc.

As shown in Table 3, the study intersections currently operate at an acceptable LOS C or better during the peak hours except for the following four (4) intersections:

1) SR-86 / Barioni Boulevard (AM: LOS D)
2) SR-111 / Evan Hewes Highway (AM/PM: LOS D)
3) SR-111 / Heber Road (AM: LOS D)
4) Cesar Chavez Boulevard / 2nd Street (AM: LOS E, PM: LOS F)

5.4 Existing Conditions Roadway Segment Analysis

The existing roadway level of service results are based on existing daily traffic volumes collected and functional classification roadway capacity. **Table 4** summarizes the roadway segment capacity analysis results under existing conditions.

As shown in the table, the study roadway segments currently operate at LOS C or better.

TABLE 4: EXISTING CONDITIONS ROADWAY SEGMENT ANALYSIS SUMMARY

Roadway	Segment	Existing Functional Classification	Roadway Capacity (LOS C) [1]	Existing ADT	LOS
SR-111	North of Davis Road	2-Lane State Highway	20,000	1,525	A
	Between Davis Road and English Road	2-Lane State Highway	20,000	1,539	A
	Between English Road and Main Street Niland	2-Lane State Highway	20,000	1,718	A
	Between Main Street Niland and Pound Road	2-Lane State Highway	20,000	2,880	A
	Between Pound Road and Sinclair Road	2-Lane State Highway	20,000	2,880	A
	Between Sinclair Road and Lindsey Road	2-Lane State Highway	20,000	2,639	A
	Between Lindsey Road and Main Street Calipatria	2-Lane State Highway	20,000	2,639	A
	Between Main Street Calipatria and Ruegger Road	2-Lane State Highway	20,000	7,167	A
	Between Ruegger Road and SR-78	2-Lane State Highway	20,000	6,402	A
SR-115	Between Northeast Avenue and Blair Road	2-Lane State Highway	20,000	2,505	A
SR-78/86	Between Lack Road and Martin Road	4-Lane State Highway	40,000	12,501	A
English Road	Between Gillespie Road and Highway 111	2-Lane Road	1,500	266	A
	Between Highway 111 and Pound Road	Unpaved	N/A	N/A	N/A
	Between Pound Road and Sinclair Road	Unpaved	N/A	N/A	N/A
	Between Sinclair Road and Lindsey Road	2-Lane Road	1,500	N/A	N/A
	Between Lindsey Road and Eddins Road	2-Lane Road	1,500	N/A	N/A
Brandt Road	Between Pound Road and Sinclair Road	Unpaved / Does Not Exist	N/A	N/A	N/A
	Between Sinclair Road and Lindsey Road	2-Lane Road	1,500	514	A
	Between Lindsey Road and Eddins Road	2-Lane Road	1,500	514	A
Davis Road / Kalin Road	Between Highway 111 and Pound Road	Unpaved	N/A	N/A	N/A
	Between Sinclair Road and Lindsey Road (Kalin Road)	2-Lane Road	1,500	209	A
	Between Lindsey Road and Eddins Road (Kalin Road)	2-Lane Road	1,500	209	A

TABLE 4 (CONTINUED): EXISTING CONDITIONS ROADWAY SEGMENT ANALYSIS SUMMARY

Roadway	Segment	Existing Functional Classification	Roadway Capacity (LOS C) [1]	Existing ADT	LOS
Gentry Road	Between Sinclair Road and Lindsey Road	2-Lane Road	1,500	873	B
	Between Lindsey Road and Eddins Road	2-Lane Road	1,500	873	B
Lack Road	Between Lindsey Road and Vail Road	2-Lane Road	1,500	241	A
Pound Road	Between Davis Road and Brandt Road	Unpaved	N/A	N/A	N/A
	Between Brandt Road and English Road	Unpaved	N/A	N/A	N/A
	Between English Road and Highway 111	Unpaved	N/A	N/A	N/A
Sinclair Road	Between Gentry Avenue and Kalin Road	2-Lane Road	1,500	431	A
	Between Kalin Road and Brandt Road	2-Lane Road	1,500	431	A
	Between Brandt Road and English Road	2-Lane Road	1,500	431	A
	Between English Road and Highway 111	2-Lane Road	1,500	431	A
	Between Highway 111 and SP East Boundary	Unpaved	N/A	N/A	N/A
Lindsey Road	Between Gentry Avenue and Kalin Road	Unpaved	N/A	N/A	N/A
	Between Kalin Road and Brandt Road	Unpaved	N/A	N/A	N/A
	Between Brandt Road and English Road	Unpaved	N/A	N/A	N/A
	Between English Road and Highway 111	Unpaved	N/A	N/A	N/A
	Between Highway 111 and SP East Boundary	Unpaved	N/A	N/A	N/A
Eddins Road / Main Street (Calipatria)	Between Gentry Avenue and Kalin Road	2-Lane Road	1,500	1,097	C
	Between Kalin Road and Brandt Road	2-Lane Road	1,500	1,097	C
	Between Brandt Road and English Road	2-Lane Road	1,500	1,097	C
	Between English Road and Highway 111	2-Lane Road	1,500	1,097	C

Footnotes:
[1] Roadway classification and capacity sourced from the Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008). Imperial County accepts LOS C or better for roadway operations as identified in the Circulation Element.
Deficient LOS (LOS D or worse) indicated in **bold** text.

6.0 PROJECT TRIP GENERATION

The trip generation of the Lithium Valley Specific Plan project was calculated based on the published Institute of Transportation Engineers (ITE) 11th Edition Trip Generation Manual (September 2021) trip rates for the following proposed land use designations:

- Manufacturing (ITE Land Use Code 140: Manufacturing)
- Logistics (ITE Land Use Code 154: High-Cube Transload and Short-Term Storage Warehouse)
- Temporary Construction Housing (ITE Land Use Code 240: Mobile Home Park)
- Community Opportunity Areas (various uses)
    - Commercial Retail (ITE Land Use Code 821: Shopping Plaza with Supermarket)
    - Commercial Office (ITE Land Use Code 710: General Office Building)
    - Medical Office (ITE Land Use Code 720: Medical-Dental Office Building)
    - Temporary Construction Housing (ITE Land Use Code 240: Mobile Home Park)
    - Permanent Housing (ITE Land Use Code 220: Multi-Family Housing)
    - Fire Station (ITE Land Use Code 575: Fire and Rescue Station)
    - Workforce Training/Services (ITE Land Use Code 710: General Office Building)

The ITE 11th Edition Trip Generation Manual does not provide trip generation rates for several unique land use designations within the Specific Plan. Therefore, custom trip generation rates were developed for the following proposed land uses:

- Green Industrial: A custom trip rate was developed for the Green Industrial land use designation, as the available industrial-related trip rates in the ITE 11th Edition Trip Generation Manual are based on typical industrial uses that are not similar to a geo-thermal plant or mineral recovery operations plant. The custom trip rate for Green Industrial was calculated based on the following steps:
    - The ratio of the average number of jobs to the average building size of a Green Industrial facility was calculated (0.05%)
    - The ratio of the average number of jobs to the average building size of a Logistics facility was calculated (0.09%)
    - The Green Industrial ratio was divided by the Logistics ratio (0.05% / 0.09% = 53.57%)
    - The resulting quotient was multiplied by the ITE Land Use 154 trip rate used for the Logistics use (53.57% * 1.40 = 0.75)
    - Custom trip rate of 0.75 trips per thousand square-feet was applied to the Green Industrial uses

- Playas Renewables: A custom trip rate was developed for the Playas Renewables land use designation, as the available industrial-related trip rates in the ITE 11th Edition Trip Generation Manual are based on typical industrial uses that are not similar to a less intensive geo-thermal or energy transmission plant. The custom trip rate for Playas Renewables was calculated based on the following steps:
- The ratio of the average number of jobs for a Playas Renewables facility versus the average number of jobs for a Green Industrial facility was calculated (8.33%)

- The resulting quotient was multiplied by the Green Industrial custom trip rate (8.33% * 0.75 = 0.06)
- Custom trip rate of 0.06 trips per thousand square-feet was applied to the Playas Renewables uses

Table 5 presents the trip generation of the proposed Specific Plan Phase One land uses, and the trip generation of the proposed Specific Plan Phase Two land uses (Phases One-Two combined) and Buildout land uses (Phases One-Two-Three combined) is presented in **Table 6** and **Table 7**, respectively. The trip generation of the Specific Plan Buildout land uses (Phases One-Two-Three combined) with the Reduced Alternative is presented in **Table 8**.

Table 9 and **Table 10**, respectively, show the net total Phase One and Phase Two trip generation of the anticipated land uses within the Community Opportunity Areas after applying the allowable internal capture and pass-by trip reductions. **Appendix C** contains the 11th Edition ITE Trip Generation Manual (September 2021) trip rate sheets for the applicable land uses.

As shown in Table 5, the proposed land uses for Lithium Valley Specific Plan Phase One are forecast to generate a total of 47,055 trips per day, with a total of 3,979 trips occurring during the AM peak hour (2,859 IN, 1,120 OUT) and a total of 5,354 trips occurring during the PM peak hour (1,873 IN, 3,481 OUT).

Table 6 shows that the proposed land uses for Lithium Valley Specific Plan Phase Two (Phases One and Two combined) are forecast to generate a total of 80,243 trips per day, with a total of 6,515 trips occurring during the AM peak hour (4,796 IN, 1,719 OUT) and a total of 9,341 trips occurring during the PM peak hour (3,264 IN, 6,077 OUT).

As shown in Table 7, the proposed land uses for Lithium Valley Specific Plan Buildout (Phases One, Two and Three combined) are forecast to generate a total of 92,933 trips per day, with a total of 8,300 trips occurring during the AM peak hour (6,215 IN, 2,085 OUT) and a total of 11,822 trips occurring during the PM peak hour (3,974 IN, 7,848 OUT).

Table 8 shows that the proposed land uses for Lithium Valley Specific Plan Buildout (Phases One, Two and Three combined) with the Reduced Alternative are forecast to generate a total of 34,747 trips per day, with a total of 2,736 trips occurring during the AM peak hour (2,045 IN, 691 OUT) and a total of 3,904 trips occurring during the PM peak hour (1,339 IN, 2,565 OUT).

As shown in Table 9, the anticipated Phase One land uses within the Community Opportunity Areas are forecast to generate a net total of 16,579 trips per day, with a net total of 1,075 trips occurring during the AM peak hour and a net total of 1,365 trips occurring during the PM peak hour. Table 10 shows that the anticipated Phase Two (Phases One-Two combined) land uses within the Community Opportunity Areas are forecast to generate a net total of 35,466 trips per day, with a net total of 2,242 trips occurring during the AM peak hour and a net total of 3,524 trips occurring during the PM peak hour.

The net total trips of the Community Opportunity Areas account for internal capture trip reductions that were calculated using the NCHRP Report 684 Internal Capture Estimation Tool, which are also shown in Tables 7 and 8. The internal capture calculation worksheets are also provided in **Appendix C**.

TABLE 5: LITHIUM VALLEY SPECIFIC PLAN PHASE ONE TRIP GENERATION

Land Use	Unit	Daily Trip Rate (per unit)	AM Peak Hour			PM Peak Hour		
			Trip Rate (per unit)	In (% AM)	Out (% AM)	Trip Rate (per unit)	In (% PM)	Out (% PM)
Trip Generation Rates (ITE and Custom)								
Manufacturing (ITE LU 140)	TSF	FCE	FCE	76%	24%	FCE	31%	69%
Logistics (ITE LU 154)	TSF	1.40	0.08	77%	23%	0.10	28%	72%
Green Industrial (custom rates)	TSF	0.75	0.04	77%	23%	0.05	30%	70%
Playas Renewables (custom rates)	TSF	0.06	0.003	77%	23%	0.004	30%	70%
Temporary Construction Housing (ITE LU 240)	DU	FCE	FCE	21%	79%	FCE	62%	38%

Forecast Project Generated Trips

Land Use	Size	Unit	Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Manufacturing	2,876.292	TSF	11,046	1,764	1,341	423	2,485	770	1,715
Logistics	4,363.253	TSF	6,109	349	269	80	436	122	314
Green Industrial	14,479.452	TSF	10,860	621	478	143	776	233	543
Playas Renewables	1,511.362	TSF	83	5	4	1	6	2	4
Temporary Construction Housing [1]	502	DU	2,378	165	35	130	286	177	109
Community Opportunity Areas [2]	532.793	TSF	16,579	1,075	732	343	1,365	569	796
Total Phase One Project Trips:			**47,055**	**3,979**	**2,859**	**1,120**	**5,354**	**1,873**	**3,481**

Source: ITE Trip Generation Manual, 11th Edition (2021)
TSF = Thousand Square-Feet; DU = Dwelling Unit; FCE = Fitted Curve Equation
[1] Because the table shown above reflects the completion of Phase One, the number of temporary housing units (502) associated with the construction of Phase Two are included in the Phase One trip generation.
[2] Trip generation of the Phase 1 Community Opportunity Areas includes temporary construction housing. Because the table shown above reflects the completion of the Phase 1 Community Opportunity Areas, the number of temporary housing units (149) associated with the construction of the Phase Two Community Opportunity Areas are included in the Phase One trip generation.

TABLE 6: LITHIUM VALLEY SPECIFIC PLAN PHASE TWO TRIP GENERATION

Land Use	Unit	Daily Trip Rate (per unit)	AM Peak Hour			PM Peak Hour		
			Trip Rate (per unit)	In (% AM)	Out (% AM)	Trip Rate (per unit)	In (% PM)	Out (% PM)
Trip Generation Rates (ITE and Custom)								
Manufacturing (ITE LU 140)	TSF	FCE	FCE	76%	24%	FCE	31%	69%
Logistics (ITE LU 154)	TSF	1.40	0.08	77%	23%	0.10	28%	72%
Green Industrial (custom rates)	TSF	0.75	0.04	77%	23%	0.05	30%	70%
Playas Renewables (custom rates)	TSF	0.06	0.003	77%	23%	0.004	30%	70%
Temporary Construction Housing (ITE LU 240)	DU	FCE	FCE	21%	79%	FCE	62%	38%

Forecast Project Generated Trips									
Land Use	**Size**	**Unit**	**Daily Trips**	**AM Peak Hour**			**PM Peak Hour**		
				Total	**In**	**Out**	**Total**	**In**	**Out**
Manufacturing	4,313.326	TSF	16,463	2,641	2,007	634	3,735	1,158	2,577
Logistics	9,887.725	TSF	13,843	791	609	182	989	277	712
Green Industrial	16,747.323	TSF	12,560	718	553	165	897	269	628
Playas Renewables	4,349.791	TSF	239	14	11	3	17	5	12
Temporary Construction Housing [1]	314	DU	1,672	109	23	86	179	111	68
Community Opportunity Areas [2]	1,542.928	TSF	35,466	2,242	1,593	649	3,524	1,444	2,080
Total Phase Two Project Trips:			**80,243**	**6,515**	**4,796**	**1,719**	**9,341**	**3,264**	**6,077**

Source: ITE Trip Generation Manual, 11th Edition (2021)
TSF = Thousand Square-Feet; FCE = Fitted Curve Equation

[1] Because the table shown above reflects the completion of Phase Two, the number of temporary housing units (314) associated with the construction of Phase Three are included in the Phase Two trip generation.

[2] Because the table shown above reflects the buildout of the Community Opportunity Areas, temporary construction housing units are not included in the Community Opportunity Areas trip generation.

TABLE 7: LITHIUM VALLEY SPECIFIC PLAN PHASE THREE (BUILDOUT) TRIP GENERATION

Land Use	Unit	Daily Trip Rate (per unit)	AM Peak Hour			PM Peak Hour		
			Trip Rate (per unit)	In (% AM)	Out (% AM)	Trip Rate (per unit)	In (% PM)	Out (% PM)
Trip Generation Rates (ITE and Custom)								
Manufacturing (ITE LU 140)	TSF	FCE	FCE	76%	24%	FCE	31%	69%
Logistics (ITE LU 154)	TSF	1.40	0.08	77%	23%	0.10	28%	72%
Green Industrial (custom rates)	TSF	0.75	0.04	77%	23%	0.05	30%	70%
Playas Renewables (custom rates)	TSF	0.06	0.003	77%	23%	0.004	30%	70%

Forecast Project Generated Trips[1]

Land Use	Size	Unit	Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Manufacturing	7,034.031	TSF	26,720	4,300	3,268	1,032	6,102	1,892	4,210
Logistics	10,532.526	TSF	14,746	843	649	194	1,053	295	758
Green Industrial	21,016.543	TSF	15,762	901	694	207	1,126	338	788
Playas Renewables	4,349.791	TSF	239	14	11	3	17	5	12
Community Opportunity Areas	1,542.928	TSF	35,466	2,242	1,593	649	3,524	1,444	2,080
Total Buildout Project Trips:			**92,933**	**8,300**	**6,215**	**2,085**	**11,822**	**3,974**	**7,848**

Source: ITE Trip Generation Manual, 11th Edition (2021)
TSF = Thousand Square-Feet; FCE = Fitted Curve Equation
[1] Because the table shown above reflects the buildout of the Specific Plan, temporary construction housing units are not included in the Phase Three (Buildout) trip generation.

TABLE 8: LITHIUM VALLEY SPECIFIC PLAN PHASE THREE (BUILDOUT) TRIP GENERATION WITH REDUCED ALTERNATIVE

Land Use	Unit	Daily Trip Rate (per unit)	AM Peak Hour			PM Peak Hour		
			Trip Rate (per unit)	In (% AM)	Out (% AM)	Trip Rate (per unit)	In (% PM)	Out (% PM)
Trip Generation Rates (ITE and Custom)								
Manufacturing (ITE LU 140)	TSF	FCE	FCE	76%	24%	FCE	31%	69%
Logistics (ITE LU 154)	TSF	1.40	0.08	77%	23%	0.10	28%	72%
Green Industrial (custom rates)	TSF	0.75	0.04	77%	23%	0.05	30%	70%
Playas Renewables (custom rates)	TSF	0.06	0.003	77%	23%	0.004	30%	70%
Forecast Project Generated Trips[1]								
Land Use	**Size**	**Unit**	**Daily Trips**	**AM Peak Hour**			**PM Peak Hour**	
				Total	**In**	**Out**	**Total**	**In**	**Out**
Manufacturing	1,777.983	TSF	6,905	1,094	831	263	1,529	474	1,055
Logistics	2,607.709	TSF	3,651	209	161	48	261	73	188
Green Industrial	12,998.705	TSF	9,749	557	429	128	696	209	487
Playas Renewables	5,926.611	TSF	326	19	15	4	23	7	16
Community Opportunity Areas	589.857	TSF	14,116	857	609	248	1,395	576	819
Total Buildout Project Trips With Reduced Alternative:			**34,747**	**2,736**	**2,045**	**691**	**3,904**	**1,339**	**2,565**

Source: ITE Trip Generation Manual, 11th Edition (2021)
TSF = Thousand Square-Feet; FCE = Fitted Curve Equation
[1] Because the table shown above reflects the buildout of the Specific Plan with the Reduced Alternative, temporary construction housing units are not included in the Phase Three (Buildout) With Reduced Alternative trip generation.

TABLE 9: PHASE ONE COMMUNITY OPPORTUNITY AREAS TRIP GENERATION

Land Use	Unit	Daily Trip Rate (per unit)	AM Peak Hour			PM Peak Hour		
			Trip Rate (per unit)	In (% AM)	Out (% AM)	Trip Rate (per unit)	In (% PM)	Out (% PM)
Trip Generation Rates (ITE)								
Commercial Retail (LU 821)	KSF	FCE	3.53	62%	38%	FCE	48%	52%
Commercial Office (LU 710)	KSF	10.84	1.52	88%	12%	1.44	17%	83%
Medical Office (LU 720)	KSF	36.00	3.10	79%	21%	3.93	30%	70%
Temporary Housing (LU 240)	DU	FCE	FCE	21%	79%	FCE	62%	38%
Fire Station (LU 575)	KSF	4.80	0.48	71%	29%	0.48	29%	71%

Forecast Project Generated Trips

Land Use	Size	Unit	Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Unadjusted Project Driveway Trips (Excluding Internal Capture Reductions)									
Commercial Retail	197.133	KSF	16,584	696	432	264	1,631	783	848
Commercial Office	76.966	KSF	834	117	103	14	111	19	92
Workforce Training (Office)	79.919	KSF	866	121	106	15	115	20	95
Medical Office	37.908	KSF	1,365	118	93	25	149	45	104
Temporary Housing	149	DU	956	59	12	47	85	53	32
Fire Stations	42.623	KSF	205	20	14	6	20	6	14
Subtotal Unadjusted Project Driveway Trips			**20,810**	**1,131**	**760**	**371**	**2,111**	**926**	**1,185**
Internal Capture Reductions[1]									
Commercial Retail			-891	-27	-15	-12	-112	-71	-41
Commercial/Workforce Training/Medical Office			-439	-28	-13	-15	-78	-18	-60
Temporary Housing			-233	-1	-0	-1	-40	-26	-14
Subtotal Internal Capture Trip Reduction[1]			**-1,563**	**-56**	**-28**	**-28**	**-230**	**-115**	**-115**
Net External Project Driveway Trips									
Commercial Retail			15,693	669	417	252	1,519	712	807
Commercial/Workforce Training/Medical Office			2,626	328	289	39	297	66	231
Temporary Housing			723	58	12	46	45	27	18
Fire Stations			205	20	14	6	20	6	14
Net Total External Project Driveway Trips			**19,247**	**1,075**	**732**	**343**	**1,881**	**811**	**1,070**
Pass-By Trip Reduction									
Commercial Retail: AM: 0%, PM: 34%, Daily: 17%			-2,668	0	0	0	-516	-242	-274
Total Pass-By Trip Reduction			**-2,668**	**0**	**0**	**0**	**-516**	**-242**	**-274**
Net Total Primary Project Trips									
Commercial Retail			13,025	669	417	252	1,003	470	533
Commercial/Workforce Training/Medical Office			2,626	328	289	39	297	66	231
Temporary Housing			723	58	12	46	45	27	18
Fire Stations			205	20	14	6	20	6	14
Net Total Primary Project Trips			**16,579**	**1,075**	**732**	**343**	**1,365**	**569**	**796**

Source: ITE Trip Generation Manual, 11th Edition (2021)
TSF = Thousand Square-Feet; FCE = Fitted Curve Equation
[1] Internal capture was calculated using the NCHRP Report 684 Internal Capture Estimation Tool.

TABLE 10: PHASE TWO COMMUNITY OPPORTUNITY AREAS TRIP GENERATION

Land Use	Unit	Daily Trip Rate (per unit)	AM Peak Hour			PM Peak Hour		
			Trip Rate (per unit)	In (% AM)	Out (% AM)	Trip Rate (per unit)	In (% PM)	Out (% PM)
Trip Generation Rates (ITE)								
Commercial Retail (LU 821)	KSF	FCE	3.53	62%	38%	FCE	48%	52%
Commercial Office (LU 710)	KSF	10.84	1.52	88%	12%	1.44	17%	83%
Medical Office (LU 720)	KSF	36.00	3.10	79%	21%	3.93	30%	70%
Permanent Housing (LU 220)	DU	6.68	0.40	24%	76%	0.51	63%	37%
Fire Station (LU 575)	KSF	4.80	0.48	71%	29%	0.48	29%	71%

Forecast Project Generated Trips

Land Use	Size	Unit	Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Unadjusted Project Driveway Trips (Excluding Internal Capture Reductions)									
Commercial Retail	528.239	KSF	42,066	1,865	1,156	709	4,170	2,002	2,168
Commercial Office	185.172	KSF	2,007	281	247	34	267	45	222
Workforce Training (Office)	242.228	KSF	2,626	368	324	44	349	59	290
Medical Office	102.832	KSF	3,702	319	252	67	404	121	283
Permanent Housing	278	DU	1,857	111	27	84	142	89	53
Fire/Police Stations	129.188	KSF	620	62	44	18	62	18	44
Subtotal Unadjusted Project Driveway Trips			**52,878**	**3,006**	**2,050**	**956**	**5,394**	**2,334**	**3,060**
Internal Capture Reductions[1]									
Commercial Retail			2,194	76	42	34	265	181	84
Commercial/Workforce Training/Medical Office			1,177	76	35	41	208	45	163
Permanent Housing			485	4	1	3	69	45	24
Subtotal Internal Capture Trip Reductions[1]			**3,855**	**156**	**78**	**78**	**542**	**271**	**271**
Net External Project Driveway Trips									
Commercial Retail			39,872	1,789	1,114	675	3,905	1,821	2,084
Commercial/Workforce Training/Medical Office			7,158	892	788	104	812	180	632
Permanent Housing			1,372	107	26	81	73	44	29
Fire/Police Stations			620	62	44	18	62	18	44
Net Total External Project Driveway Trips			**49,023**	**2,850**	**1,972**	**878**	**4,852**	**2,063**	**2,789**
Pass-By Trip Reduction									
Commercial Retail: AM/PM, Daily: 34%			-13,557	-608	-379	-230	-1,328	-619	-709
Total Pass-By Trip Reduction			**-13,557**	**-608**	**-379**	**-230**	**-1,328**	**-619**	**-709**
Net Total Primary Project Trips									
Commercial Retail			26,316	1,181	735	446	2,577	1,202	1,375
Commercial/Workforce Training/Medical Office			7,158	892	788	104	812	180	632
Permanent Housing			1,372	107	26	81	73	44	29
Fire/Police Stations			620	62	44	18	62	18	44
Net Total Primary Project Trips			**35,466**	**2,242**	**1,593**	**649**	**3,524**	**1,444**	**2,080**

Source: ITE Trip Generation Manual, 11th Edition (2021)
TSF = Thousand Square-Feet; FCE = Fitted Curve Equation
[1] Internal capture was calculated using the NCHRP Report 684 Internal Capture Estimation Tool.

7.0 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The Phase One, Phase Two, Phase Three (Buildout) and Phase Three (Buildout) With Reduced Alternative project trip distribution percentages were developed based on the Select Zone Assignment that was conducted for each development phase using the Southern California Association of Governments (SCAG) regional travel demand model. Due to the low number of Travel Analysis Zones (TAZs) within the Specific Plan site in the SCAG model, adjustments were made to the Select Zone Assignment trip distribution percentages to balance the project trips among all roadways serving the Specific Plan site. The SCAG Select Zone Assignment trip distribution plots for each development phase is provided in **Appendix D**.

Exhibits 7A and **7B** illustrate the project trip distribution percentages for Phase One of the Specific Plan within the north and south study areas, respectively.

The Specific Plan Phase Two project trip distribution percentages within the north and south study areas are illustrated in **Exhibits 8A** and **8B**, respectively.

Exhibits 9A and **9B** illustrate the project trip distribution percentages for Phase Three (Buildout) of the Specific Plan within the north and south study areas, respectively.

The Specific Plan Phase Three (Buildout) With Reduced Alternative project trip distribution percentages within the north and south study areas are illustrated in **Exhibits 10A** and **10B**, respectively.

Based on the project trip generation and distribution for each Specific Plan phase, the project trips were assigned to the intersections and roadway segments in the study area.

Exhibits 11A and **11B** illustrate the AM/PM peak hour project trips for Phase One of the Specific Plan within the north and south study areas, respectively.

Exhibit 12 illustrates the daily project trips for Phase One of the Specific Plan within the north study area.

The Specific Plan Phase Two AM/PM peak hour project trips within the north and south study areas are illustrated in **Exhibits 13A** and **13B**, respectively.

Exhibit 14 illustrates the daily project trips for Phase Two of the Specific Plan within the north study area.

Exhibits 15A and **15B** illustrate the AM/PM peak hour project trips for Phase Three (Buildout) of the Specific Plan within the north and south study areas, respectively.

Exhibit 16 illustrates the daily project trips for Phase Three (Buildout) of the Specific Plan within the north study area.

The Specific Plan Phase Three (Buildout) With Reduced Alternative AM/PM peak hour project trips within the north and south study areas are illustrated in **Exhibits 17A** and **17B**, respectively.

Exhibit 18 illustrates the daily project trips for Specific Plan Phase Three (Buildout) With Reduced Alternative within the north study area.

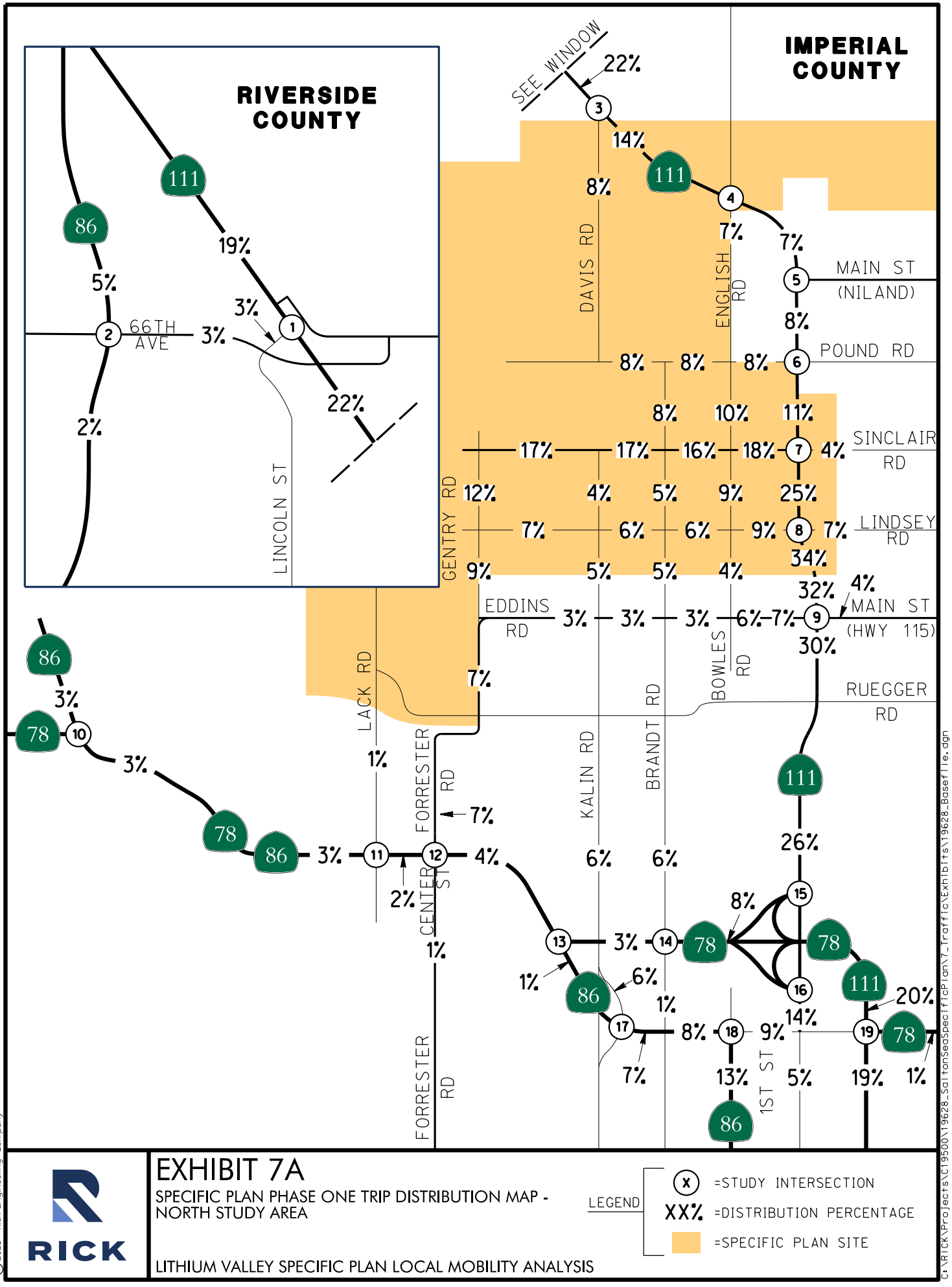


EXHIBIT 7A

SPECIFIC PLAN PHASE ONE TRIP DISTRIBUTION MAP - NORTH STUDY AREA

LEGEND
- (X) =STUDY INTERSECTION
- XX% =DISTRIBUTION PERCENTAGE
- =SPECIFIC PLAN SITE

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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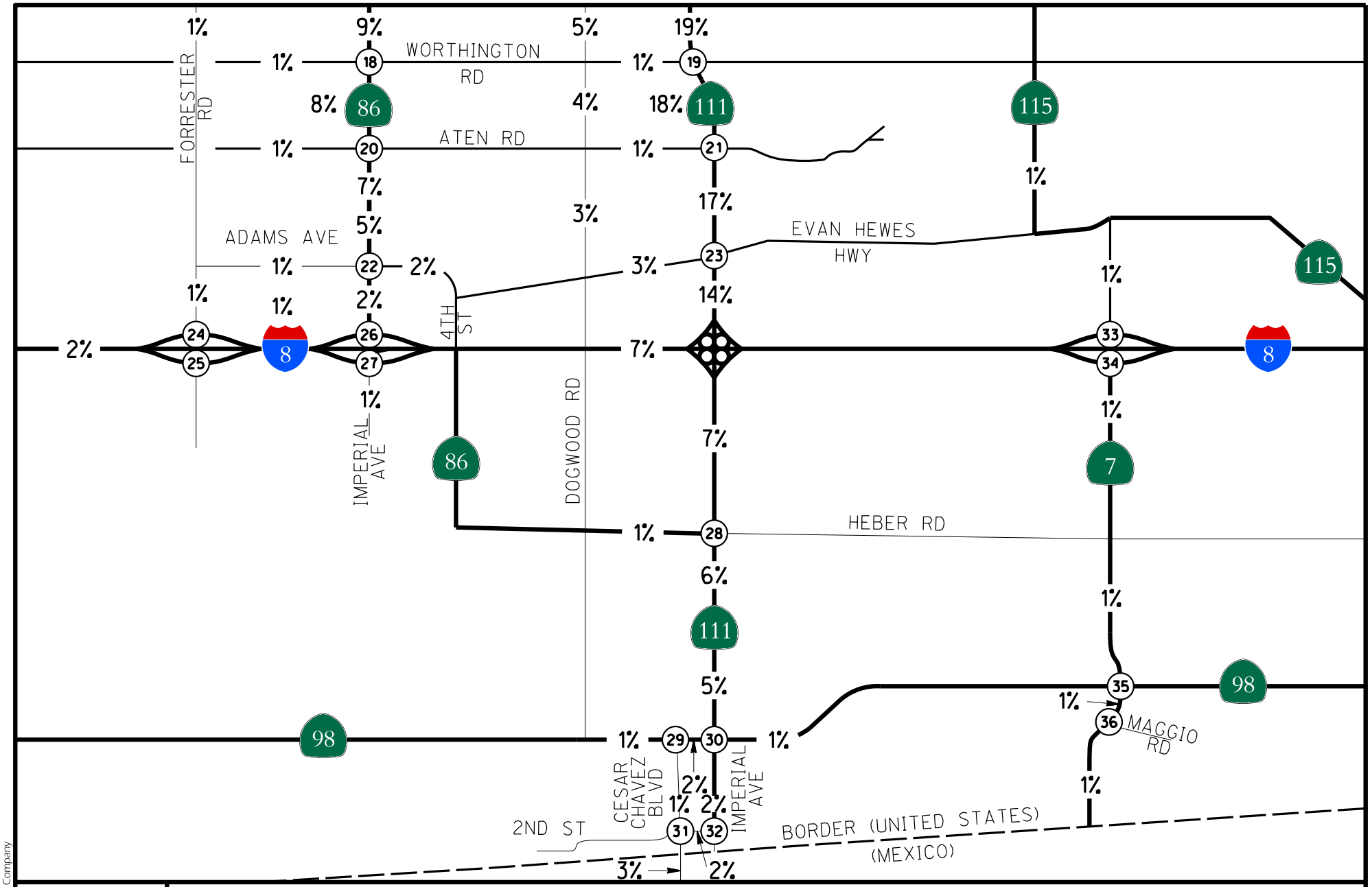


EXHIBIT 7B

SPECIFIC PLAN PHASE ONE TRIP DISTRIBUTION MAP - SOUTH STUDY AREA

LEGEND
(X) =STUDY INTERSECTION
XX% =DISTRIBUTION PERCENTAGE

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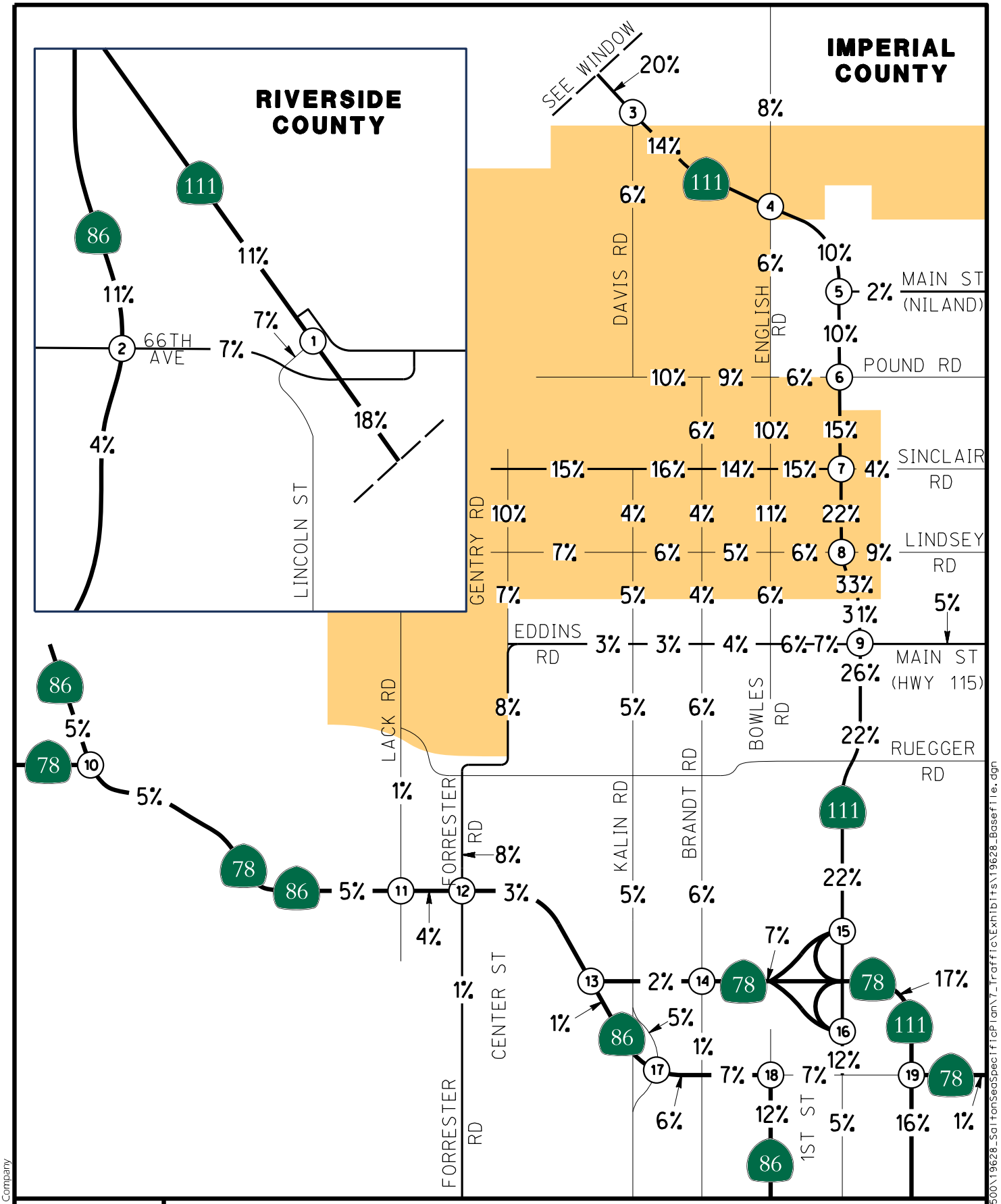


EXHIBIT 8A

SPECIFIC PLAN PHASE TWO TRIP DISTRIBUTION MAP - NORTH STUDY AREA

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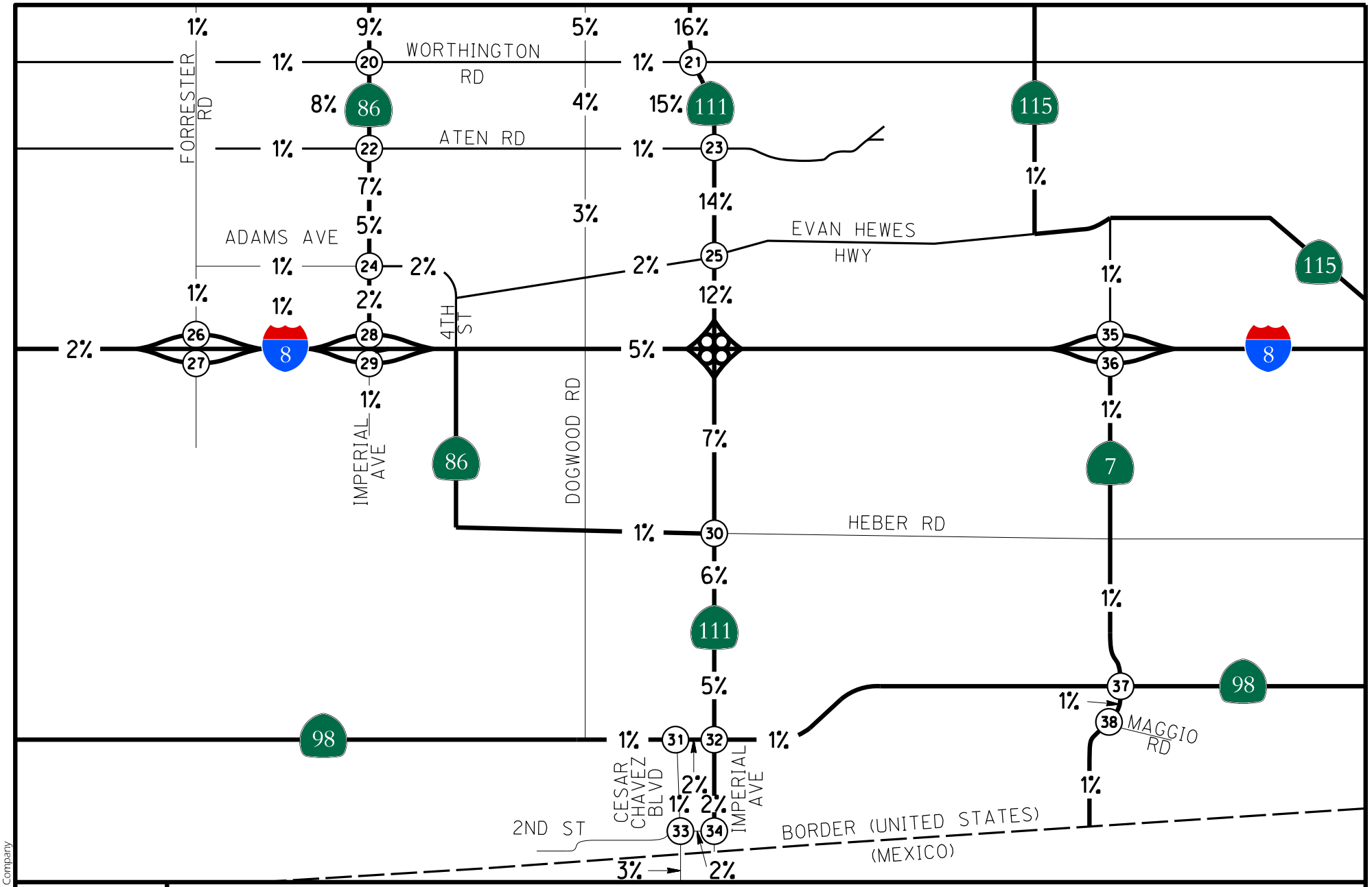


EXHIBIT 8B

SPECIFIC PLAN PHASE TWO TRIP DISTRIBUTION MAP - SOUTH STUDY AREA

LEGEND
(X) =STUDY INTERSECTION
XX% =DISTRIBUTION PERCENTAGE

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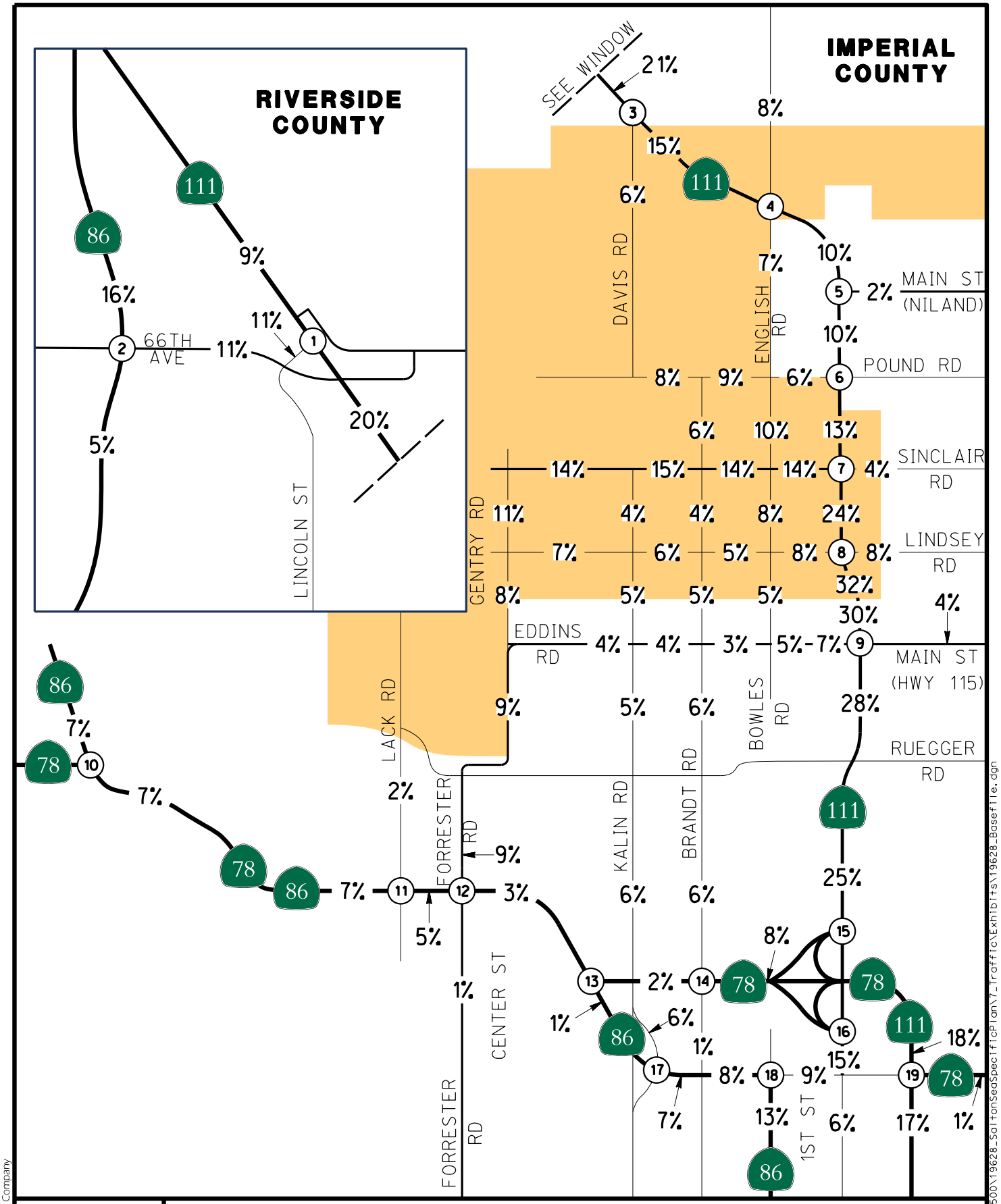


EXHIBIT 9A

SPECIFIC PLAN PHASE THREE (BUILDOUT) TRIP DISTRIBUTION MAP - NORTH STUDY AREA

LEGEND

(X) =STUDY INTERSECTION

XX% =DISTRIBUTION PERCENTAGE

=SPECIFIC PLAN SITE

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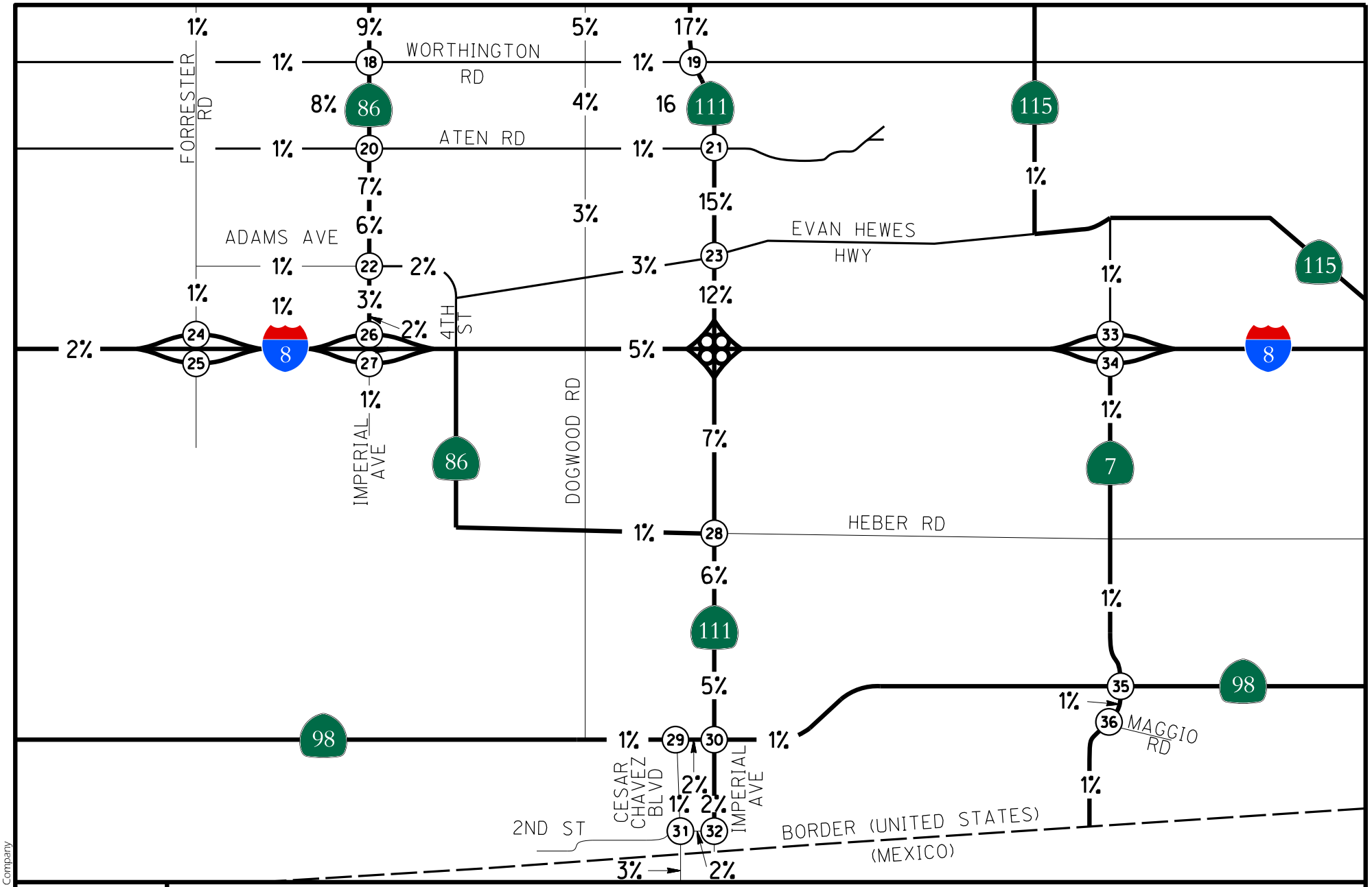


EXHIBIT 9B

SPECIFIC PLAN PHASE THREE (BUILDOUT) TRIP DISTRIBUTION MAP - SOUTH STUDY AREA

LEGEND
(X) =STUDY INTERSECTION
XX% =DISTRIBUTION PERCENTAGE

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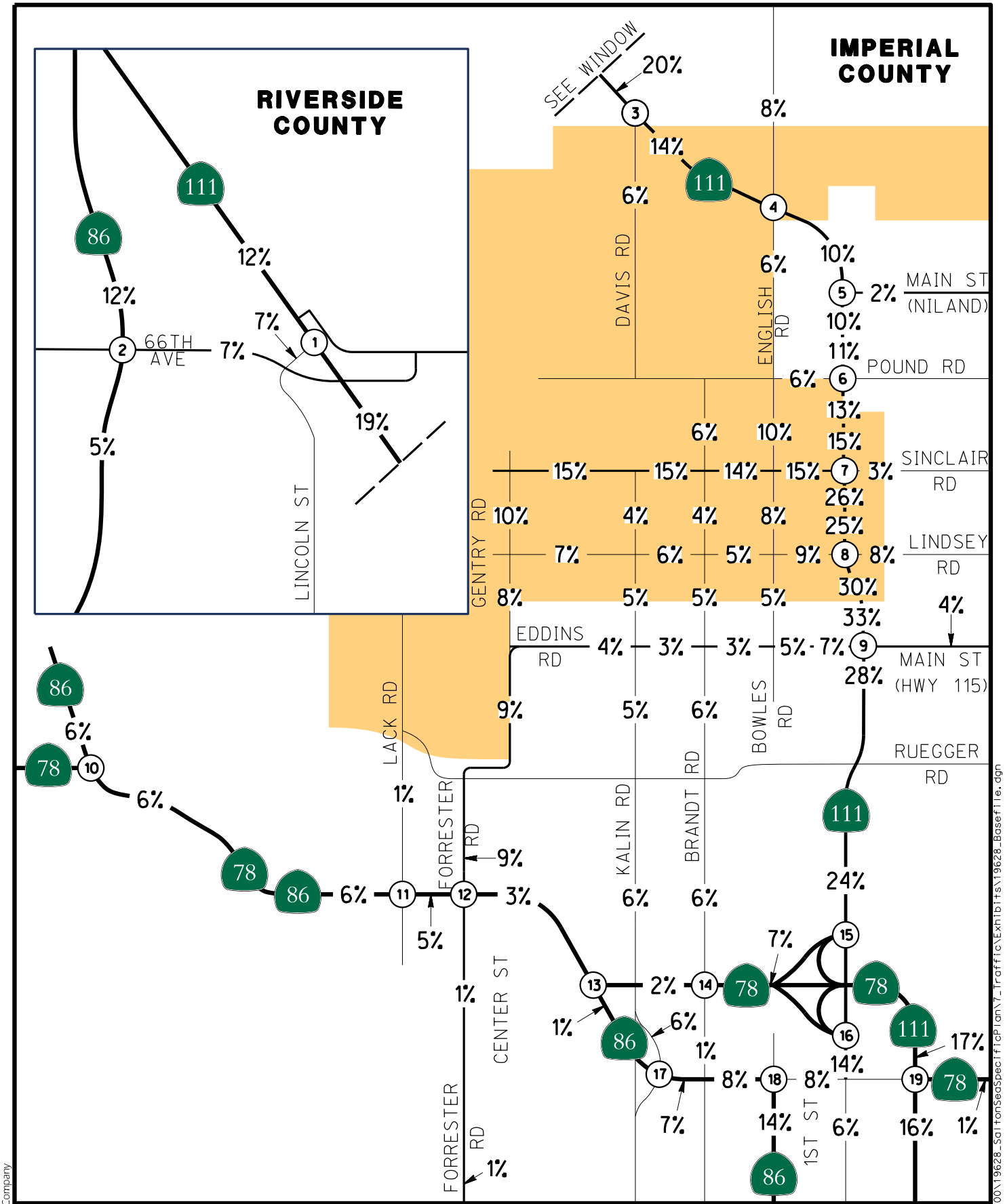


EXHIBIT 10A

SPECIFIC PLAN PHASE THREE (BUILDOUT)
WITH REDUCED ALTERNATIVE TRIP DISTRIBUTION MAP -
NORTH STUDY AREA

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LEGEND
(X) =STUDY INTERSECTION
XX% =DISTRIBUTION PERCENTAGE
=SPECIFIC PLAN SITE

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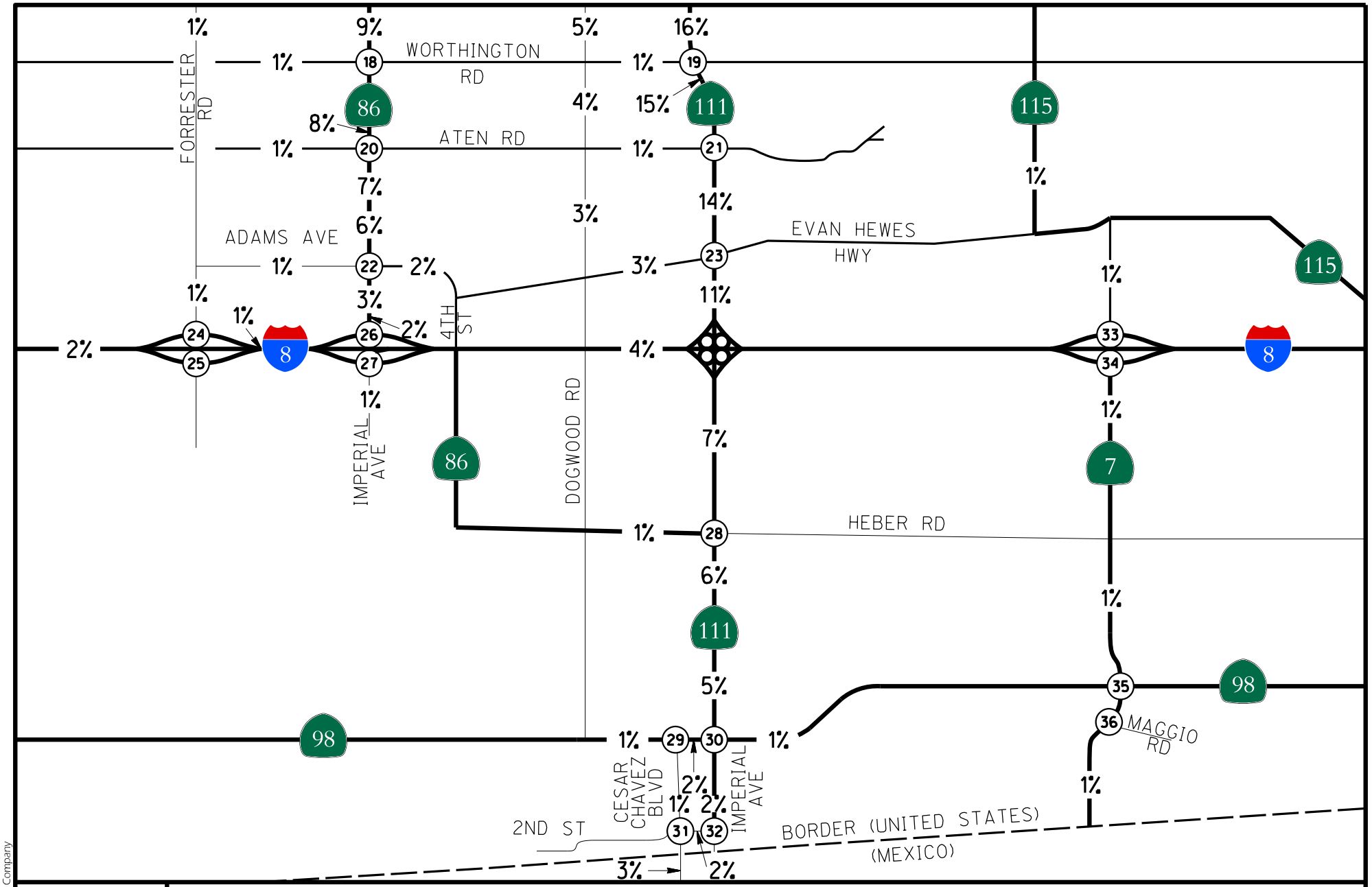


EXHIBIT 10B

SPECIFIC PLAN PHASE THREE (BUILDOUT) WITH REDUCED ALTERNATIVE TRIP DISTRIBUTION MAP - SOUTH STUDY AREA

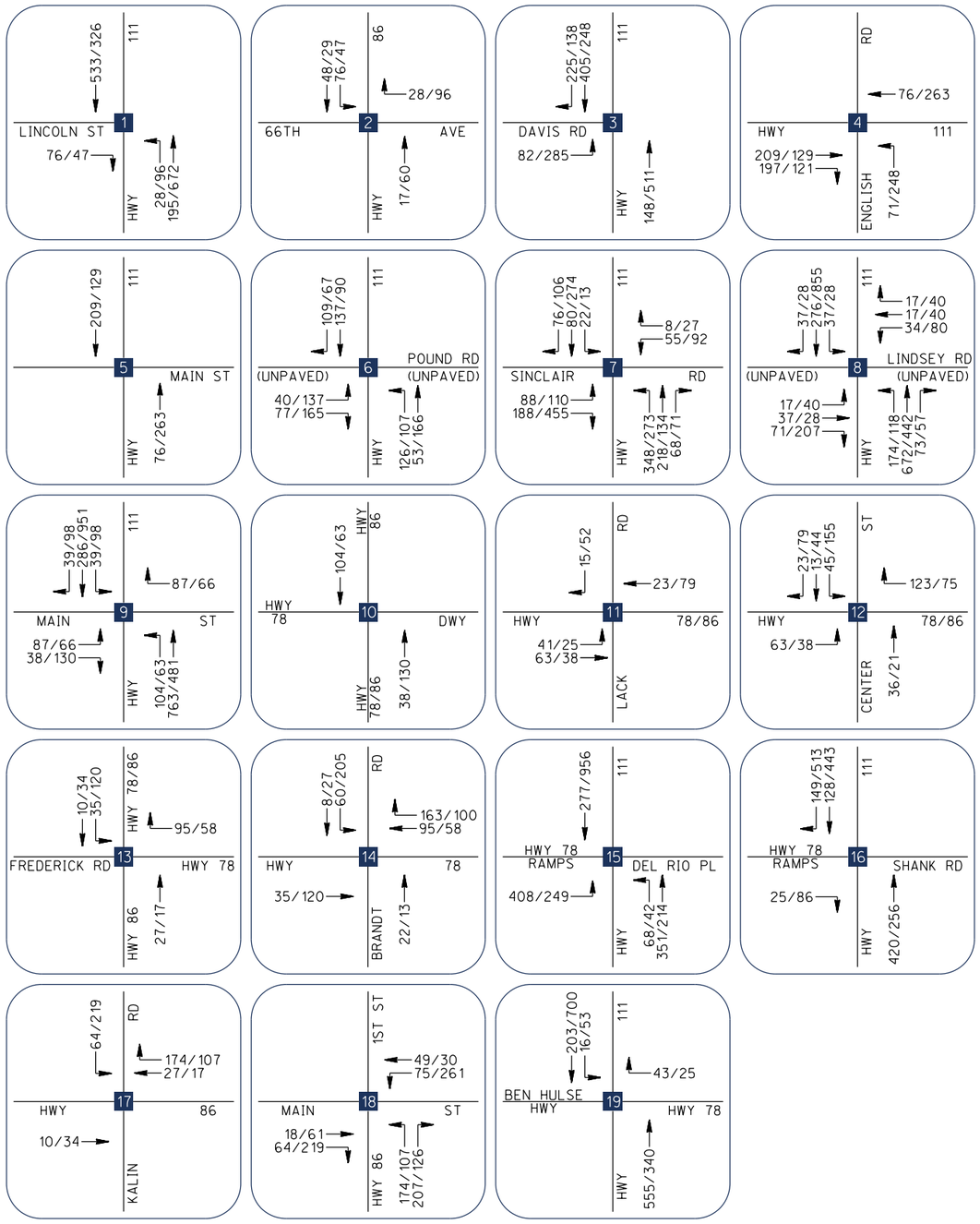
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LEGEND
(X) =STUDY INTERSECTION
XX% =DISTRIBUTION PERCENTAGE

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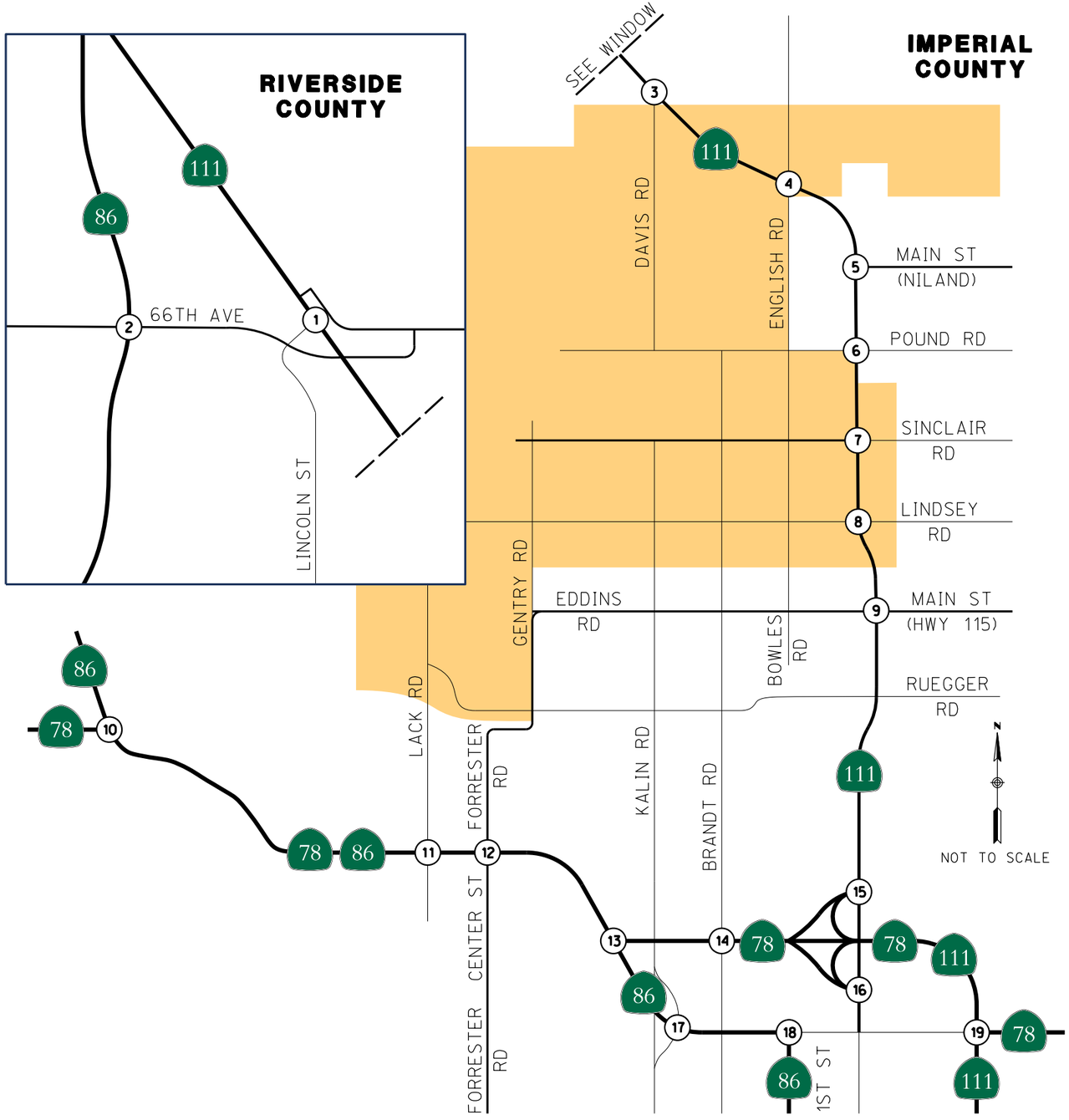


EXHIBIT 11A

SPECIFIC PLAN PHASE ONE PEAK HOUR PROJECT TRIPS - NORTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND
AM/PM=PEAK HOUR VOLUMES
=SPECIFIC PLAN SITE

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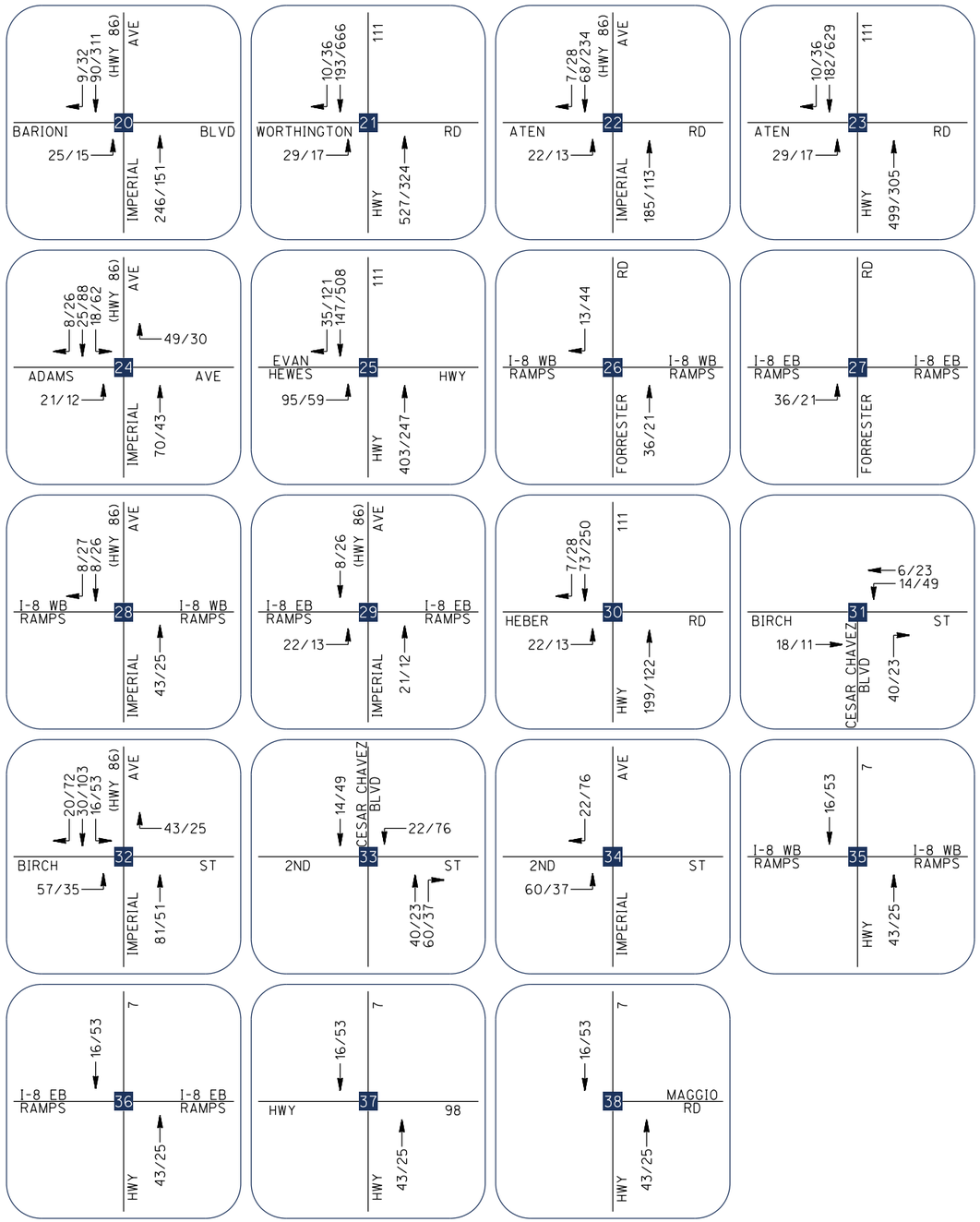


EXHIBIT 11B

SPECIFIC PLAN PHASE ONE PEAK HOUR PROJECT TRIPS - SOUTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

AM/PM=PEAK HOUR VOLUMES

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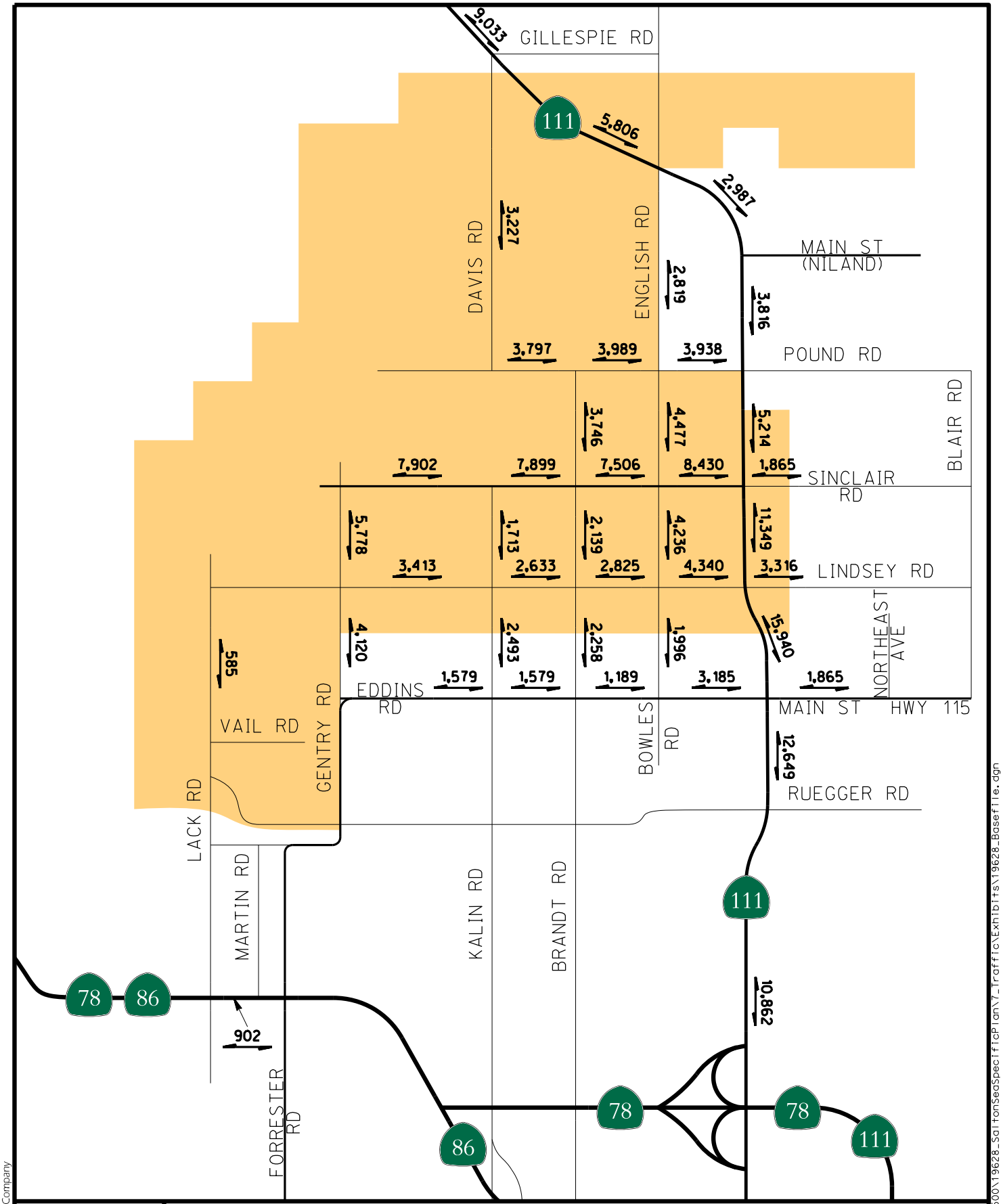


EXHIBIT 12

SPECIFIC PLAN PHASE ONE DAILY PROJECT TRIPS
(NORTH STUDY AREA ONLY)

LEGEND

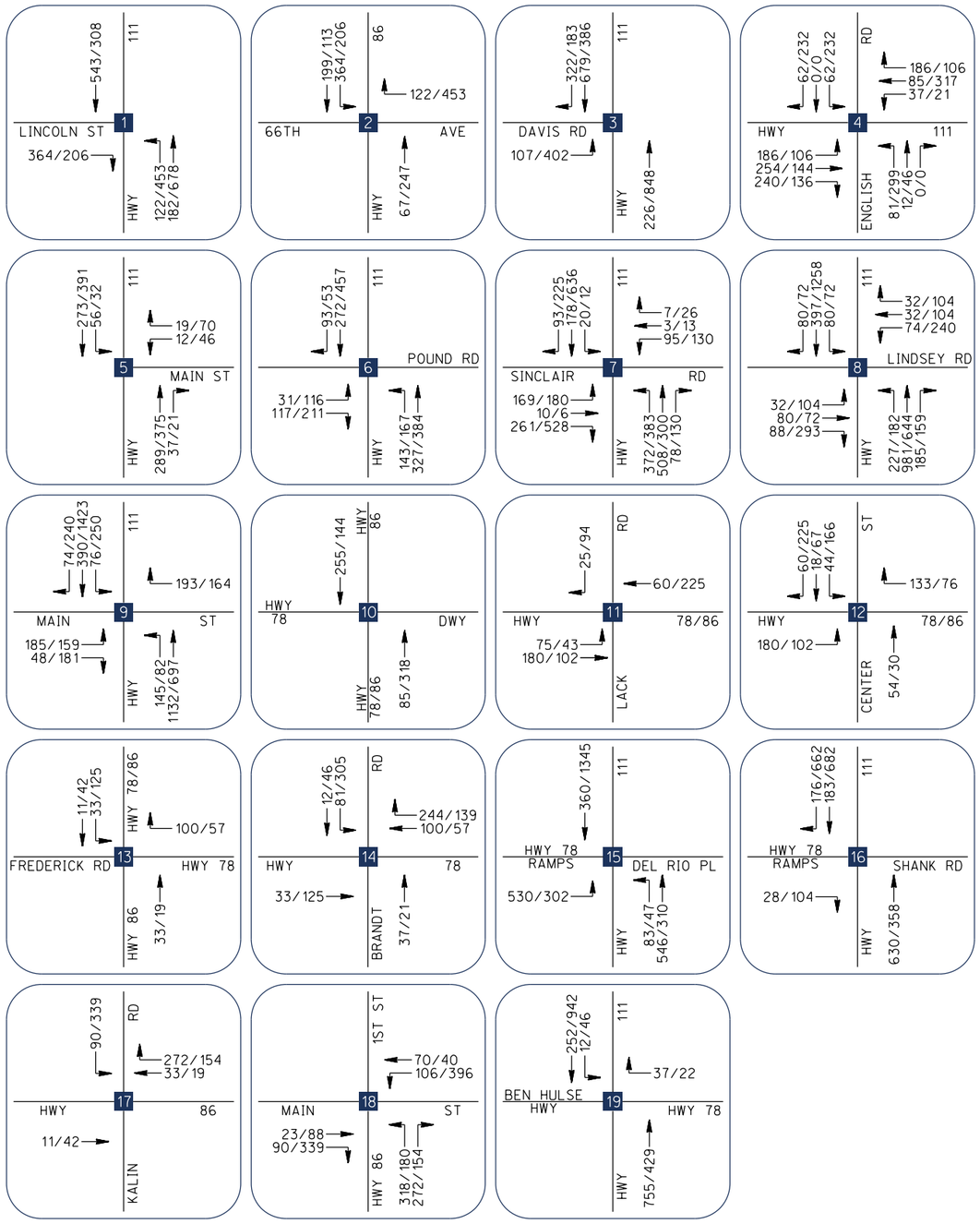
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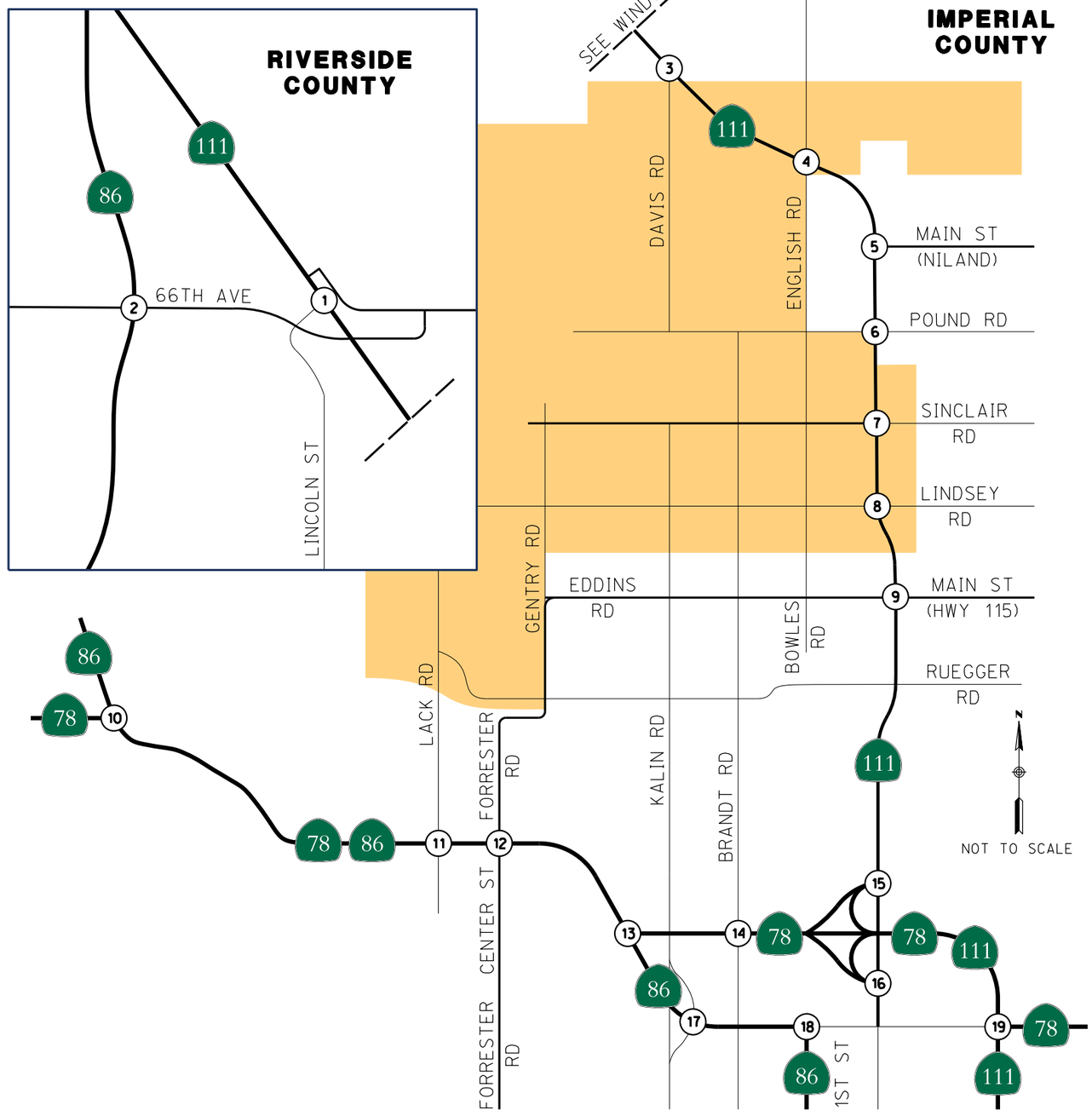
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EXHIBIT 13A

SPECIFIC PLAN PHASE TWO PEAK HOUR PROJECT TRIPS - NORTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND
AM/PM=PEAK HOUR VOLUMES
=SPECIFIC PLAN SITE

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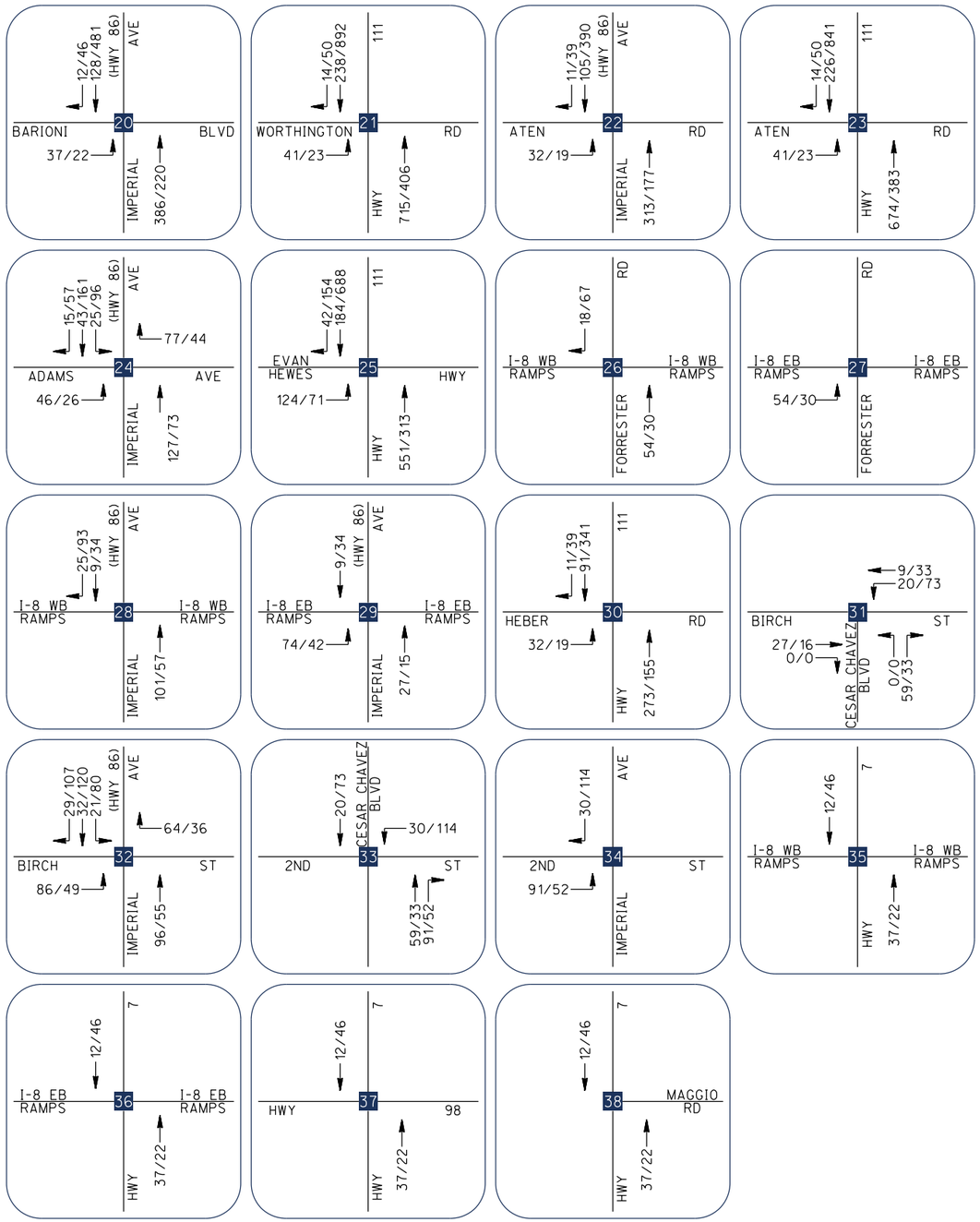


EXHIBIT 13B

SPECIFIC PLAN PHASE TWO PEAK HOUR PROJECT TRIPS - SOUTHSTUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

AM/PM=PEAK HOUR VOLUMES

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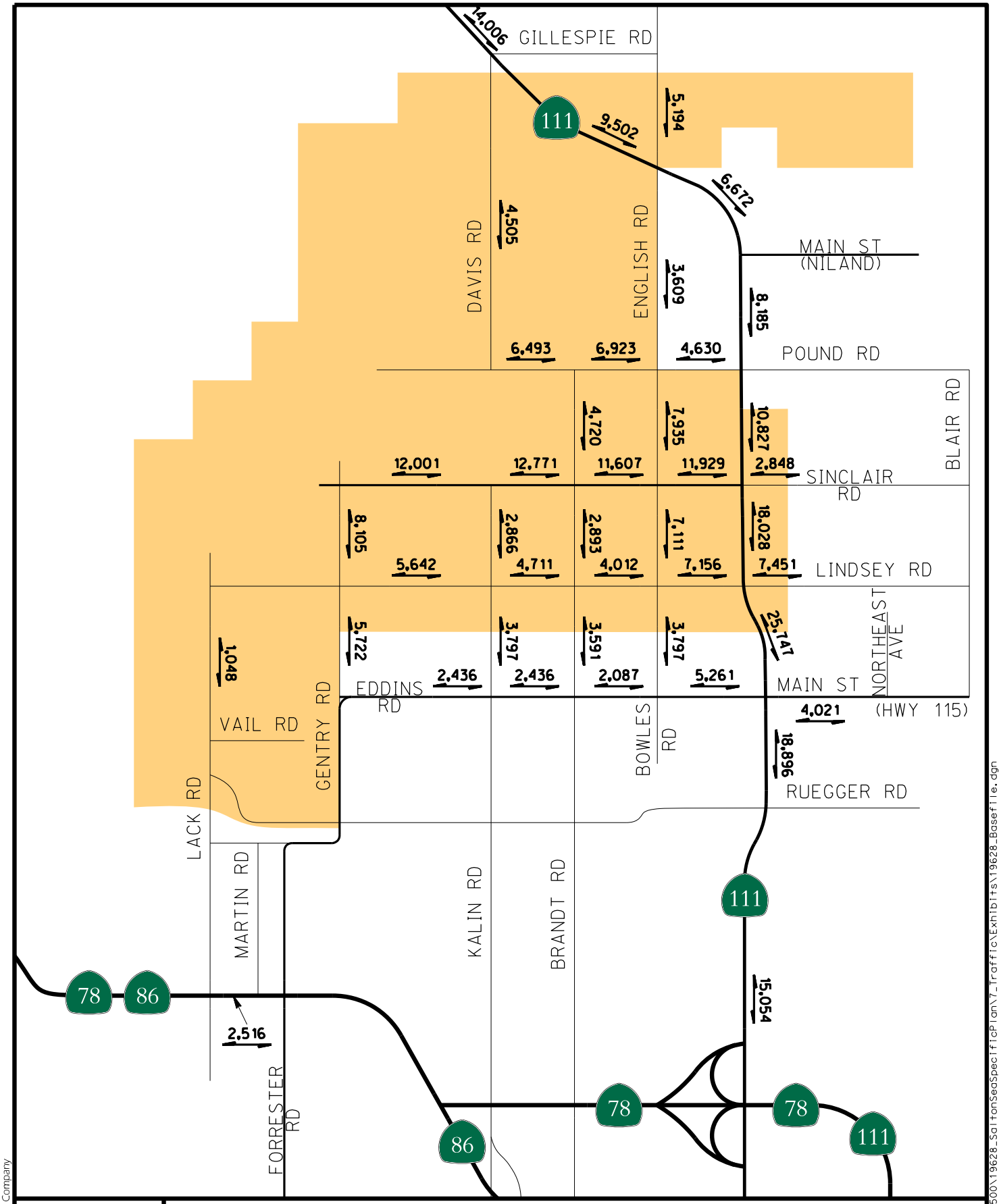


EXHIBIT 14

SPECIFIC PLAN PHASE TWO DAILY PROJECT TRIPS
(NORTH STUDY AREA ONLY)

LEGEND

X,XXX =TWO-WAY ADT

=SPECIFIC PLAN SITE

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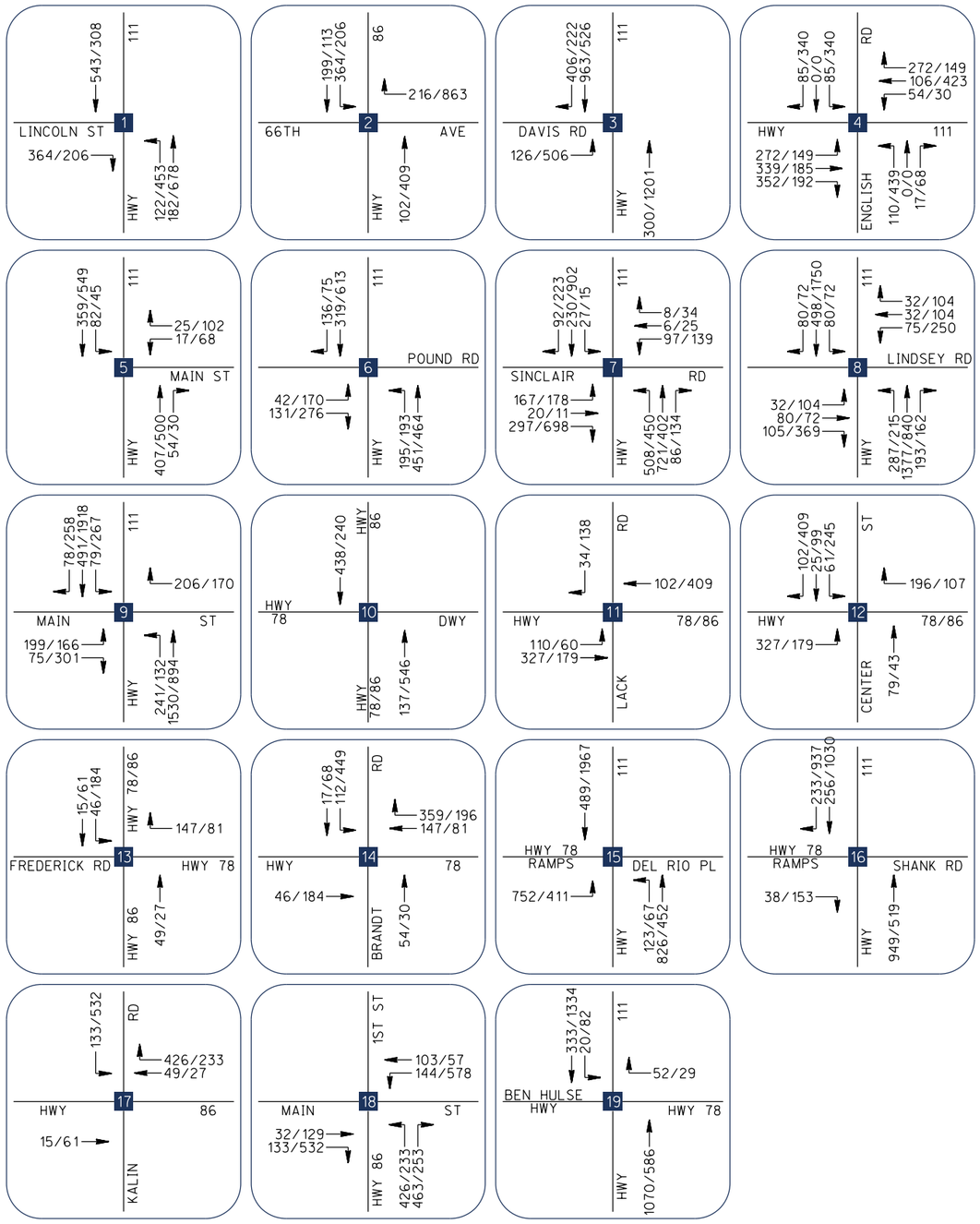


EXHIBIT 15A

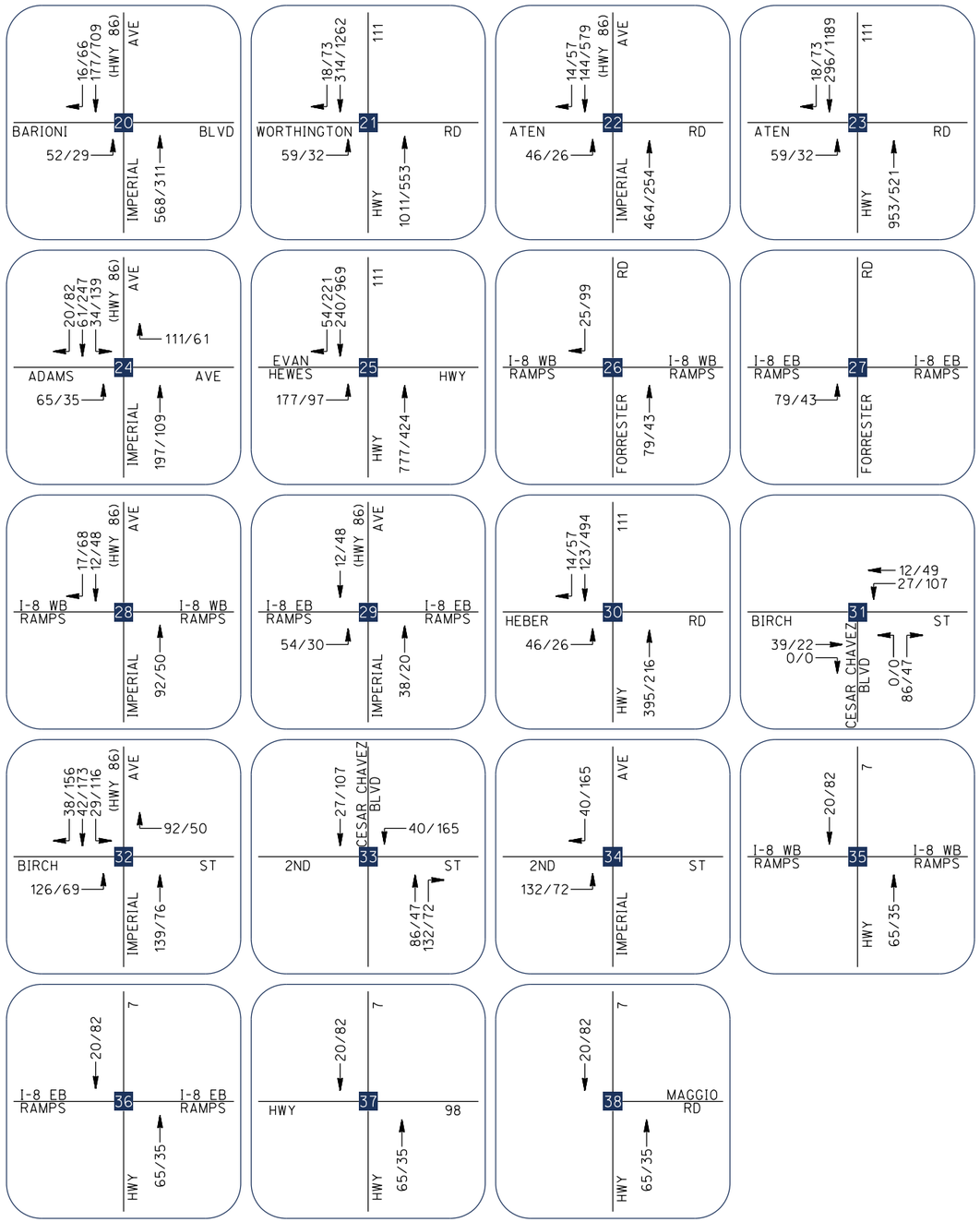
SPECIFIC PLAN PHASE THREE (BUILDOUT) PEAK HOUR PROJECT TRIPS - NORTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND
AM/PM=PEAK HOUR VOLUMES
=SPECIFIC PLAN SITE

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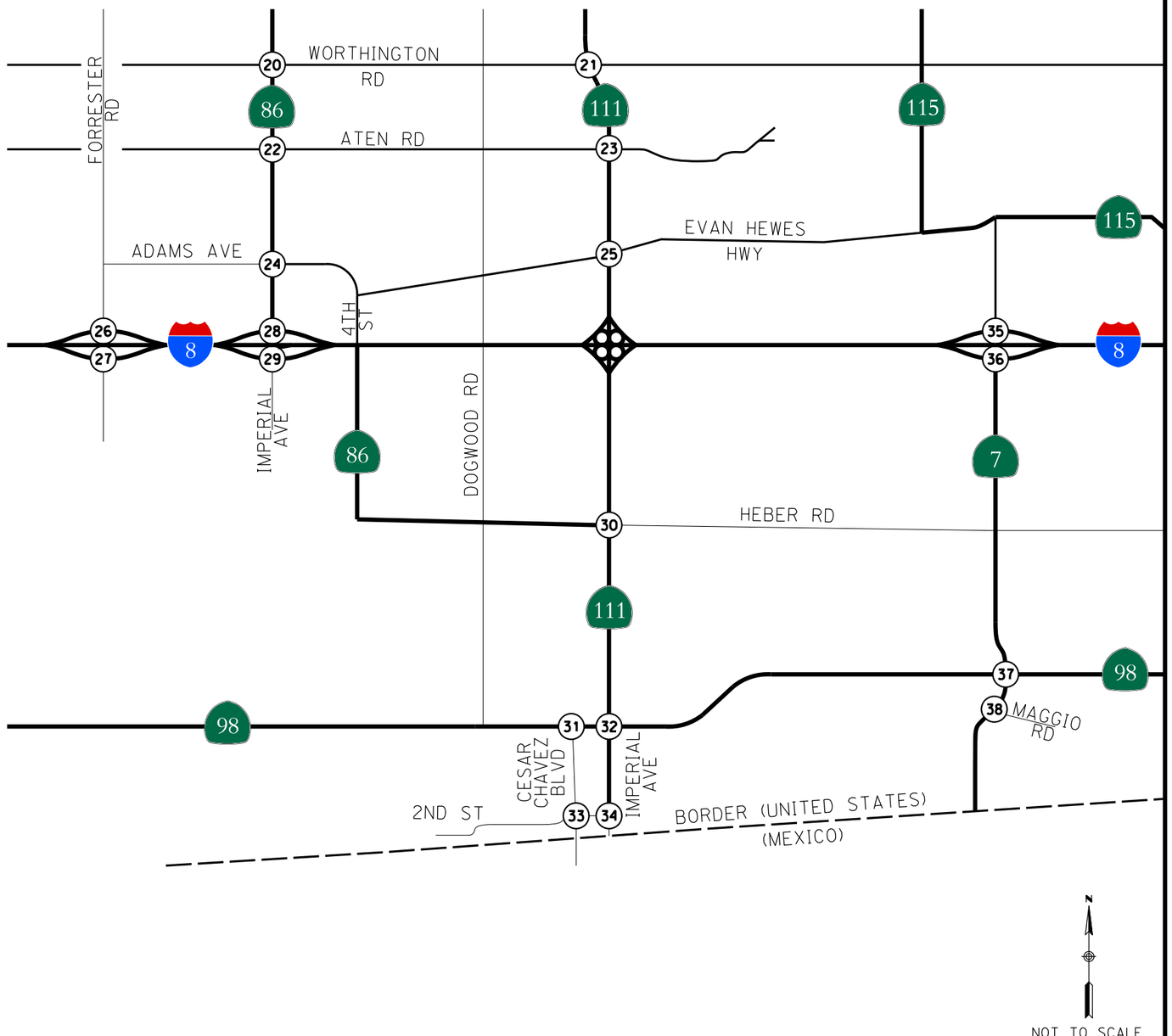


EXHIBIT 15B

SPECIFIC PLAN PHASE THREE (BUILDOUT) PEAK HOUR PROJECT TRIPS - SOUTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND: AM/PM=PEAK HOUR VOLUMES

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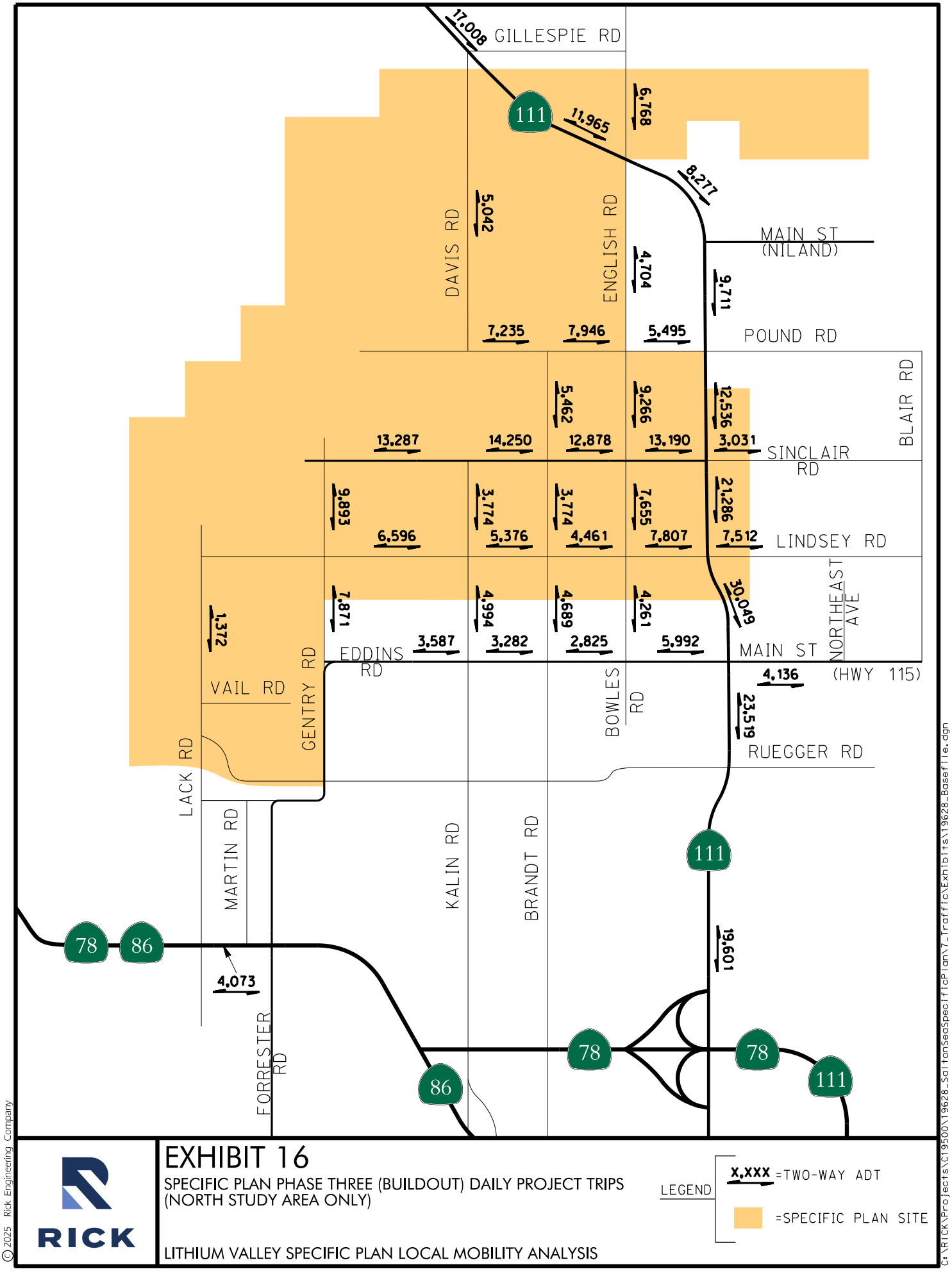


EXHIBIT 16

SPECIFIC PLAN PHASE THREE (BUILDOUT) DAILY PROJECT TRIPS
(NORTH STUDY AREA ONLY)

LEGEND

X,XXX =TWO-WAY ADT

=SPECIFIC PLAN SITE

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

RICK

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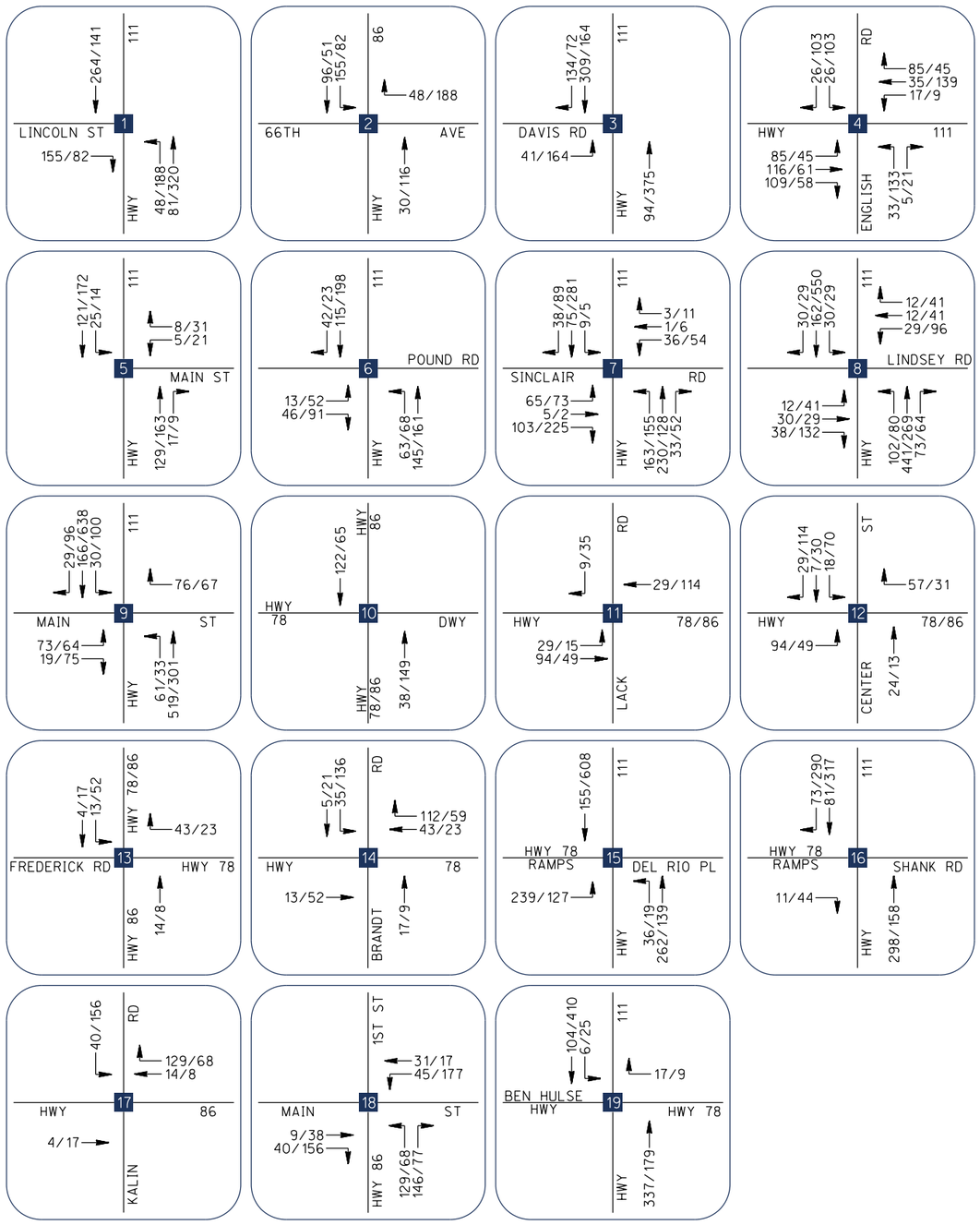


EXHIBIT 17A

SPECIFIC PLAN PHASE THREE (BUILDOUT) WITH REDUCED ALTERNATIVE PEAK HOUR PROJECT TRIPS - NORTH STUDY AREA

LEGEND
AM/PM=PEAK HOUR VOLUMES
=SPECIFIC PLAN SITE

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LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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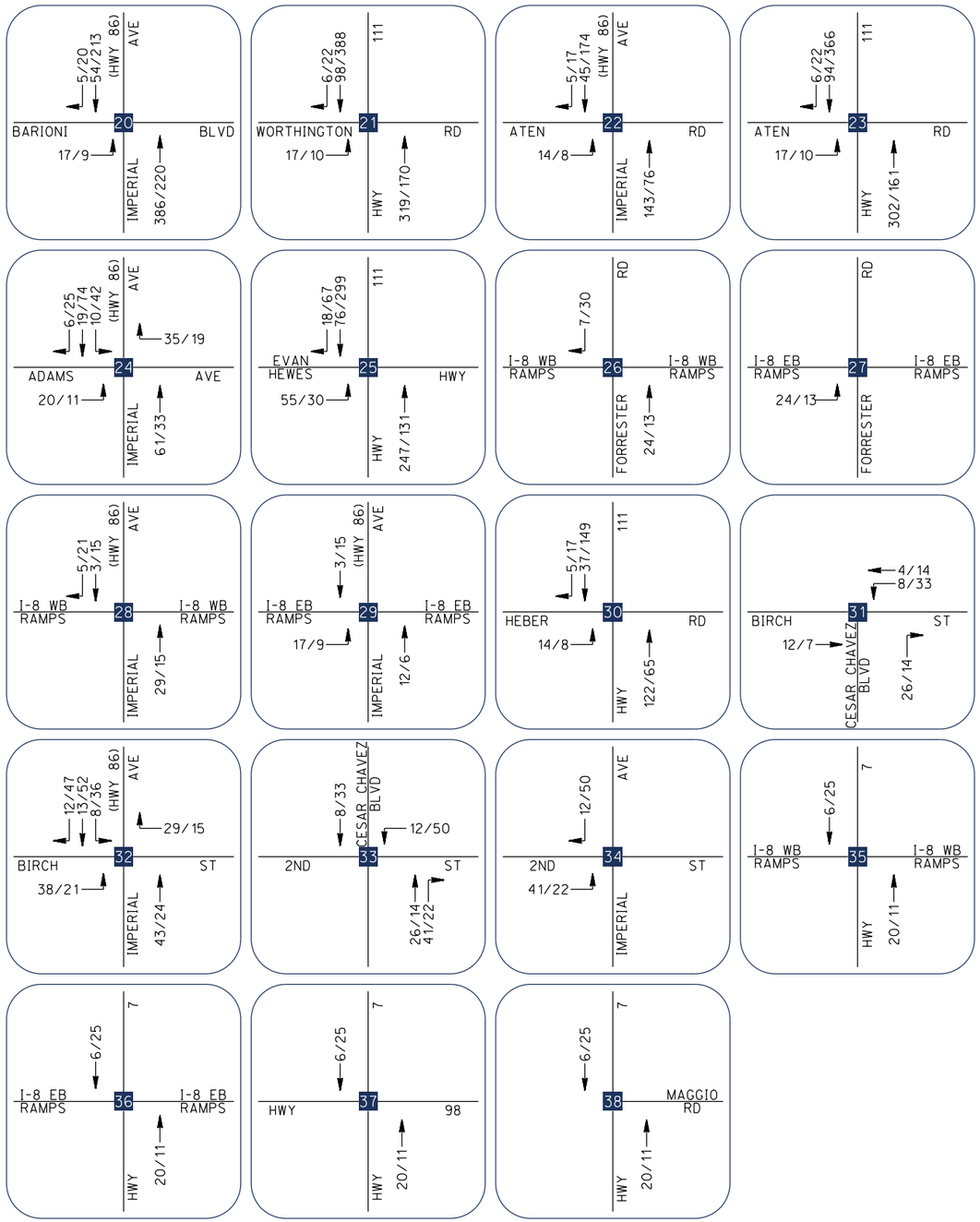


EXHIBIT 17B

SPECIFIC PLAN PHASE THREE (BUILDOUT) WITH REDUCED ALTERNATIVE PEAK HOUR PROJECT TRIPS - SOUTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

AM/PM=PEAK HOUR VOLUMES

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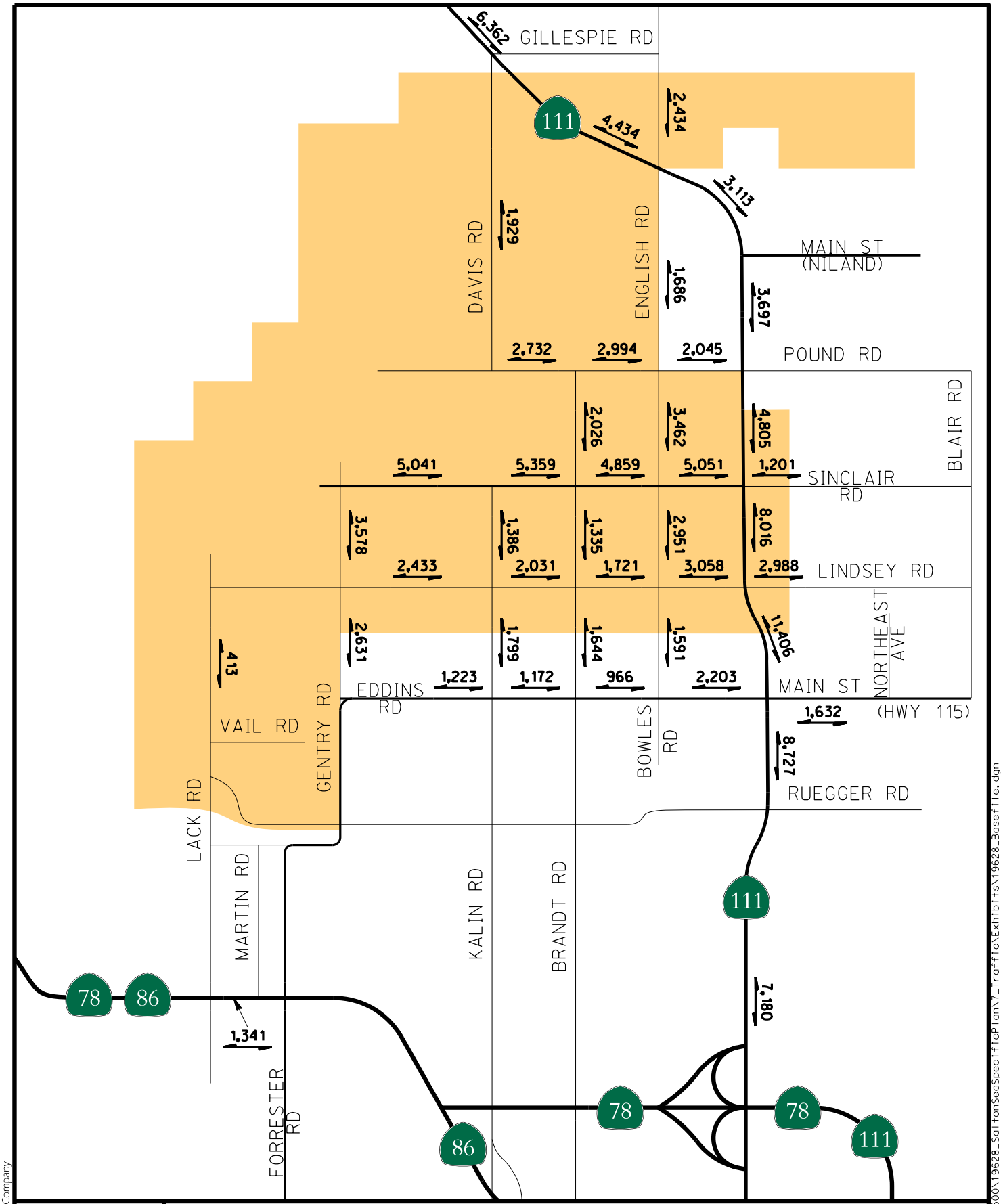


EXHIBIT 18

SPECIFIC PLAN PHASE THREE (BUILDOUT) WITH REDUCED ALTERNATIVE DAILY PROJECT TRIPS (NORTH STUDY AREA ONLY)

LEGEND

X,XXX =TWO-WAY ADT

=SPECIFIC PLAN SITE

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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8.0 FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE TRANSPORTATION CONDITIONS

Future Year 2035 With Specific Plan Phase One conditions reflect the completion of the Phase One land uses within the Lithium Valley Specific Plan. The Year 2035 scenario of the Southern California Association of Governments (SCAG) regional travel demand model was used to develop the Future Year 2035 With Specific Plan Phase One traffic volumes in the study area.

The proposed Specific Plan Phase One land uses were inputted into the Travel Analysis Zones (TAZs) that make up the Lithium Valley Specific Plan area in the SCAG model, which was run for the SCAG model Year 2035 scenario.

8.1 Future Year 2035 With Specific Plan Phase One Conditions Roadway Network

The Future Year 2035 With Specific Plan Phase One roadway network assumes that all roadways connecting the project site to SR-111 or SR-78/86 would be paved and that all key roadways accessing the Specific Plan site would be built to at least two-lane Industrial Local standards. The intersection analysis assumes the existing lane configurations and controls to determine the improvement needs based on the Future Year 2035 With Specific Plan Phase One traffic volumes.

8.2 Future Year 2035 With Specific Plan Phase One Conditions Traffic Volumes

The Future Year 2035 With Specific Plan Phase One traffic volumes were derived based on the forecast growth in traffic in the SCAG model and the distribution of project trips. Growth factors were developed based on the forecast traffic growth from Baseline Year 2019 to Future Year 2035 No Project/No General Plan traffic volumes. These growth factors were applied to Existing Year 2025 traffic volume counts where applicable to reflect 10 years of growth from 2025 to 2035.

The Future Year 2035 No Project/No General Plan traffic volumes were post-processed to develop the intersection turning movement volumes during the AM and PM peak hours. Adjustments were made where appropriate to reflect changes in traffic patterns and growth on all legs of the study intersections.

Project-specific daily and AM/PM peak hour trips associated with the proposed Phase One land uses were added to the Future Year 2035 No Project/No General Plan traffic volumes to develop the Future Year 2035 With Specific Plan Phase One traffic volumes.

Exhibits 19A and **19B** illustrate the Future Year 2035 With Specific Plan Phase One AM/PM peak hour intersection turning movement volumes within the north and south study areas, respectively.

Exhibit 20 illustrates the Future Year 2035 With Specific Plan Phase One daily traffic volumes within the north study area.

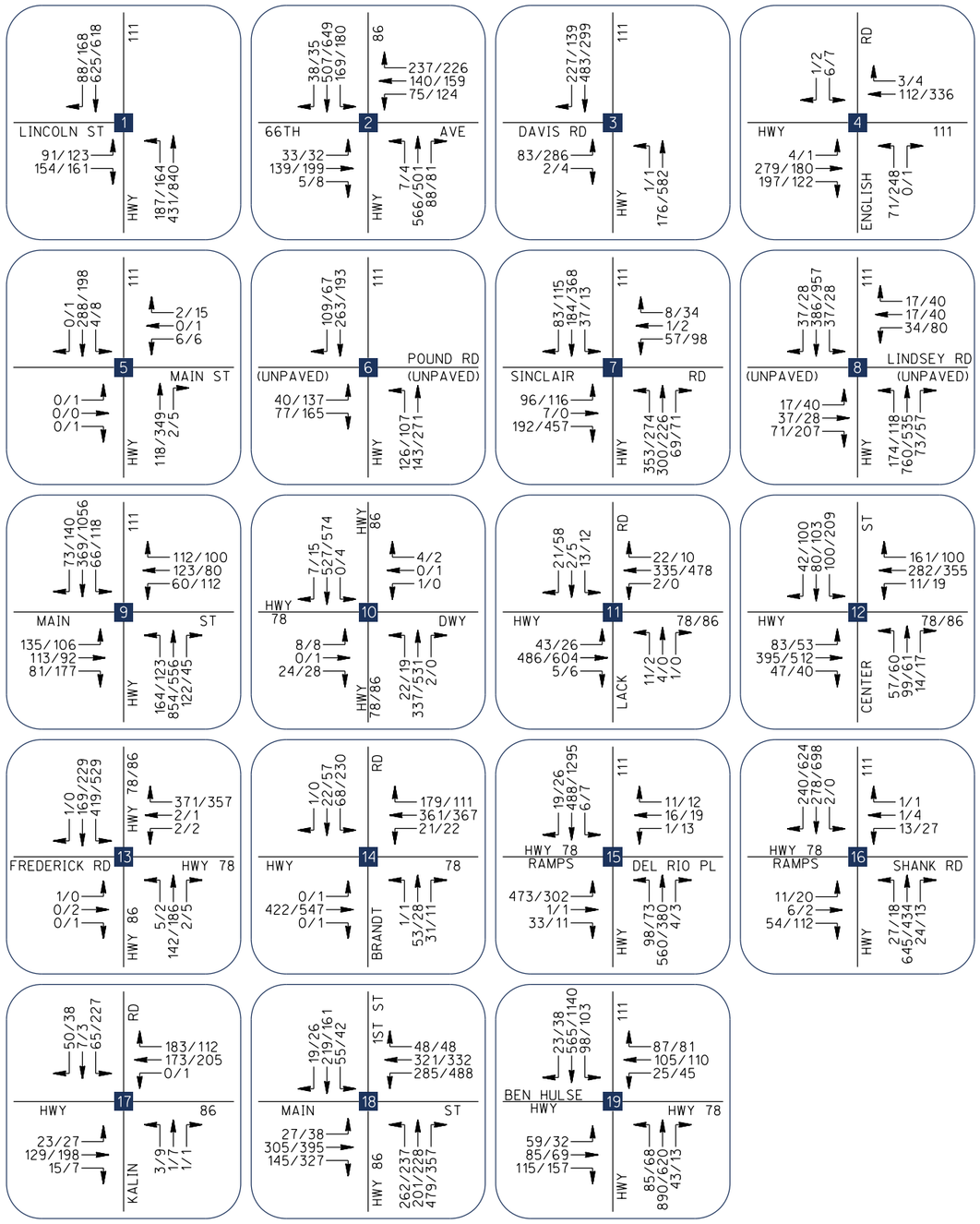


EXHIBIT 19A

FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE PEAK HOUR INTERSECTION TRAFFIC VOLUMES - NORTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

AM/PM=PEAK HOUR VOLUMES

=SPECIFIC PLAN SITE

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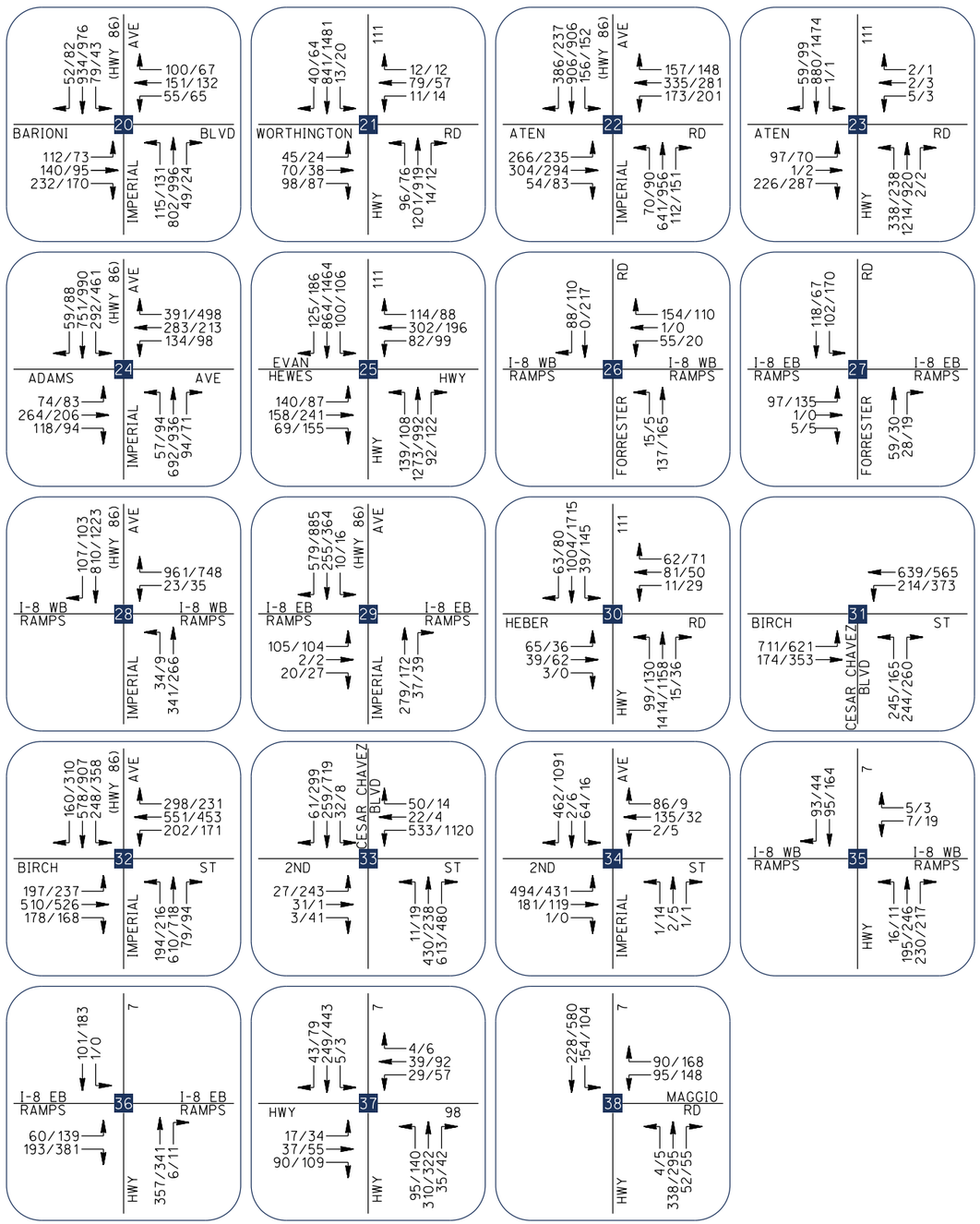


EXHIBIT 19B

FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE PEAK HOUR INTERSECTION TRAFFIC VOLUMES - SOUTH STUDY AREA

LEGEND: AM/PM=PEAK HOUR VOLUMES

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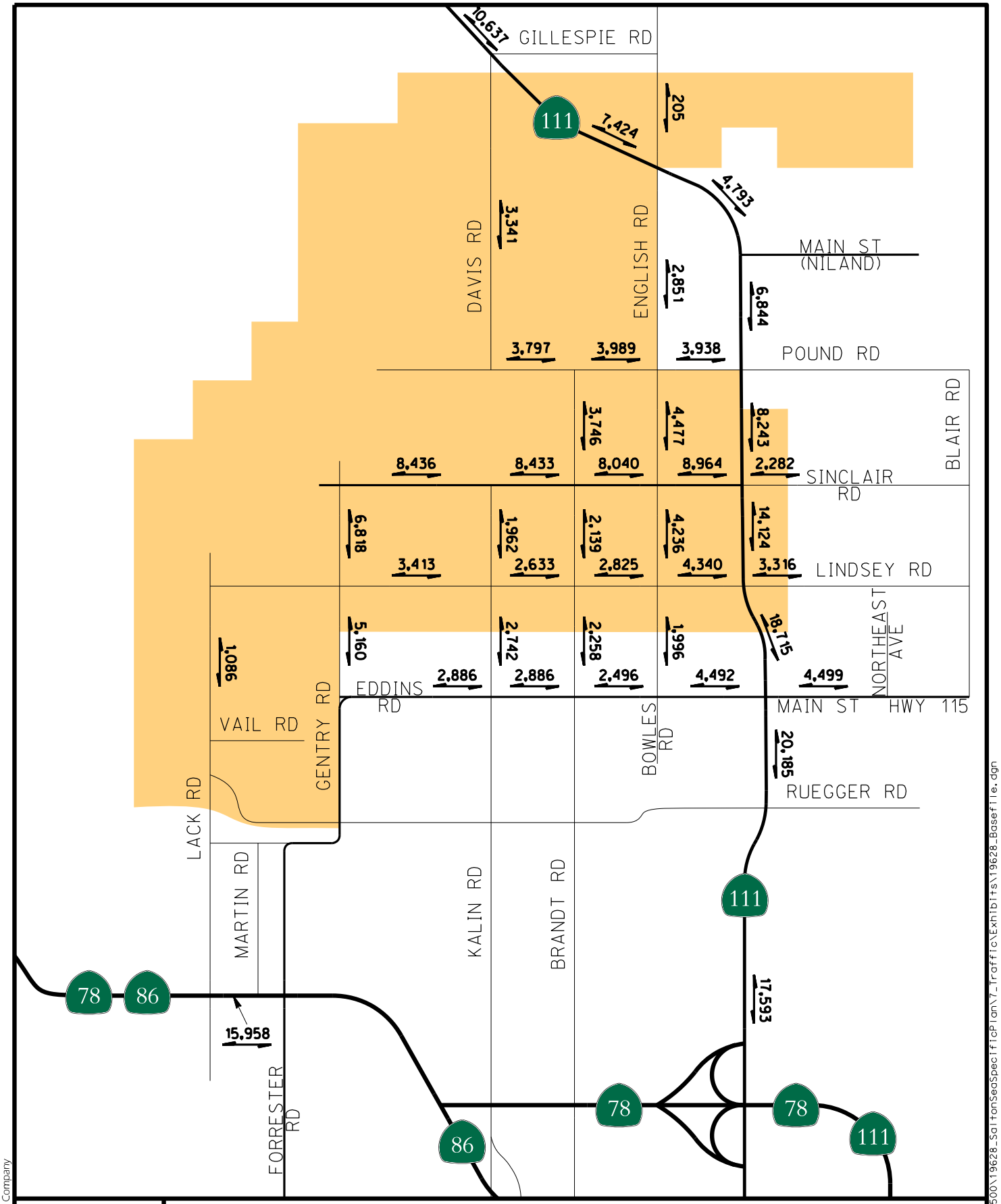


EXHIBIT 20

FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE DAILY TRAFFIC VOLUMES (NORTH STUDY AREA ONLY)

LEGEND

X,XXX =TWO-WAY ADT

=SPECIFIC PLAN SITE

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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8.3 Future Year 2035 With Specific Plan Phase One Conditions Intersection Operations

Table 11 displays the operational analysis results for the study intersections under Future Year 2035 With Specific Plan Phase One conditions. **Appendix B** contains the Future Year 2035 With Specific Plan Phase One intersection analysis worksheets.

TABLE 11: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE INTERSECTION OPERATIONS

#	Intersection	Control	Future Year 2035 With SP Phase One					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
1	SR-111 / Lincoln Street	(SIGNAL)	Overall	13.7	B	Overall	13.0	B
2	SR-86 / 66th Avenue	(SIGNAL)	Overall	**35.4**	**D**	Overall	**39.6**	**D**
3	SR-111 / Davis Road	(OWSC)	EB-L	16.1	C	EB-L	**48.7**	**E**
4	SR-111 / English Road	(TWSC)	NB-L	15.2	C	NB-L	**34.2**	**D**
5	SR-111 / Main Street (in Niland)	(OWSC)	WB-L	10.6	B	WB-L	11.1	B
6	SR-111 / Pound Road	(TWSC)	EB-L	16.4	C	EB-L	**37.9**	**E**
7	SR-111 / Sinclair Road	(TWSC)	WB-L	**>300**	**F**	EB-L	**>300**	**F**
8	SR-111 / Lindsey Road	(TWSC)	WB-L	**>300**	**F**	WB-L	**>300**	**F**
9	SR-111 / Main Street (in Calipatria)	(AWSC)	Overall	**143.6**	**F**	Overall	**222.1**	**F**
10	SR-86 / SR-78 (west)	(TWSC)	EB-L	11.5	B	WB-L	12.2	B
11	SR-78/86 / Lack Road	(TWSC)	NB-L	14.8	B	NB-L	16.4	C
12	SR-78/86 / Center Street (Forrester Road)	(SIGNAL)	Overall	25.7	C	Overall	28.6	C
13	SR-86 / SR-78 (east)	(SIGNAL)	Overall	18.3	B	Overall	16.9	B
14	SR-78 / Brandt Road	(TWSC)	NB-L	16.6	C	SB-L	**31.0**	**D**
15	SR-111 / SR-78 WB Ramps	(SIGNAL)	Overall	**39.6**	**D**	Overall	**42.9**	**D**
16	SR-111 / SR-78 EB Ramps	(SIGNAL)	Overall	14.5	B	Overall	10.2	B
17	SR-86 / Kalin Road	(TWSC)	SB-L	11.0	B	SB-L	14.5	B
18	SR-86 / 1st Street-Main Street	(SIGNAL)	Overall	**36.6**	**D**	Overall	**62.9**	**E**
19	SR-111 / Ben Hulse Highway	(SIGNAL)	Overall	29.5	C	Overall	34.7	C
20	SR-86 / Barioni Boulevard	(SIGNAL)	Overall	**52.2**	**D**	Overall	**50.4**	**D**
21	SR-111 / Worthington Road	(SIGNAL)	Overall	23.1	C	Overall	32.0	C
22	SR-86 / Aten Road	(SIGNAL)	Overall	**48.9**	**D**	Overall	**48.1**	**D**
23	SR-111 / Aten Road	(SIGNAL)	Overall	19.1	B	Overall	**38.2**	**D**
24	SR-86 / Adams Avenue	(SIGNAL)	Overall	30.0	C	Overall	31.2	C
25	SR-111 / Evan Hewes Highway	(SIGNAL)	Overall	**70.6**	**E**	Overall	**96.2**	**F**
26	Forrester Road / I-8 WB Ramps	(TWSC)	WB-L	10.1	B	WB-L	11.6	B
27	Forrester Road / I-8 EB Ramps	(TWSC)	EB-L	13.5	B	EB-L	15.7	C

TABLE 11 (CONTINUED): FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE INTERSECTION OPERATIONS

#	Intersection	Control	Future Year 2035 With SP Phase One					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
28	SR-86 / I-8 Westbound Ramps	(SIGNAL)	Overall	31.7	C	Overall	29.7	C
29	SR-86 / I-8 Eastbound Ramps	(SIGNAL)	Overall	7.5	A	Overall	8.4	A
30	SR-111 / Heber Road	(SIGNAL)	Overall	**68.3**	**E**	Overall	29.6	C
31	Cesar Chavez Boulevard / SR-98 (Birch Street)	(SIGNAL)	Overall	9.7	A	Overall	9.4	A
32	SR-111 / SR-98 (Birch Street)	(SIGNAL)	Overall	**39.4**	**D**	Overall	34.8	C
33	Cesar Chavez Boulevard / 2nd Street	(SIGNAL)	Overall	**120.0**	**F**	Overall	**132.3**	**F**
34	SR-111 / 2nd Street	(SIGNAL)	Overall	21.5	C	Overall	32.1	C
35	SR-7 / I-8 Westbound Ramps	(TWSC)	WB-L	10.4	B	WB-L	11.7	B
36	SR-7 / I-8 Eastbound Ramps	(TWSC)	EB-L	11.2	B	EB-L	13.1	B
37	SR-7 / SR-98	(SIGNAL)	Overall	22.0	C	Overall	27.2	C
38	SR-7 / Maggio Road	(SIGNAL)	Overall	24.9	C	Overall	22.7	C

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 7th edition of the HCM.
1) Delay is measured in seconds per vehicle.
2) Level of Service
(AWSC) = All-Way Stop Controlled; (TWSC) = Two-Way Stop Controlled; (OWSC) = One-Way Stop Controlled
NB=Northbound, WB=Westbound, etc.
L=Left-turn movement, R= Right-turn movement, LT=Left-Through lane, LTR=Left-Through-Right lane, etc.

As shown in Table 11, the following 17 study intersections are forecast to operate at a deficient LOS D or worse under Future Year 2035 conditions with Specific Plan Phase One:

1) SR-86 / 66th Avenue (AM/PM: LOS D)
2) SR-111 / Davis Road (PM: LOS E)
3) SR-111 / English Road (PM: LOS D)
4) SR-111 / Pound Road (PM: LOS E)
5) SR-111 / Sinclair Road (AM/PM: LOS F)
6) SR-111 / Lindsey Road (AM/PM: LOS F)
7) SR-111 / Main Street Calipatria (AM/PM: LOS F)
8) SR-78 / Brandt Road (PM: LOS D)
9) SR-111 / SR-78 Westbound Ramps (AM/PM: LOS D)
10) SR-86 / 1st Street-Main Street (AM: LOS D, PM: LOS E)
11) SR-86 / Barioni Boulevard (AM/PM: LOS D)
12) SR-86 / Aten Road (AM/PM: LOS D)
13) SR-111 / Aten Road (PM: LOS D)
14) SR-111 / Evan Hewes Highway (AM: LOS E; PM: LOS F)
15) SR-111 / Heber Road (AM: LOS E)
16) SR-111 / SR-98 (AM: LOS D)
17) Cesar Chavez Boulevard / 2nd Street (AM/PM: LOS F)

Improvements are recommended for 13 of the 17 study intersections listed above, which are presented in Section 7.5. However, improvements are not recommended for 4 of the 17 study intersections listed above, and below are the reasons why improvements are not recommended at these intersections:

SR-111 / Aten Road
The deficient LOS D operation during the PM peak hour is primarily attributed to the length of the eastbound pedestrian phase that crosses the south leg of SR-111 at the intersection. The total width of SR-111 at the pedestrian crossing is approximately 135 feet. As a result, a total of 50 seconds is needed to allow pedestrians to cross SR-111 on the south leg of the intersection. The length of this pedestrian phase requires an overall longer cycle length at the intersection when a pedestrian call is activated to cross SR-111 on the south leg of the intersection.

SR-111 / Evan Hewes Highway
The relatively long delays and deficient LOS E and F operations during the peak hours are primarily attributed to the length of the eastbound pedestrian phase that crosses the south leg of SR-111 at the intersection. The center median on SR-111 is approximately 45 feet wide and the total width of SR-111 at the pedestrian crossing is approximately 155 feet. As a result, a total of 57 seconds is needed to allow pedestrians to cross SR-111 on the south leg of the intersection. The length of this pedestrian phase requires an overall longer cycle length when a pedestrian call is activated to cross SR-111 on the south leg of the intersection.

SR-111 / Heber Road
The deficient LOS E operation during the PM peak hour is primarily attributed to the lengths of the eastbound and westbound pedestrian phases that cross SR-111 on the north and south legs of the intersection, which are each approximately 41 seconds. The east-west traffic volumes are relatively low and don't require 41 seconds to clear the intersection, so as a result, the intersection has an overall longer cycle length than what is needed to serve the vehicular traffic.

SR-111 / SR-98 (Birch street)
The deficient LOS D operations during the peak hours are primarily attributed to the lengths of the pedestrian phases across all legs of the intersection, ranging from 36 seconds to 39 seconds. These longer pedestrian phases require a longer overall cycle length than what would be needed to serve the vehicular traffic at the intersection.

8.4 Future Year 2035 With Specific Plan Phase One Conditions Roadway Segment Analysis

Table 12 summarizes the roadway segment capacity analysis results under Future Year 2035 With Specific Plan Phase One conditions. As shown in Table 12, the study roadway segments are forecast to operate at an acceptable LOS C or better under Future Year 2035 With Specific Plan Phase One conditions except for the following:

1) SR-111 between Main Street (Calipatria) and Ruegger Road (LOS D)
2) Sinclair Road between Gentry Road and Kalin Road (LOS D)
3) Sinclair Road between Kalin Road and Brandt Road (LOS D)
4) Sinclair Road between Brandt Road and English Road (LOS D)
5) Sinclair Road between English Road and SR-111 (LOS E)

Improvements are recommended for the five (5) above-listed roadway segments, which are presented in Section 7.5.

TABLE 12: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE ROADWAY SEGMENT ANALYSIS

Roadway	Segment	Existing or Proposed Future Classification	Roadway Capacity (LOS C) [1]	Year 2035 With Phase One ADT	LOS
SR-111	North of Davis Road	2-Lane State Highway	20,000	10,637	B
	Between Davis Road and English Road	2-Lane State Highway	20,000	7,424	B
	Between English Road and Main Street Niland	2-Lane State Highway	20,000	4,793	A
	Between Main Street Niland and Pound Road	2-Lane State Highway	20,000	6,844	B
	Between Pound Road and Sinclair Road	2-Lane State Highway	20,000	8,243	B
	Between Sinclair Road and Lindsey Road	2-Lane State Highway	20,000	14,124	C
	Between Lindsey Road and Main Street Calipatria	2-Lane State Highway	20,000	18,715	C
	Between Main Street Calipatria and Ruegger Road	2-Lane State Highway	20,000	**20,185**	**D**
	Between Ruegger Road and SR-78	2-Lane State Highway	20,000	17,593	C
SR-115	Between Northeast Avenue and Blair Road	2-Lane State Highway	20,000	4,499	A
SR-78/86	Between Lack Road and Martin Road	4-Lane State Highway	40,000	15,958	A
English Road	Between Gillespie Road and Highway 111	2-Lane Industrial Local	7,000	205	A
	Between Highway 111 and Pound Road	2-Lane Industrial Local	7,000	2,851	B
	Between Pound Road and Sinclair Road	2-Lane Industrial Local	7,000	4,477	C
	Between Sinclair Road and Lindsey Road	2-Lane Industrial Local	7,000	4,236	C
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	1,996	A
Brandt Road	Between Pound Road and Sinclair Road	2-Lane Industrial Local	7,000	3,746	B
	Between Sinclair Road and Lindsey Road	2-Lane Industrial Local	7,000	2,139	A
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	2,258	A
Davis Road / Kalin Road	Between Highway 111 and Pound Road	2-Lane Industrial Local	7,000	3,341	B
	Between Sinclair Road and Lindsey Road (Kalin Road)	2-Lane Industrial Local	7,000	1,962	A
	Between Lindsey Road and Eddins Road (Kalin Road)	2-Lane Industrial Local	7,000	2,742	B

TABLE 12 (CONTINUED): FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE ROADWAY SEGMENT ANALYSIS

Roadway	Segment	Existing or Proposed Future Classification	Roadway Capacity (LOS C) [1]	Year 2035 With Phase One ADT	LOS
Gentry Road	Between Sinclair Road and Lindsey Road	2-Lane Industrial Local	7,000	6,818	C
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	5,160	C
Lack Road	Between Lindsey Road and Vail Road	2-Lane Industrial Local	7,000	1,086	A
Pound Road	Between Davis Road and Brandt Road	2-Lane Industrial Local	7,000	3,797	B
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	3,989	B
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	3,938	B
Sinclair Road	Between Gentry Avenue and Kalin Road	2-Lane Industrial Local	7,000	**8,436**	**D**
	Between Kalin Road and Brandt Road	2-Lane Industrial Local	7,000	**8,433**	**D**
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	**8,040**	**D**
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	**8,964**	**E**
	Between Highway 111 and SP East Boundary	2-Lane Industrial Local	7,000	2,282	A
Lindsey Road	Between Gentry Avenue and Kalin Road	2-Lane Industrial Local	7,000	3,413	B
	Between Kalin Road and Brandt Road	2-Lane Industrial Local	7,000	2,633	B
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	2,825	B
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	4,340	B
	Between Highway 111 and SP East Boundary	2-Lane Industrial Local	7,000	3,316	B
Eddins Road / Main Street (Calipatria)	Between Gentry Avenue and Kalin Road	2-Lane Industrial Local	7,000	2,886	B
	Between Kalin Road and Brandt Road	2-Lane Industrial Local	7,000	2,886	B
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	2,496	A
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	4,492	B

Footnotes:
[1] Roadway classification and capacity sourced from the Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008). Imperial County accepts LOS C or better for roadway operations as identified in the Circulation Element.
Deficient LOS (LOS D or worse) indicated in **bold** text.

8.5 Future Year 2035 With Specific Plan Phase One Recommended Improvements

Based on the findings of the intersection and roadway segment analysis under Future Year 2035 conditions with Specific Plan Phase One, improvements are recommended to provide an acceptable LOS in compliance with the County of Imperial *General Plan Circulation and Scenic Highways Element* (January 29, 2008) and the County of Riverside *General Plan Circulation Element* (Amended December 12, 2017). All study intersections along a State Highway where installation of traffic signals are recommended will be subject to an Intersection Safety and Operations Assessment Process (ISOAP) to determine the appropriate intersection control as required by Caltrans.

8.5.1 Recommended Intersection Improvements

SR-86 / 66th Avenue

- Modify existing traffic signal to provide a right-turn overlap on the westbound 66th Avenue approach

SR-111 / Davis Road

- Install a traffic signal
- Widen the southbound SR-111 approach to provide a dedicated right-turn lane
- Provide protected + permissive left-turn phasing on the northbound SR-111 approach

SR-111 / English Road

- Install a traffic signal
- Widen the eastbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound SR-111 approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the eastbound and westbound SR-111 approaches
- Provide permissive left-turn phasing on the northbound and southbound English Road approaches

SR-111 / Pound Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane and one shared through/right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound and westbound Pound Road approaches to provide one left-turn lane and one shared through/right-turn lane on each approach
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Pound Road approaches

SR-111 / Sinclair Road

- Install a traffic signal
- Widen the northbound and southbound SR-111 approaches to provide one left-turn lane, one through lane and one right-turn lane on each approach
- Widen the eastbound Sinclair Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Sinclair Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Sinclair Road approaches
- Provide a right-turn overlap phase on the eastbound Sinclair Road approach

SR-111 / Lindsey Road

- Install a traffic signal
- Widen the northbound and southbound SR-111 approaches to provide one left-turn lane, one through lane and one right-turn lane on each approach
- Widen the eastbound Lindsey Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Lindsey Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Lindsey Road approaches

SR-111 / Main Street (Calipatria)

- Install a traffic signal
- Restripe and reconstruct the center median on the north and south legs of the intersection to provide one left-turn lane, one through lane and one shared through/right-turn lane on the northbound and southbound SR-111 approaches
- Restripe and reconstruct the center median on the east and west legs of the intersection to provide one left-turn lane, one through lane and one right-turn lane on the eastbound and westbound Main Street approaches
- Provide protected left-turn phasing on the northbound and southbound SR-111 approaches
- Provide protected + permissive left-turn phasing on the eastbound and westbound Main Street approaches

SR-78 / Brandt Road

- Install a traffic signal
- Provide protected left-turn phasing on the eastbound and westbound SR-78 approaches
- Provide permissive left-turn phasing on the northbound and southbound Brandt Road approaches

SR-111 / SR-78 Westbound Ramps – Del Rio Place

- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound approaches (Westbound SR-78 off-ramp and Del Rio Place)

SR-86 / 1st Street-Main Street

- Restripe the eastbound SR-86 (Main Street) approach to provide one left-turn lane, one through lane and one right-turn lane
- Restripe the westbound Main Street approach to provide two left-turn lanes and one shared through/ right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the northbound and southbound SR-86/1st Street approaches
- Modify the existing traffic signal to provide a right-turn overlap on the eastbound SR-86 (Main Street) approach

SR-86 / Barioni Boulevard

- Restripe the eastbound and westbound Barioni Boulevard approaches to provide one left-turn lane, one through lane and one right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Barioni Boulevard approaches

SR-86 / Aten Road

- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Aten Road approaches
- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-86 approach

Cesar Chavez Boulevard / 2nd Street*

- Modify the existing traffic signal to provide a right-turn overlap on the northbound approach (exiting the U.S./Mexico Port-of-Entry)
- Increase the traffic signal cycle length to 120 seconds during the AM peak hour, and 180 seconds during the PM peak hour

*The westbound left-turn movement at this intersection is the primary movement for traffic traveling across the border into Mexico, with the Port of Entry located 250 feet south of the intersection. There is currently only one left-turn lane on the westbound approach to serve approximately 1,120 vehicles during the Year 2035 PM peak hour that are traveling across the U.S./Mexico border into Mexico. Although the east leg of 2nd Street is wide enough to accommodate a second westbound left-turn lane, there is a center striped median with pavement markings indicating that the center lane is restricted to only emergency vehicles. Therefore, it is not feasible to provide a second westbound left-turn lane at the Cesar Chavez Boulevard / 2nd Street intersection.

8.5.2 Recommended Roadway Segment Improvements

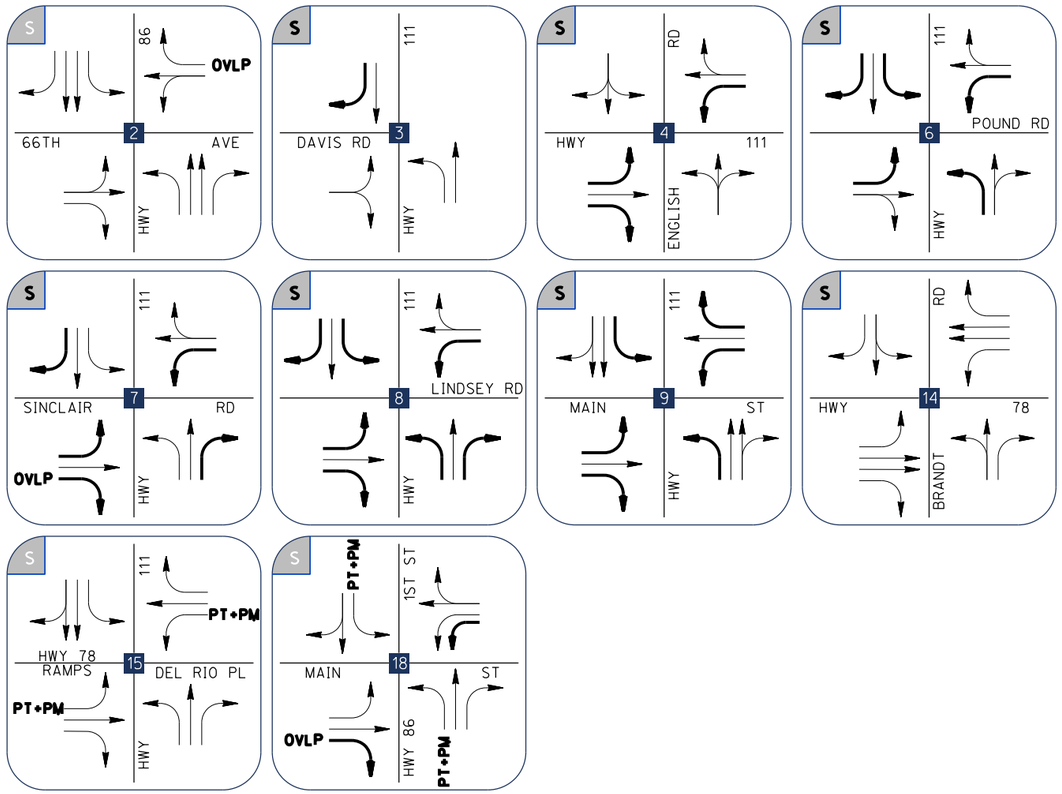
SR-111 between Main Street Calipatria and Ruegger Road

- Widen SR-111 from Bonita Street to Bowles Road to provide two travel lanes and a buffered Class II bike lane in each direction of travel to match the existing cross-section of SR-111 north of Bonita Street
- Widen SR-111 from Bowles Road to Ruegger Road to a four-lane Divided State Highway

Sinclair Road between Gentry Road and SR-111

- Widen Sinclair Road from Gentry Road to SR-111 to two-lane Major Industrial Collector standards

Exhibits 21A and 21B illustrate the Future Year 2035 With Specific Plan Phase One recommended intersection and roadway segment improvements as described above within the north and south study areas, respectively.



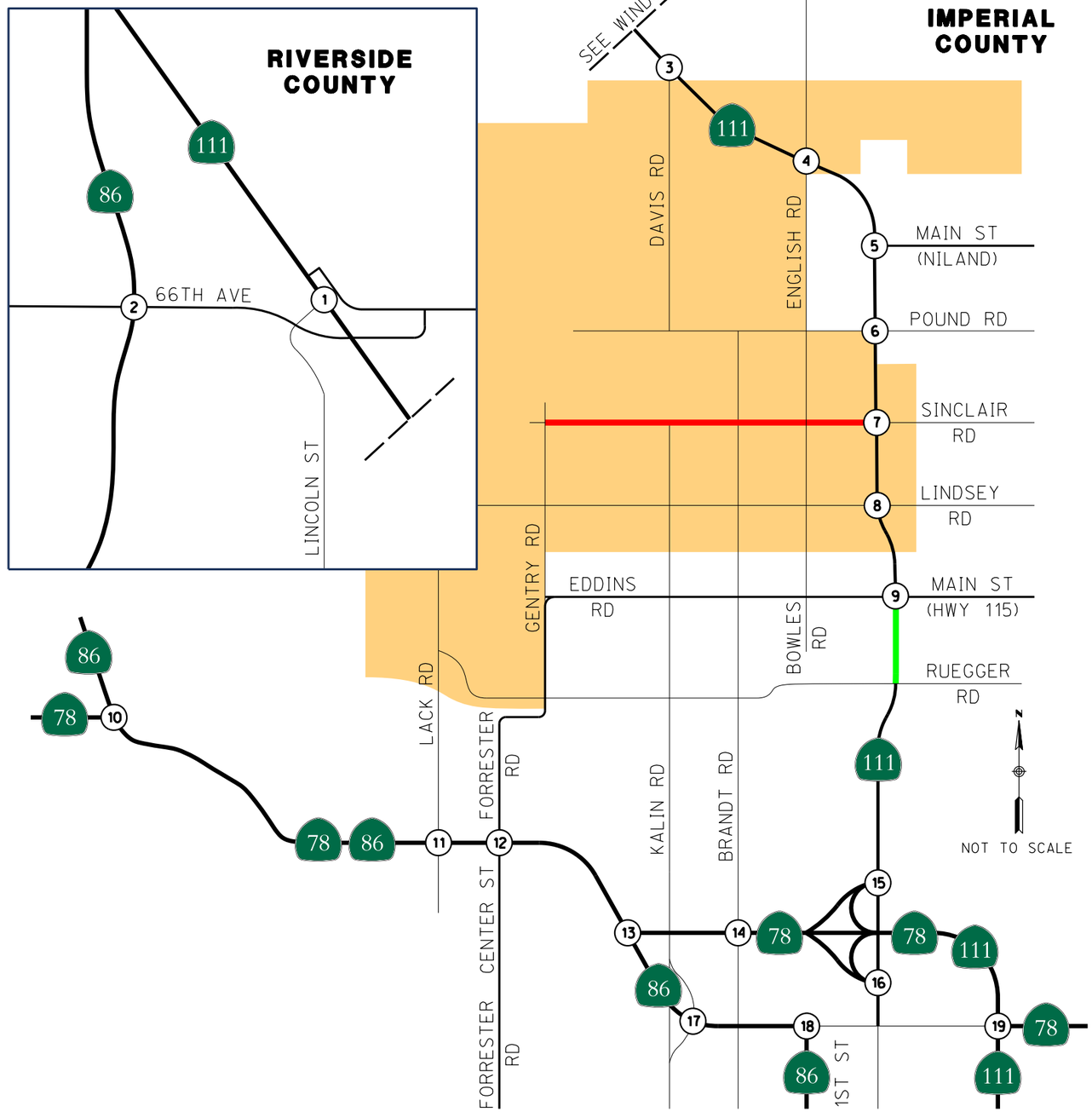


EXHIBIT 21A

FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE
RECOMMENDED IMPROVEMENTS - NORTH STUDY AREA

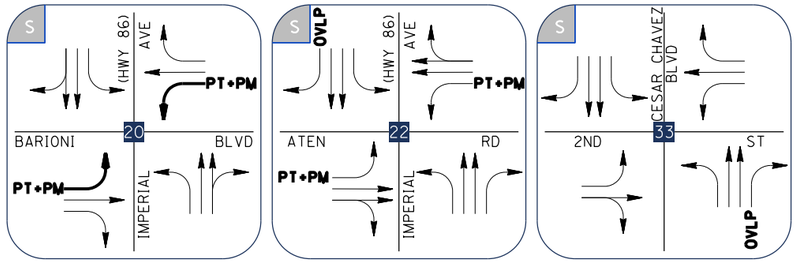
LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

- S = RECOMMENDED TRAFFIC SIGNAL
- S = EXISTING TRAFFIC SIGNAL
- = EXISTING LANE CONFIGURATION
- = RECOMMENDED LANE CONFIGURATION
- PT+PM = RECOMMENDED PROTECTED PERMISSIVE PHASING
- OVLP = RECOMMENDED RIGHT-TURN OVERLAP
- = IMPROVE TO 2-LANE MAJOR INDUSTRIAL COLLECTOR
- = IMPROVE TO 4-LANE STATE HIGHWAY
- (X) = STUDY INTERSECTION
- =SPECIFIC PLAN SITE

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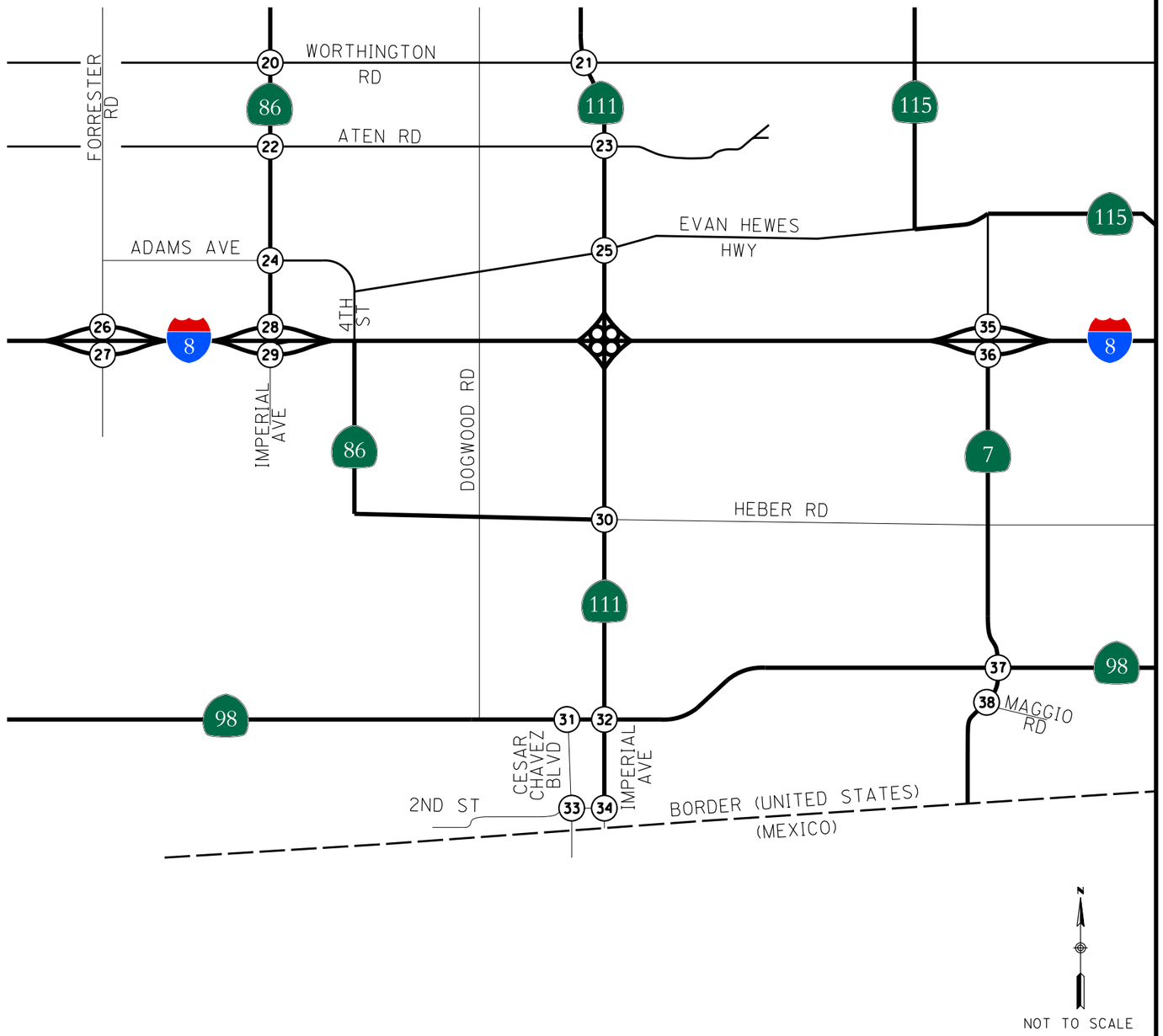


EXHIBIT 21B

FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE RECOMMENDED IMPROVEMENTS - SOUTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

= EXISTING LANE CONFIGURATION

= RECOMMENDED LANE CONFIGURATION

PT+PM = RECOMMENDED PROTECTED PERMISSIVE PHASING

OVLP = RECOMMENDED RIGHT-TURN OVERLAP

(X) = STUDY INTERSECTION

S = EXISTING TRAFFIC SIGNAL

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8.5.3 Intersection LOS With Recommended Improvements

Table 13 displays the operational analysis results for the study intersections with the recommended improvements under Future Year 2035 With Specific Plan Phase One conditions. **Appendix E** contains the Future Year 2035 With Specific Plan Phase One With Recommended Improvements intersection analysis worksheets.

TABLE 13: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE INTERSECTION OPERATIONS WITH RECOMMENDED IMPROVEMENTS

#	Intersection	Control	Future Year 2035 With SP Phase One With Recommended Improvements					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
2	SR-86 / 66th Avenue	(SIGNAL)	Overall	28.9	C	Overall	34.1	C
3	SR-111 / Davis Road	(SIGNAL)	Overall	11.1	B	Overall	14.1	B
4	SR-111 / English Road	(SIGNAL)	Overall	6.3	A	Overall	11.8	B
6	SR-111 / Pound Road	(SIGNAL)	Overall	10.0	A	Overall	11.1	B
7	SR-111 / Sinclair Road	(SIGNAL)	Overall	11.8	B	Overall	17.7	B
8	SR-111 / Lindsey Road	(SIGNAL)	Overall	13.2	B	Overall	26.4	C
9	SR-111 / Main Street (in Calipatria)	(SIGNAL)	Overall	26.6	C	Overall	29.5	C
14	SR-78 / Brandt Road	(SIGNAL)	Overall	12.3	B	Overall	14.5	B
15	SR-111 / SR-78 WB Ramps	(SIGNAL)	Overall	27.8	C	Overall	30.0	C
18	SR-86 / 1st Street-Main Street	(SIGNAL)	Overall	28.5	C	Overall	31.8	C
20	SR-86 / Barioni Boulevard	(SIGNAL)	Overall	20.1	C	Overall	18.1	B
22	SR-86 / Aten Road	(SIGNAL)	Overall	**38.6**	**D**	Overall	**40.3**	**D**
33	Cesar Chavez Boulevard / 2nd Street	(SIGNAL)	Overall	27.6	C	Overall	**62.6**	**E**

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 7th edition of the HCM.
1) Delay is measured in seconds per vehicle.
2) Level of Service
(AWSC) = All-Way Stop Controlled; (TWSC) = Two-Way Stop Controlled; (OWSC) = One-Way Stop Controlled
NB=Northbound, WB=Westbound, etc.
L=Left-turn movement, R= Right-turn movement, LT=Left-Through lane, LTR=Left-Through-Right lane, etc.

As shown in Table 13, the recommended improvements are anticipated to improve operations under Future Year 2035 With Specific Plan Phase One conditions to LOS C or better during the peak hours except for the following:

- SR-86 / Aten Road (AM/PM: LOS D with recommended improvements)
- Cesar Chavez Boulevard / 2nd Street (PM: LOS E with recommended improvements)

8.5.4 Intersection Queuing Analysis With Recommended Improvements

A queuing analysis was performed for the study intersections under Future Year 2035 With Specific Plan Phase One conditions with the recommended improvements to determine the storage lengths that would be needed for the recommended future left-turn and right-turn lanes, to determine if the existing storage lengths would accommodate the peak queue lengths, and to ensure that queuing at the intersection approaches of the off-ramps would not spill back onto the freeway mainline. The queuing analysis results are based on the 95th percentile queue lengths in feet for each turning movement or approach. The SimTraffic application within the Synchro 12 software program was used to perform the queuing analysis.

The results of the queuing analysis under Future Year 2035 With Specific Plan Phase One conditions are provided in **Table 14**. **Appendix F** contains the SimTraffic queuing analysis worksheets.

As shown in Table 14, the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections under Future Year 2035 With Specific Plan Phase One conditions with the recommended improvements except for at the following study intersections:

SR-86 / 1st Street-Main Street

- Northbound Left-Turn Lane (AM/PM)

SR-86 / Aten Road

- Eastbound Left-Turn Lane (PM)
- Westbound Left-Turn Lane (PM)

8.5.5 Roadway Segment LOS With Recommended Improvements

Table 15 displays the roadway segment analysis results with the recommended improvements under Future Year 2035 With Specific Plan Phase One conditions. As shown in Table 15, the recommended improvements are anticipated to improve daily roadway segment LOS to LOS C or better under Future Year 2035 With Specific Plan Phase One conditions.

TABLE 14: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE INTERSECTION QUEUING ANALYSIS WITH RECOMMENDED IMPROVEMENTS

	Study Intersection	Peak Hour	Northbound						Southbound						Eastbound						Westbound					
			Left			Right			Left			Right			Left			Right			Left			Right		
			Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes
3	SR-111 / Davis Road	AM	7'	385'	1	-	-	-	-	-	-	65'	DNE	1	72'	-	1 (LR)	-	-	-	-	-	-	-	-	-
		PM	4'						-			58'			171'											
4	SR-111 / English Road	AM	59'	-	1 (LTR)	-	-	-	18'	-	1 (LTR)	-	-	-	8'	DNE	1	31'	DNE	1	0'	DNE	1	62'	-	1 (TR)
		PM	128'						19'						2'			33'			0'			158'		
6	SR-111 / Pound Road	AM	93'	DNE	1	72'	-	1 (TR)	0'	DNE	1	62'	DNE	1	52'	DNE	1	46'	-	1 (TR)	0'	DNE	1	0'	-	1 (TR)
		PM	91'			141'			0'			51'			93'			78'			0'			0'		
7	SR-111 / Sinclair Road	AM	157'	240'	1	38'	DNE	1	52'	290'	1	78'	DNE	1	96'	DNE	1	68'	DNE	1	64'	DNE	1	22'	-	1 (TR)
		PM	221'			33'			29'			74'			106'			227'			164'			83'		
8	SR-111 / Lindsey Road	AM	84'	DNE	1	30'	DNE	1	55'	DNE	1	37'	DNE	1	35'	DNE	1	45'	DNE	1	50'	DNE	1	41'	-	1 (TR)
		PM	140'			24'			195'			248'			75'			173'			127'			94'		
9	SR-111 / Main Street Calipatria	AM	312'	DNE	1	284'	-	1 (TR)	103'	DNE	1	140'	-	1 (TR)	151'	DNE	1	71'	DNE	1	76'	DNE	1	80'	DNE	1
		PM	165'			217'			334'			398'			133'			128'			137'			67'		
14	SR-78 / Brandt Road	AM	48'	-	1 (LT)	31'	30'	1	69'	-	1 (LT)	4'	30'	1	0'	570'	1	0'	570'	1	30'	650'	1	48'	650'	1
		PM	40'			21'			182'			0'			6'			3'			41'			40'		
15	SR-111 / SR-78 WB Ramps	AM	169'	600'	1	5'	285'	1	26'	225'	1	166'	-	1 (TR)	1,156'	1,940'[1]	1	97'	185'	1	4'	130'	1	22'	130'	1
		PM	112'			6'			23'			307'			496'			28'			30'			25'		
18	SR-86 / 1st Street-Main Street	AM	**234'**	210'	1	148'	-	1	99'	100'	1	234'	-	1 (TR)	78'	165'	1	92'	-	1	174'	245'	2	235'	-	1 (TR)
		PM	**235'**			137'			67'			193'			180'			174'			259'			256'		
20	SR-86 / Barioni Boulevard	AM	129'	245'	1	192'	-	1 (TR)	94'	235'	1	217'	-	1 (TR)	147'	DNE	1	146'	-	1	92'	DNE	1	83'	-	1
		PM	153'			178'			58'			223'			101'			112'			114'			61'		
22	SR-86 / Aten Road	AM	138'	390'	1	68'	305'	1	277'	340'	1	158'	340'	1	283'	280'	1	204'	-	1 (TR)	168'	145'	1	254'	-	1 (TR)
		PM	157'			119'			233'			86'			**323'**			175'			**178'**			189'		

Footnotes:
Queue length exceeding existing storage length by at least one car length (20 feet) indicated in **bold**.
DNE = Does Not Exist
L = Left; R = Right, T = Through
LTR = Shared left/through/right lane
LT = Shared left/through lane
LR = Shared left/right lane
TR = Shared through/right lane
[1] Total length of off-ramp from gore point to intersection stop bar.
[2] No turn pocket, transition from through lane to right-turn lane.

TABLE 15: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE ROADWAY SEGMENT ANALYSIS WITH RECOMMENDED IMPROVEMENTS

Roadway	Segment	Existing or Proposed Future Classification / *Recommended Classification*	ROADWAY CAPACITY (LOS C) [1]	Year 2035 With Phase 1 ADT	LOS
SR-111	Between Main Street Calipatria and Ruegger Road	2-Lane State Highway	20,000	**20,185**	**D**
	With Recommended Improvement	*4-Lane State Highway*	*40,000*	*20,185*	*B*
Sinclair Road	Between Gentry Avenue and Kalin Road	2-Lane Industrial Local	7,000	**8,436**	**D**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*8,436*	*C*
	Between Kalin Road and Brandt Road	2-Lane Industrial Local	7,000	**8,433**	**D**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*8,433*	*C*
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	**8,040**	**D**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*8,040*	*C*
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	**8,964**	**E**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*8,964*	*C*

Footnotes:
[1] Roadway classification and capacity sourced from the Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008). Imperial County accepts LOS C or better for roadway operations as identified in the Circulation Element.
Deficient LOS (LOS D or worse) indicated in **bold** text.

9.0 FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO TRANSPORTATION CONDITIONS

Future Year 2050 With Specific Plan Phase Two conditions reflect the completion of the Phase Two land uses within the Lithium Valley Specific Plan. The Year 2050 scenario of the Southern California Association of Governments (SCAG) regional travel demand model was used to develop the Future Year 2050 With Specific Plan Phase Two traffic volumes in the study area.

The proposed Specific Plan Phase Two land uses were inputted into the Travel Analysis Zones (TAZs) that make up the Lithium Valley Specific Plan area in the SCAG model, which was run for the SCAG model Year 2050 scenario.

9.1 Future Year 2050 With Specific Plan Phase Two Conditions Roadway Network

The Future Year 2050 With Specific Plan Phase Two roadway network assumes that all roadways connecting the project site to SR-111 or SR-78/86 would be paved and that all key roadways accessing the Specific Plan site would be built to at least two-lane Industrial Local standards. The recommended Future Year 2035 With Specific Plan Phase One roadway and intersection improvements are assumed to be built prior to completion of Specific Plan Phase Two.

9.2 Future Year 2050 With Specific Plan Phase Two Conditions Traffic Volumes

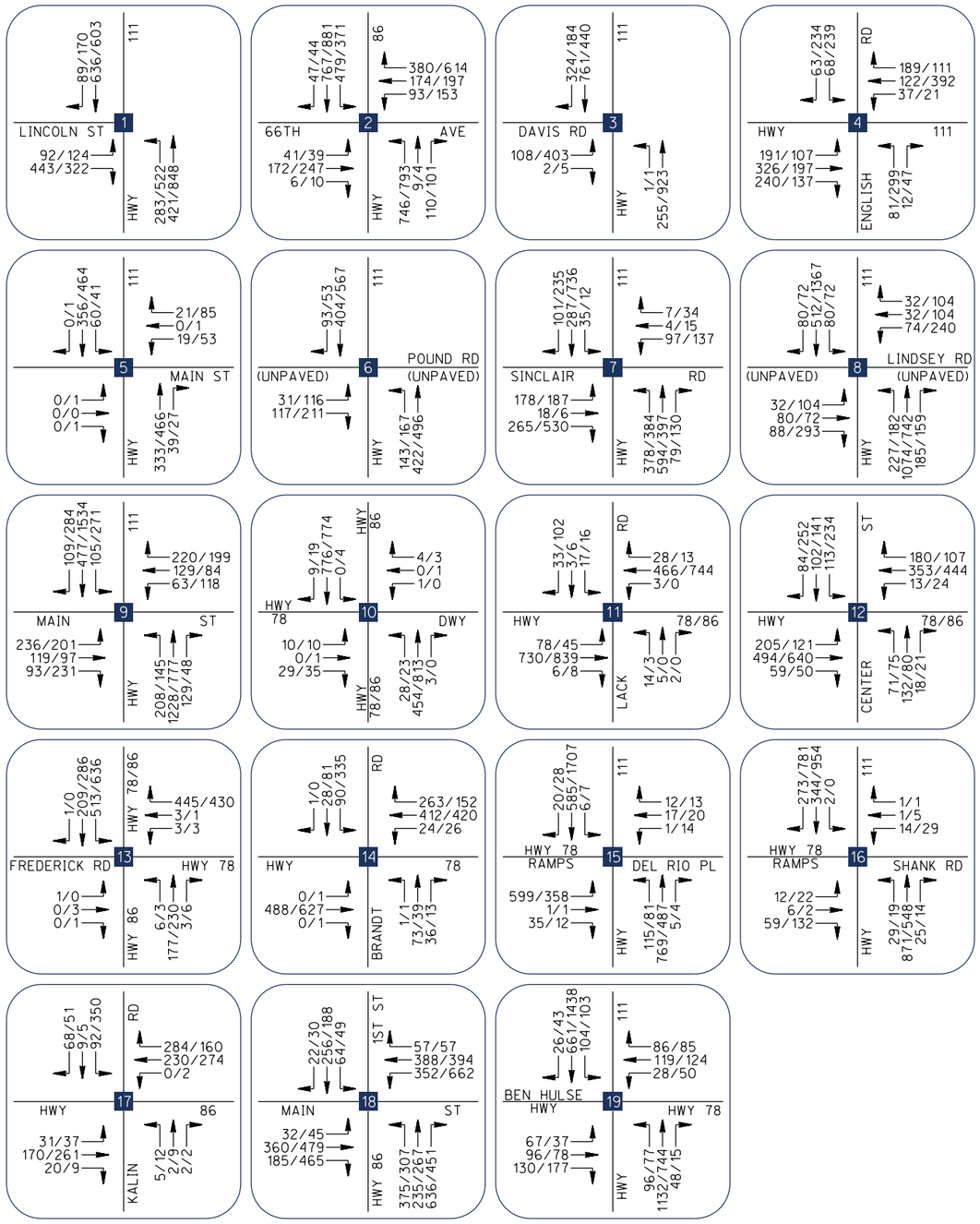
The Future Year 2050 With Specific Plan Phase Two traffic volumes were derived based on the forecast growth in traffic in the SCAG model and the distribution of project trips. Growth factors were developed based on the forecast traffic growth from Baseline Year 2019 to Future Year 2050 No Project/No General Plan traffic volumes. These growth factors were applied to Existing Year 2025 traffic volume counts where applicable to reflect 25 years of growth from 2025 to 2050.

The Future Year 2050 No Project/No General Plan traffic volumes were post-processed to develop the intersection turning movement volumes during the AM and PM peak hours. Adjustments were made where appropriate to reflect changes in traffic patterns and growth on all legs of the study intersections.

Project-specific daily and AM/PM peak hour trips associated with the proposed Phase Two land uses were added to the Future Year 2050 No Project/No General Plan traffic volumes to develop the Future Year 2050 With Specific Plan Phase Two traffic volumes.

Exhibits 22A and **22B** illustrate the Future Year 2050 With Specific Plan Phase Two AM/PM peak hour intersection turning movement volumes within the north and south study areas, respectively.

Exhibit 23 illustrates the Future Year 2050 With Specific Plan Phase Two daily traffic volumes within the north study area.



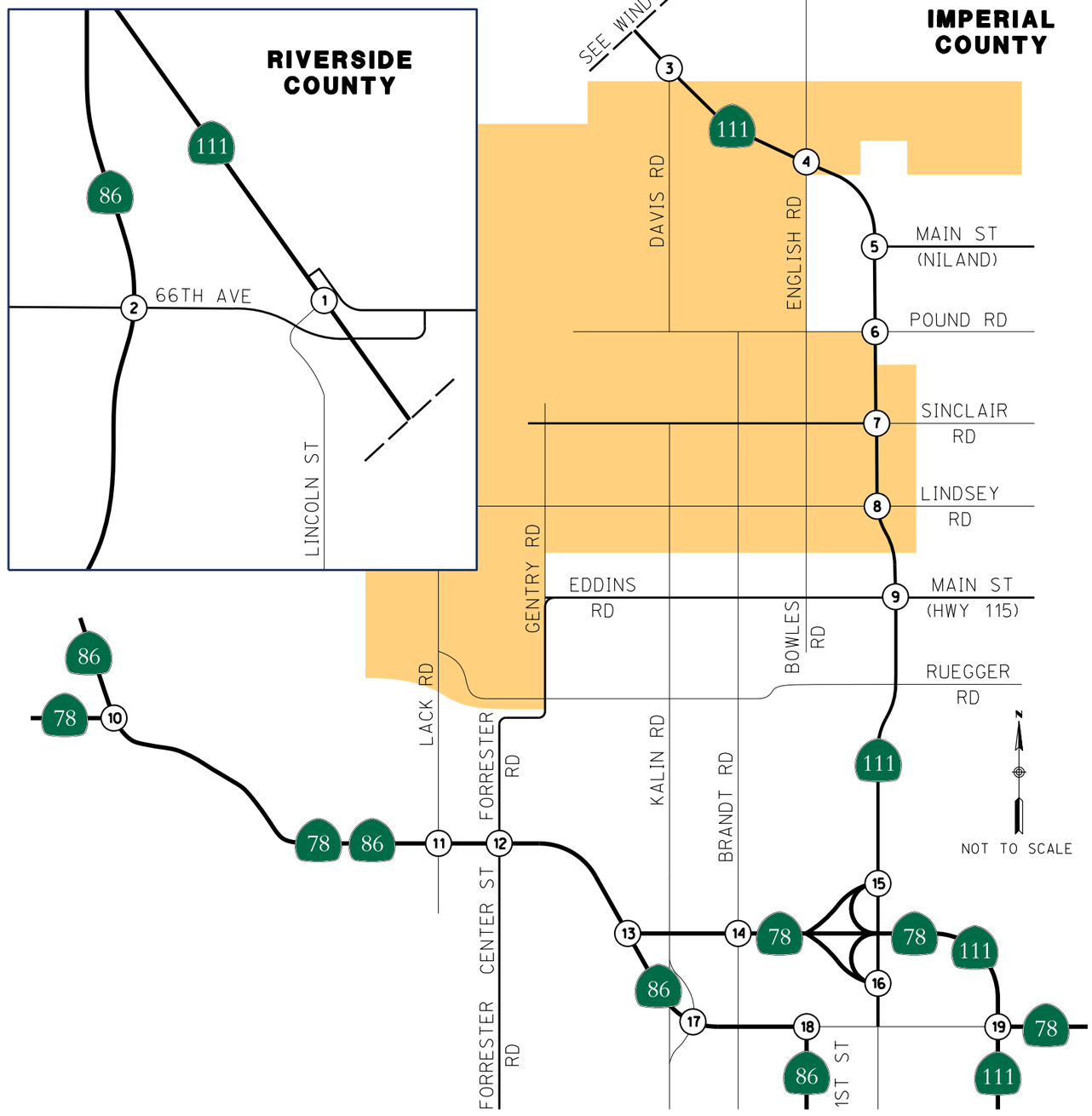


EXHIBIT 22A

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO PEAK HOUR INTERSECTION TRAFFIC VOLUMES - NORTH STUDY AREA

LEGEND
AM/PM=PEAK HOUR VOLUMES
=SPECIFIC PLAN SITE

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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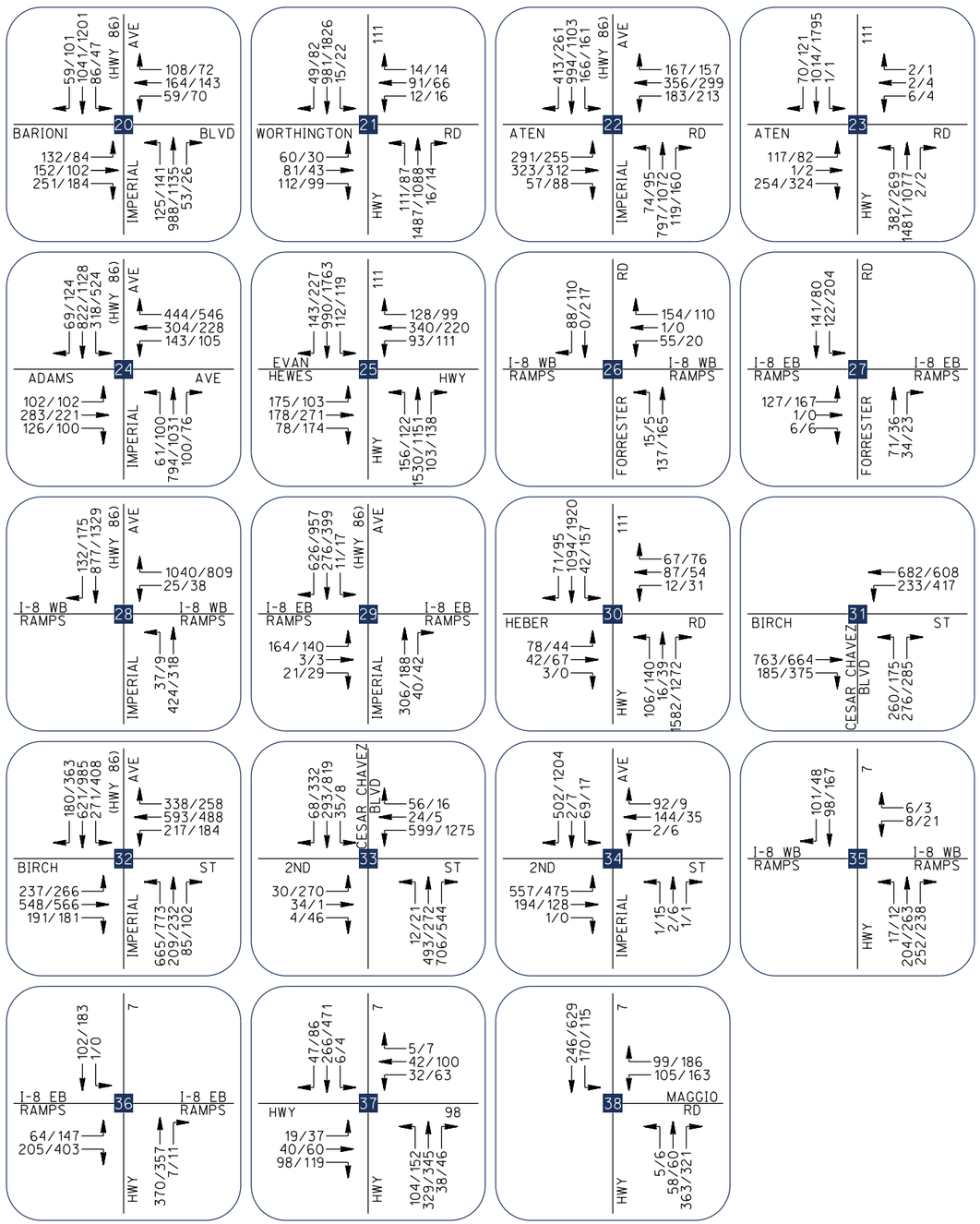


EXHIBIT 22B

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO PEAK HOUR INTERSECTION TRAFFIC VOLUMES - SOUTH STUDY AREA

LEGEND: AM/PM=PEAK HOUR VOLUMES

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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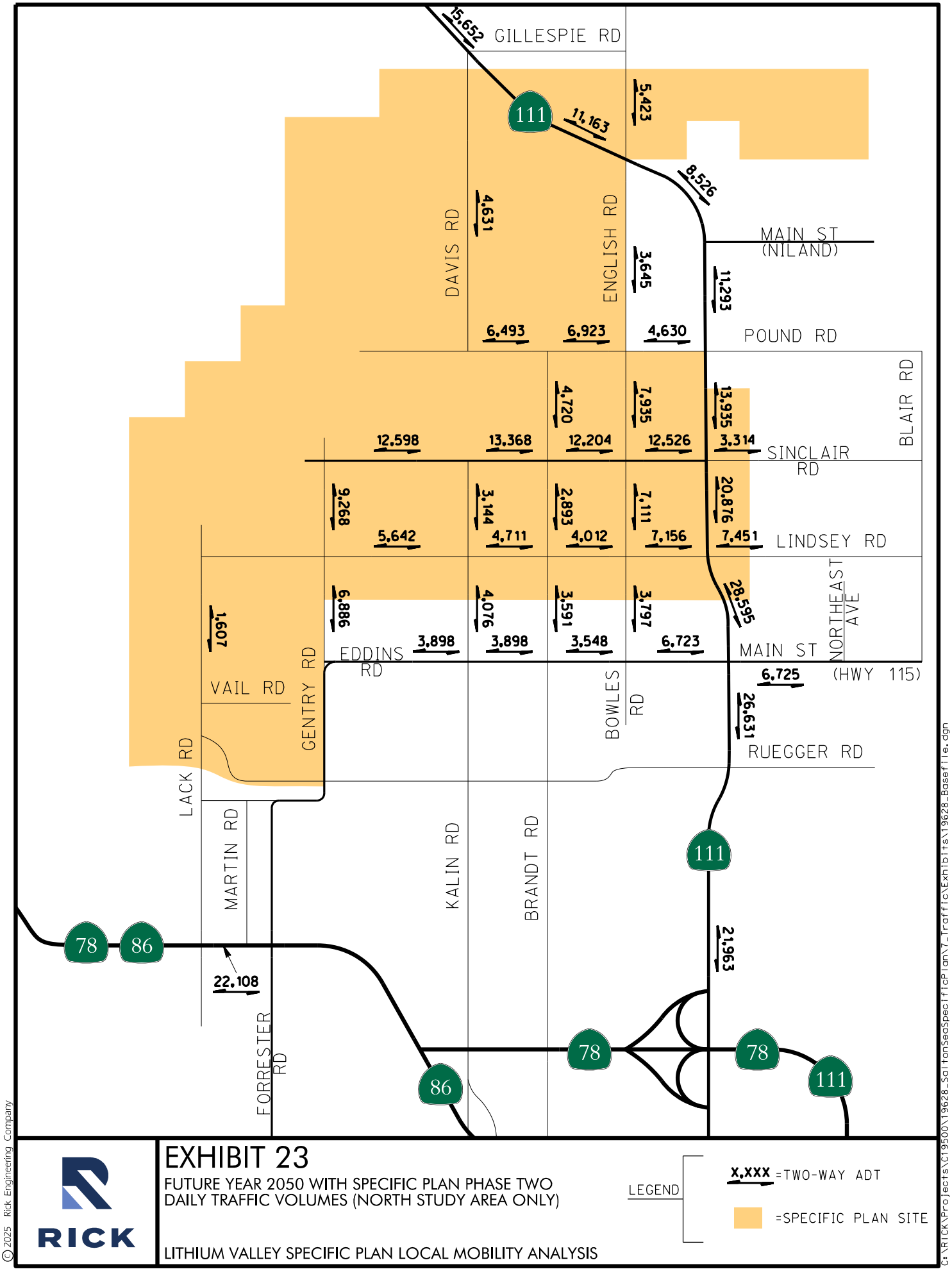


EXHIBIT 23

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO
DAILY TRAFFIC VOLUMES (NORTH STUDY AREA ONLY)

LEGEND
X,XXX =TWO-WAY ADT
=SPECIFIC PLAN SITE

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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9.3 Future Year 2050 With Specific Plan Phase Two Conditions Intersection Operations

Table 16 displays the operational analysis results for the study intersections under Future Year 2050 With Specific Plan Phase Two conditions. **Appendix B** contains the Future Year 2050 With Specific Plan Phase Two intersection analysis worksheets.

TABLE 16: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO INTERSECTION OPERATIONS

#	Intersection	Control	Future Year 2050 With SP Phase Two					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
1	SR-111 / Lincoln Street	(SIGNAL)	Overall	18.7	B	Overall	34.4	C
2	SR-86 / 66th Avenue	(SIGNAL)	Overall	**67.2**	**E**	Overall	**86.4**	**F**
3	SR-111 / Davis Road	(SIGNAL)	Overall	17.7	B	Overall	**41.3**	**D**
4	SR-111 / English Road	(SIGNAL)	Overall	12.1	B	Overall	33.7	C
5	SR-111 / Main Street (in Niland)	(OWSC)	WB-L	12.9	B	WB-L	17.0	C
6	SR-111 / Pound Road	(SIGNAL)	Overall	10.9	B	Overall	21.4	C
7	SR-111 / Sinclair Road	(SIGNAL)	Overall	16.0	B	Overall	**45.4**	**D**
8	SR-111 / Lindsey Road	(SIGNAL)	Overall	25.5	C	Overall	**119.8**	**F**
9	SR-111 / Main Street (in Calipatria)	(SIGNAL)	Overall	**40.2**	**D**	Overall	**66.3**	**E**
10	SR-86 / SR-78 (west)	(TWSC)	EB-L	14.0	B	EB-L	14.3	B
11	SR-78/86 / Lack Road	(TWSC)	NB-L	21.7	C	NB-L	23.9	C
12	SR-78/86 / Center Street (Forrester Road)	(SIGNAL)	Overall	31.3	C	Overall	**38.9**	**D**
13	SR-86 / SR-78 (east)	(SIGNAL)	Overall	18.6	B	Overall	18.8	B
14	SR-78 / Brandt Road	(SIGNAL)	Overall	15.3	B	Overall	20.3	C
15	SR-111 / SR-78 WB Ramps	(SIGNAL)	Overall	**55.9**	**E**	Overall	**49.0**	**D**
16	SR-111 / SR-78 EB Ramps	(SIGNAL)	Overall	17.3	B	Overall	20.8	C
17	SR-86 / Kalin Road	(TWSC)	SB-L	12.2	B	SB-L	**25.9**	**D**
18	SR-86 / 1st Street-Main Street	(SIGNAL)	Overall	**42.7**	**D**	Overall	**53.4**	**D**
19	SR-111 / Ben Hulse Highway	(SIGNAL)	Overall	33.9	C	Overall	**49.2**	**D**
20	SR-86 / Barioni Boulevard	(SIGNAL)	Overall	22.9	C	Overall	21.8	C
21	SR-111 / Worthington Road	(SIGNAL)	Overall	31.0	C	Overall	34.6	C
22	SR-86 / Aten Road	(SIGNAL)	Overall	**43.1**	**D**	Overall	**46.1**	**D**
23	SR-111 / Aten Road	(SIGNAL)	Overall	27.3	C	Overall	**73.1**	**E**
24	SR-86 / Adams Avenue	(SIGNAL)	Overall	33.9	C	Overall	34.8	C
25	SR-111 / Evan Hewes Highway	(SIGNAL)	Overall	**89.1**	**F**	Overall	**100.1**	**F**
26	Forrester Road / I-8 WB Ramps	(TWSC)	WB-L	10.8	B	WB-L	12.8	B
27	Forrester Road / I-8 EB Ramps	(TWSC)	EB-L	16.1	C	EB-L	20.1	C

TABLE 16 (CONTINUED): FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO INTERSECTION OPERATIONS

#	Intersection	Control	Future Year 2050 With SP Phase Two					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
28	SR-86 / I-8 Westbound Ramps	(SIGNAL)	Overall	**38.0**	**D**	Overall	**36.3**	**D**
29	SR-86 / I-8 Eastbound Ramps	(SIGNAL)	Overall	6.4	A	Overall	5.0	A
30	SR-111 / Heber Road	(SIGNAL)	Overall	**71.8**	**E**	Overall	**40.7**	**D**
31	Cesar Chavez Boulevard / SR-98 (Birch Street)	(SIGNAL)	Overall	14.7	B	Overall	28.6	C
32	SR-111 / SR-98 (Birch Street)	(SIGNAL)	Overall	**36.3**	**D**	Overall	**40.5**	**D**
33	Cesar Chavez Boulevard / 2nd Street	(SIGNAL)	Overall	31.0	C	Overall	**93.8**	**F**
34	SR-111 / 2nd Street	(SIGNAL)	Overall	22.9	C	Overall	34.0	C
35	SR-7 / I-8 Westbound Ramps	(TWSC)	WB-L	10.5	B	WB-L	12.0	B
36	SR-7 / I-8 Eastbound Ramps	(TWSC)	EB-L	11.3	B	EB-L	13.4	B
37	SR-7 / SR-98	(SIGNAL)	Overall	22.5	C	Overall	28.4	C
38	SR-7 / Maggio Road	(SIGNAL)	Overall	29.2	C	Overall	25.3	C

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 7th edition of the HCM.
1) Delay is measured in seconds per vehicle.
2) Level of Service
(AWSC) = All-Way Stop Controlled; (TWSC) = Two-Way Stop Controlled; (OWSC) = One-Way Stop Controlled
NB=Northbound, WB=Westbound, etc.
L=Left-turn movement, R= Right-turn movement, LT=Left-Through lane, LTR=Left-Through-Right lane, etc.

As shown in Table 16, the following 17 study intersections are forecast to operate at a deficient LOS D or worse under Future Year 2050 conditions with Specific Plan Phase Two:

1) SR-86 / 66th Avenue (AM: LOS E, PM: LOS F)
2) SR-111 / Davis Road (PM: LOS D)
3) SR-111 / Sinclair Road (PM: LOS D)
4) SR-111 / Lindsey Road (PM: LOS F)
5) SR-111 / Main Street Calipatria (AM: LOS D, PM: LOS E)
6) SR-78/86 / Center Street (PM: LOS D)
7) SR-111 / SR-78 Westbound Ramps (AM: LOS E, PM: LOS D)
8) SR-86 / Kalin Road (PM: LOS D)
9) SR-86 / 1st Street-Main Street (AM/PM: LOS D)
10) SR-111 / Ben Hulse Highway (PM: LOS D)
11) SR-86 / Aten Road (AM/PM: LOS D)
12) SR-111 / Aten Road (PM: LOS E)
13) SR-111 / Evan Hewes Highway (AM/PM: LOS F)
14) SR-86 / I-8 Westbound Ramps (AM/PM: LOS D)
15) SR-111 / Heber Road (AM: LOS E, PM: LOS D)
16) SR-111 / SR-98 (AM/PM: LOS D)
17) Cesar Chavez Boulevard / 2nd Street (PM: LOS F)

Improvements are recommended for 9 of the 17 study intersections listed above, which are presented in Section 8.5. However, improvements are not recommended for 8 of the 17 study intersections listed above, and below are the reasons why improvements are not recommended at these intersections:

SR-86 / 1st Street-Main Street

The recommended Year 2035 With Specific Plan Phase One improvements at the SR-86 / 1st Street-Main Street intersection consist of restriping the existing lanes and modifying the existing traffic signal, which can be achieved without widening the roadways at the intersection. Any further improvements at this intersection would require widening to provide additional lanes, and widening is not feasible due to the existing development abutting all corners of the intersections. Therefore, no further improvements are recommended at the SR-86 / 1st Street-Main Street intersection.

SR-111 / Ben Hulse Highway

The deficient LOS D operation during the PM peak hour is primarily attributed to the lengths of the eastbound and westbound pedestrian phases that cross SR-111 on the north and south legs of the intersection, which are approximately 51 seconds and 49 seconds, respectively. The length of these pedestrian phases require an overall longer cycle length at the intersection when a pedestrian call is activated to cross SR-11 on the north and south legs of the intersection.

SR-86 / Aten Road

The recommended Year 2035 With Specific Plan Phase One improvements at the SR-86 / Aten Road intersection consist of restriping the existing lanes and modifying the existing traffic signal, which can be achieved without widening the roadways at the intersection. Any further improvements at this intersection would require widening to provide additional lanes, and widening is not feasible due to the existing development abutting all corners of the intersections. Therefore, no further improvements are recommended at the SR-86 / Aten Road intersection.

SR-111 / Aten Road

The deficient LOS E operation during the PM peak hour is primarily attributed to the length of the eastbound pedestrian phase that crosses the south leg of SR-111 at the intersection. The total width of SR-111 at the pedestrian crossing is approximately 135 feet. As a result, a total of 50 seconds is needed to allow pedestrians to cross SR-111 on the south leg of the intersection. The length of this pedestrian phase requires an overall longer cycle length when a pedestrian call is activated to cross SR-111 on the south leg of the intersection.

SR-111 / Evan Hewes Highway

The relatively long delays and deficient LOS F operations during the peak hours are primarily attributed to the length of the eastbound pedestrian phase that crosses the south leg of SR-111 at the intersection. The center median on SR-111 is approximately 45 feet wide and the total width of SR-111 at the pedestrian crossing is approximately 155 feet. As a result, a total of 57 seconds is needed to allow pedestrians to cross SR-111 on the south leg of the intersection. The length of this pedestrian phase requires an overall longer cycle length when a pedestrian call is activated to cross SR-111 on the south leg of the intersection.

SR-111 / Heber Road
The deficient LOS D and E operations during the peak hours are primarily attributed to the lengths of the eastbound and westbound pedestrian phases that cross the north and south legs of SR-111 at the intersection, which are each approximately 41 seconds. The east-west traffic volumes are relatively low and don't require 41 seconds to clear the intersection, so as a result, the intersection has an overall longer cycle length than what is needed to serve the vehicular traffic.

SR-111 / SR-98 (Birch street)
The deficient LOS D operations during the peak hours are primarily attributed to the lengths of the pedestrian phases across all legs of the intersection, ranging from 36 seconds to 39 seconds. These longer pedestrian phases require a longer overall cycle length than what would be needed to serve the vehicular traffic at the intersection.

Cesar Chavez Boulevard / SR-98 (Birch street)
Any further improvements at the Cesar Chavez Boulevard / SR-98 (Birch street) intersection are not feasible due to existing development at all corners of the intersections, and for the following reason: The westbound left-turn movement at this intersection is the primary movement for traffic traveling across the border into Mexico, with the Port of Entry located 250 feet south of the intersection. There is currently only one left-turn lane on the westbound approach to serve approximately 1,275 vehicles during the Year 2050 PM peak hour that are traveling across the U.S./Mexico border into Mexico. Although the east leg of 2nd Street is wide enough to accommodate a second westbound left-turn lane, there is a center striped median with pavement markings indicating that the center lane is restricted to only emergency vehicles. Therefore, it is not feasible to provide a second westbound left-turn lane at the Cesar Chavez Boulevard / 2nd Street intersection.

9.4 Future Year 2050 With Specific Plan Phase Two Conditions Roadway Segment Analysis

Table 17 summarizes the roadway segment capacity analysis results under Future Year 2050 With Specific Plan Phase Two conditions. As shown in Table 17, the study roadway segments are forecast to operate at an acceptable LOS C or better under Future Year 2050 With Specific Plan Phase Two conditions except for the following:

1) SR-111 between Sinclair Road and Lindsey Road (LOS D)
2) SR-111 between Lindsey Road and Main Street (Calipatria) (LOS F)
3) SR-111 between Ruegger Road and SR-78 (LOS D)
4) English Road between Pound Road and Sinclair Road (LOS D)
5) English Road between Sinclair Road and Lindsey Road (LOS D)
6) Gentry Road between Sinclair Road and Lindsey Road (LOS E)
7) Sinclair Road between Gentry Road and Kalin Road (LOS D)
8) Sinclair Road between Kalin Road and Brandt Road (LOS E)
9) Sinclair Road between Brandt Road and English Road (LOS D)
10) Sinclair Road between English Road and SR-111 (LOS D)
11) Lindsey Road between English Road and SR-111 (LOS D)
12) Lindsey Road between SR-111 and Specific Plan East Boundary (LOS D)

Improvements are recommended for the 12 above-listed roadway segments, which are presented in Section 8.5.

TABLE 17: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO ROADWAY SEGMENT ANALYSIS

Roadway	Segment	Existing or Proposed Future Classification	Roadway Capacity (LOS C) [1]	Year 2050 With Phase Two ADT	LOS
SR-111	North of Davis Road	2-Lane State Highway	20,000	15,652	C
	Between Davis Road and English Road	2-Lane State Highway	20,000	11,163	B
	Between English Road and Main Street Niland	2-Lane State Highway	20,000	8,526	A
	Between Main Street Niland and Pound Road	2-Lane State Highway	20,000	11,293	B
	Between Pound Road and Sinclair Road	2-Lane State Highway	20,000	13,935	B
	Between Sinclair Road and Lindsey Road	2-Lane State Highway	20,000	**20,876**	**D**
	Between Lindsey Road and Main Street Calipatria	2-Lane State Highway	20,000	**28,595**	**F**
	Between Main Street Calipatria and Ruegger Road	*4-Lane State Highway*	*40,000*	26,631	B
	Between Ruegger Road and SR-78	2-Lane State Highway	20,000	**21,963**	**D**
SR-115	Between Northeast Avenue and Blair Road	2-Lane State Highway	20,000	6,725	A
SR-78/86	Between Lack Road and Martin Road	4-Lane State Highway	40,000	22,108	B
English Road	Between Gillespie Road and Highway 111	2-Lane Industrial Local	7,000	5,423	C
	Between Highway 111 and Pound Road	2-Lane Industrial Local	7,000	3,645	B
	Between Pound Road and Sinclair Road	2-Lane Industrial Local	7,000	**7,935**	**D**
	Between Sinclair Road and Lindsey Road	2-Lane Industrial Local	7,000	**7,111**	**D**
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	3,797	B
Brandt Road	Between Pound Road and Sinclair Road	2-Lane Industrial Local	7,000	4,720	B
	Between Sinclair Road and Lindsey Road	2-Lane Industrial Local	7,000	2,893	B
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	3,591	B
Davis Road / Kalin Road	Between Highway 111 and Pound Road	2-Lane Industrial Local	7,000	4,631	B
	Between Sinclair Road and Lindsey Road (Kalin Road)	2-Lane Industrial Local	7,000	3,144	B
	Between Lindsey Road and Eddins Road (Kalin Road)	2-Lane Industrial Local	7,000	4,076	B

TABLE 17 (CONTINUED): FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO ROADWAY SEGMENT ANALYSIS

Roadway	Segment	Existing or Proposed Future Classification	Roadway Capacity (LOS C) [1]	Year 2050 With Phase Two ADT	LOS
Gentry Road	Between Sinclair Road and Lindsey Road	2-Lane Industrial Local	7,000	**9,268**	**E**
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	6,886	C
Lack Road	Between Lindsey Road and Vail Road	2-Lane Industrial Local	7,000	1,607	A
Pound Road	Between Davis Road and Brandt Road	2-Lane Industrial Local	7,000	6,493	C
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	6,923	C
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	4,630	B
Sinclair Road	Between Gentry Avenue and Kalin Road	2-Lane Major Industrial Collector	10,500	**12,598**	**D**
	Between Kalin Road and Brandt Road	2-Lane Major Industrial Collector	10,500	**13,368**	**E**
	Between Brandt Road and English Road	2-Lane Major Industrial Collector	10,500	**12,204**	**D**
	Between English Road and Highway 111	2-Lane Major Industrial Collector	10,500	**12,526**	**D**
	Between Highway 111 and SP East Boundary	2-Lane Industrial Local	7,000	3,314	A
Lindsey Road	Between Gentry Avenue and Kalin Road	2-Lane Industrial Local	7,000	5,642	C
	Between Kalin Road and Brandt Road	2-Lane Industrial Local	7,000	4,711	B
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	4,012	B
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	**7,156**	**D**
	Between Highway 111 and SP East Boundary	2-Lane Industrial Local	7,000	**7,451**	**D**
Eddins Road / Main Street (Calipatria)	Between Gentry Avenue and Kalin Road	2-Lane Industrial Local	7,000	3,898	B
	Between Kalin Road and Brandt Road	2-Lane Industrial Local	7,000	3,898	B
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	3,548	B
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	6,723	C

Footnotes:
[1] Roadway classification and capacity sourced from the Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008). Imperial County accepts LOS C or better for roadway operations as identified in the Circulation Element.
Deficient LOS (LOS D or worse) indicated in **bold** text.

9.5 Future Year 2050 With Specific Plan Phase Two Recommended Improvements

Based on the findings of the intersection and roadway segment analysis under Future Year 2050 conditions with Specific Plan Phase Two, improvements are recommended to provide an acceptable LOS in compliance with the County of Imperial *General Plan Circulation and Scenic Highways Element* (January 29, 2008) and the County of Riverside *General Plan Circulation Element* (Amended December 12, 2017). All study intersections along a State Highway where installation of traffic signals are recommended will be subject to an Intersection Safety and Operations Assessment Process (ISOAP) to determine the appropriate intersection control as required by Caltrans.

9.5.1 Recommended Intersection Improvements

SR-86 / 66th Avenue

- Widen the eastbound and westbound 66th Avenue approaches to provide one dedicated left-turn lane on each approach
- Provide protected + permissive left-turn phasing on the eastbound and westbound 66th Avenue approaches

SR-111 / Davis Road

- Widen the eastbound Davis Road approach to provide one left-turn lane and one shared left-turn/right-turn lane
- Widen the north leg of the intersection to provide a second northbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to one northbound lane

SR-111 / English Road*

- Widen the westbound SR-111 approach to provide a dedicated right-turn lane
- Widen the northbound and southbound English Road approaches to provide a dedicated left-turn lane on each approach

*Although the Future Year 2050 with Specific Plan Phase Two analysis findings showed that the SR-111 / English Road is expected to operate at LOS C or better during the peak hours, a westbound right-turn lane and dedicated right-turn lanes on the northbound and southbound approaches are recommended to accommodate the forecast traffic volumes on these intersection movements during the peak hours.

SR-111 / Sinclair Road

- Widen the northbound SR-111 approach to provide a second left-turn lane*
- Widen the southbound SR-111 approach to provide a second through lane*
- Provide protected left-turn phasing on the northbound and southbound SR-111 approaches

*Sinclair Road west of SR-111 is recommended to be widened to four travel lanes, which would accommodate the recommended second northbound left-turn lane at the intersection. SR-111 south of Sinclair Road is recommended to be widened to four travel lanes, which would provide a second receiving lane for the recommended second southbound through lane at the intersection.

SR-111 / Lindsey Road

- Widen the north and south legs of the intersection to provide a second through lane on SR-111 on the northbound and southbound approaches of the intersection*
- Widen the westbound Lindsey Road approach to provide a dedicated right-turn lane

*SR-111 from Sinclair Road to Main Street in Calipatria is recommended to be widened to four travel lanes, which would accommodate the recommended second northbound and southbound through lanes at the intersection.

SR-111 / Main Street (Calipatria)

- Widen the northbound SR-111 approach to provide a dedicated right-turn lane
- Widen the southbound SR-111 approach to provide a dedicated right-turn lane
- Provide right-turn overlap phases on all approaches of the intersection

SR-78/86 / Center Street (Forrester Road)

- Restripe the southbound Center Street approach to provide a dedicated right-turn lane
- Modify the existing traffic signal to provide a right-turn overlap on the southbound approach

SR-111 / SR-78 Westbound Ramps – Del Rio Place

- Restripe the eastbound approach (Westbound SR-78 off-ramp) to provide one left-turn lane, one shared left-turn/through lane and one right-turn lane*
- Modify the existing traffic signal to provide split phasing on the eastbound and westbound approaches

*SR-111 from Ruegger Road to SR-78 is recommended to be widened to four travel lanes, which would accommodate a second northbound receiving lane for the recommended second eastbound left-turn lane at the intersection.

SR-86 / Kalin Road

- Install a traffic signal
- Widen the SR-86 center median and the eastbound SR-86 bridge over the Westside Main Canal to provide one eastbound left-turn lane
- Widen the southbound Kalin Road approach to provide one left-turn lane, one shared left-turn/through lane and one right-turn lane
- Provide protected + permissive left-turn phasing on the eastbound and westbound SR-86 approaches
- Provide split phasing on the northbound and southbound Kalin Road approaches

SR-86 / I-8 Westbound Ramps

- Restripe the westbound I-8 off-ramp approach to provide one shared left-turn/through/ right lane and two right-turn lanes
- Restripe the center median north of the intersection to provide a third northbound receiving lane on SR-86 to accommodate three westbound right-turn lanes from the westbound I-8 off-ramp

9.5.2 Recommended Roadway Segment Improvements

SR-111 between Sinclair Road and Lindsey Road

- Widen SR-111 from Sinclair Road to Lindsey Road to a four-lane Divided State Highway

SR-111 between Lindsey Road and Main Street Calipatria

- Widen SR-111 from Lindsey Road to Young Road a four-lane Divided State Highway
- Widen SR-111 from Young Road to Barbara Street to provide two travel lanes and a buffered Class II bike lane in each direction of travel to match the existing cross-section of SR-111 south of Barbara Street

SR-111 between Ruegger Road and SR-78

- Widen SR-111 from Ruegger Road to SR-78 Westbound Ramps-Del Rio Place to a four-lane Divided State Highway

Gentry Road between Sinclair Road and Lindsey Road

- Widen Gentry Road from Sinclair Road to Lindsey Road to two-lane Major Industrial Collector standards

Sinclair Road between Gentry Road and SR-111

- Widen Sinclair Road from Gentry Road to SR-111 to four-lane Major Industrial Collector standards

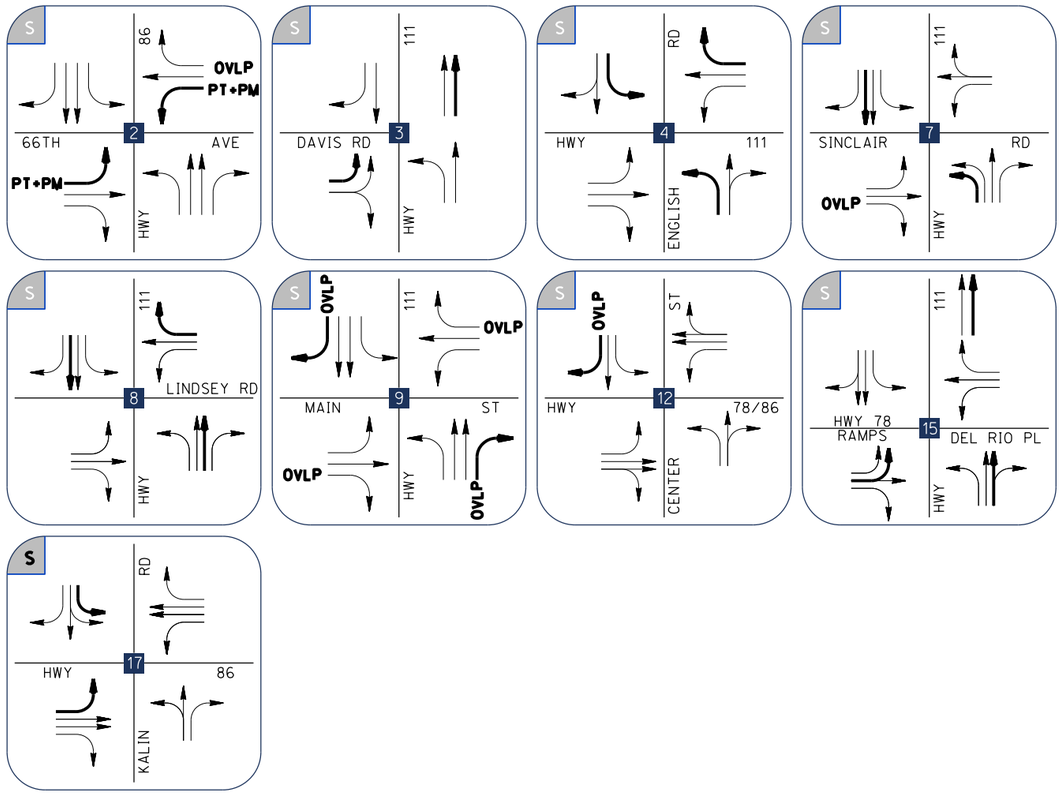
Lindsey Road between English Road and SR-111

- Widen Lindsey Road from English Road to SR-111 to two-lane Major Industrial Collector standards

Lindsey Road between SR-111 and Specific Plan East Boundary

- Widen Lindsey Road from SR-111 to Specific Plan East Boundary to two-lane Major Industrial Collector standards

Exhibits 24A and 24B illustrate the Future Year 2050 With Specific Plan Phase Two recommended intersection and roadway segment improvements as described above within the north and south study areas, respectively.



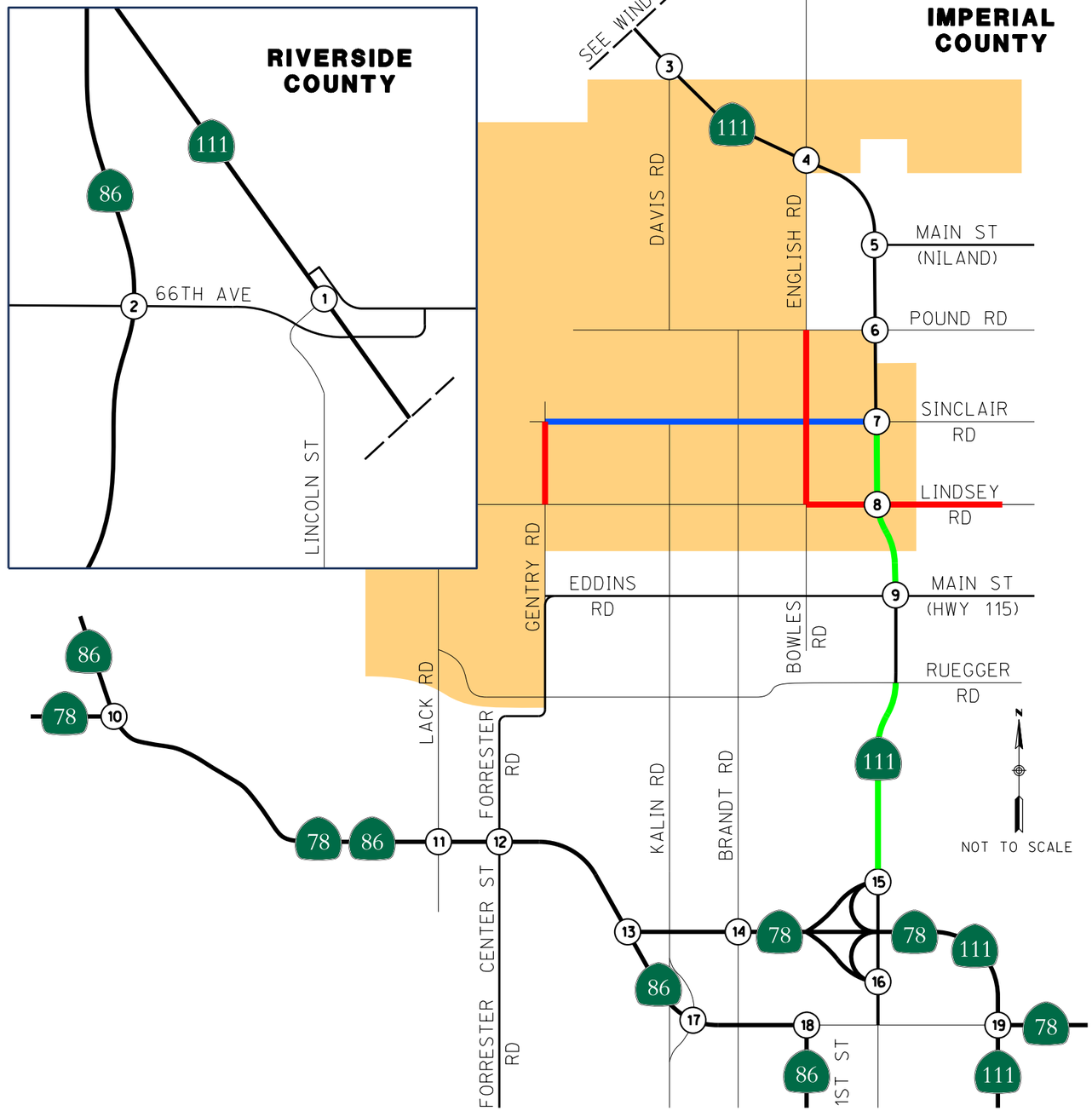


EXHIBIT 24A

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO
RECOMMENDED IMPROVEMENTS - NORTH STUDY AREA

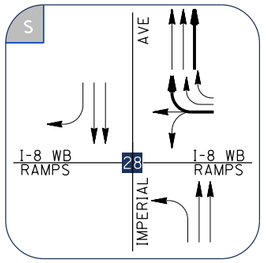
LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

- S = RECOMMENDED TRAFFIC SIGNAL
- S = EXISTING TRAFFIC SIGNAL OR FUTURE TRAFFIC SIGNAL INSTALLED IN PHASE 1
- = EXISTING LANE CONFIGURATION
- = RECOMMENDED LANE CONFIGURATION
- PT+PM = RECOMMENDED PROTECTED PERMISSIVE PHASING
- OVLP = RECOMMENDED RIGHT-TURN OVERLAP
- = IMPROVE TO 4-LANE MAJOR INDUSTRIAL COLLECTOR
- = IMPROVE TO 4-LANE STATE HIGHWAY
- = IMPROVE TO 2-LANE MAJOR INDUSTRIAL COLLECTOR
- X = STUDY INTERSECTION
- =SPECIFIC PLAN SITE

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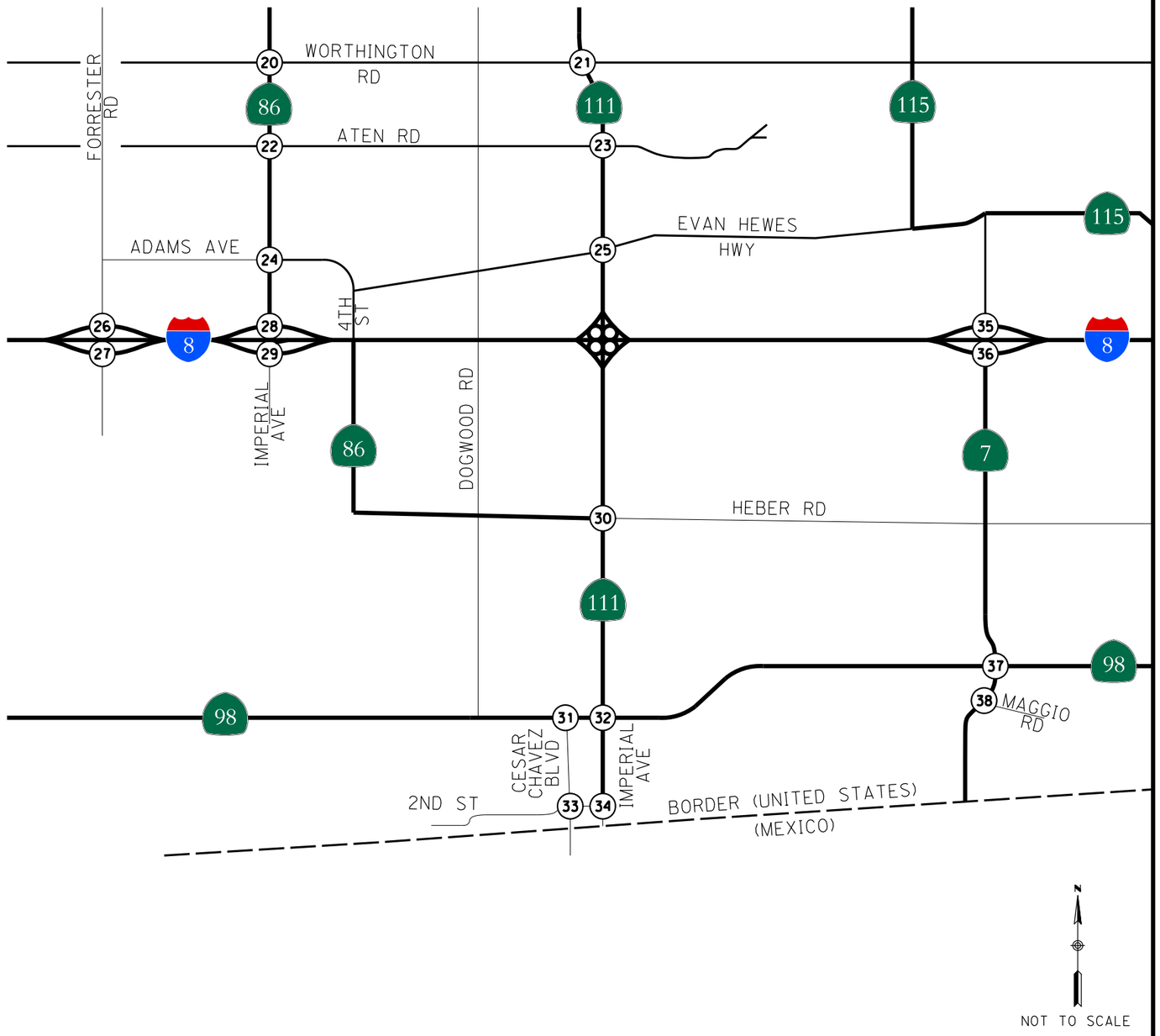


EXHIBIT 24B

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO RECOMMENDED IMPROVEMENTS - SOUTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

= EXISTING LANE CONFIGURATION

= RECOMMENDED LANE CONFIGURATION

PT+PM = RECOMMENDED PROTECTED PERMISSIVE PHASING

OVLP = RECOMMENDED RIGHT-TURN OVERLAP

(X) = STUDY INTERSECTION

S = EXISTING TRAFFIC SIGNAL

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9.5.3 Intersection LOS With Recommended Improvements

Table 18 displays the operational analysis results for the study intersections with the recommended improvements under Future Year 2050 With Specific Plan Phase Two conditions. **Appendix E** contains the Future Year 2050 With Specific Plan Phase Two With Recommended Improvements intersection analysis worksheets.

TABLE 18: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO INTERSECTION OPERATIONS WITH RECOMMENDED IMPROVEMENTS

#	Intersection	Control	Future Year 2050 With SP Phase Two With Recommended Improvements					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
2	SR-86 / 66th Avenue	(SIGNAL)	Overall	**45.9**	**D**	Overall	**45.0**	**D**
3	SR-111 / Davis Road	(SIGNAL)	Overall	15.6	B	Overall	18.2	B
4	SR-111 / English Road	(SIGNAL)	Overall	11.7	B	Overall	26.6	C
7	SR-111 / Sinclair Road	(SIGNAL)	Overall	18.6	C	Overall	25.9	C
8	SR-111 / Lindsey Road	(SIGNAL)	Overall	13.0	B	Overall	32.9	C
9	SR-111 / Main Street (in Calipatria)	(SIGNAL)	Overall	31.3	C	Overall	**40.1**	**D**
12	SR-78/86 / Center Street (Forrester Road)	(SIGNAL)	Overall	29.2	C	Overall	33.0	C
15	SR-111 / SR-78 WB Ramps	(SIGNAL)	Overall	25.1	C	Overall	**36.9**	**D**
17	SR-86 / Kalin Road	(SIGNAL)	Overall	13.6	B	Overall	19.3	B
28	SR-86 / I-8 Westbound Ramps	(SIGNAL)	Overall	22.4	C	Overall	25.2	C

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 7th edition of the HCM.
1) Delay is measured in seconds per vehicle.
2) Level of Service
(AWSC) = All-Way Stop Controlled; (TWSC) = Two-Way Stop Controlled; (OWSC) = One-Way Stop Controlled
NB=Northbound, WB=Westbound, etc.
L=Left-turn movement, R= Right-turn movement, LT=Left-Through lane, LTR=Left-Through-Right lane, etc.

As shown in Table 18, the recommended improvements are anticipated to improve operations under Future Year 2050 With Specific Plan Phase Two conditions to LOS C or better during the peak hours except for the following:

- SR-86 / 66th Avenue (AM/PM: LOS D with recommended improvements)
- SR-111 / Main Street Calipatria (PM: LOS D with recommended improvements)
- SR-111 / SR-78 Westbound Ramps (PM: LOS D with recommended improvements)

9.5.4 Intersection Queuing Analysis With Recommended Improvements

A queuing analysis was performed for the study intersections under Future Year 2050 With Specific Plan Phase Two conditions with the recommended improvements to determine the storage lengths that would be needed for the recommended future left-turn and right-turn lanes, and where applicable, to determine if the existing storage lengths would accommodate the peak queue lengths and to ensure that queuing at the intersection approaches of the off-ramps would not spill back onto the freeway mainline. The queuing analysis results are based on the 95th percentile queue lengths in feet for each turning movement or approach. The SimTraffic application within the Synchro 12 software program was used to perform the queuing analysis.

The results of the queuing analysis under Future Year 2050 With Specific Plan Phase Two conditions are provided in **Table 19**. **Appendix F** contains the SimTraffic queuing analysis worksheets.

As shown in Table 19, the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections under Future Year 2050 With Specific Plan Phase Two conditions with the recommended improvements except for at the following study intersections:

SR-78/86 / Center Street
- Northbound Left-Turn Lane (AM)
- Southbound Left-Turn Lane (PM)
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (PM)

SR-86 / Kalin Road
- Southbound Right-Turn Lane (AM/PM)

SR-86 / 1st Street-Main Street
- Southbound Left-Turn Lane (AM/PM)
- Eastbound Left-Turn Lane (PM)
- Westbound Left-Turn Lane (PM)

SR-86 / Aten Road
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / I-8 Westbound Ramps
- Southbound Right-Turn Lane (PM)

9.5.5 Roadway Segment LOS With Recommended Improvements

Table 20 displays the roadway segment analysis results with the recommended improvements under Future Year 2050 With Specific Plan Phase Two conditions. As shown in Table 20, the recommended improvements are anticipated to improve daily roadway segment LOS to LOS C or better under Future Year 2050 With Specific Plan Phase Two conditions.

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TABLE 19: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO INTERSECTION QUEUING ANALYSIS WITH RECOMMENDED IMPROVEMENTS

Study Intersection	Peak Hour	Northbound						Southbound						Eastbound						Westbound					
		Left			Right			Left			Right			Left			Right			Left			Right		
		Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes
2 SR-86 / 66th Avenue	AM	30'	760'	1	108'	300'	1	585'	750'	1	31'	260'	1	69'	DNE	1	13'	490'	1	100'	DNE	1	146'	(2)	1
	PM	18'			96'			595'			99'			221'			126'			141'			272'		
3 SR-111 / Davis Road	AM	5'	385'	1	-	-	-	-	-	-	74'	DNE	1	61'	DNE	2 (L, LR)	-	-	-	-	-	-	-	-	-
	PM	4'						-			57'			226'											
4 SR-111 / English Road	AM	76'	DNE	1	26'	-	1 (TR)	73'	DNE	1	54'	-	1 (TR)	91'	DNE	1	60'	DNE	1	47'	DNE	1	58'	DNE	1
	PM	235'			70'			169'			122'			96'			34'			24'			36'		
6 SR-111 / Pound Road	AM	88'	DNE	1	141'	-	1 (TR)	0'	DNE	1	52'	DNE	1	50'	DNE	1	72'	-	1 (TR)	0'	DNE	1	0'	-	1 (TR)
	PM	120'			170'			0'			51'			96'			122'			0'			0'		
7 SR-111 / Sinclair Road	AM	187'	240'	2	97'	(2)	1	67'	290'	1	77'	DNE	1	144'	DNE	1	91'	DNE	1	99'	DNE	1	25'	-	1 (TR)
	PM	173'			82'			27'			98'			163'			238'			116'			45'		
8 SR-111 / Lindsey Road	AM	126'	DNE	1	60'	DNE	1	73'	DNE	1	44'	DNE	1	46'	DNE	1	48'	DNE	1	90'	DNE	1	34'	DNE	1
	PM	161'			59'			163'			120'			138'			210'			251'			87'		
9 SR-111 / Main Street Calipatria	AM	258'	DNE	1	221'	DNE	1	149'	DNE	1	61'	DNE	1	395'	DNE	1	116'	DNE	1	89'	DNE	1	159'	DNE	1
	PM	231'			53'			355'			367'			328'			341'			190'			98'		
12 SR-78/86 / Center Street	AM	**130'**	100'	1	197'	-	1 (TR)	147'	150'	1	68'	DNE	1	**175'**	60'	1	275'	-	1 (TR)	62'	60'	1	262'	-	1 (TR)
	PM	113'			136'			**217'**			129'			**164'**			354'			**84'**			287'		
14 SR-78 / Brandt Road	AM	65'	-	1 (LT)	34'	30'	1	99'	-	1 (LT)	6'	30'	1	0'	570'	1	0'	570'	1	41'	650'	1	80'	650'	1
	PM	44'			23'			254'			0'			4'			4'			48'			48'		
15 SR-111 / SR-78 WB Ramps	AM	188'	600'	1	233'	-	1 (TR)	24'	225'	1	194'	-	1 (TR)	298'	1,940'[1]	2 (L, LT)	111'	185'	1	7'	130'	1	33'	130'	1
	PM	138'			152'			72'			520'			290'			36'			45'			37'		
17 SR-86 / Kalin Road	AM	27'	-	1 (LT)	13'	50'	1	46'	DNE	2 (L, LT)	**61'**	35'	1	14'	DNE	1	0'	650'	1	0'	620'	1	23'	600'	1
	PM	37'			14'			141'			**83'**			26'			0'			1'			19'		
18 SR-86 / 1st Street-Main Street	AM	**322'**	210'	1	298'	(2)	1	**139'**	75'	1	339'	-	1 (TR)	128'	165'	1	121'	(2)	1	232'	245'	2	367'	-	1 (TR)
	PM	**333'**			282'			**126'**			308'			**230'**			372'			**483'**			405'		
20 SR-86 / Barioni Boulevard	AM	141'	245'	1	233'	-	1 (TR)	112'	235'	1	259'	-	1 (TR)	206'	DNE	1	174'	195'	1	96'	DNE	1	96'	180'	1
	PM	172'			236'			82'			303'			135'			137'			102'			71'		
22 SR-86 / Aten Road	AM	140'	390'	1	118'	305'	1	316'	340'	1	252'	340'	1	**320'**	280'	1	226'	-	1 (TR)	**168'**	145'	1	254'	-	1 (TR)
	PM	294'			261'			314'			235'			**358'**			284'			**207'**			219'		
28 SR-86 / I-8 WB Ramps	AM	72'	260'	1	-	-	-	-	-	-	481'	295'	1	-	-	-	-	-	-	250'	1,320'[1]	1 (LR)	152'	310'	2
	PM	31'									**552'**									252'			131'		

Footnotes:
Queue length exceeding existing storage length by at least one car length (20 feet) indicated in **bold**.
DNE = Does Not Exist
L = Left; R = Right, T = Through
LTR = Shared left/through/right lane
LT = Shared left/through lane
LR = Shared left/right lane
TR = Shared through/right lane
1 Total length of off-ramp from gore point to intersection stop bar.
[2] No turn pocket, transition from through lane to right-turn lane.

TABLE 20: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO ROADWAY SEGMENT ANALYSIS WITH RECOMMENDED IMPROVEMENTS

Roadway	Segment	Existing or Proposed Future Classification	ROADWAY CAPACITY (LOS C) [1]	Year 2050 With Phase 2 ADT	LOS
SR-111	Between Sinclair Road and Lindsay Road	2-Lane State Highway	20,000	**20,876**	**D**
	With Recommended Improvement	*4-Lane State Highway*	*40,000*	*20,876*	*B*
	Between Lindsay Road and Main Street Calipatria	2-Lane State Highway	20,000	**28,595**	**F**
	With Recommended Improvement	*4-Lane State Highway*	*40,000*	*28,595*	*B*
	Between Ruegger Road and SR-78	2-Lane State Highway	20,000	**21,963**	**D**
	With Recommended Improvement	*4-Lane State Highway*	*40,000*	*21,963*	*B*
English Road	Between Pound Road and Sinclair Road	2-Lane Industrial Local	7,000	**7,935**	**D**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*7,935*	*C*
	Between Sinclair Road and Lindsay Road	2-Lane Industrial Local	7,000	**7,111**	**D**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*7,111*	*B*
Gentry Road	Between Sinclair Road and Lindsay Road	2-Lane Industrial Local	7,000	**9,268**	**E**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*9,268*	*C*
Sinclair Road	Between Gentry Avenue and Kalin Road	2-Lane Major Industrial Collector	10,500	**12,598**	**D**
	With Recommended Improvement	*4-Lane Major Industrial Collector*	*20,000*	*12,598*	*B*
	Between Kalin Road and Brandt Road	2-Lane Major Industrial Collector	10,500	**13,368**	**E**
	With Recommended Improvement	*4-Lane Major Industrial Collector*	*20,000*	*13,368*	*B*
	Between Brandt Road and English Road	2-Lane Major Industrial Collector	10,500	**12,204**	**D**
	With Recommended Improvement	*4-Lane Major Industrial Collector*	*20,000*	*12,204*	*B*
	Between English Road and Highway 111	2-Lane Major Industrial Collector	10,500	**12,526**	**D**
	With Recommended Improvement	*4-Lane Major Industrial Collector*	*20,000*	*12,526*	*B*
Lindsay Road	Between English Road and Highway 111	2-Lane Industrial Local	7,000	**7,156**	**D**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*7,156*	*B*
	Between Highway 111 and SP East Boundary	2-Lane Industrial Local	7,000	**7,451**	**D**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*7,451*	*B*

Footnotes:
[1] Roadway classification and capacity sourced from the Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008). Imperial County accepts LOS C or better for roadway operations as identified in the Circulation Element.
Deficient LOS (LOS D or worse) indicated in **bold** text.

10.0 FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT) TRANSPORTATION CONDITIONS

Future Year 2050 With Specific Plan Phase Three conditions reflect the buildout of the Lithium Valley Specific Plan. The Year 2050 scenario of the Southern California Association of Governments (SCAG) regional travel demand model was used to develop the Future Year 2050 With Specific Plan Phase Three (Buildout) traffic volumes in the study area.

The proposed Specific Plan Phase Three (Buildout) land uses were inputted into the Travel Analysis Zones (TAZs) that make up the Lithium Valley Specific Plan area in the SCAG model, which was run for the SCAG model Year 2050 scenario.

10.1 Future Year 2050 With Specific Plan Phase Three (Buildout) Conditions Roadway Network

The Future Year 2050 With Specific Plan Phase Three (Buildout) roadway network assumes that all roadways connecting the project site to SR-111 or SR-78/86 would be paved and that all key roadways accessing the Specific Plan site would be built to at least two-lane Industrial Local standards. The recommended Future Year 2035 With Specific Plan Phase One and Future Year 2050 With Specific Plan Phase Two roadway and intersection improvements are assumed to be built prior to completion of Specific Plan Phase Three (Buildout).

10.2 Future Year 2050 With Specific Plan Phase Three (Buildout) Conditions Traffic Volumes

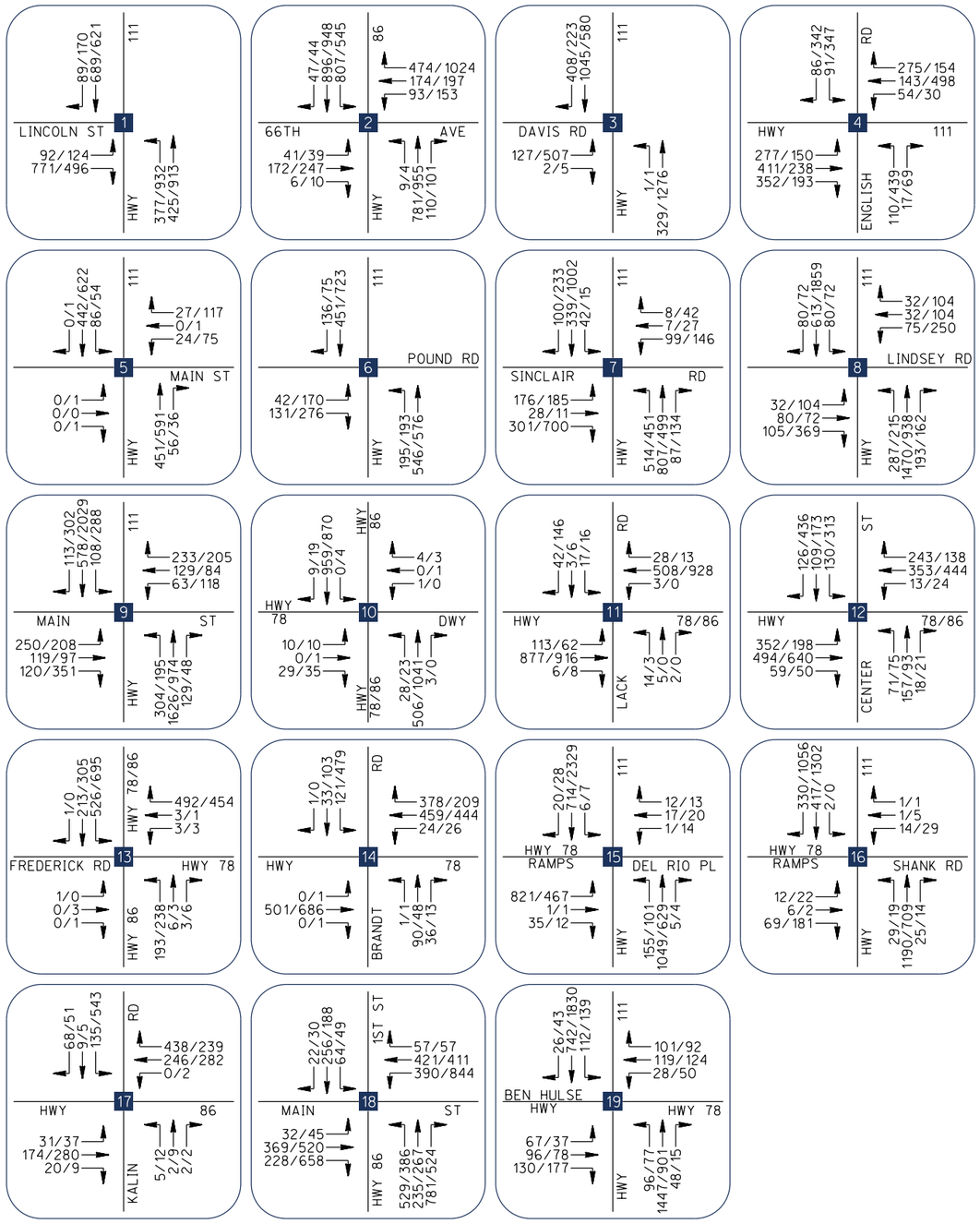
The Future Year 2050 With Specific Plan Phase Three (Buildout) traffic volumes were derived based on the forecast growth in traffic in the SCAG model and the distribution of project trips. Growth factors were developed based on the forecast traffic growth from Baseline Year 2019 to Future Year 2050 No Project/No General Plan traffic volumes. These growth factors were applied to Existing Year 2025 traffic volume counts where applicable to reflect 25 years of growth from 2025 to 2050.

The Future Year 2050 No Project/No General Plan traffic volumes were post-processed to develop the intersection turning movement volumes during the AM and PM peak hours. Adjustments were made where appropriate to reflect changes in traffic patterns and growth on all legs of the study intersections.

Project-specific daily and AM/PM peak hour trips associated with the proposed Phase One land uses were added to the Future Year 2050 No Project/No General Plan traffic volumes to develop the Future Year 2050 With Specific Plan Phase Three (Buildout) traffic volumes.

Exhibits 25A and **25B** illustrate the Future Year 2050 With Specific Plan Phase Three (Buildout) AM/PM peak hour intersection turning movement volumes within the north and south study areas, respectively.

Exhibit 26 illustrates the Future Year 2050 With Specific Plan Phase Three (Buildout) daily traffic volumes within the north study area.



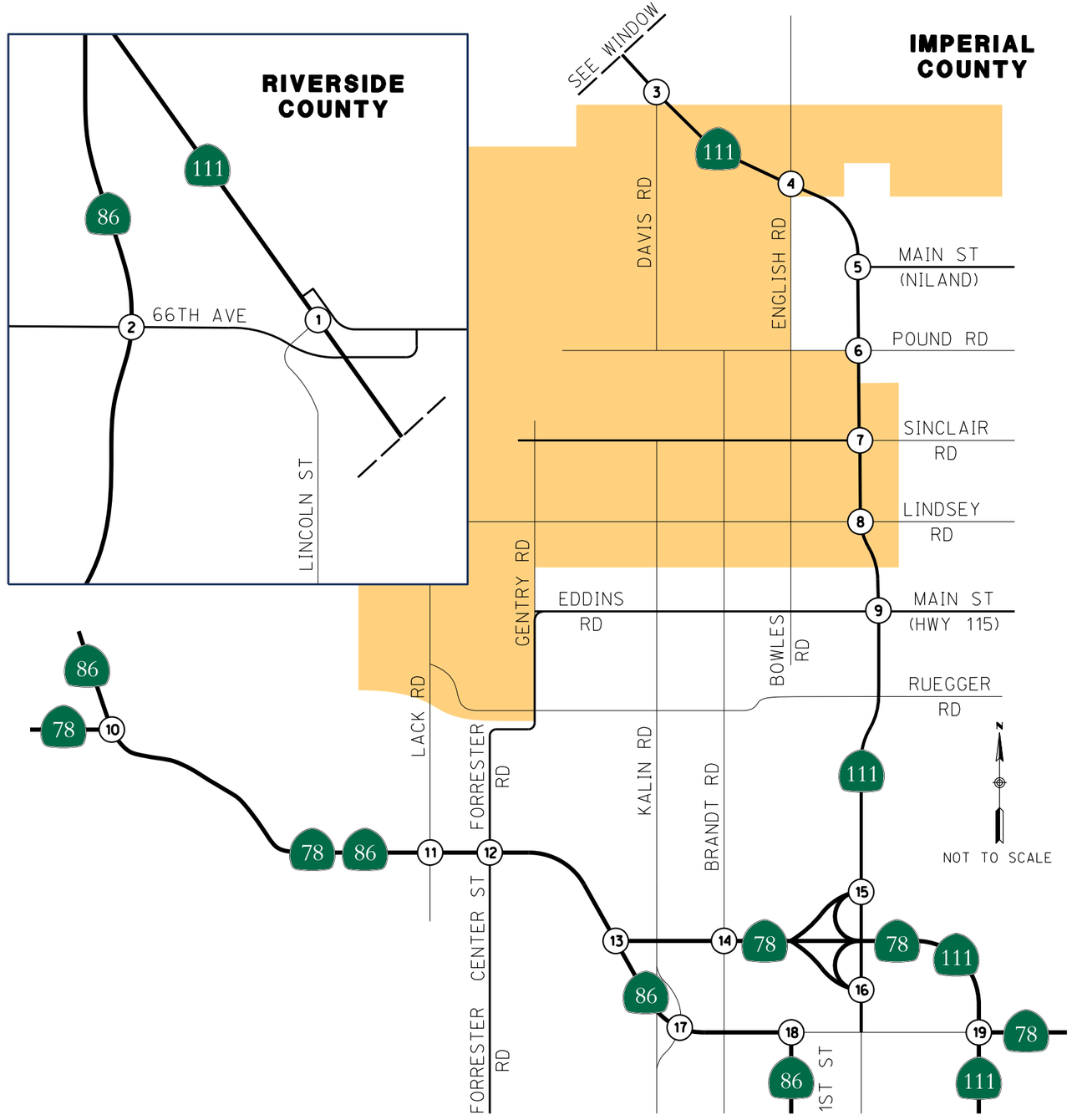


EXHIBIT 25A

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT) PEAK HOUR INTERSECTION TRAFFIC VOLUMES - NORTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND
AM/PM=PEAK HOUR VOLUMES
=SPECIFIC PLAN SITE

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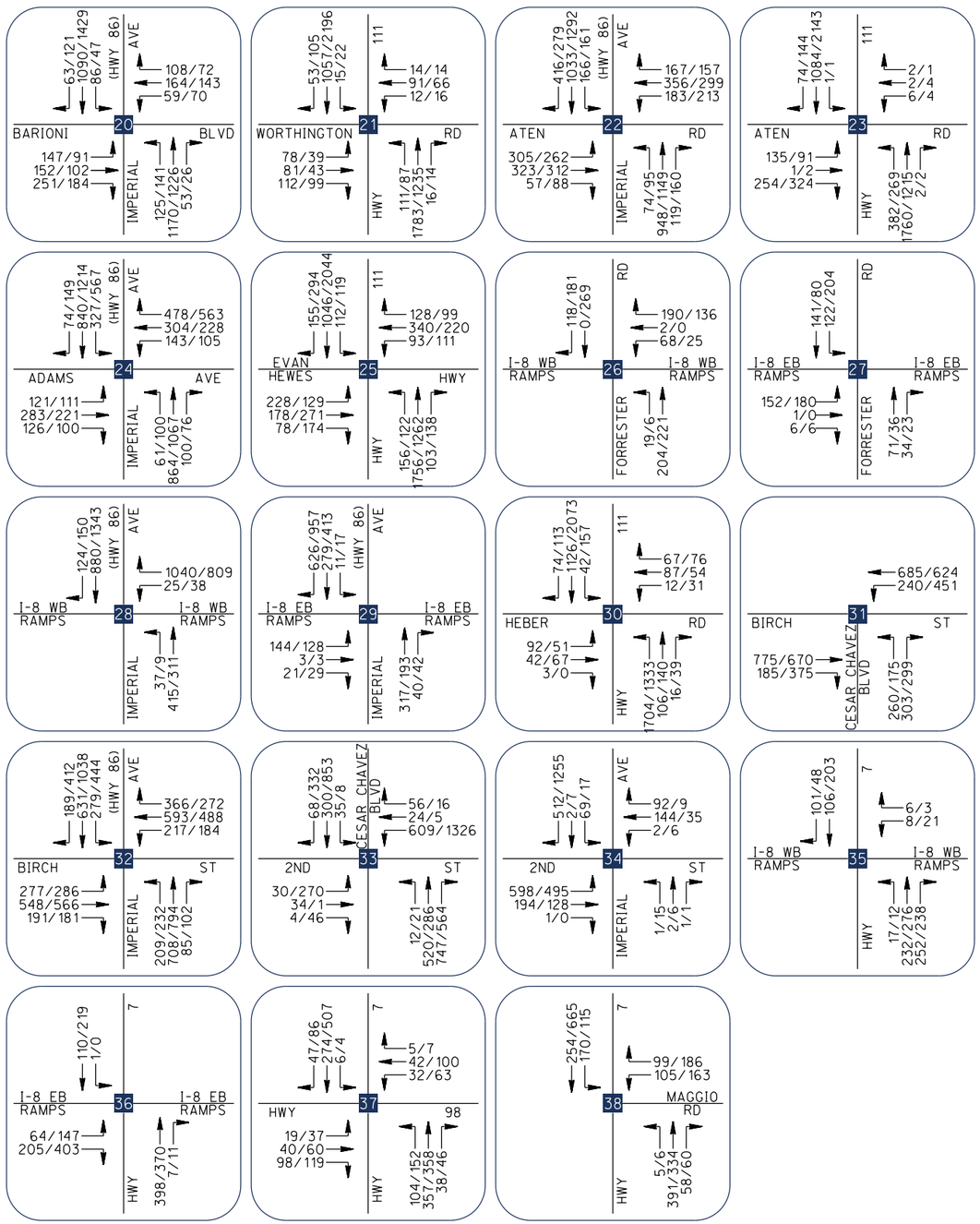


EXHIBIT 25B

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT) PEAK HOUR INTERSECTION TRAFFIC VOLUMES - SOUTH STUDY AREA

LEGEND: AM/PM=PEAK HOUR VOLUMES

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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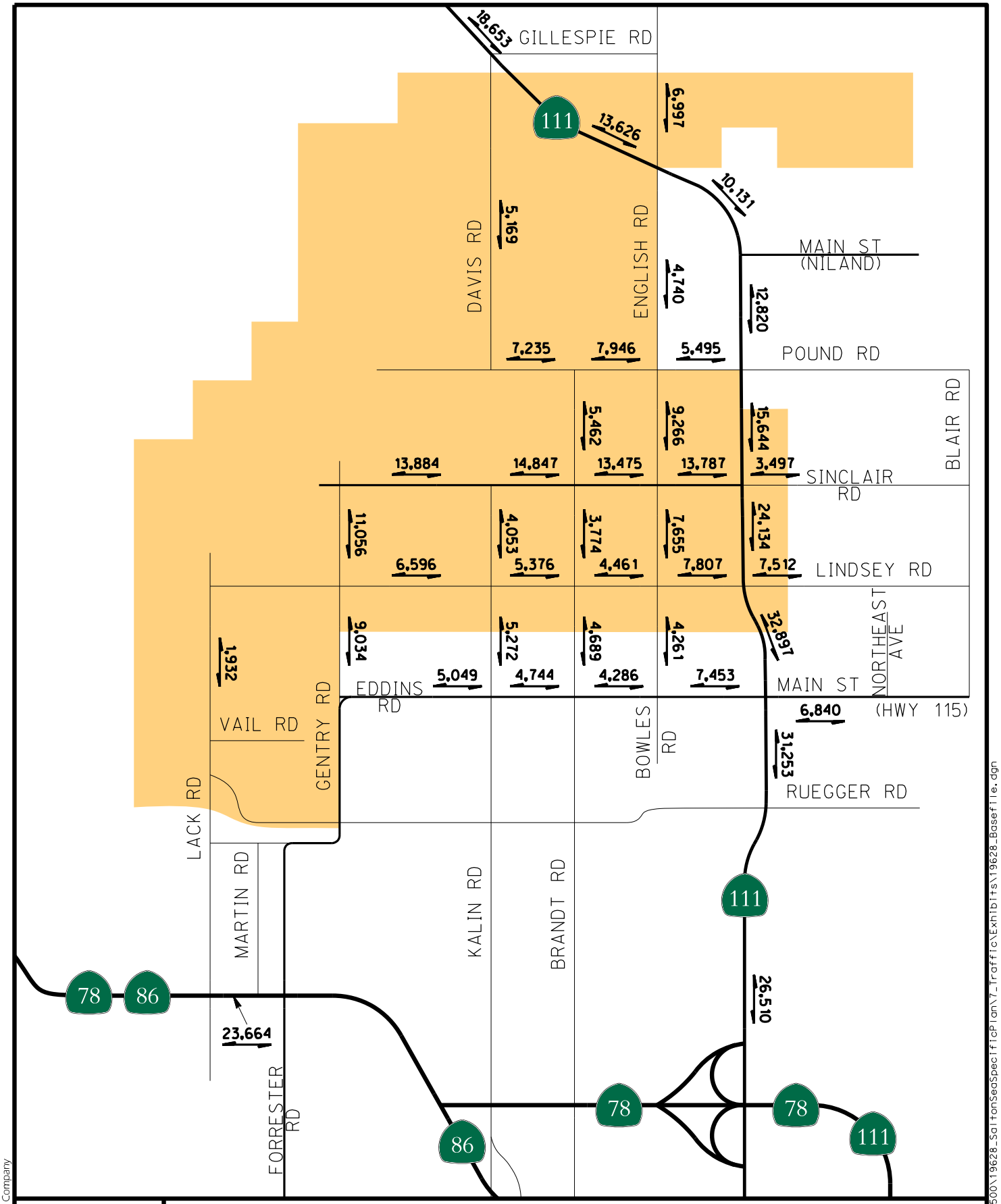


EXHIBIT 26

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT)
DAILY TRAFFIC VOLUMES (NORTH STUDY AREA ONLY)

LEGEND

X,XXX =TWO-WAY ADT

=SPECIFIC PLAN SITE

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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10.3 Future Year 2050 With Specific Plan Phase Three (Buildout) Conditions Intersection Operations

Table 21 displays the operational analysis results for the study intersections under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions. **Appendix B** contains the Future Year 2050 With Specific Plan Phase Three intersection analysis worksheets.

TABLE 21: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE INTERSECTION OPERATIONS

#	Intersection	Control	Future Year 2050 With SP Phase Three (Buildout)					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
1	SR-111 / Lincoln Street	(SIGNAL)	Overall	26.5	C	Overall	**101.9**	**F**
2	SR-86 / 66th Avenue	(SIGNAL)	Overall	**75.6**	**E**	Overall	**93.0**	**F**
3	SR-111 / Davis Road	(SIGNAL)	Overall	19.9	B	Overall	**65.1**	**E**
4	SR-111 / English Road	(SIGNAL)	Overall	14.5	B	Overall	**78.4**	**E**
5	SR-111 / Main Street (in Niland)	(OWSC)	WB-L	15.4	C	WB-L	**28.6**	**D**
6	SR-111 / Pound Road	(SIGNAL)	Overall	12.2	B	Overall	34.1	C
7	SR-111 / Sinclair Road	(SIGNAL)	Overall	27.2	C	Overall	**45.1**	**D**
8	SR-111 / Lindsey Road	(SIGNAL)	Overall	15.5	B	Overall	**67.2**	**E**
9	SR-111 / Main Street (in Calipatria)	(SIGNAL)	Overall	**49.5**	**D**	Overall	**96.5**	**F**
10	SR-86 / SR-78 (west)	(TWSC)	EB-L	16.2	C	WB-L	16.3	C
11	SR-78/86 / Lack Road	(TWSC)	NB-L	**29.5**	**D**	NB-L	**30.7**	**D**
12	SR-78/86 / Center Street (Forrester Road)	(SIGNAL)	Overall	**43.5**	**D**	Overall	**47.0**	**D**
13	SR-86 / SR-78 (east)	(SIGNAL)	Overall	18.1	B	Overall	18.2	B
14	SR-78 / Brandt Road	(SIGNAL)	Overall	22.0	C	Overall	34.0	C
15	SR-111 / SR-78 WB Ramps	(SIGNAL)	Overall	32.1	C	Overall	**105.5**	**F**
16	SR-111 / SR-78 EB Ramps	(SIGNAL)	Overall	**40.0**	**D**	Overall	**73.9**	**E**
17	SR-86 / Kalin Road	(SIGNAL)	Overall	18.1	B	Overall	20.7	C
18	SR-86 / 1st Street-Main Street	(SIGNAL)	Overall	**62.9**	**E**	Overall	**95.0**	**F**
19	SR-111 / Ben Hulse Highway	(SIGNAL)	Overall	**63.7**	**E**	Overall	**148.8**	**F**
20	SR-86 / Barioni Boulevard	(SIGNAL)	Overall	24.6	C	Overall	27.3	C
21	SR-111 / Worthington Road	(SIGNAL)	Overall	**46.3**	**D**	Overall	**67.8**	**E**
22	SR-86 / Aten Road	(SIGNAL)	Overall	**47.3**	**D**	Overall	**50.3**	**D**
23	SR-111 / Aten Road	(SIGNAL)	Overall	**42.4**	**D**	Overall	**153.5**	**F**
24	SR-86 / Adams Avenue	(SIGNAL)	Overall	**36.9**	**D**	Overall	**39.0**	**D**
25	SR-111 / Evan Hewes Highway	(SIGNAL)	Overall	**197.4**	**F**	Overall	**225.3**	**F**
26	Forrester Road / I-8 WB Ramps	(TWSC)	WB-L	11.1	B	WB-L	13.0	B
27	Forrester Road / I-8 EB Ramps	(TWSC)	EB-L	17.1	C	EB-L	21.0	C

TABLE 21 (CONTINUED): FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE INTERSECTION OPERATIONS

#	Intersection	Control	Future Year 2050 With SP Phase Three					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
28	SR-86 / I-8 Westbound Ramps	(SIGNAL)	Overall	22.5	C	Overall	25.4	C
29	SR-86 / I-8 Eastbound Ramps	(SIGNAL)	Overall	8.4	A	Overall	5.3	A
30	SR-111 / Heber Road	(SIGNAL)	Overall	**92.5**	**F**	Overall	**61.2**	**E**
31	Cesar Chavez Boulevard / SR-98 (Birch Street)	(SIGNAL)	Overall	15.1	B	Overall	14.9	B
32	SR-111 / SR-98 (Birch Street)	(SIGNAL)	Overall	**41.7**	**D**	Overall	**45.7**	**D**
33	Cesar Chavez Boulevard / 2nd Street	(SIGNAL)	Overall	**88.8**	**F**	Overall	**119.2**	**F**
34	SR-111 / 2nd Street	(SIGNAL)	Overall	23.8	C	Overall	**61.8**	**E**
35	SR-7 / I-8 Westbound Ramps	(TWSC)	WB-L	10.7	B	WB-L	12.5	B
36	SR-7 / I-8 Eastbound Ramps	(TWSC)	EB-L	11.5	B	EB-L	14.2	B
37	SR-7 / SR-98	(SIGNAL)	Overall	22.6	C	Overall	29.5	C
38	SR-7 / Maggio Road	(SIGNAL)	Overall	30.1	C	Overall	25.6	C

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 7th edition of the HCM.
1) Delay is measured in seconds per vehicle.
2) Level of Service
(AWSC) = All-Way Stop Controlled; (TWSC) = Two-Way Stop Controlled; (OWSC) = One-Way Stop Controlled
NB=Northbound, WB=Westbound, etc.
L=Left-turn movement, R= Right-turn movement, LT=Left-Through lane, LTR=Left-Through-Right lane, etc.

As shown in Table 21, the following 23 study intersections are forecast to operate at a deficient LOS D or worse under Future Year 2050 conditions with Specific Plan Phase Three (Buildout):

1) SR-111 / Lincoln Street (PM: LOS F)
2) SR-86 / 66th Avenue (AM: LOS E, PM: LOS F)
3) SR-111 / Davis Road (PM: LOS E)
4) SR-111 / English Road (PM: LOS E)
5) SR-111 / Main Street Niland (PM: LOS D)
6) SR-111 / Sinclair Road (PM: LOS D)
7) SR-111 / Lindsey Road (PM: LOS E)
8) SR-111 / Main Street Calipatria (AM: LOS D, PM: LOS F)
9) SR-78/86 / Lack Road (AM/PM: LOS D)
10) SR-78/86 / Center Street (AM/PM: LOS D)
11) SR-111 / SR-78 Westbound Ramps (PM: LOS F)
12) SR-111 / SR-78 Eastbound Ramps (AM: LOS D, PM: LOS E)
13) SR-86 / 1st Street-Main Street (AM: LOS E, PM: LOS F)
14) SR-111 / Ben Hulse Highway (AM: LOS E, PM: LOS F)
15) SR-111 / Worthington Road (AM: LOS D, PM: LOS E)
16) SR-86 / Aten Road (AM/PM: LOS D)
17) SR-111 / Aten Road (AM: LOS D, PM: LOS F)
18) SR-86 / Adams Avenue (AM/PM: LOS D)

19) SR-111 / Evan Hewes Highway (AM/PM: LOS F)
20) SR-111 / Heber Road (AM: LOS F, PM: LOS E)
21) SR-111 / SR-98 (AM/PM: LOS D)
22) Cesar Chavez Boulevard / 2nd Street (AM/PM: LOS F)
23) SR-111 / 2nd Street (PM: LOS E)

Improvements are recommended for 14 of the 23 study intersections listed above, which are presented in Section 9.5. However, improvements are not recommended for 9 of the 23 study intersections listed above, and below are the reasons why improvements are not recommended at these intersections:

SR-86 / 1st Street-Main Street

The recommended Year 2035 With Specific Plan Phase One improvements at the SR-86 / 1st Street-Main Street intersection consist of restriping the existing lanes and modifying the existing traffic signal, which can be achieved without widening the roadways at the intersection. Any further improvements at this intersection would require widening to provide additional lanes, and widening is not feasible due to the existing development abutting all corners of the intersections. Therefore, no further improvements are recommended at the SR-86 / 1st Street-Main Street intersection.

SR-86 / Aten Road

The recommended Year 2035 With Specific Plan Phase One improvements at the SR-86 / Aten Road intersection consist of restriping the existing lanes and modifying the existing traffic signal, which can be achieved without widening the roadways at the intersection. Any further improvements at this intersection would require widening to provide additional lanes, and widening is not feasible due to the existing development abutting all corners of the intersections. Therefore, no further improvements are recommended at the SR-86 / Aten Road intersection.

SR-111 / Evan Hewes Highway

The relatively long delays and deficient LOS F operations during the peak hours are primarily attributed to the length of the eastbound pedestrian phase that crosses the south leg of SR-111 at the intersection. The center median on SR-111 is approximately 45 feet wide and the total width of SR-111 at the pedestrian crossing is approximately 155 feet. As a result, a total of 57 seconds is needed to allow pedestrians to cross SR-111 on the south leg of the intersection. The length of this pedestrian phase requires an overall longer cycle length when a pedestrian call is activated to cross SR-111 on the south leg of the intersection.

SR-111 / Heber Road

The deficient LOS E and F operations during the peak hours are primarily attributed to the lengths of the eastbound and westbound pedestrian phases that cross the north and south legs of SR-111 at the intersection, which are each approximately 41 seconds. The east-west traffic volumes are relatively low and don't require 41 seconds to clear the intersection, so as a result, the intersection has an overall longer cycle length than what is needed to serve the vehicular traffic.

SR-111 / SR-98 (Birch street)

The deficient LOS D operations during the peak hours are primarily attributed to the lengths of the pedestrian phases across all legs of the intersection, ranging from 36 seconds to 39 seconds. These longer pedestrian phases require a longer overall cycle length than what would be needed to serve the vehicular traffic at the intersection.

Cesar Chavez Boulevard / SR-98 (Birch street)

Any further improvements at the Cesar Chavez Boulevard / SR-98 (Birch street) intersection are not feasible due to existing development at all corners of the intersections, and for the following reason: The westbound left-turn movement at this intersection is the primary movement for traffic traveling across the border into Mexico, with the Port of Entry located 250 feet south of the intersection. There is currently only one left-turn lane on the westbound approach to serve approximately 1,275 vehicles during the Year 2050 PM peak hour that are traveling across the U.S./Mexico border into Mexico. Although the east leg of 2nd Street is wide enough to accommodate a second westbound left-turn lane, there is a center striped median with pavement markings indicating that the center lane is restricted to only emergency vehicles. Therefore, it is not feasible to provide a second westbound left-turn lane at the Cesar Chavez Boulevard / 2nd Street intersection.

10.4 Future Year 2050 With Specific Plan Phase Three (Buildout) Conditions Roadway Segment Analysis

Table 22 summarizes the roadway segment capacity analysis results under Future Year 2050 With Specific Plan Phase Three conditions. As shown in Table 22, the study roadway segments are forecast to operate at an acceptable LOS C or better under Future Year 2050 With Specific Plan Phase Three conditions except for the following:

1) Gentry Road between Sinclair Road and Lindsey Road (LOS D)
2) Gentry Road between Lindsey Road and Eddins Road (LOS E)
3) Pound Road between Davis Road and Brandt Road (LOS D)
4) Pound Road between Brandt Road and English Road (LOS D)
5) Eddins Road between English Road and SR-111 (LOS D)

Improvements are recommended for the five (5) above-listed roadway segments, which are presented in Section 9.5.

TABLE 22: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE ROADWAY SEGMENT ANALYSIS

Roadway	Segment	Existing or Proposed Future Classification	Roadway Capacity (LOS C) [1]	Year 2050 With Phase Three ADT	LOS
SR-111	North of Davis Road	2-Lane State Highway	20,000	18,653	C
	Between Davis Road and English Road	2-Lane State Highway	20,000	13,626	B
	Between English Road and Main Street Niland	2-Lane State Highway	20,000	10,131	B
	Between Main Street Niland and Pound Road	2-Lane State Highway	20,000	12,820	B
	Between Pound Road and Sinclair Road	2-Lane State Highway	20,000	15,644	C
	Between Sinclair Road and Lindsey Road	4-Lane State Highway	40,000	24,134	B
	Between Lindsey Road and Main Street Calipatria	4-Lane State Highway	40,000	32,897	C
	Between Main Street Calipatria and Ruegger Road	4-Lane State Highway	40,000	31,253	C
	Between Ruegger Road and SR-78	4-Lane State Highway	40,000	26,510	B
SR-115	Between Northeast Avenue and Blair Road	2-Lane State Highway	20,000	6,840	A
SR-78/86	Between Lack Road and Martin Road	4-Lane State Highway	40,000	23,664	B
English Road	Between Gillespie Road and Highway 111	2-Lane Industrial Local	7,000	6,997	C
	Between Highway 111 and Pound Road	2-Lane Industrial Local	7,000	4,740	B
	Between Pound Road and Sinclair Road	2-Lane Major Industrial Collector	10,500	9,266	C
	Between Sinclair Road and Lindsey Road	2-Lane Major Industrial Collector	10,500	7,655	C
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	4,261	C
Brandt Road	Between Pound Road and Sinclair Road	2-Lane Industrial Local	7,000	5,462	C
	Between Sinclair Road and Lindsey Road	2-Lane Industrial Local	7,000	3,774	B
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	4,689	B
Davis Road / Kalin Road	Between Highway 111 and Pound Road	2-Lane Industrial Local	7,000	5,169	C
	Between Sinclair Road and Lindsey Road (Kalin Road)	2-Lane Industrial Local	7,000	4,053	B
	Between Lindsey Road and Eddins Road (Kalin Road)	2-Lane Industrial Local	7,000	5,272	C

TABLE 22 (CONTINUED): FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE ROADWAY SEGMENT ANALYSIS

Roadway	Segment	Existing or Proposed Future Classification	Roadway Capacity (LOS C) [1]	Year 2050 With Phase Three ADT	LOS
Gentry Road	Between Sinclair Road and Lindsey Road	2-Lane Major Industrial Collector	10,500	**11,056**	**D**
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	**9,034**	**E**
Lack Road	Between Lindsey Road and Vail Road	2-Lane Industrial Local	7,000	1,932	A
Pound Road	Between Davis Road and Brandt Road	2-Lane Industrial Local	7,000	**7,235**	**D**
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	**7,946**	**D**
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	5,495	C
Sinclair Road	Between Gentry Avenue and Kalin Road	4-Lane Major Industrial Collector	20,000	13,884	B
	Between Kalin Road and Brandt Road	4-Lane Major Industrial Collector	20,000	14,847	B
	Between Brandt Road and English Road	4-Lane Major Industrial Collector	20,000	13,475	B
	Between English Road and Highway 111	4-Lane Major Industrial Collector	20,000	13,787	B
	Between Highway 111 and SP East Boundary	2-Lane Industrial Local	7,000	3,497	A
Lindsey Road	Between Gentry Avenue and Kalin Road	2-Lane Industrial Local	7,000	6,596	C
	Between Kalin Road and Brandt Road	2-Lane Industrial Local	7,000	5,376	C
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	4,461	B
	Between English Road and Highway 111	2-Lane Major Industrial Collector	10,500	7,807	C
	Between Highway 111 and SP East Boundary	2-Lane Major Industrial Collector	10,500	7,512	C
Eddins Road / Main Street (Calipatria)	Between Gentry Avenue and Kalin Road	2-Lane Industrial Local	7,000	5,049	C
	Between Kalin Road and Brandt Road	2-Lane Industrial Local	7,000	4,744	B
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	4,286	B
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	**7,453**	**D**

Footnotes:
[1] Roadway classification and capacity sourced from the Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008). Imperial County accepts LOS C or better for roadway operations as identified in the Circulation Element.
Deficient LOS (LOS D or worse) indicated in **bold** text.

10.5 Future Year 2050 With Specific Plan Phase Three (Buildout) Recommended Improvements

Based on the findings of the intersection and roadway segment analysis under Future Year 2050 conditions with Specific Plan Phase Three (Buildout), improvements are recommended to provide an acceptable LOS in compliance with the County of Imperial *General Plan Circulation and Scenic Highways Element* (January 29, 2008) and the County of Riverside *General Plan Circulation Element* (Amended December 12, 2017). All study intersections along a State Highway where installation of traffic signals are recommended will be subject to an Intersection Safety and Operations Assessment Process (ISOAP) to determine the appropriate intersection control as required by Caltrans.

9.5.1 Recommended Intersection Improvements

SR-111 / Lincoln Street

- Widen and restripe the northbound SR-111 approach to provide a second left-turn lane
- Widen and restripe the north leg to accommodate the realigned northbound through lane at the intersection
- Remove the existing southbound "pork-chop" island and reconfigure southbound approach to remove the free right-turn and provide a standard right-turn lane
- Restripe the west leg of the intersection to provide two westbound receiving lanes

SR-86 / 66th Avenue

- Widen within the SR-86 center median to provide a second southbound left-turn lane
- Widen the westbound 66th Avenue approach to provide a second right-turn lane
- Widen the east leg of the intersection to provide a second eastbound receiving lane on 66th Avenue for a minimum distance of 300 feet before transitioning back to one eastbound lane

SR-111 / Davis Road

- Widen the northbound SR-111 approach to provide a second through lane*

*The recommended second northbound through lane will be aligned with the second northbound receiving lane that was recommended for Phase Two of the Specific Plan.

SR-111 / English Road

- Restripe the northbound English Road approach to provide one left-turn and one shared left/through/right-turn lane
- Widen the southbound English Road approach to provide a dedicated right-turn lane
- Widen the west leg of the intersection to provide a second westbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to one westbound lane

SR-111 / Main Street (Niland)

- Install a traffic signal
- Provide protected left-turn phasing on the southbound SR-111 approach

SR-111 / Sinclair Road

- Widen the eastbound Sinclair Road approach to provide a second right-turn lane

SR-111 / Lindsey Road

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

SR-78/86 / Lack Road

- Install a traffic signal
- Provide protected left-turn phasing on the eastbound and westbound SR-78/86 approaches
- Provide permissive left-turn phasing on the northbound and southbound Lack Road approaches

SR-78/86 / Center Street (Forrester Road)

- Widen the SR-78/86 westbound approach to provide a dedicated right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the northbound and southbound Center Street approaches

SR-78 / Brandt Road*

- Widen the southbound Brandt Road approach to provide one left-turn lane, one shared left-turn/through lane and one right-turn lane
- Provide split phasing on the northbound and southbound Brandt Road approaches

*Although the Future Year 2050 with Specific Plan Phase Three analysis findings showed that the SR-78 / Brandt Road is expected to operate at LOS C or better during the peak hours, two left-turn lanes on the southbound approach are recommended to accommodate the forecast traffic volumes on this intersection movement during the peak hours.

SR-111 / SR-78 Westbound Ramps – Del Rio Place

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111, and extend the third southbound lane to connect with the southbound right-turn lane at the SR-111 / SR-78 Eastbound Ramps – Shank Road intersection*

*A second southbound through lane is recommended at the SR-111 / SR-78 Eastbound Ramps – Shank Road intersection, and the third southbound lane from the SR-111 / SR-78 Westbound Ramps – Del Rio Place intersection would transition to the southbound right-turn lane for the SR-78 Eastbound Ramps.

SR-111 / SR-78 Eastbound Ramps – Shank Road

- Widen the southbound SR-111 approach to provide a second through lane
- Widen the south leg of the intersection to provide a second southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to one southbound lane

SR-111 / Ben Hulse Highway*

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

*Improvements were not recommended at the SR-111 / Ben Hulse Highway intersection for Phase Two of the Specific Plan because the deficient LOS was primarily attributed to the longer cycle length needed to accommodate the long pedestrian phases across SR-111. But by buildout of the Specific Plan beyond 2050, the addition of project trips are requiring three southbound through lanes at the intersection.

SR-111 / Worthington Road

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

SR-111 / Aten Road*

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

*Improvements were not recommended at the SR-111 / Aten Road intersection for Phase Two of the Specific Plan because the deficient LOS was primarily attributed to the longer cycle length needed to accommodate the long pedestrian phases across SR-111. But by buildout of the Specific Plan beyond 2050, the addition of project trips are requiring three southbound through lanes at the intersection.

SR-111 / 2nd Street

- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-111 approach

10.5.2 Recommended Roadway Segment Improvements

Gentry Road between Sinclair Road and Lindsey Road

- Widen Gentry Road from Sinclair Road to Lindsey Road to four-lane Major Industrial Collector standards

Gentry Road between Lindsey Road and Eddins Road

- Widen Gentry Road from Sinclair Road to Lindsey Road to two-lane Major Industrial Collector standards

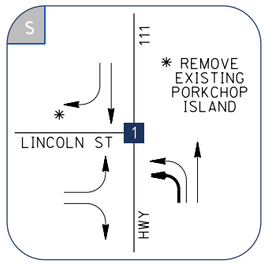
Pound Road between Davis Road and SR-111

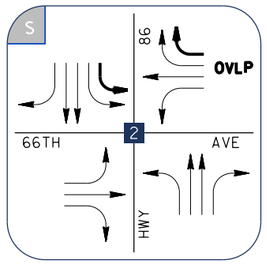
- Widen Pound Road from Davis Road to SR-111 to two-lane Major Industrial Collector standards

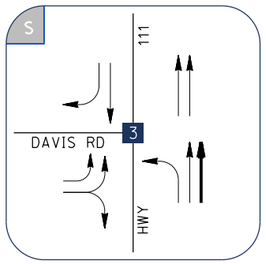
Eddins Road between English Road and SR-111

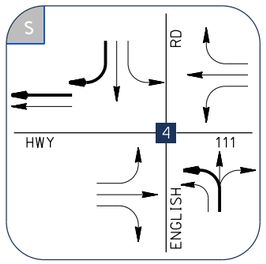
- Widen Eddins Road from English Road to SR-111 to two-lane Major Industrial Collector standards

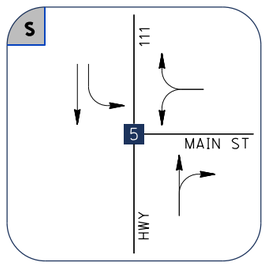
Exhibits 27A and 27B illustrate the Future Year 2050 With Specific Plan Phase Three (Buildout) recommended intersection and roadway segment improvements as described above within the north and south study areas, respectively.

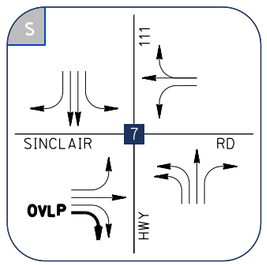


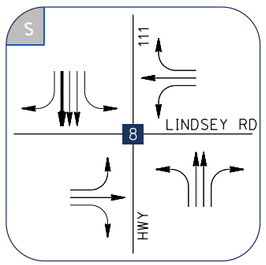


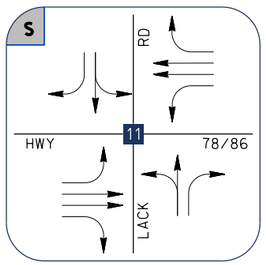


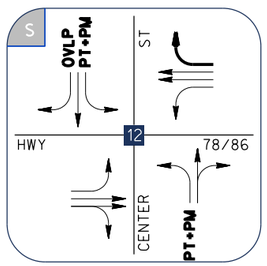


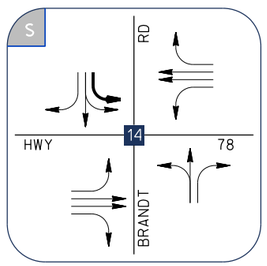


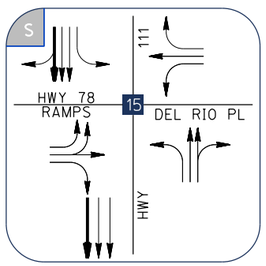


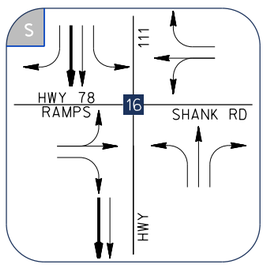


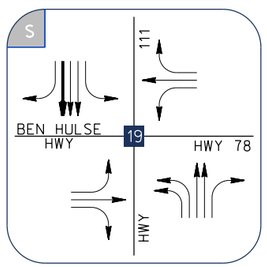












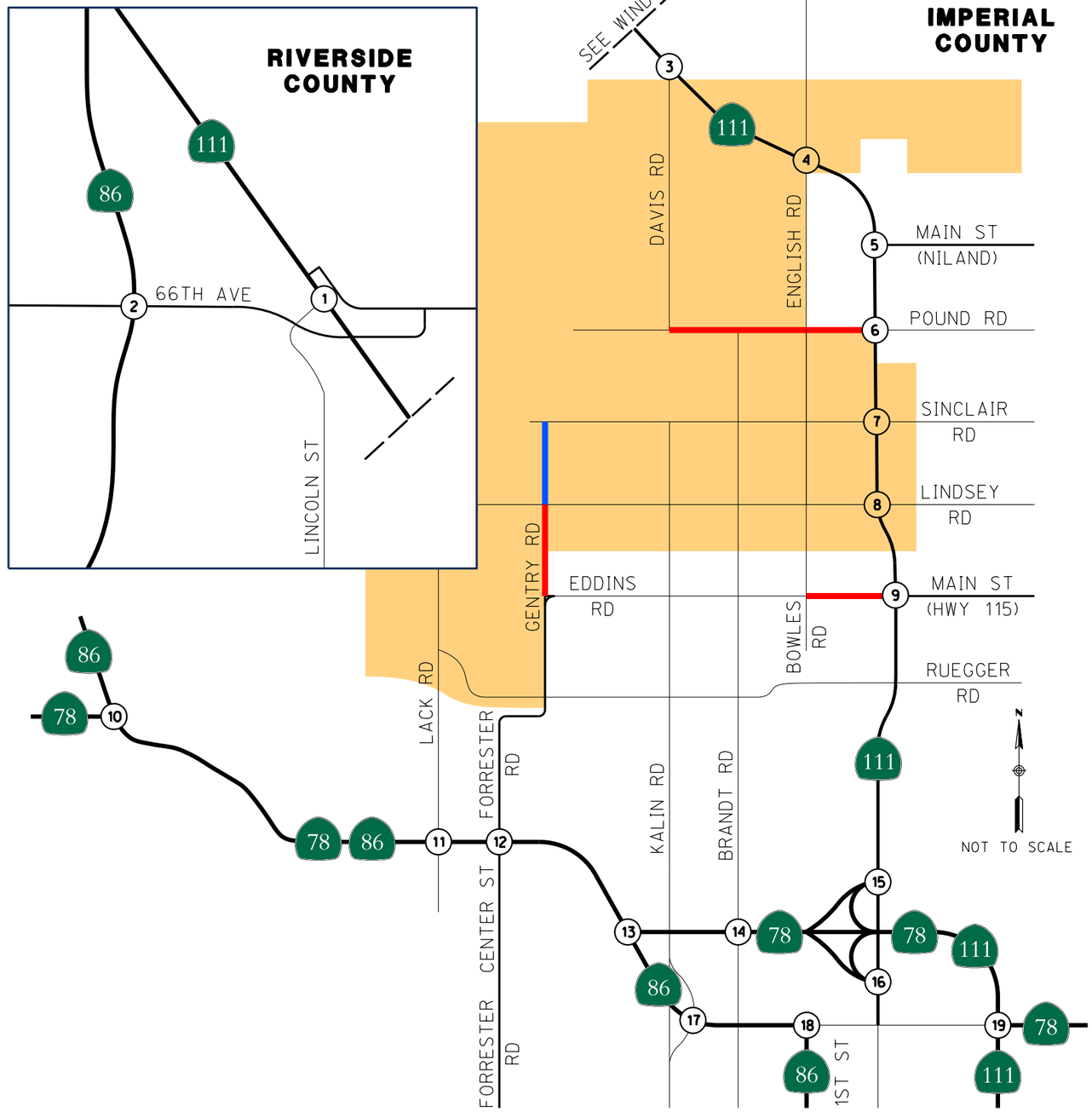


EXHIBIT 27A

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT)
RECOMMENDED IMPROVEMENTS - NORTH STUDY AREA

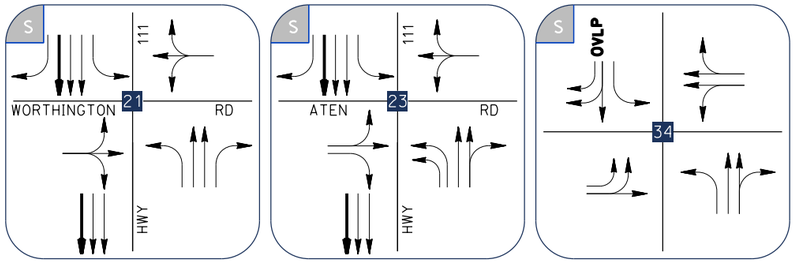
LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

- S = RECOMMENDED TRAFFIC SIGNAL
- S = EXISTING TRAFFIC SIGNAL OR FUTURE TRAFFIC SIGNAL INSTALLED IN PHASE 1 OR 2
- = EXISTING LANE CONFIGURATION
- = RECOMMENDED LANE CONFIGURATION
- PT+PM = RECOMMENDED PROTECTED PERMISSIVE PHASING
- OVLP = RECOMMENDED RIGHT-TURN OVERLAP
- = IMPROVE TO 4-LANE MAJOR INDUSTRIAL COLLECTOR
- = IMPROVE TO 2-LANE MAJOR INDUSTRIAL COLLECTOR
- =SPECIFIC PLAN SITE
- X = STUDY INTERSECTION

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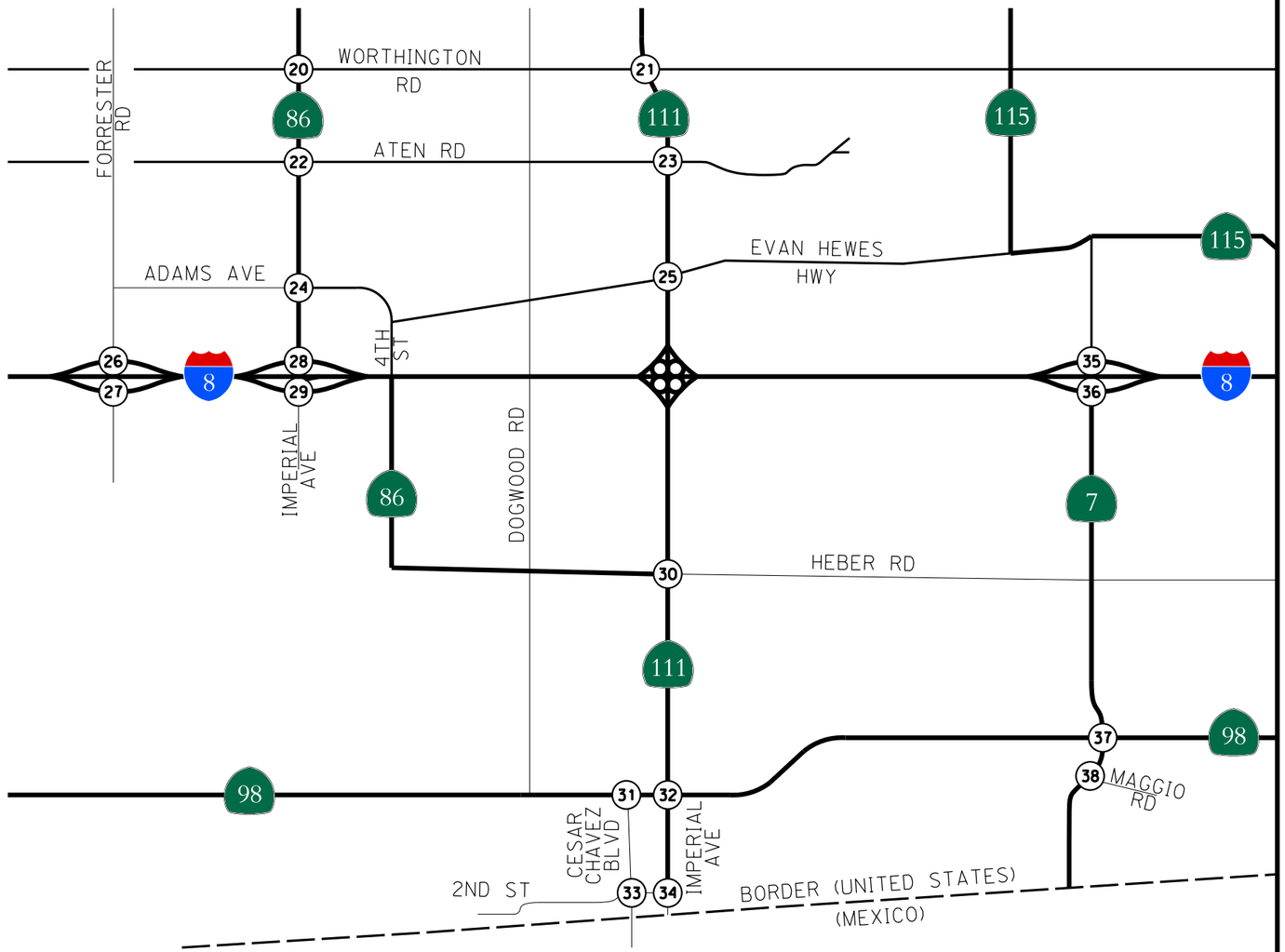


EXHIBIT 27B

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT) RECOMMENDED IMPROVEMENTS - SOUTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

= EXISTING LANE CONFIGURATION

= RECOMMENDED LANE CONFIGURATION

PT+PM = RECOMMENDED PROTECTED PERMISSIVE PHASING

OVLP = RECOMMENDED RIGHT-TURN OVERLAP

(X) = STUDY INTERSECTION

S = EXISTING TRAFFIC SIGNAL

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10.5.3 Intersection LOS With Recommended Improvements

Table 23 displays the operational analysis results for the study intersections with the recommended improvements under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions. **Appendix E** contains the Future Year 2050 With Specific Plan Phase Three (Buildout) With Recommended Improvements intersection analysis worksheets.

TABLE 23: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE INTERSECTION OPERATIONS WITH RECOMMENDED IMPROVEMENTS

#	Intersection	Control	Future Year 2050 With SP Phase Three With Recommended Improvements					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
1	SR-111 / Lincoln Street	(SIGNAL)	Overall	17.7	B	Overall	33.9	C
2	SR-86 / 66th Avenue	(SIGNAL)	Overall	**39.6**	**D**	Overall	**43.6**	**D**
3	SR-111 / Davis Road	(SIGNAL)	Overall	19.9	B	Overall	13.9	B
4	SR-111 / English Road	(SIGNAL)	Overall	12.7	B	Overall	24.7	C
5	SR-111 / Main Street (in Niland)	(SIGNAL)	Overall	9.9	A	Overall	14.9	B
7	SR-111 / Sinclair Road	(SIGNAL)	Overall	25.6	C	Overall	28.0	C
8	SR-111 / Lindsey Road	(SIGNAL)	Overall	15.2	B	Overall	34.3	C
11	SR-78/86 / Lack Road	(SIGNAL)	Overall	13.9	B	Overall	12.6	B
12	SR-78/86 / Center Street (Forrester Road)	(SIGNAL)	Overall	30.9	C	Overall	34.6	C
14	SR-78/86 / Brandt Road	(SIGNAL)	Overall	15.6	B	Overall	20.7	C
15	SR-111 / SR-78 WB Ramps	(SIGNAL)	Overall	30.8	C	Overall	**38.0**	**D**
16	SR-111 / SR-78 EB Ramps	(SIGNAL)	Overall	**45.9**	**D**	Overall	**38.7**	**D**
19	SR-111 / Ben Hulse Highway	(SIGNAL)	Overall	**63.2**	**E**	Overall	**49.6**	**D**
21	SR-111 / Worthington Road	(SIGNAL)	Overall	**45.1**	**D**	Overall	28.9	C
23	SR-111 / Aten Road	(SIGNAL)	Overall	**43.8**	**D**	Overall	**51.3**	**D**
34	SR-111 / 2nd Street	(SIGNAL)	Overall	17.3	B	Overall	16.4	B

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 7th edition of the HCM.
1) Delay is measured in seconds per vehicle.
2) Level of Service
(AWSC) = All-Way Stop Controlled; (TWSC) = Two-Way Stop Controlled; (OWSC) = One-Way Stop Controlled
NB=Northbound, WB=Westbound, etc.
L=Left-turn movement, R= Right-turn movement, LT=Left-Through lane, LTR=Left-Through-Right lane, etc.

As shown in Table 23, the recommended improvements are anticipated to improve operations under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions to LOS C or better during the peak hours except for the following:

- SR-86 / 66th Avenue (AM/PM: LOS D with recommended improvements)
- SR-111 / SR-78 Westbound Ramps (PM: LOS D with recommended improvements)
- SR-111 / SR-78 Eastbound Ramps (AM/PM: LOS D with recommended improvements)
- SR-111 / Ben Hulse Highway (AM: LOS E, PM: LOS D with recommended improvements)
- SR-111 / Worthington Road (AM: LOS D with recommended improvements)
- SR-111 / Aten Road (AM/PM: LOS D with recommended improvements)

10.5.4 Intersection Queuing Analysis With Recommended Improvements

A queuing analysis was performed for the study intersections under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions with the recommended improvements to determine the storage lengths that would be needed for the recommended future left-turn and right-turn lanes, and where applicable, to determine if the existing storage lengths would accommodate the peak queue lengths and to ensure that queuing at the intersection approaches of the off-ramps would not spill back onto the freeway mainline. The queuing analysis results are based on the 95th percentile queue lengths in feet for each turning movement or approach. The SimTraffic application within the Synchro 12 software program was used to perform the queuing analysis.

The results of the queuing analysis under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions are provided in **Table 24**. **Appendix F** contains the SimTraffic queuing analysis worksheets.

As shown in Table 24, the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions with the recommended improvements except for at the following study intersections:

<u>SR-111 / Sinclair Road</u>

- Northbound Left-Turn Lane (AM/PM)

<u>SR-78/86 / Lack Road</u>

- Southbound Right-Turn Lane (PM)

<u>SR-78/86 / Center Street</u>

- Southbound Left-Turn Lane (PM)
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (PM)

<u>SR-86 / Kalin Road</u>

- Southbound Right-Turn Lane (AM/PM)

SR-86 / 1st Street-Main Street

- Southbound Left-Turn Lane (AM/PM)
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / Aten Road

- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / I-8 Westbound Ramps

- Southbound Right-Turn Lane (AM/PM)

In addition, Table 24 shows that excessive queue lengths exceeding 1,000 feet are anticipated on the recommended future left-turn and right-turn lanes at the following intersections:

SR-111 / Main Street Calipatria

- Eastbound Right-Turn Lane (PM)

SR-86 / 1st Street-Main Street

- Northbound Right-Turn Lane (AM/PM)
- Eastbound Right-Turn Lane (PM)
- Westbound Shared Through/Right-Turn Lane (PM)

10.5.5 Roadway Segment LOS With Recommended Improvements

Table 25 displays the roadway segment analysis results with the recommended improvements under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions. As shown in Table 25, the recommended improvements are anticipated to improve daily roadway segment LOS to LOS C or better under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions.

TABLE 24: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE INTERSECTION QUEUING ANALYSIS WITH RECOMMENDED IMPROVEMENTS

	Study Intersection	Peak Hour	Northbound						Southbound						Eastbound						Westbound					
			Left			Right			Left			Right			Left			Right			Left			Right		
			Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes
1	SR-111 / Lincoln Street	AM	192'	475'	2	-	-	-	-	-	-	198'	210'	1	223'	(2)	1	226'	(3)	1	-	-	-	-	-	-
		PM	275'									**330'**			184'			0'								
2	SR-86 / 66th Avenue	AM	31'	760'	1	141'	300'	1	425'	750'	2	56'	260'	1	78'	DNE	1	10'	490'	1	93'	DNE	1	131'	(3)	2
		PM	22'			224'			624'			26'			248'			90'			130'			313'		
3	SR-111 / Davis Road	AM	6'	385'	1	-	-	-	-	-	-	75'	DNE	1	75'	DNE	2 (L, LR)	-	-	-	-	-	-	-	-	-
		PM	7'						-			42'			190'											
4	SR-111 / English Road	AM	67'	DNE	2 (L, LTR)	-	-	-	72'	DNE	1	47'	DNE	1	122'	DNE	1	47'	DNE	1	61'	DNE	1	95'	DNE	1
		PM	186'						239'			112'			139'			45'			87'			240'		
5	SR-111 / Main Street Niland	AM	-	-	-	217'	-	1 (TR)	86'	150'	1	-	-	-	-	-	-	-	-	-	70'	-	1 (LR)	-	-	-
		PM				391'			109'												155'					
6	SR-111 / Pound Road	AM	110'	DNE	1	162'	-	1 (TR)	0'	DNE	1	67'	DNE	1	67'	DNE	1	83'	-	1 (TR)	0'	DNE	1	0'	-	1 (TR)
		PM	167'			240'			0'			97'			181'			212'			0'			0'		
7	SR-111 / Sinclair Road	AM	**289'**	240'	2	112'	(2)	1	72'	290'	1	71'	DNE	1	169'	DNE	1	64'	DNE	2	131'	DNE	1	38'	-	1 (TR)
		PM	**416'**			73'			41'			110'			163'			189'			342'			72'		
8	SR-111 / Lindsey Road	AM	152'	DNE	1	57'	DNE	1	86'	DNE	1	38'	DNE	1	53'	DNE	1	60'	DNE	1	97'	DNE	1	43'	DNE	1
		PM	206'			50'			116'			90'			130'			223'			265'			73'		
9	SR-111 / Main Street Calipatria	AM	453'	DNE	1	199'	DNE	1	307'	DNE	1	73'	DNE	1	586'	DNE	1	813'	DNE	1	99'	DNE	1	247'	DNE	1
		PM	587'			91'			587'			662'			611'			**1,101'**			217'			148'		
11	SR-78/86 / Lack Road	AM	35'	-	1 (LT)	6'	30'	1	29'	-	1 (LT)	35'	30'	1	116'	665'	1	8'	590'	1	10'	665'	1	22'	575'	1
		PM	11'			0'			71'			**88'**			79'			8'			0'			14'		
12	SR-78/86 / Center Street	AM	101'	100'	1	187'	-	1 (TR)	137'	150'	1	71'	DNE	1	**167'**	60'		473'	-	1 (TR)	62'	60'	1	172'	DNE	1
		PM	94'			149'			**234'**			212'			**181'**			369'			**86'**			90'		
14	SR-78 / Brandt Road	AM	84'	-	1 (LT)	**54'**	30'	1	75'	DNE	2 (L, LT)	6'	30'	1	0'	570'	1	0'	570'	1	38'	650'	1	96'	650'	1
		PM	76'			34'			234'			0'			3'			3'			46'			59'		
15	SR-111 / SR-78 WB Ramps	AM	228'	600'	1	444'	-	1 (TR)	25'	225'	1	226'	-	1 (TR)	442'	1,940'[1]	2 (L, LT)	159'	185'	1	5'	130'	1	32'	130'	1
		PM	220'			187'			58'			679'			329'			55'			43'			39'		
16	SR-111 / SR-78 EB Ramps	AM	289'	455'	1	188'	455'	1	10'	450'	1	147'	(3)	1	35'	2,080' [1]	1 (LT)	37'	2,080' [1]	1	48'	-	1 (LT)	11'	50'	1
		PM	50'			10'			0'			728'			58'			153'			93'			11'		
17	SR-86 / Kalin Road	AM	21'	-	1 (LT)	10'	50'	1	60'	DNE	2 (L, LT)	**67'**	35'	1	25'	DNE	1	3'	650'	1	0'	620'	1	49'	600'	1
		PM	48'			12'			228'			**123'**			30'			6'			1'			29'		
18	SR-86 / 1st Street-Main Street	AM	**330'**	210'	1	**1,427'**	(3)	1	**182'**	75'	1	476'	-	1 (TR)	**193'**	165'	1	140'	(3)	1	**335'**	245'	2	623'	-	1 (TR)
		PM	**335'**			**1,541'**			**162'**			317'			**248'**			**1,556'**			**891'**			**1,541'**		
20	SR-86 / Barioni Boulevard	AM	153'	245'	1	286'	-	1 (TR)	137'	235'	1	266'	-	1 (TR)	222'	DNE	1	185'	195'	1	103'	DNE	1	124'	180'	1
		PM	203'			257'			146'			415'			225'			163'			110'			76'		
22	SR-86 / Aten Road	AM	155'	390'	1	189'	305'	1	283'	340'	1	240'	340'	1	**360'**	280'	1	277'	-	1 (TR)	**177'**	145'	1	266'	-	1 (TR)
		PM	225'			181'			**393'**			344'			**331'**			237'			**211'**			243'		
28	SR-86 / I-8 WB Ramps	AM	65'	260'	1	-	-	-	-	-	-	**491'**	295'	1	-	-	-	-	-	-	222'	1,320'[1]	1 (LR)	150'	310'	2
		PM	29'									**557'**									223'			123'		

Footnotes:

Queue length exceeding existing storage length by at least one car length (20 feet) indicated in **bold**.

DNE = Does Not Exist

L = Left; R = Right, T = Through; LTR = Shared left/through/right lane; LT = Shared left/through lane; LR = Shared left/right lane; TR = Shared through/right lane

[1] Total length of off-ramp from gore point to intersection stop bar.

[2] No turn pocket, transition from through lane to left-turn lane.

[3] No turn pocket, transition from through lane to right-turn lane.

TABLE 25: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE ROADWAY SEGMENT ANALYSIS WITH RECOMMENDED IMPROVEMENTS

Roadway	Segment	Existing or Proposed Future Classification	ROADWAY CAPACITY (LOS C) [1]	Year 2050 With Phase 3 ADT	LOS
Gentry Road	Between Sinclair Road and Lindsay Road	2-Lane Major Industrial Collector	10,500	**11,056**	**D**
	With Recommended Improvement	*4-Lane Major Industrial Collector*	*20,000*	*11,056*	*B*
	Between Lindsay Road and Eddins Road	2-Lane Industrial Local	7,000	**9,034**	**E**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*9,034*	*C*
Pound Road	Between Davis Road and Brandt Road	2-Lane Industrial Local	7,000	**7,235**	**D**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*7,235*	*B*
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	**7,946**	**D**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*7,946*	*C*
Eddins Road / Main Street (Calipatria)	Between English Road and Highway 111	2-Lane Industrial Local	7,000	**7,453**	**D**
	With Recommended Improvement	*2-Lane Major Industrial Collector*	*10,500*	*7,453*	*B*

Footnotes:
[1] Roadway classification and capacity sourced from the Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008). Imperial County accepts LOS C or better for roadway operations as identified in the Circulation Element.
Deficient LOS (LOS D or worse) indicated in **bold** text.

11.0 FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT) WITH REDUCED ALTERNATIVE TRANSPORTATION CONDITIONS

Future Year 2050 With Specific Plan Phase Three With Reduced Alternative conditions reflect the buildout of the Lithium Valley Specific Plan, with the building square-footages of the Green Industrial uses reduced by 33% and the remaining uses reduced by 50% or more. The Year 2050 scenario of the Southern California Association of Governments (SCAG) regional travel demand model was used to develop the Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative traffic volumes in the study area.

The proposed Specific Plan Phase Three (Buildout) With Reduced Alternative land uses were inputted into the Travel Analysis Zones (TAZs) that make up the Lithium Valley Specific Plan area in the SCAG model, which was run for the SCAG model Year 2050 scenario.

11.1 Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Conditions Roadway Network

The Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative roadway network assumes that all roadways connecting the project site to SR-111 or SR-78/86 would be paved and that all key roadways accessing the Specific Plan site would be built to at least two-lane Industrial Local standards. The intersection analysis assumes the existing lane configurations and controls to determine the improvement needs based on the Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative traffic volumes.

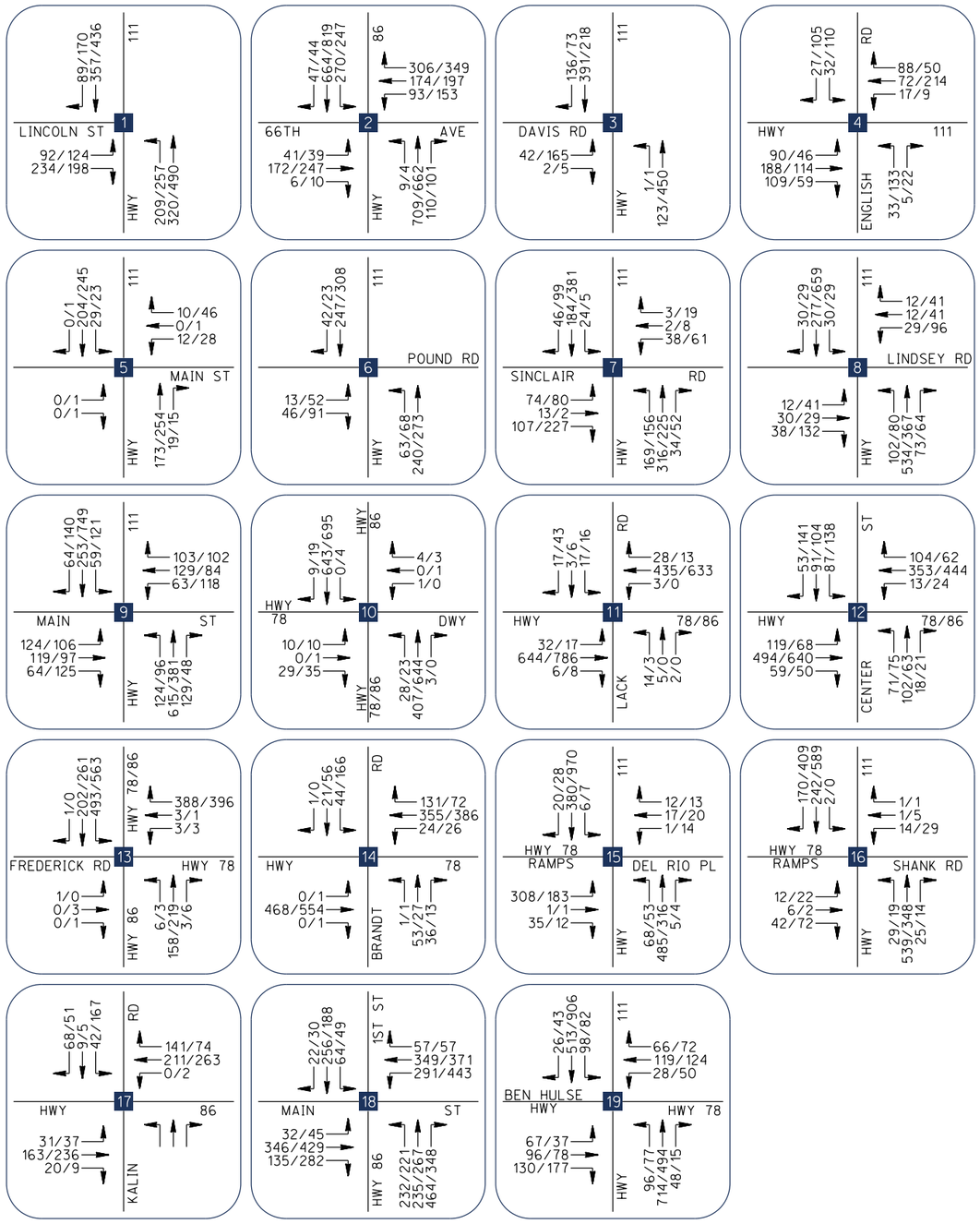
11.2 Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Conditions Traffic Volumes

The Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative traffic volumes were derived based on the forecast growth in traffic in the SCAG model and the distribution of project trips. Growth factors were developed based on the forecast traffic growth from Baseline Year 2019 to Future Year 2050 No Project/No General Plan traffic volumes. These growth factors were applied to Existing Year 2025 traffic volume counts where applicable to reflect 25 years of growth from 2025 to 2050.

The Future Year 2050 No Project/No General Plan traffic volumes were post-processed to develop the intersection turning movement volumes during the AM and PM peak hours. Adjustments were made where appropriate to reflect changes in traffic patterns and growth on all legs of the study intersections.

Project-specific daily and AM/PM peak hour trips associated with the proposed Phase One land uses were added to the Future Year 2050 No Project/No General Plan traffic volumes to develop the Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative traffic volumes.

Exhibits 28A and **28B** illustrate the Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative AM/PM peak hour intersection turning movement volumes within the north and south study areas, respectively. **Exhibit 29** illustrates the Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative daily traffic volumes within the north study area.



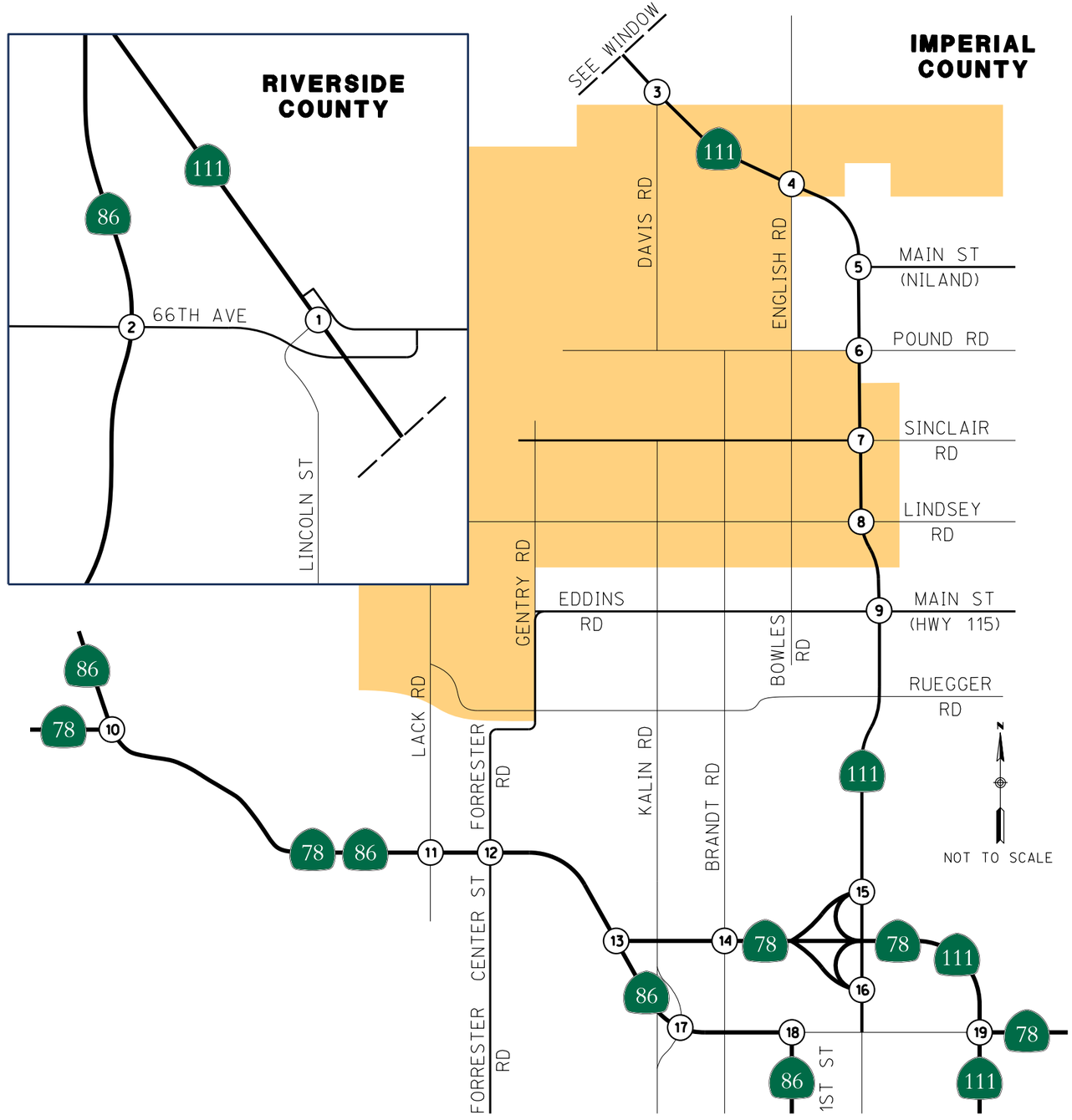


EXHIBIT 28A

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT) WITH REDUCED ALTERNATIVE PEAK HOUR INTERSECTION TRAFFIC VOLUMES - NORTH STUDY AREA

LEGEND
AM/PM=PEAK HOUR VOLUMES
=SPECIFIC PLAN SITE

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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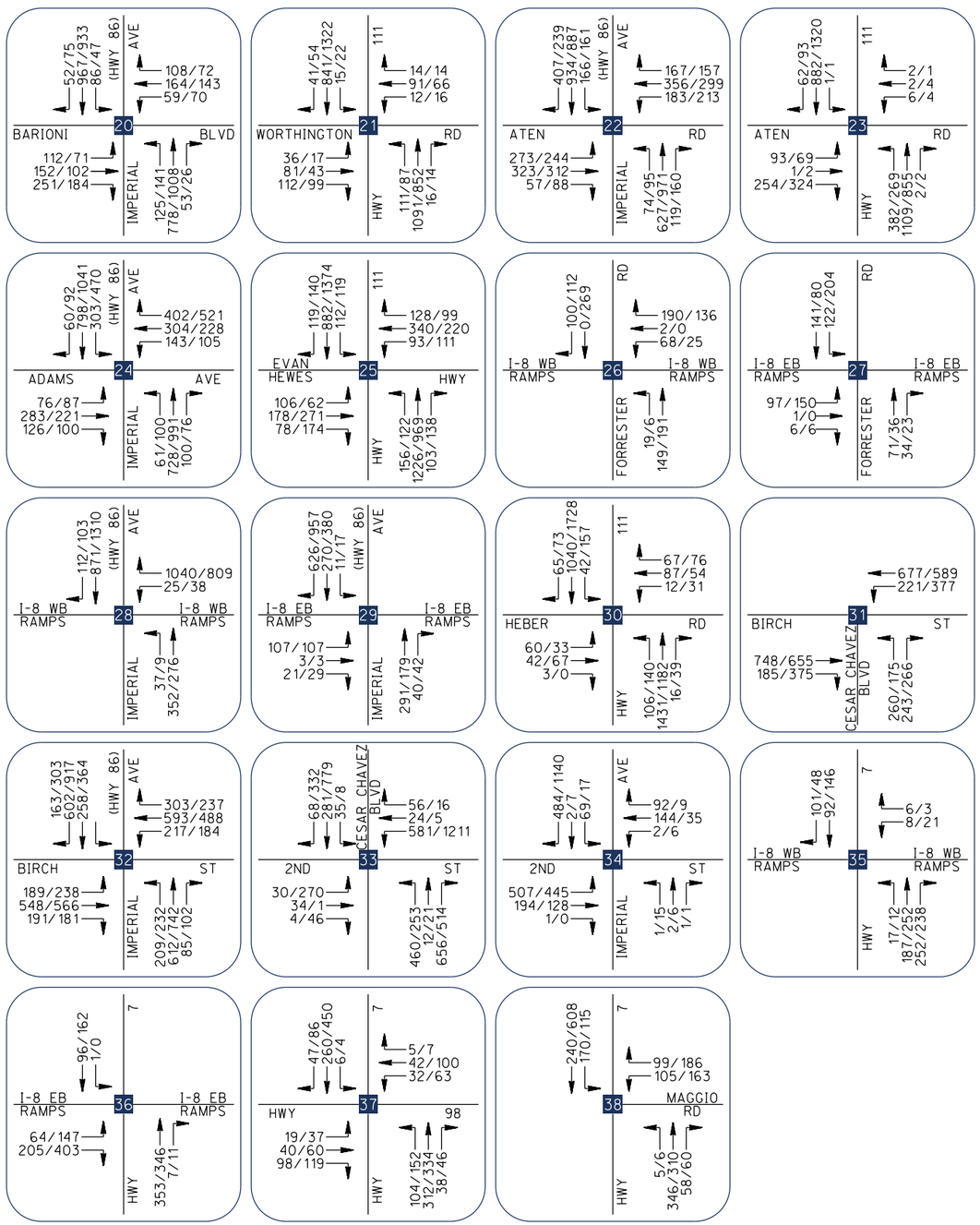


EXHIBIT 28B

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT) WITH REDUCED ALTERNATIVE PEAK HOUR INTERSECTION TRAFFIC VOLUMES - SOUTH STUDY AREA

LEGEND: AM/PM=PEAK HOUR VOLUMES

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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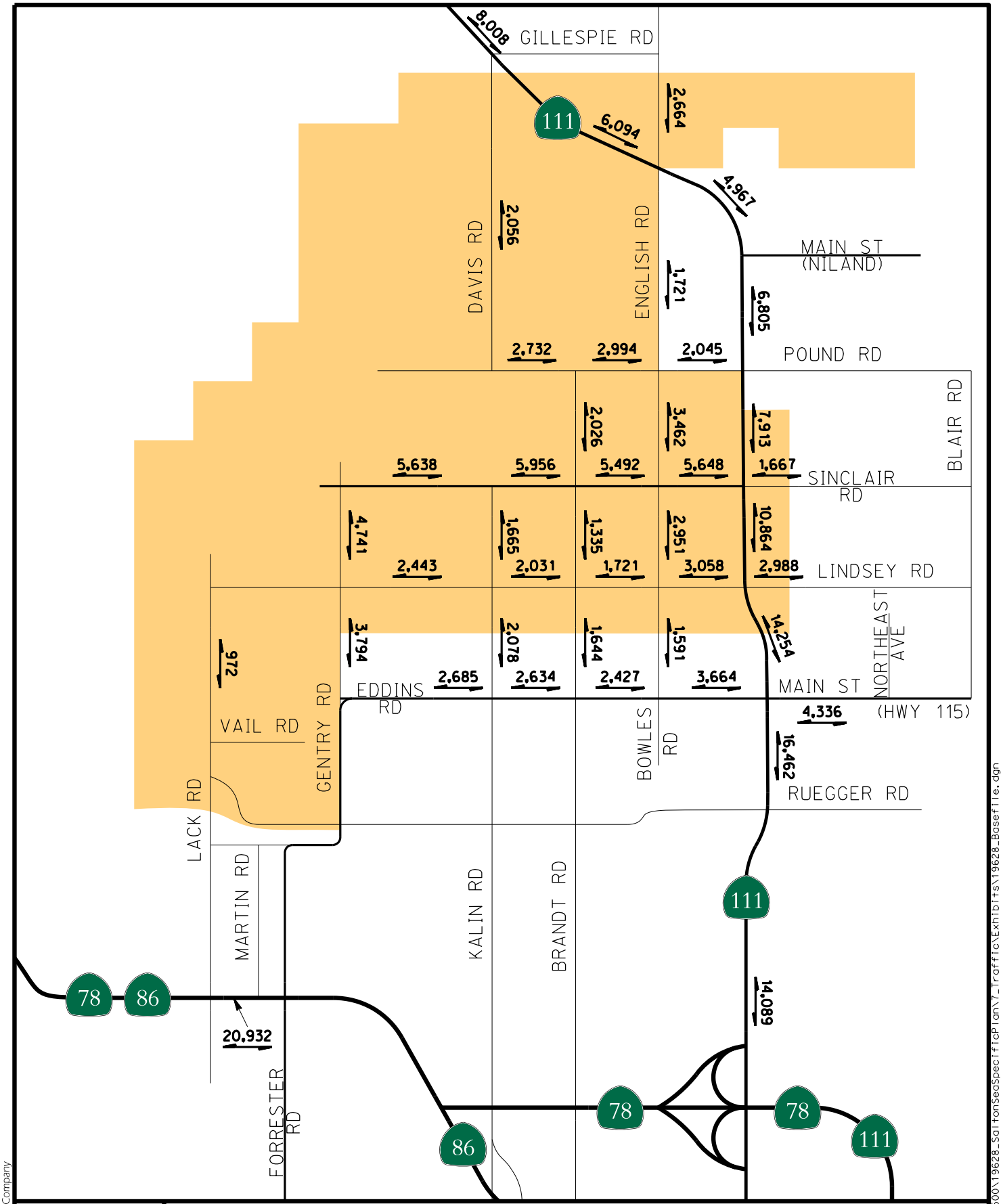


EXHIBIT 29

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT)
WITH REDUCED ALTERNATIVE DAILY TRAFFIC VOLUMES
(NORTH STUDY AREA ONLY)

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

X,XXX =TWO-WAY ADT

=SPECIFIC PLAN SITE

RICK

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11.3 Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Conditions Intersection Operations

Table 26 displays the operational analysis results for the study intersections under Future Year 2050 With Specific Plan Phase Three With Reduced Alternative conditions. **Appendix B** contains the Future Year 2050 With Specific Plan Phase Three With Reduced Alternative intersection analysis worksheets.

TABLE 26: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE INTERSECTION OPERATIONS

#	Intersection	Control	Future Year 2050 With SP Phase Three With Reduced Alternative					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
1	SR-111 / Lincoln Street	(SIGNAL)	Overall	11.9	B	Overall	13.6	B
2	SR-86 / 66th Avenue	(SIGNAL)	Overall	**77.1**	**E**	Overall	**83.1**	**F**
3	SR-111 / Davis Road	(OWSC)	EB-L	12.9	B	EB-L	17.6	C
4	SR-111 / English Road	(TWSC)	NB-L	15.5	C	NB-L	20.1	C
5	SR-111 / Main Street (in Niland)	(OWSC)	WB-L	10.6	B	WB-L	11.4	B
6	SR-111 / Pound Road	(TWSC)	EB-L	12.1	B	EB-L	17.5	C
7	SR-111 / Sinclair Road	(TWSC)	WB-L	**37.6**	**E**	WB-L	**71.5**	**F**
8	SR-111 / Lindsey Road	(TWSC)	WB-L	**55.3**	**F**	WB-L	**>300**	**F**
9	SR-111 / Main Street (in Calipatria)	(AWSC)	Overall	**54.3**	**F**	Overall	**103.2**	**F**
10	SR-86 / SR-78 (west)	(TWSC)	EB-L	12.6	B	EB-L	13.4	B
11	SR-78/86 / Lack Road	(TWSC)	NB-L	17.1	C	NB-L	19.7	B
12	SR-78/86 / Center Street (Forrester Road)	(SIGNAL)	Overall	26.4	C	Overall	31.4	C
13	SR-86 / SR-78 (east)	(SIGNAL)	Overall	19.2	B	Overall	17.4	C
14	SR-78 / Brandt Road	(TWSC)	NB-L	16.5	C	SB-L	24.7	C
15	SR-111 / SR-78 WB Ramps	(SIGNAL)	Overall	26.0	C	Overall	22.6	C
16	SR-111 / SR-78 EB Ramps	(SIGNAL)	Overall	11.8	B	Overall	8.0	A
17	SR-86 / Kalin Road	(TWSC)	NB-L	11.5	B	SB-L	14.6	B
18	SR-86 / 1st Street	(SIGNAL)	Overall	**37.8**	**D**	Overall	**58.5**	**E**
19	SR-111 / Ben Hulse Highway	(SIGNAL)	Overall	28.0	C	Overall	30.6	C
20	SR-86 / Barioni Boulevard	(SIGNAL)	Overall	**63.0**	**E**	Overall	**52.0**	**D**
21	SR-111 / Worthington Road	(SIGNAL)	Overall	23.3	C	Overall	24.8	C
22	SR-86 / Aten Road	(SIGNAL)	Overall	**52.5**	**D**	Overall	**50.9**	**D**
23	SR-111 / Aten Road	(SIGNAL)	Overall	20.6	C	Overall	34.9	C
24	SR-86 / Adams Avenue	(SIGNAL)	Overall	32.6	C	Overall	34.7	C
25	SR-111 / Evan Hewes Highway	(SIGNAL)	Overall	**71.5**	**E**	Overall	**89.2**	**F**

TABLE 26 (CONTINUED): FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE INTERSECTION OPERATIONS

#	Intersection	Control	Future Year 2050 With SP Phase Three With Reduced Alternative					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
26	Forrester Road / I-8 WB Ramps	(TWSC)	WB-L	10.5	B	WB-L	12.6	B
27	Forrester Road / I-8 EB Ramps	(TWSC)	EB-L	15.1	C	EB-L	19.1	C
28	SR-86 / I-8 Westbound Ramps	(SIGNAL)	Overall	**39.0**	**D**	Overall	**36.5**	**D**
29	SR-86 / I-8 Eastbound Ramps	(SIGNAL)	Overall	7.5	A	Overall	8.5	A
30	SR-111 / Heber Road	(SIGNAL)	Overall	**57.1**	**E**	Overall	31.2	C
31	Cesar Chavez Boulevard / SR-98 (Birch Street)	(SIGNAL)	Overall	14.2	B	Overall	21.5	C
32	SR-111 / SR-98 (Birch Street)	(SIGNAL)	Overall	**41.0**	**D**	Overall	**36.6**	**D**
33	Cesar Chavez Boulevard / 2nd Street	(SIGNAL)	Overall	**143.9**	**F**	Overall	**154.5**	**F**
34	SR-111 / 2nd Street	(SIGNAL)	Overall	22.1	C	Overall	**37.2**	**D**
35	SR-7 / I-8 Westbound Ramps	(TWSC)	WB-L	10.3	B	WB-L	11.7	B
36	SR-7 / I-8 Eastbound Ramps	(TWSC)	EB-L	11.1	B	EB-L	13.0	B
37	SR-7 / SR-98	(SIGNAL)	Overall	22.5	C	Overall	27.9	C
38	SR-7 / Maggio Road	(SIGNAL)	Overall	28.5	C	Overall	25.0	C

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 7th edition of the HCM.
1) Delay is measured in seconds per vehicle.
2) Level of Service
(AWSC) = All-Way Stop Controlled; (TWSC) = Two-Way Stop Controlled; (OWSC) = One-Way Stop Controlled
NB=Northbound, WB=Westbound, etc.
L=Left-turn movement, R= Right-turn movement, LT=Left-Through lane, LTR=Left-Through-Right lane, etc.

As shown in Table 26, the following 13 study intersections are forecast to operate at a deficient LOS D or worse under Future Year 2050 conditions with Specific Plan Phase Three (Buildout) With Reduced Alternative:

1) SR-86 / 66th Avenue (AM: LOS E; PM: LOS F)
2) SR-111 / Sinclair Road (AM: LOS E; PM: LOS F)
3) SR-111 / Lindsey Road (AM/PM: LOS F)
4) SR-111 / Main Street Calipatria (AM/PM: LOS F)
5) SR-86 / 1st Street-Main Street (AM: LOS D, PM: LOS E)
6) SR-86 / Barioni Boulevard (AM: LOS E, PM: LOS D)
7) SR-86 / Aten Road (AM/PM: LOS D)
8) SR-111 / Evan Hewes Highway (AM: LOS E; PM: LOS F)
9) SR-86 / I-8 Westbound Ramps (AM/PM: LOS D)
10) SR-111 / Heber Road (AM: LOS E)
11) SR-111 / SR-98 (AM/PM: LOS D)
12) Cesar Chavez Boulevard / 2nd Street (AM/PM: LOS F)
13) SR-111 / 2nd Street (PM: LOS D)

Improvements are recommended for 10 of the 13 study intersections listed above, which are presented in Section 7.5. However, improvements are not recommended for 3 of the 13 study intersections listed above, and below are the reasons why improvements are not recommended at these intersections:

SR-111 / Evan Hewes Highway
The relatively long delays and deficient LOS E and F operations during the peak hours are primarily attributed to the length of the eastbound pedestrian phase that crosses the south leg of SR-111 at the intersection. The center median on SR-111 is approximately 45 feet wide and the total width of SR-111 at the pedestrian crossing is approximately 155 feet. As a result, a total of 57 seconds is needed to allow pedestrians to cross SR-111 on the south leg of the intersection. The length of this pedestrian phase requires an overall longer cycle length when a pedestrian call is activated to cross SR-111 on the south leg of the intersection.

SR-111 / Heber Road
The deficient LOS E operation during the PM peak hour is primarily attributed to the lengths of the eastbound and westbound pedestrian phases that cross SR-111 on the north and south legs of the intersection, which are each approximately 41 seconds. The east-west traffic volumes are relatively low and don't require 41 seconds to clear the intersection, so as a result, the intersection has an overall longer cycle length than what is needed to serve the vehicular traffic.

SR-111 / SR-98 (Birch street)
The deficient LOS D operations during the peak hours are primarily attributed to the lengths of the pedestrian phases across all legs of the intersection, ranging from 36 seconds to 39 seconds. These longer pedestrian phases require a longer overall cycle length than what would be needed to serve the vehicular traffic at the intersection.

11.4 Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Conditions Roadway Segment Analysis

Table 27 summarizes the roadway segment capacity analysis results under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions. As shown in Table 27, all study roadway segments are forecast to operate at an acceptable LOS C or better under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions. Therefore, no additional improvements are required on the study area roadway segments.

TABLE 27: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE ROADWAY SEGMENT ANALYSIS

Roadway	Segment	Existing or Proposed Future Classification	Roadway Capacity (LOS C) [1]	Year 2050 With Phase Three Reduced ADT	LOS
SR-111	North of Davis Road	2-Lane State Highway	20,000	8,008	A
	Between Davis Road and English Road	2-Lane State Highway	20,000	6,094	A
	Between English Road and Main Street Niland	2-Lane State Highway	20,000	4,967	A
	Between Main Street Niland and Pound Road	2-Lane State Highway	20,000	6,805	A
	Between Pound Road and Sinclair Road	2-Lane State Highway	20,000	7,913	A
	Between Sinclair Road and Lindsey Road	2-Lane State Highway	20,000	10,864	B
	Between Lindsey Road and Main Street Calipatria	2-Lane State Highway	20,000	14,254	B
	Between Main Street Calipatria and Ruegger Road	2-Lane State Highway	20,000	16,462	C
	Between Ruegger Road and SR-78	2-Lane State Highway	20,000	14,089	B
SR-115	Between Northeast Avenue and Blair Road	2-Lane State Highway	20,000	4,336	A
SR-78/86	Between Lack Road and Martin Road	4-Lane State Highway	40,000	20,932	B
English Road	Between Gillespie Road and Highway 111	2-Lane Industrial Local	7,000	2,664	B
	Between Highway 111 and Pound Road	2-Lane Industrial Local	7,000	1,721	A
	Between Pound Road and Sinclair Road	2-Lane Industrial Local	7,000	3,462	B
	Between Sinclair Road and Lindsey Road	2-Lane Industrial Local	7,000	2,951	B
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	1,591	A
Brandt Road	Between Pound Road and Sinclair Road	2-Lane Industrial Local	7,000	2,026	A
	Between Sinclair Road and Lindsey Road	2-Lane Industrial Local	7,000	1,335	A
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	1,644	A
Davis Road / Kalin Road	Between Highway 111 and Pound Road	2-Lane Industrial Local	7,000	2,056	A
	Between Sinclair Road and Lindsey Road (Kalin Road)	2-Lane Industrial Local	7,000	1,665	A
	Between Lindsey Road and Eddins Road (Kalin Road)	2-Lane Industrial Local	7,000	2,078	A

TABLE 27 (CONTINUED): FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE ROADWAY SEGMENT ANALYSIS

Roadway	Segment	Existing or Proposed Future Classification	Roadway Capacity (LOS C) [1]	Year 2050 With Phase Three ADT	LOS
Gentry Road	Between Sinclair Road and Lindsey Road	2-Lane Industrial Local	7,000	4,741	B
	Between Lindsey Road and Eddins Road	2-Lane Industrial Local	7,000	3,794	B
Lack Road	Between Lindsey Road and Vail Road	2-Lane Industrial Local	7,000	972	A
Pound Road	Between Davis Road and Brandt Road	2-Lane Industrial Local	7,000	2,732	B
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	2,994	B
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	2,045	B
Sinclair Road	Between Gentry Avenue and Kalin Road	2-Lane Industrial Local	7,000	5,638	C
	Between Kalin Road and Brandt Road	2-Lane Industrial Local	7,000	5,956	C
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	5,492	C
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	5,648	C
	Between Highway 111 and SP East Boundary	2-Lane Industrial Local	7,000	1,667	A
Lindsey Road	Between Gentry Avenue and Kalin Road	2-Lane Industrial Local	7,000	2,443	A
	Between Kalin Road and Brandt Road	2-Lane Industrial Local	7,000	2,031	A
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	1,721	A
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	3,058	B
	Between Highway 111 and SP East Boundary	2-Lane Industrial Local	7,000	2,988	B
Eddins Road / Main Street (Calipatria)	Between Gentry Avenue and Kalin Road	2-Lane Industrial Local	7,000	2,685	B
	Between Kalin Road and Brandt Road	2-Lane Industrial Local	7,000	2,634	B
	Between Brandt Road and English Road	2-Lane Industrial Local	7,000	2,427	A
	Between English Road and Highway 111	2-Lane Industrial Local	7,000	3,664	B

Footnotes:
[1] Roadway classification and capacity sourced from the Imperial County General Plan Circulation and Scenic Highways Element (January 29, 2008). Imperial County accepts LOS C or better for roadway operations as identified in the Circulation Element.
Deficient LOS (LOS D or worse) indicated in **bold** text.

11.5 Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative Recommended Improvements

Based on the findings of the intersection and roadway segment analysis under Future Year 2050 conditions with Specific Plan Phase Three (Buildout) With Reduced Alternative, improvements are recommended to provide an acceptable LOS in compliance with the County of Imperial *General Plan Circulation and Scenic Highways Element* (January 29, 2008) and the County of Riverside *General Plan Circulation Element* (Amended December 12, 2017). All study intersections along a State Highway where installation of traffic signals are recommended will be subject to an Intersection Safety and Operations Assessment Process (ISOAP) to determine the appropriate intersection control as required by Caltrans.

11.5.1 Recommended Intersection Improvements

SR-86 / 66th Avenue

- Widen the eastbound and westbound 66th Avenue approaches to provide one dedicated left-turn lane on each approach
- Modify existing traffic signal to provide a right-turn overlap on the westbound 66th Avenue approach

SR-111 / Davis Road

- Install a traffic signal
- Widen the southbound SR-111 approach to provide a dedicated right-turn lane
- Provide protected + permissive left-turn phasing on the northbound SR-111 approach

SR-111 / English Road

- Install a traffic signal
- Widen the eastbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the northbound and southbound English Road approaches to provide a dedicated left-turn lane on each approach
- Provide protected + permissive left-turn phasing on the eastbound and westbound SR-111 approaches
- Provide permissive left-turn phasing on the northbound and southbound English Road approaches

SR-111 / Pound Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane and one shared through/right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound and westbound Pound Road approaches to provide one left-turn lane and one shared through/right-turn lane on each approach
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Pound Road approaches

SR-111 / Sinclair Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound Sinclair Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Sinclair Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Sinclair Road approaches

SR-111 / Lindsey Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound Lindsey Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Lindsey Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Lindsey Road approaches

SR-111 / Main Street (Calipatria)

- Install a traffic signal
- Restripe and reconstruct the center median on the north and south legs of the intersection to provide one left-turn lane, one through lane and one shared through/right-turn lane on the northbound and southbound SR-111 approaches
- Restripe and reconstruct the center median on the east and west legs of the intersection to provide one left-turn lane, one through lane and one right-turn lane on the eastbound and westbound Main Street approaches
- Provide protected left-turn phasing on the northbound and southbound SR-111 approaches
- Provide protected + permissive left-turn phasing on the eastbound and westbound Main Street approaches

SR-86 / 1st Street-Main Street

- Restripe the eastbound SR-86 (Main Street) approach to provide one left-turn lane, one through lane and one right-turn lane
- Restripe the westbound Main Street approach to provide two left-turn lanes and one shared through/ right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the northbound and southbound SR-86/1st Street approaches
- Modify the existing traffic signal to provide a right-turn overlap on the eastbound SR-86 (Main Street) approach

SR-86 / Barioni Boulevard

- Restripe the eastbound and westbound Barioni Boulevard approaches to provide one left-turn lane, one through lane and one right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Barioni Boulevard approaches

SR-86 / Aten Road

- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Aten Road approaches
- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-86 approach

SR-86 / I-8 Westbound Ramps

- Restripe the westbound I-8 off-ramp approach to provide one shared left-turn/through/ right lane and two right-turn lanes
- Restripe the center median north of the intersection to provide a third northbound receiving lane on SR-86 to accommodate three westbound right-turn lanes from the westbound I-8 off-ramp

Cesar Chavez Boulevard / 2nd Street*

- Modify the existing traffic signal to provide a right-turn overlap on the northbound approach (exiting the U.S./Mexico Port-of-Entry)
- Increase the traffic signal cycle length to 120 seconds during the AM peak hour, and 180 seconds during the PM peak hour

*The westbound left-turn movement at this intersection is the primary movement for traffic traveling across the border into Mexico, with the Port of Entry located 250 feet south of the intersection. There is currently only one left-turn lane on the westbound approach to serve approximately 1,120 vehicles during the Year 2035 PM peak hour that are traveling across the U.S./Mexico border into Mexico. Although the east leg of 2nd Street is wide enough to accommodate a second westbound left-turn lane, there is a center striped median with pavement markings indicating that the center lane is restricted to only emergency vehicles. Therefore, it is not feasible to provide a second westbound left-turn lane at the Cesar Chavez Boulevard / 2nd Street intersection.

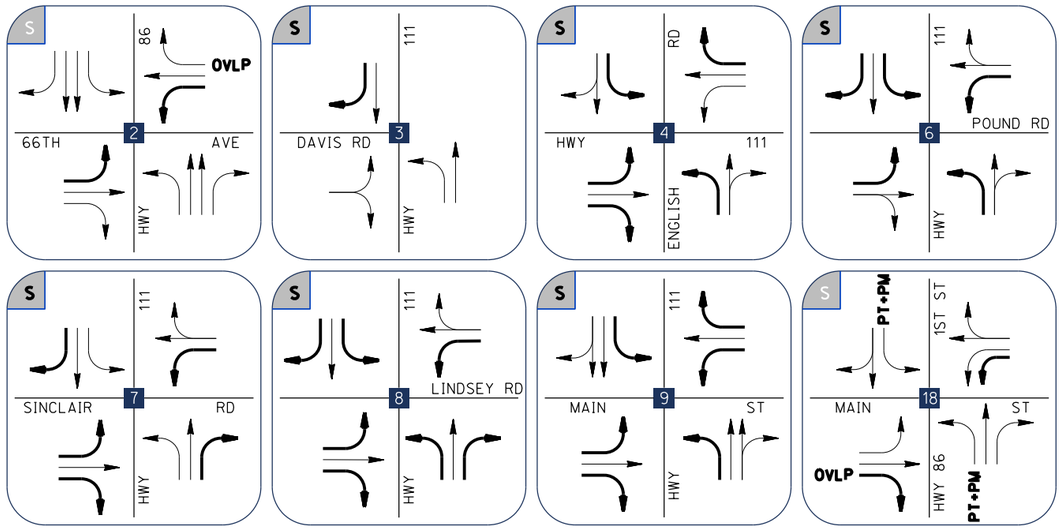
SR-111 / 2nd Street

- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-111 approach

11.5.2 Recommended Roadway Segment Improvements

All study roadway segments are forecast to operate at an acceptable LOS C or better under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions. Therefore, no additional improvements are required on the study area roadway segments.

Exhibits 30A and 30B illustrate the Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative recommended intersection and roadway segment improvements as described above within the north and south study areas, respectively.



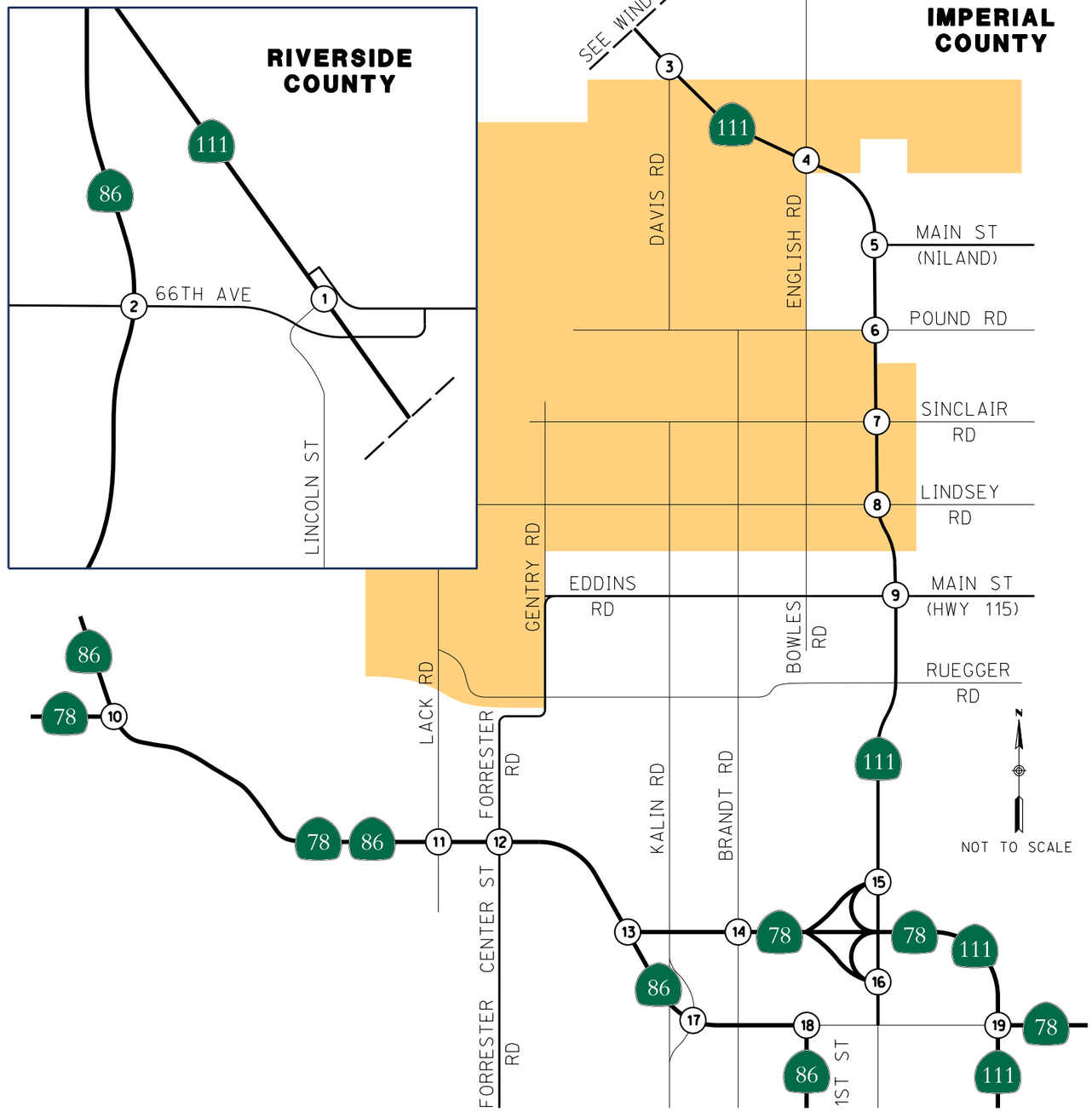


EXHIBIT 30A

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT) WITH REDUCED ALTERNATIVE RECOMMENDED IMPROVEMENTS - NORTH STUDY AREA

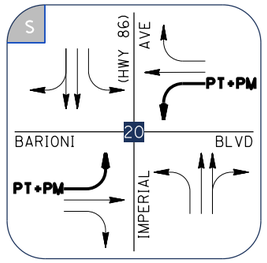
LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

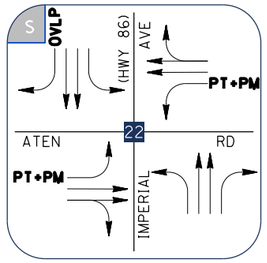
LEGEND

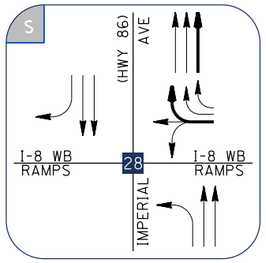
- S = RECOMMENDED TRAFFIC SIGNAL
- S = EXISTING TRAFFIC SIGNAL
- = EXISTING LANE CONFIGURATION
- = RECOMMENDED LANE CONFIGURATION
- PT+PM = RECOMMENDED PROTECTED PERMISSIVE PHASING
- OVLP = RECOMMENDED RIGHT-TURN OVERLAP
- (X) = STUDY INTERSECTION
- =SPECIFIC PLAN SITE

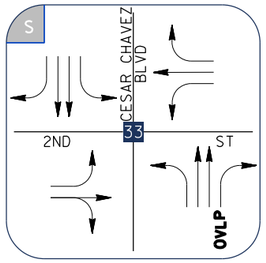
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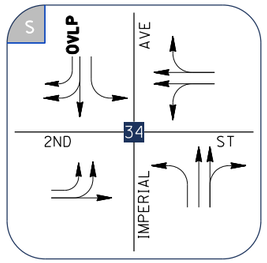
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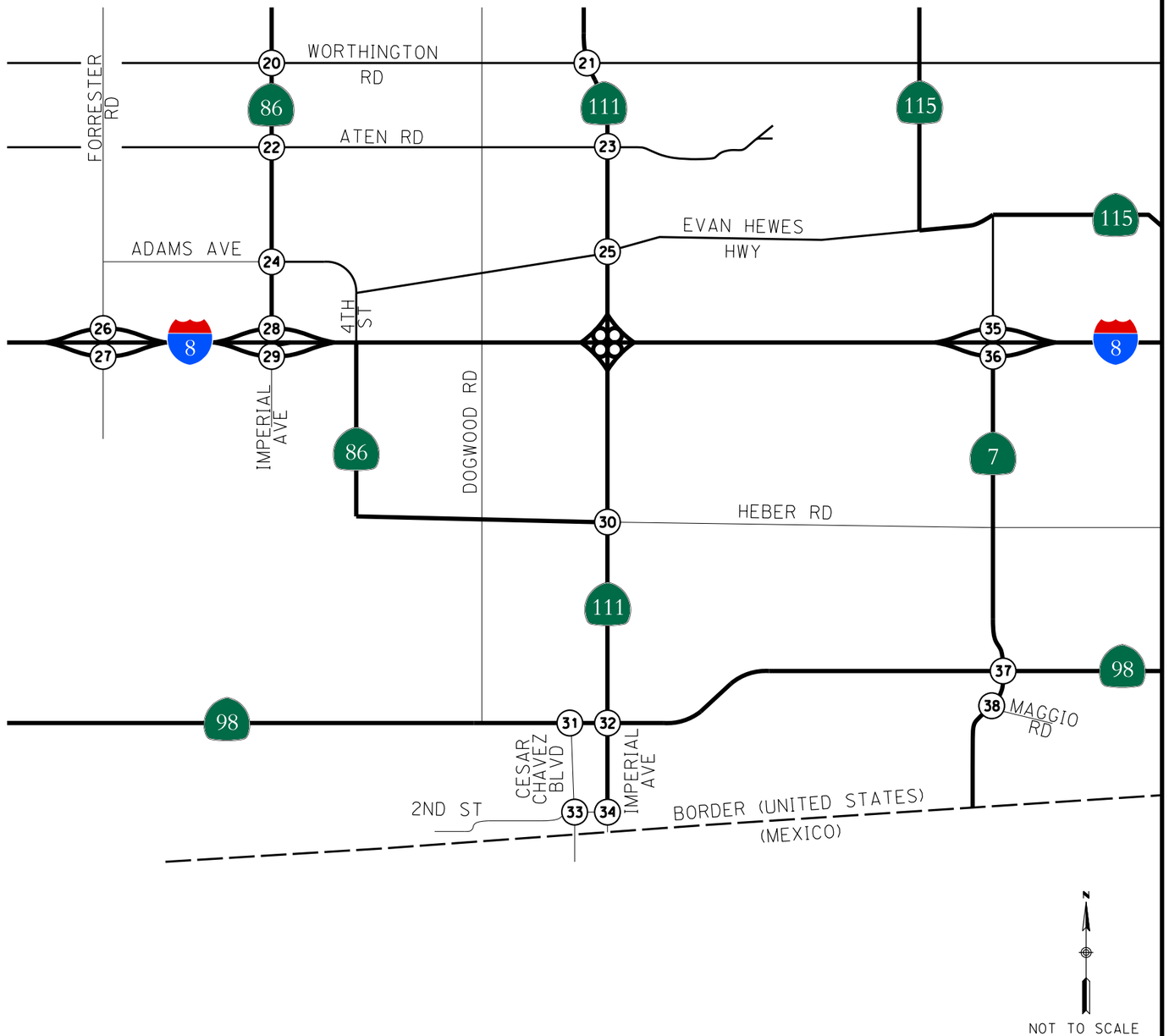


EXHIBIT 30B

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE (BUILDOUT) WITH REDUCED ALTERNATIVE RECOMMENDED IMPROVEMENTS - SOUTH STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

LEGEND

= EXISTING LANE CONFIGURATION

= RECOMMENDED LANE CONFIGURATION

PT+PM = RECOMMENDED PROTECTED PERMISSIVE PHASING

OVLP = RECOMMENDED RIGHT-TURN OVERLAP

(X) = STUDY INTERSECTION

S = EXISTING TRAFFIC SIGNAL

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11.5.3 Intersection LOS With Recommended Improvements

Table 28 displays the operational analysis results for the study intersections with the recommended improvements under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions. **Appendix E** contains the Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative With Recommended Improvements intersection analysis worksheets.

TABLE 28: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE INTERSECTION OPERATIONS WITH RECOMMENDED IMPROVEMENTS

#	Intersection	Control	Future Year 2035 With SP Phase One With Recommended Improvements					
			AM Peak Hour			PM Peak Hour		
			Direction/ Movement	Delay [1]	LOS [2]	Direction/ Movement	Delay [1]	LOS [2]
2	SR-86 / 66th Avenue	(SIGNAL)	Overall	34.0	C	Overall	34.6	C
3	SR-111 / Davis Road	(SIGNAL)	Overall	10.6	B	Overall	10.3	B
4	SR-111 / English Road	(SIGNAL)	Overall	8.9	A	Overall	12.4	B
6	SR-111 / Pound Road	(SIGNAL)	Overall	7.9	A	Overall	10.0	B
7	SR-111 / Sinclair Road	(SIGNAL)	Overall	10.5	B	Overall	12.9	B
8	SR-111 / Lindsey Road	(SIGNAL)	Overall	11.0	B	Overall	15.3	B
9	SR-111 / Main Street (in Calipatria)	(SIGNAL)	Overall	20.4	C	Overall	22.9	C
18	SR-86 / 1st Street-Main Street	(SIGNAL)	Overall	30.8	C	Overall	33.0	C
20	SR-86 / Barioni Boulevard	(SIGNAL)	Overall	21.8	C	Overall	18.7	B
22	SR-86 / Aten Road	(SIGNAL)	Overall	**40.6**	**D**	Overall	**43.5**	**D**
28	SR-86 / I-8 Westbound Ramps	(SIGNAL)	Overall	23.0	C	Overall	21.0	C
33	Cesar Chavez Boulevard / 2nd Street	(SIGNAL)	Overall	31.3	C	Overall	**81.1**	**F**
34	SR-111 / 2nd Street	(SIGNAL)	Overall	17.0	B	Overall	14.7	B

Footnotes:
Results calculated utilizing the methodologies described in Chapters 19, 20, 21, and 22 in the 7th edition of the HCM.
1) Delay is measured in seconds per vehicle.
2) Level of Service
(AWSC) = All-Way Stop Controlled; (TWSC) = Two-Way Stop Controlled; (OWSC) = One-Way Stop Controlled
NB=Northbound, WB=Westbound, etc.
L=Left-turn movement, R= Right-turn movement, LT=Left-Through lane, LTR=Left-Through-Right lane, etc.

As shown in Table 28, the recommended improvements are anticipated to improve operations under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions to LOS C or better during the peak hours except for the following:

- SR-86 / Aten Road (AM/PM: LOS D with recommended improvements)
- Cesar Chavez Boulevard / 2nd Street (PM: LOS F with recommended improvements)

11.5.4 Intersection Queuing Analysis With Recommended Improvements

A queuing analysis was performed for the study intersections under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions with the recommended improvements to determine the storage lengths that would be needed for the recommended future left-turn and right-turn lanes, and where applicable, to determine if the existing storage lengths would accommodate the peak queue lengths and to ensure that queuing at the intersection approaches of the off-ramps would not spill back onto the freeway mainline. The queuing analysis results are based on the 95th percentile queue lengths in feet for each turning movement or approach. The SimTraffic application within the Synchro 12 software program was used to perform the queuing analysis.

The results of the queuing analysis under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions are provided in **Table 29**. **Appendix F** contains the SimTraffic queuing analysis worksheets.

As shown in Table 29, the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions with the recommended improvements except for at the following study intersections:

SR-86 / 1st Street-Main Street
- Southbound Left-Turn Lane (AM/PM)
- Eastbound Left-Turn Lane (PM)

SR-86 / Aten Road
- Eastbound Left-Turn Lane (PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / I-8 Westbound Ramps
- Southbound Right-Turn Lane (PM)

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TABLE 29: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE INTERSECTION QUEUING ANALYSIS WITH RECOMMENDED IMPROVEMENTS

	Study Intersection	Peak Hour	Northbound						Southbound						Eastbound						Westbound					
			Left			Right			Left			Right			Left			Right			Left			Right		
			Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes	Queue Length (feet)	Existing Storage Length (feet)	# Lanes
2	SR-86 / 66th Avenue	AM	32'	760'	1	51'	300'	1	242'	750'	1	34'	260'	1	69'	DNE	1	11'	490'	1	112'	DNE	1	120'	-	1
		PM	16'			65'			261'			29'			68'			23'			173'			156'		
3	SR-111 / Davis Road	AM	7'	385'	1	-	-	-	-	-	-	52'	DNE	1	63'	-	1 (LR)	-	-	-	-	-	-	-	-	-
		PM	6'									44'			116'											
4	SR-111 / English Road	AM	41'	DNE	1	22'	-	1 (TR)	45'	DNE	1	39'	-	1 (TR)	47'	DNE	1	17'	DNE	1	21'	DNE	1	27'	DNE	1
		PM	95'			33'			82'			63'			47'			12'			14'			13'		
6	SR-111 / Pound Road	AM	57'	DNE	1	90'	-	1 (TR)	0'	DNE	1	31'	DNE	1	24'	DNE	1	46'	-	1 (TR)	0'	DNE	1	0'	-	1 (TR)
		PM	72'			115'			0'			30'			60'			55'			0'			0'		
7	SR-111 / Sinclair Road	AM	95'	240'	1	22'	DNE	1	40'	290'	1	51'	DNE	1	67'	DNE	1	48'	DNE	1	50'	DNE	1	12'	-	1 (TR)
		PM	106'			28'			16'			59'			93'			92'			73'			27'		
8	SR-111 / Lindsey Road	AM	65'	DNE	1	30'	DNE	1	44'	DNE	1	29'	DNE	1	25'	DNE	1	36'	DNE	1	42'	DNE	1	31'	-	1 (TR)
		PM	70'			32'			47'			32'			56'			91'			102'			61'		
9	SR-111 / Main Street Calipatria	AM	167'	DNE	1	176'	-	1 (TR)	91'	DNE	1	103'	-	1 (TR)	119'	DNE	1	66'	DNE	1	78'	DNE	1	72'	DNE	1
		PM	130'			133'			184'			255'			105'			86'			120'			67'		
18	SR-86 / 1st Street-Main Street	AM	198'	210'	1	132'	(2)	1	**124'**	75'	1	280'	-	1 (TR)	84'	165'	1	93'	(2)	1	180'	245'	2	292'	-	1 (TR)
		PM	218'			123'			**127'**			254'			**205'**			188'			235'			296'		
20	SR-86 / Barioni Boulevard	AM	130'	245'	1	181'	-	1 (TR)	115'	235'	1	242'	-	1 (TR)	149'	DNE	1	152'	195'	1	97'	DNE	1	74'	180'	1
		PM	138'			184'			72'			205'			124'			112'			104'			73'		
22	SR-86 / Aten Road	AM	208'	390'	1	71'	305'	1	273'	340'	1	186'	340'	1	254'	280'	1	187'	-	1 (TR)	**191'**	145'	1	257'	-	1 (TR)
		PM	167'			124'			268'			84'			**335'**			208'			**204'**			213'		
28	SR-86 / I-8 WB Ramps	AM	66'	260'	1	-	-	-	-	-	-	328'	295'	1	-	-	-	-	-	-	222'	1,320'[1]	1 (LR)	136'	310'	2
		PM	31'									**555'**									203'			92'		

Footnotes:

Queue length exceeding existing storage length by at least one car length (20 feet) indicated in **bold**.

DNE = Does Not Exist

L = Left; R = Right, T = Through

LTR = Shared left/through/right lane

LT = Shared left/through lane

LR = Shared left/right lane

TR = Shared through/right lane

1 Total length of off-ramp from gore point to intersection stop bar.

[2] No turn pocket, transition from through lane to right-turn lane.

12.0 ACTIVE TRANSPORTATION AND PUBLIC TRANSIT ASSESSMENT

12.1 Proposed Bicycle and Pedestrian Network

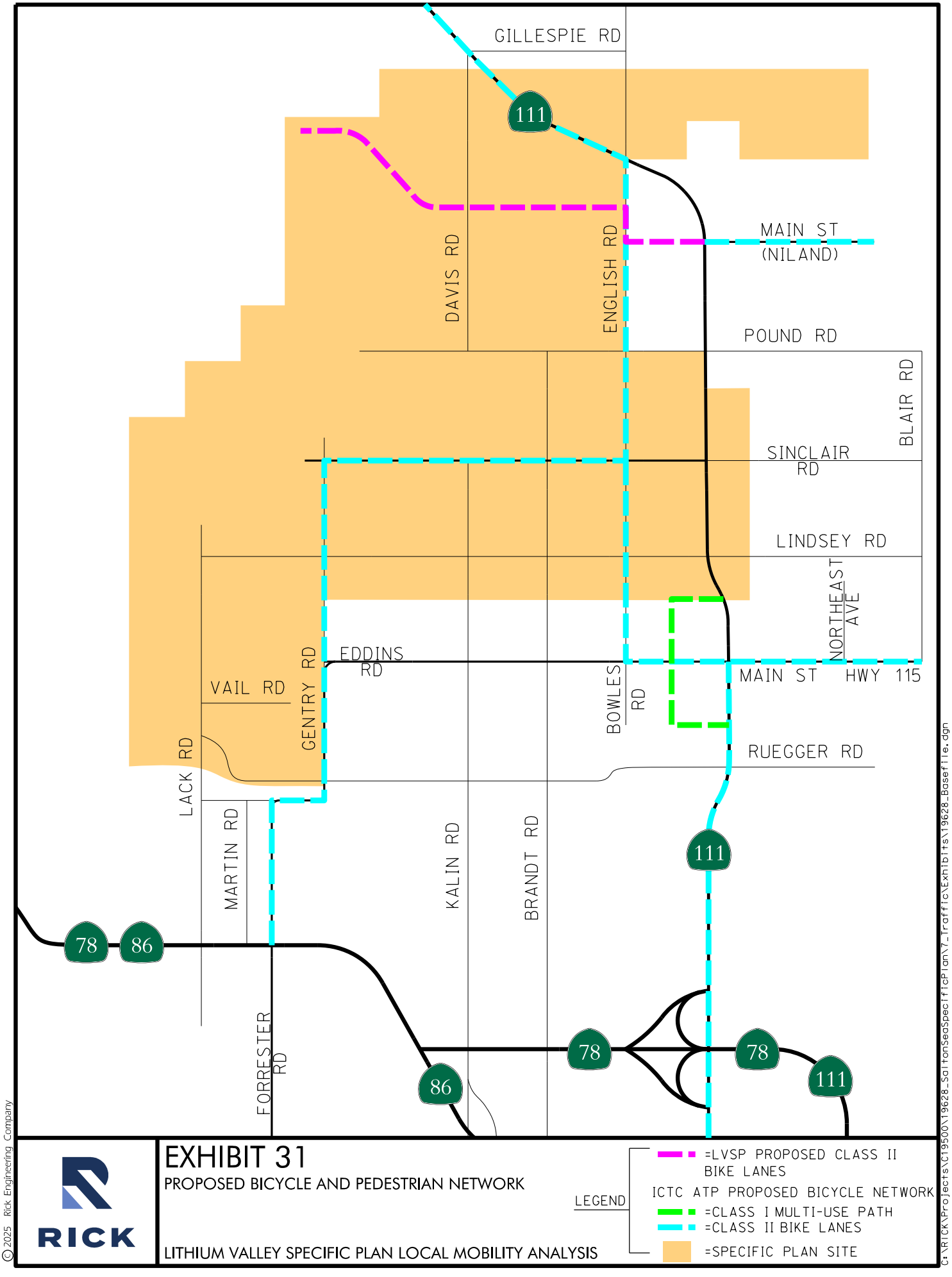
The proposed bicycle network, which is illustrated in **Exhibit 31**, includes routes that take into consideration bicyclist safety. The proposed bicycle network was developed to:

- Minimize truck traffic conflicts;
- Provide safe bicycle routes to and from the communities of Calipatria and Niland;
- Provide connections to the planned routes in the Imperial County's Active Transportation Plan;
- Provide a connection from Niland to the Salton Sea via a Recreational Access Easement;
- Improve the health and well-being of local residents and employees, encouraging active living and sustainable communities.

The 2022 Imperial County Transportation Commission (ICTC) Regional Active Transportation Plan (ATP) reported that the City of Calipatria currently lacks designated bicycle facilities within its boundaries. To enhance active transportation, the ATP proposed the implementation of Class I Multi-Use Paths and Class II Bike Lanes. Additionally, the plan outlined the development of Class II Bike Lanes extending westward from Calipatria, then north along English Road, creating a connection between the communities of Niland and Calipatria. The proposed Class II facilities would also intersect at Sinclair Road and English Road, providing an east-west route into the Green Industrial areas.

These proposed routes aim to strengthen connectivity between communities, employment centers, conceptual commercial nodes, and transit hubs, supporting integrated and accessible active transportation networks. By encouraging active living and reducing greenhouse gas emissions, the plan supports public health and fosters the development of sustainable communities.

Pedestrian access would be limited to areas within developments to offer internal transportation between buildings and parking areas. Due to the extreme climate and long distances between residential communities and planned employment areas, pedestrian travel as a main form of transportation across and throughout the Specific Plan area is not anticipated. However, there are pedestrian pathways proposed along at least one side of the Alamo and New Rivers, and a conceptual pedestrian trail connecting Niland to the Salton Sea. Pedestrian amenities within the Community Opportunity Areas will be further refined and planned in consultation with the neighboring communities of Niland and Calipatria.


GILLESPIE RD
111
DAVIS RD
ENGLISH RD
MAIN ST
(NILAND)
POUND RD
BLAIR RD
SINCLAIR
RD
LINDSEY RD
NORTHEAST
AVE
EDDINS
RD
MAIN ST HWY 115
VAIL RD
GENTRY RD
BOWLES
RD
RUEGGER RD
LACK RD
MARTIN RD
KALIN RD
BRANDT RD
111
78
86
FORRESTER
RD
78
78
111
86
EXHIBIT 31
PROPOSED BICYCLE AND PEDESTRIAN NETWORK
LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS
LEGEND
=LVSP PROPOSED CLASS II
BIKE LANES
ICTC ATP PROPOSED BICYCLE NETWORK
=CLASS I MULTI-USE PATH
=CLASS II BIKE LANES
=SPECIFIC PLAN SITE
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12.2 Proposed Transit Network

To enhance public transportation accessibility and efficiency within the Lithium Valley region, consultation will continue between Imperial County, the Imperial County Transit Commission (ICTC), and the Southern California Association of Governments (SCAG). This partnership aims to identify transportation improvements to be integrated into the next Long Range Transportation Plan (LRTP) update or amendment. Imperial County shall continue to consult with ICTC and SCAG to identify public transportation improvements to be included in the next Long Range Transportation Plan (LRTP) update or amendment. Through this coordination and LRTP update or amendment process, triggers may be established for improvements based on operational needs and employment metrics within the Specific Plan Area and phased according to current and projected demand to align with community needs. Once there is sufficient demand, it is anticipated that either an employee shuttle or an express bus route will connect the nearby communities to the employment centers.

Employee Shuttle: An employee shuttle is expected once there are three (3) employers with over 200 on-site employees, for a total of over 600 employees in the Plan Area. The employee shuttle would connect the transit hubs at Niland and Calipatria to the employment centers of over 200 on-site employees. This service would link workers to their jobs, promote rideshare opportunities and reduce greenhouse gas emissions.

Express Bus Routes: An express bus route may be implemented based on the region's needs and demand. The express bus route shall consider stops at various locations within the northern communities inclusive of transit hubs and employment centers. This service will link workers to their jobs, promote rideshare opportunities, provide further travel opportunities to the general public and reduce greenhouse gas emissions.

The employee shuttle or express bus route may be funded and operated by one or more of the following: the newly established Lithium Valley Infrastructure Special District, the participating private employers, or ICTC.

Recommended Transit Improvements

1. **Increased Bus Frequencies:** The frequency of Imperial Valley Transit Route 2 will be significantly enhanced. On weekdays, service intervals will be reduced from the current 60-180 minutes to 15-30 minutes, while service internals on weekends will improve to 30-60 minutes. This increase is designed to provide more reliable and convenient transit options for residents and workers.

2. **Development of Transit Hubs:** As illustrated in Figure 5-10, Transit Network Map, strategically located transit hubs will be established to facilitate seamless connectivity. These hubs will serve as essential nodes within the transit system.

3. **Transit Hub Features:** Each transit hub will include designated spaces for park and ride lots, shared vehicles, and shuttles to employment centers, ensuring efficient transfers and accessibility for commuters.

4. **Additional Express Connections:** Express routes will also connect Calipatria to SDSU Brawley Campus and Imperial Valley College, facilitating access to educational institutions and expanding opportunities for residents.

5. **Dedicated Bus Lane on SR-111**: Construction of a new outside lane, exclusive to buses, defined as a dedicated bus lane, would significantly improve the reliability and timeliness of transit services, making public transportation a more attractive option for residents, potentially increasing ridership and reducing the overall number of vehicles on the road, and reducing the number of single-occupancy vehicles on the road.

The proposed transit network as described above is illustrated in **Exhibit 32**.

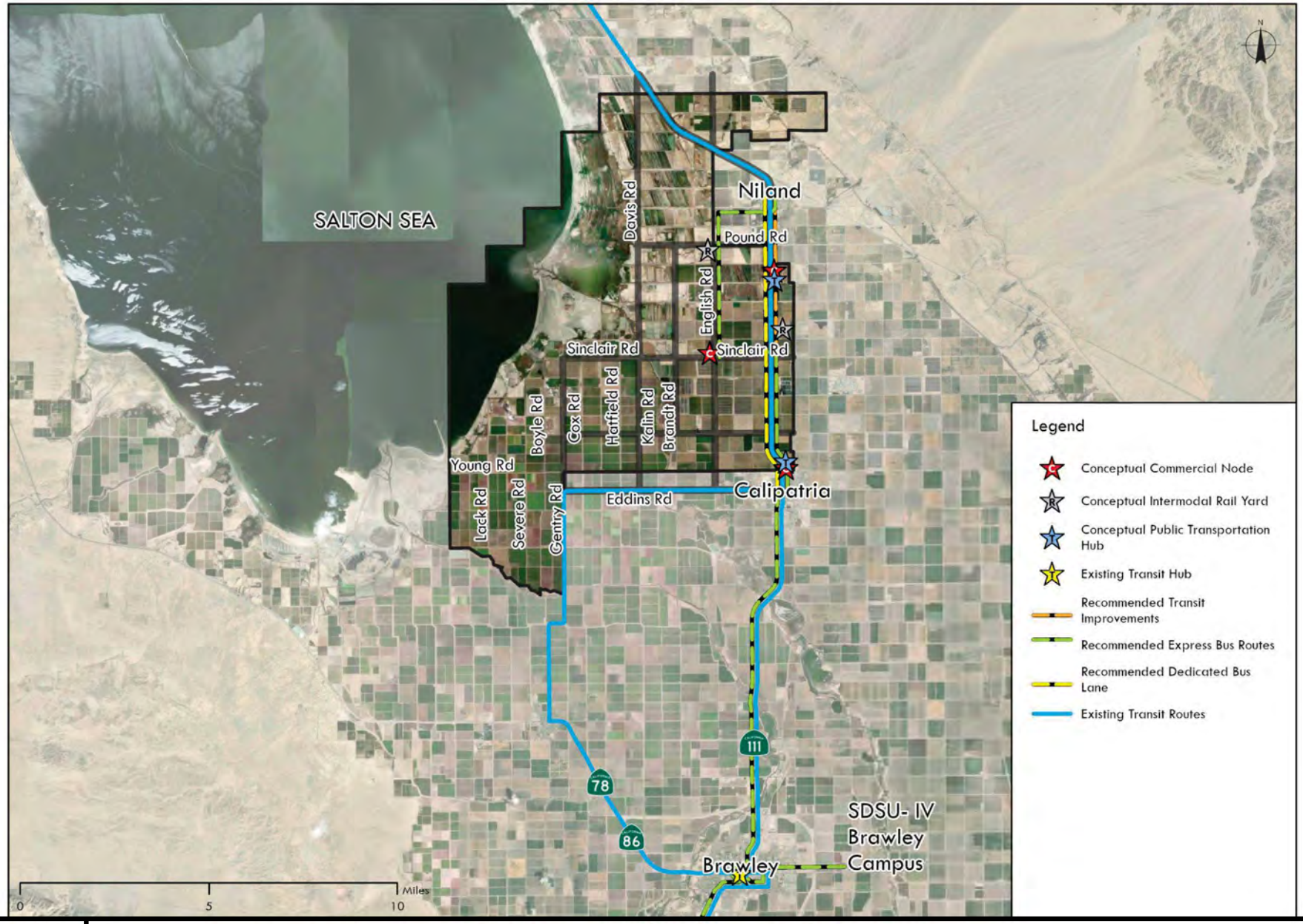


EXHIBIT 32

PROPOSED TRANSIT NETWORK

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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13.0 BRIDGES ASSESSMENT

13.1 Existing Bridges Assessment

The Bridges section evaluates the physical and operational conditions of the existing bridges in the Specific Plan study area. Imperial County Public Works staff provided an inventory of the existing bridges that currently cross the Alamo River, the New River or canals in the study area, which are listed below:

Bridges Crossing Alamo River

- Sinclair Road, approximately 3.3 miles west of Highway 111
- Eddins Road, approximately 3.3 miles west of Highway 111
- Brandt Road, approximately 0.4 mile south of Eddins Road
- Ruegger Road, approximately 1.5 miles west of Highway 111

Bridges Crossing New River

- Lack Road, approximately 4.2 miles north of Highway 78/86
- Gentry Road, approximately 0.7 mile north of Walker Road
- Kalin Road, approximately 0.5 mile south of Ruegger Road
- Brandt Road, approximately 0.9 mile south of Ruegger Road

Bridges Crossing Z Lateral Canal

- English Road, approximately 1.4 miles north of Highway 111

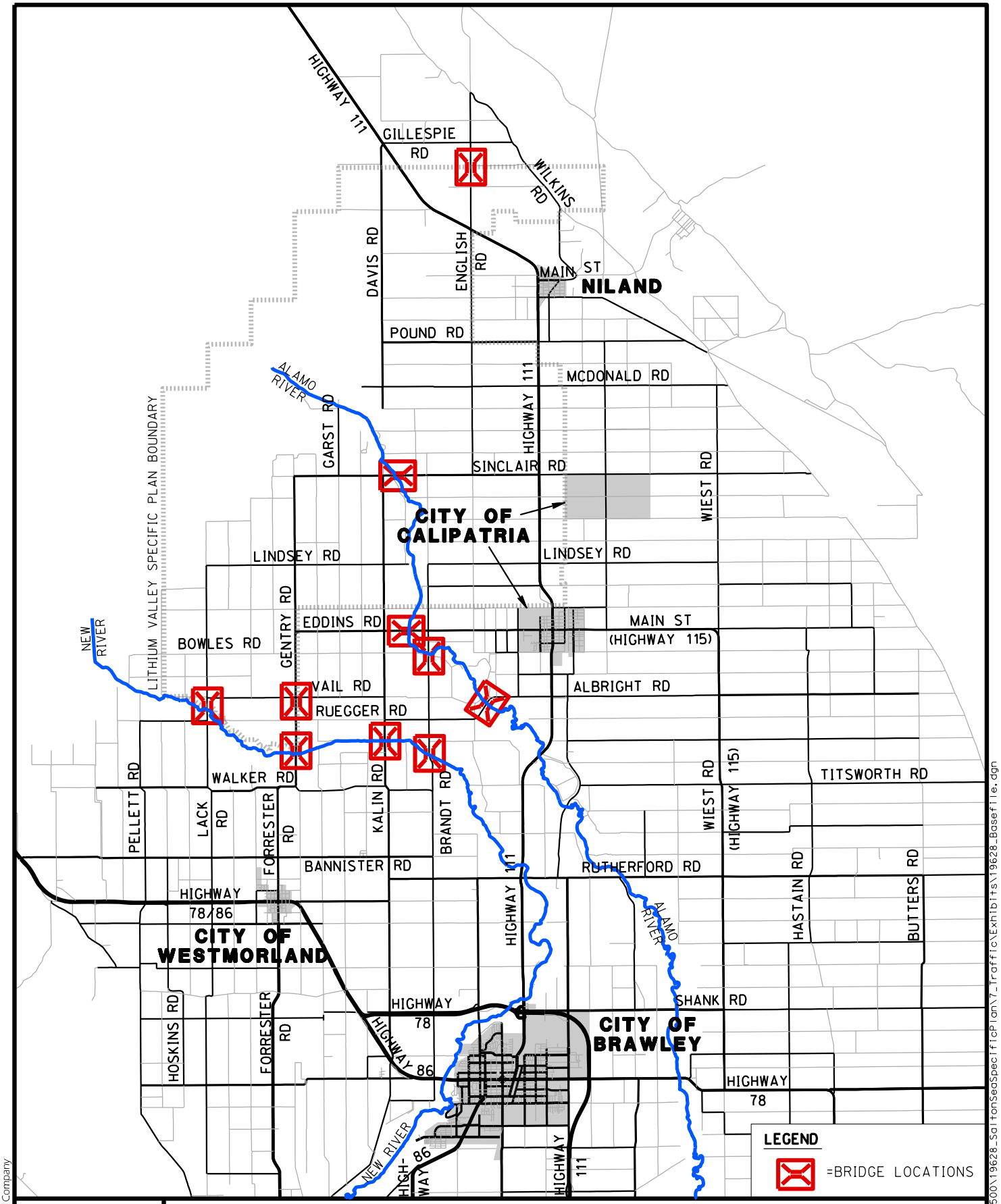
Bridges Crossing Vail Canal

- Gentry Road, approximately 1.5 miles south of Eddins Road

Exhibit 33 illustrates the locations of the existing above-listed bridges in the Specific Plan study area.

A detailed evaluation of the existing bridges in the Specific Plan study area was conducted for the Lithium Valley Specific Plan Infrastructure Assessment report dated May 2023, which was based on the regulations, standards and specifications of the following documents:

- AASHTO LRFD Bridge Design Specifications, 9th Edition, 2020
- AASHTO Manual for Bridge Evaluation, 3rd Edition, 2018
- National Bridge Inspection Standards (NBIS), 2022
- Caltrans Standard Plans and Standard Specifications, 2022
- AASHTO LRFD Bridge Design Specifications, 8th Edition with California Amendments (AASHTO-CA BDS-8), 2019
- Imperial County Engineering Design Guidelines Manual for the Preparation and Checking of Street Improvement, Drainage and Grading Plans, 2008



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EXHIBIT 33

EXISTING BRIDGES IN SPECIFIC PLAN STUDY AREA

LITHIUM VALLEY SPECIFIC PLAN LOCAL MOBILITY ANALYSIS

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There are three (3) typical permit rating load capacities for bridges, which are usually shown as a string of five (5) characters showing permit capacity for 5, 7, 9, 11, and 13 axle vehicles, and are listed below:

- Purple Permit Capacity (P5): 45,675 – 76,125 pounds
- Green Permit Capacity (G5): 39,585 – 65,975 pounds
- Orange Permit Capacity (O5): 32,025 – 50,750 pounds
- No Permit Capacity (X5): Not Applicable

The bridges in the Specific Plan study area have permit rating load capacities of either P5 or O5, and one (1) bridge (Lack Road over New River) had a permit rating of X5 (no permit capacity) due to being closed at the time of the last inspection (December 7, 2021). The permit ratings and other bridge conditions for each bridge in the Specific Plan study area are shown in **Table 30**.

There are also legal load capacity limits for specific types of trucks based on size and number of axles, which are listed below:

- Type 3 Trucks (3-Axle Single-Unit): 25 tons (50,000 pounds)
- Type 3-S2 Trucks (5-Axle Semi-Tractor-Trailer): 36 tons (72,000 pounds)
- Type 3-3 Trucks (6-Axle Single-Unit Plus Trailer): 40 tons (80,000 pounds)

The Operational Rating of a bridge is the maximum permissible load a bridge may be subjected to. Allowing a load to cross a bridge for which its operational rating is exceeded will shorten the life of such bridge. The Imperial County Department of Public Works uses the operational rating as the ultimate factor to determine if a load is allowed to cross a bridge, regardless of a transport being within the legal weight limits.

Table 30 shows the above-listed legal load capacity limits based on truck type they can accommodate for the existing bridges in the Specific Plan study area.

As shown in Table 30, the bridges in the Specific Plan study area are all built with two (2) travel lanes and have widths ranging from 24 feet to 38 feet, and lengths ranging from 25 feet to 150 feet. In addition to the permit ratings and legal load capacity limits, Table 30 also shows the operational ratings, years bridges were built, and dates of the last inspection by Caltrans based on Year 2023 information provided by the Imperial County Department of Public Works department for the Lithium Valley Specific Plan Infrastructure Assessment report.

As shown, the majority of bridges in the Specific Plan study area have the highest permit rating (P5) and can accommodate the legal load limits of Type 3, Type 3-S2 and Type 3-3 trucks. Three (3) bridges in the Specific Plan study area (Brandt Road 0.4 mile south of Eddins Road, Kalin Road 0.5 mile south of Ruegger Road, and Gentry Road 1.5 miles south of Eddins Road) have a lower permit rating of O5, but only one (Gentry Road) can safely accommodate all the legal load limits of Type 3, Type 3-S2 and Type 3-3 trucks.

TABLE 30: EXISTING BRIDGES INVENTORY AND CONDITIONS

Bridge Location	Bridge Number	Year Built	Length (ft)	Width (ft)	No. of Lanes	Permit Rating	Operational Rating (Metric Tons)	Date of Last Inspection [1]	Truck Type / Legal Load Limits					
									Type 3 (3-Axle Single-Unit)		Type 3-S2 (5-Axle Semi Tractor-Trailer)		Type 3-3 (6-Axle Single-Unit + Trailer)	
									Load Limit (Tons)	Legal on Bridge?	Load Limit (Tons)	Legal on Bridge?	Load Limit (Tons)	Legal on Bridge?
Bridges Crossing Alamo River														
Sinclair Road, 3.3 miles west of Highway 111	58C0216	1994	144'	24.6'	2	P5	54.1	12/7/2021	25	Yes	36	Yes	40	Yes
Eddins Road, 3.3 miles west of Highway 111	58C0077	1990	97.1'	32.2'	2	P5	54.1	12/8/2020	25	Yes	36	Yes	40	Yes
Brandt Road, 0.4 mile south of Eddins Road	58C0165	1950	150.9'	24.6'	2	O5	33.4	12/7/2021	25	Yes	36	No [4]	40	No [4]
Ruegger Road, 1.5 miles west of Highway 111	58C0145	1967	100.1'	32.2'	2	P5	61.6	12/7/2021	25	Yes	36	Yes	40	Yes
Bridges Crossing New River														
Lack Road, 4.2 miles north of Highway 78/86	58C0224	2022	125’	32’	2	N/A [2]	N/A [2]	N/A [2]	25	N/A [2]	36	N/A [2]	40	N/A [2]
Gentry Road, 0.7 mile north of Walker Road	58C0006	1978	132.9'	32.2'	2	P5	89.7	12/7/2021	25	Yes	36	Yes	40	Yes
Kalin Road, 0.5 mile south of Ruegger Road	58C0100	1940	90.9'	24.6'	2	O5	33.0	12/7/2021	25	Yes	36	No [4]	40	No [4]
Brandt Road, 0.9 mile south of Ruegger Road	58C0222	2002	133.9'	38.1'	2	P5	54.1	11/12/2019	25	Yes	36	Yes	40	Yes

TABLE 30 (CONTINUED): EXISTING BRIDGES INVENTORY AND CONDITIONS

Bridge Location	Bridge Number	Year Built	Length (ft)	Width (ft)	No. of Lanes	Permit Rating	Operational Rating (Metric Tons)	Date of Last Inspection [1]	Truck Type / Legal Load Limits					
									Type 3 (3-Axle Single-Unit)		Type 3-S2 (5-Axle Semi Tractor-Trailer)		Type 3-3 (6-Axle Single-Unit + Trailer)	
									Load Limit (Tons)	Legal on Bridge?	Load Limit (Tons)	Legal on Bridge?	Load Limit (Tons)	Legal on Bridge?
Bridges Crossing Z Lateral Canal														
English Road, 1.4 miles north of Highway 111	58C0223	2014	80’	24'	2	P5	0.0 [3]	12/7/2021	25	Yes	36	Yes	40	Yes
Bridges Crossing Vail Canal														
Gentry Road, 1.5 miles south of Eddins Road	58C0007	1936	24.9'	24.9'	2	O5	28.5	12/7/2021	25	Yes	36	Yes	40	Yes

Footnotes:

Source: Imperial County Public Works Department

P5 = Purple Permit Capacity; O5 = Orange Permit Capacity; X = No Permit Capacity

[1] The date of the last Caltrans bridge inspection shown in the table (12/7/2021) is based on Year 2023 information provided by the Imperial County Department of Public Works department for the Lithium Valley Specific Plan Infrastructure Assessment report. It is likely that more recent inspections had been conducted by Caltrans since 2023; however, the information provided in the Existing Bridges Assessment is based on the conditions present in 2023.

[2] N/A = Not applicable, as Bridge 58C0101 (Lack Road) was closed for reconstruction at the time Caltrans had performed their inspection (12/7/2021), but since that time the reconstruction project was completed and the bridge was re-opened and considered legal for Type 3, Type 3-S2 and Type 3-3 load limits. .

[3] Caltrans did not provide the operational rating for Bridge 58C0223 (English Road) when the last inspection was performed on 12/7/2021; however, the bridge is currently operational and legal for Type 3, Type 3-S2 and Type 3-3 load limits.

[4] These loads are considered as Non-Legal due to the Truck Type load limit exceeding the Operational Rating of the bridge.

Development in the Specific Plan study area will require the transportation of material and equipment, and some of those transports will very likely be beyond legal weight and/or dimensions limits. Some of these transports have the potential of exceeding the operational rating of a bridge along their proposed routes. Other transports may be within the legal limits but have a route that includes bridges with a lower operating rating that is exceeded by the weight of such transports.

Table 30 also shows that according to the information provided by the Imperial County Public Works Department, the bridge on Lack Road over the New River was reconstructed on 2022 (Bridge 58C0224) but has no permit rating load capacity because it has not been inspected by Caltrans. However, the reconstructed bridge is currently operational and considered legal for Type 3, Type 3-S2 and Type 3-3 load limits.

All of the information described above on the bridges in the Specific Plan study area and shown in Table 30 was provided by Imperial County Public Works staff and is contained in **Appendix G**.

13.2 Existing Bridges Assessment Findings

The findings of the Existing Bridges Assessment revealed the following:

- Four (4) of the ten bridges in the Specific Plan study area were built more than 50 years ago.
- Eight (8) of the ten bridges in the Transportation Study Area have been inspected in the past 3 years. One (1) bridge (Brandt Road 0.9 mile south of Ruegger Road) was last inspected in 2019. The inspection of Lack Road Bridge (Bridge 58C0224) is still pending.
- The Operating Rating of the bridges will be the ultimate limiting factor for the approval of transports in the Study Area for both legal and extralegal loads.
- Six (6) of the ten bridges in the Transportation Study Area have the highest permit rating (P5) and can accommodate the legal load limits of Type 3, Type 3-S2 and Type 3-3 trucks.
- Three (3) of the ten bridges in the Transportation Study Area have a lower permit rating of O5, but only one (1) bridge can accommodate the legal load limits for all three truck types.
- Although the Lack Road Bridge (Bridge 58C0224) has not been inspected by Caltrans, it is currently operational and considered legal for Type 3, Type 3-S2 and Type 3-3 load limits.
- The latest Caltrans inspection report for the English Road Bridge (Bridge 58C0223) does not provide an Operating Rating, but it is reported that it can accommodate the legal load limits of Type 3, Type 3-S2 and Type 3-3 trucks.
- A bridge rehabilitation project is currently underway for the Sinclair Road Bridge over the Alamo River (Bridge 58C0216), which consists of deck repairs to the existing bridge.
- It was recently announced that federal funding of up to $4 million has been secured to replace the 73-year-old Brandt Road Bridge over the Alamo River (Bridge 58C0165) with a new single-span bridge.

13.3 Recommendations

The existing bridges in the Specific Plan study area are recommended to be improved or replaced during Phases One, Two or Three of the Lithium Valley Specific Plan based on the existing legal load limit, permit rating, age of bridge, bridge width, and estimated project traffic for each development phase of the Specific Plan.

13.3.1 Specific Plan Phase One Recommended Bridge Improvements

The following existing bridges are recommended to be improved or replaced during Phase One of the Lithium Valley Specific Plan:

- Sinclair Road over Alamo River (Bridge 58C0216): At a minimum, the bridge will need to be widened or replaced to accommodate the recommended cross-section of Sinclair Road (two-lane Major Industrial Collector with 58' curb-to-curb width) and estimated daily traffic (8,433) in Phase One of the Specific Plan. However, based on the Phase Two volumes and analysis findings, Sinclair Road between Gentry Road and SR-111 was recommended to be improved to its ultimate width as a four-lane Major Industrial Collector in Phase Two. It is recommended that the Sinclair Road Bridge over the Alamo River be improved to its ultimate width (four-lane Major Industrial Collector with 70' curb-to-curb width) in Phase One so that the ultimate bridge improvements are constructed at one time.

- Brandt Road over Alamo River (Bridge 58C0165): Bridge will need to be replaced due to age (built 75 years ago), lower legal load limit (25 tons) and permit rating (O5). It is recommended that the new bridge should be constructed with a legal load limit of 40 tons and have a P5 permit rating to accommodate the largest trucks that are anticipated to use Brandt Road in Phase One of the Specific Plan. Federal funding of up to $4 million has been secured to replace the existing bridge with a new single-span bridge.

- Kalin Road over New River (Bridge 58C0100): Bridge will need to be replaced due to age (built 85 years ago), lower legal load limit (25 tons) and permit rating (O5). It is recommended that the new bridge should be constructed with a legal load limit of 40 tons and have a P5 permit rating to accommodate the largest trucks that are anticipated to use Kalin Road in Phase One of the Specific Plan.

- Gentry Road over Vail Canal (Bridge 58C0007): Bridge will need to be replaced due to age (built 89 years ago) and lower permit rating (O5). It is recommended that the new bridge should be constructed with a legal load limit of 40 tons and have a P5 permit rating to accommodate the largest trucks that are anticipated to use Gentry Road in Phase One of the Specific Plan.

- Eddins Road over Alamo River (Bridge 58C0077): Bridge will need to be widened or replaced to accommodate the recommended cross-section of Eddins Road (two-lane Industrial Local with 44' curb-to-curb width) in Phase One.

Exhibit 34 illustrates the locations of the recommended bridges to be improved or replaced in Phase One of the Lithium Valley Specific Plan.

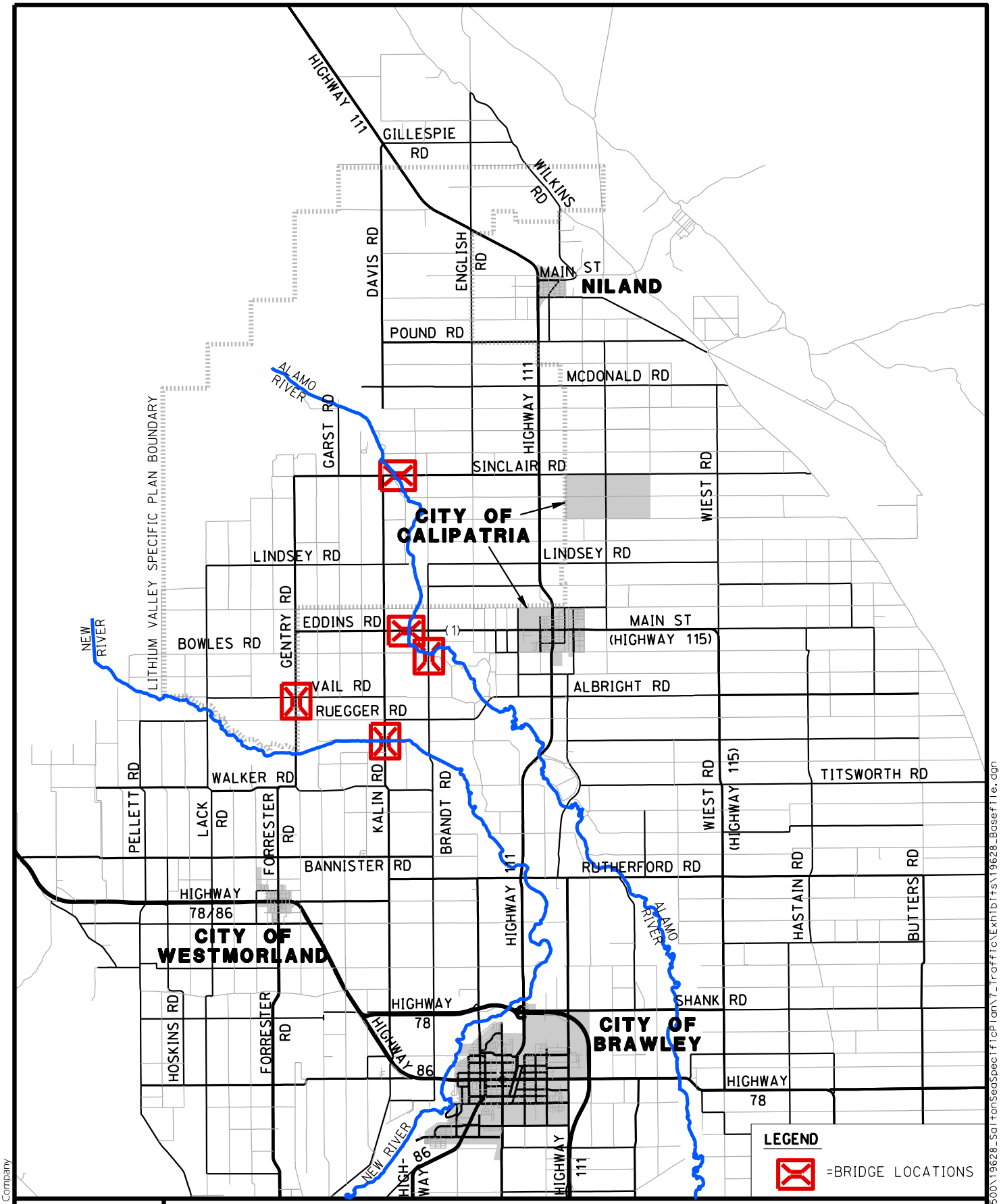


EXHIBIT 34

RECOMMENDED BRIDGES TO BE IMPROVED OR REPLACED IN SPECIFIC PLAN PHASE ONE

(1) $4 MILLION IN FEDERAL FUNDING HAS BEEN SECURED TO REPLACE BRANDT ROAD BRIDGE OVER ALAMO RIVER

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13.3.2 Specific Plan Phase Two Recommended Bridge Improvements

The following existing bridges are recommended to be improved or replaced during Phase Two of the Lithium Valley Specific Plan:

- English Road over Z Lateral Canal (Bridge 58C0223): Bridge will need to be widened or replaced to accommodate the recommended cross-section of English Road (two-lane Industrial Local with 44' curb-to-curb width) and estimated daily traffic (5,423) in Phase Two. The Phase Two Logistics uses will be developed along the segment of English Road north of SR-111 that includes the bridge; therefore, it is recommended that the bridge improvements occur in Phase Two.

Exhibit 35 illustrates the locations of the recommended bridges to be improved or replaced in Phase Two of the Lithium Valley Specific Plan.

13.3.3 Specific Plan Phase Three Recommended Bridge Improvements

The following existing bridges are recommended to be improved or replaced during Phase Three of the Lithium Valley Specific Plan:

- Gentry Road over New River (Bridge 58C0006): Bridge will need to be widened or replaced to accommodate the recommended cross-section of Gentry Road (two-lane Major Industrial Collector with 58' curb-to-curb width) and estimated daily traffic (9,237) in Phase Three.

- Lack Road over New River (Bridge 58C0216): Bridge will need to be widened to accommodate the recommended cross-section of Lack Road (two-lane Industrial Local with 44' curb-to-curb width) in Phase Three. Lack Road will provide access to some of the Green Industrial uses in Phase Three; therefore, it is recommended that the bridge improvements occur in Phase Three.

- Ruegger Road over Alamo River (Bridge 58C0145): Bridge may need to be improved or replaced due to age (built in 1967) by the time Phase Three is completed, which is anticipated after the year 2050.

- Brandt Road over New River (Bridge 58C0222): Bridge may need to be improved by the time Phase Three is completed due to wear and tear and future daily traffic volumes after the year 2050. However, the bridge was built in 2002 with an existing width of 38 feet, and is expected to accommodate future traffic through the year 2050.

Exhibit 36 illustrates the locations of the recommended bridges to be improved or replaced in Phase Three of the Lithium Valley Specific Plan.

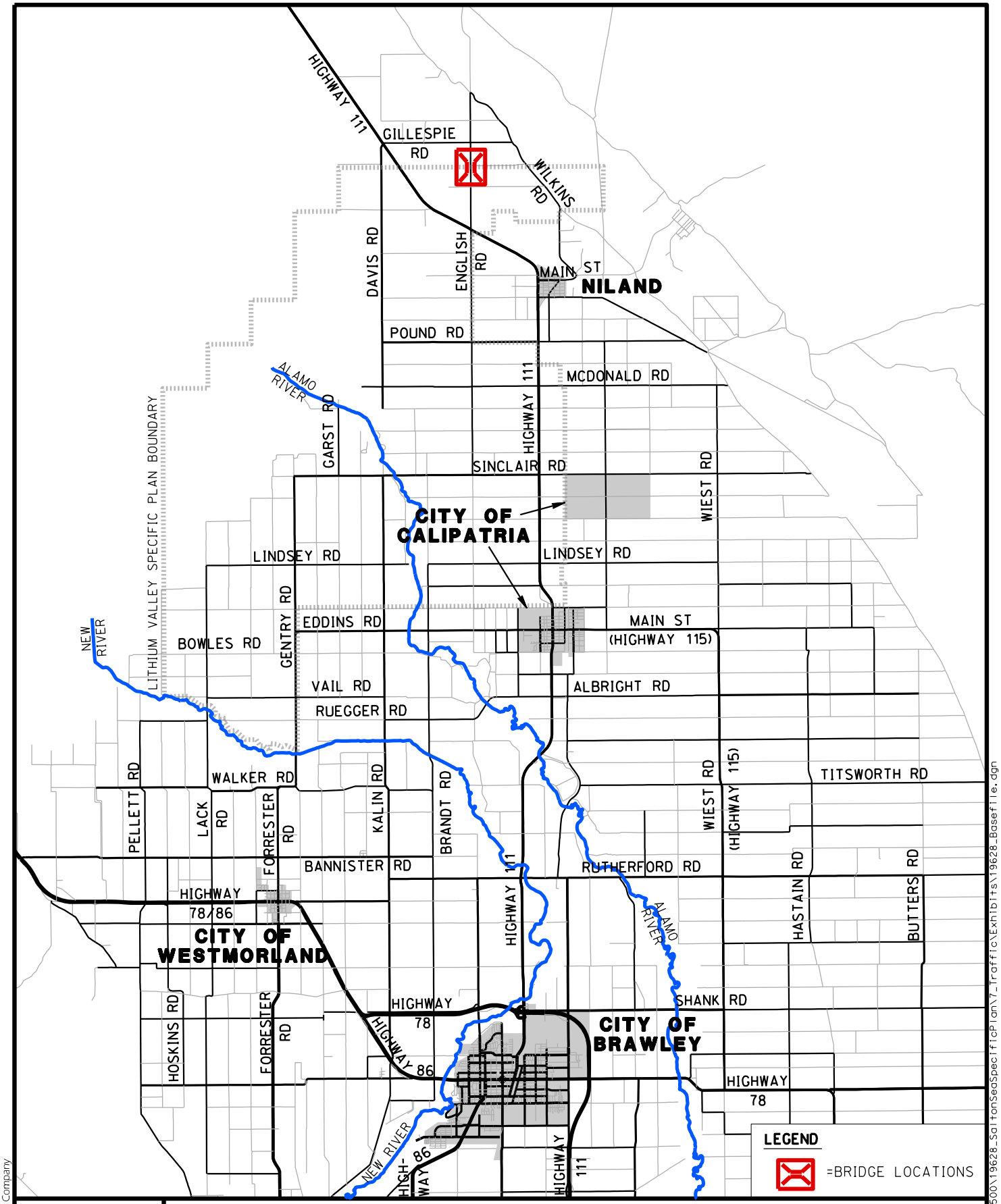


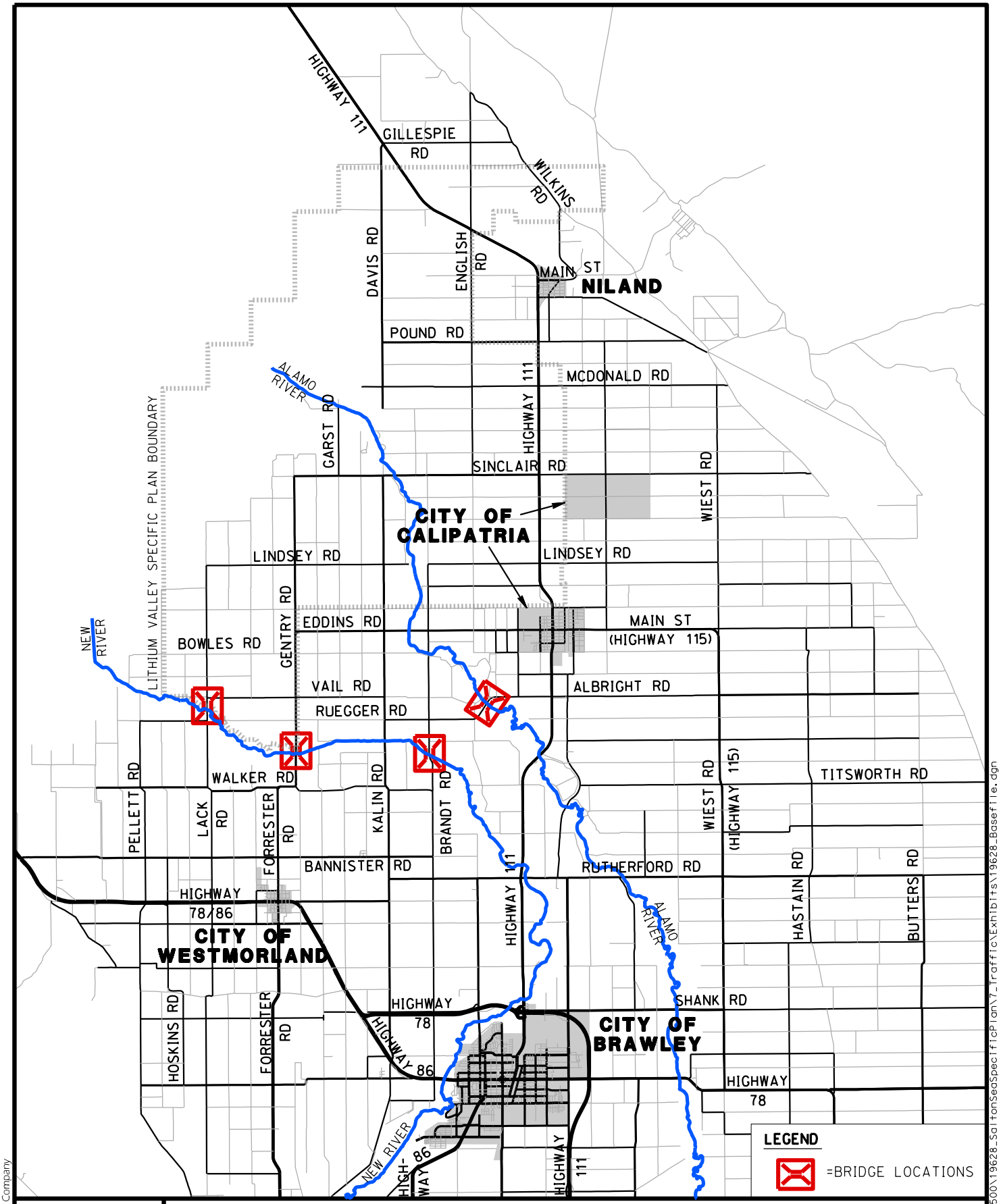
EXHIBIT 35

RECOMMENDED BRIDGES TO BE IMPROVED OR REPLACED IN SPECIFIC PLAN PHASE TWO

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EXHIBIT 36

RECOMMENDED BRIDGES TO BE IMPROVED OR REPLACED IN SPECIFIC PLAN PHASE THREE

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14.0 CONCLUSIONS AND RECOMMENDATIONS

This Local Mobility Analysis evaluated the potential level of service (LOS) deficiencies and transportation improvements that may need to be considered in association with the traffic generated by the proposed Lithium Valley Specific Plan project. Below is a summary of the analysis findings and recommended transportation improvements:

14.1 Intersection Operations Analysis Findings

The results of the Existing Conditions intersection analysis showed that a total of four (4) study intersections currently operate at a deficient LOS D or worse during the peak hours.

The Future Year 2035 conditions with Specific Plan Phase One intersection analysis results showed that a total of 17 study intersections are forecast to operate at a deficient LOS D or worse during the peak hours.

The results of the Future Year 2050 conditions with Specific Plan Phase Two intersection analysis showed that a total of 17 study intersections are forecast to operate at a deficient LOS D or worse during the peak hours.

The Future Year 2050 conditions with Specific Plan Phase Three (Buildout) intersection analysis results showed that a total of 23 study intersections are forecast to operate at a deficient LOS D or worse during the peak hours.

The results of the Future Year 2050 conditions with Specific Plan Phase Three (Buildout) With Reduced Alternative intersection analysis showed that a total of 13 study intersections are forecast to operate at a deficient LOS D or worse during the peak hours.

14.2 Roadway Segment Analysis Findings

The results of the Existing Conditions roadway segment operations analysis showed that all study roadway segments currently operate at an acceptable LOS C or better.

The Future Year 2035 conditions with Specific Plan Phase One roadway segment analysis results showed that a total of five (5) study roadway segments are forecast to operate at a deficient LOS D or worse.

The results of the Future Year 2050 conditions with Specific Plan Phase Two roadway segment analysis showed that a total of 12 study roadway segments are forecast to operate at a deficient LOS D or worse.

The Future Year 2050 conditions with Specific Plan Phase Three (Buildout) roadway segment analysis results showed that a total of five (5) study roadway segments are forecast to operate at a deficient LOS D or worse.

The results of the Future Year 2050 conditions with Specific Plan Phase Three (Buildout) With Reduced Alternative roadway segment analysis showed that all study roadway segments are forecast to operate at an acceptable LOS C or better.

14.3 Recommended Improvements

Improvements are recommended below for each Specific Plan development phase to improve operations at the deficient study intersections and roadway segments to acceptable levels of service. All study intersections along a State Highway where installation of traffic signals are recommended will be subject to an Intersection Safety and Operations Assessment Process (ISOAP) to determine the appropriate intersection control as required by Caltrans.

14.3.1 Recommended Specific Plan Phase One Intersection Improvements

SR-86 / 66th Avenue

- Modify existing traffic signal to provide a right-turn overlap on the westbound 66th Avenue approach

SR-111 / Davis Road

- Install a traffic signal
- Widen the southbound SR-111 approach to provide a dedicated right-turn lane
- Provide protected + permissive left-turn phasing on the northbound SR-111 approach

SR-111 / English Road

- Install a traffic signal
- Widen the eastbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound SR-111 approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the eastbound and westbound SR-111 approaches
- Provide permissive left-turn phasing on the northbound and southbound English Road approaches

SR-111 / Pound Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane and one shared through/right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound and westbound Pound Road approaches to provide one left-turn lane and one shared through/right-turn lane on each approach
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Pound Road approaches

SR-111 / Sinclair Road

- Install a traffic signal
- Widen the northbound and southbound SR-111 approaches to provide one left-turn lane, one through lane and one right-turn lane on each approach
- Widen the eastbound Sinclair Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Sinclair Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Sinclair Road approaches
- Provide a right-turn overlap phase on the eastbound Sinclair Road approach

SR-111 / Lindsey Road

- Install a traffic signal
- Widen the northbound and southbound SR-111 approaches to provide one left-turn lane, one through lane and one right-turn lane on each approach
- Widen the eastbound Lindsey Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Lindsey Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Lindsey Road approaches

SR-111 / Main Street (Calipatria)

- Install a traffic signal
- Restripe and reconstruct the center median on the north and south legs of the intersection to provide one left-turn lane, one through lane and one shared through/right-turn lane on the northbound and southbound SR-111 approaches
- Restripe and reconstruct the center median on the east and west legs of the intersection to provide one left-turn lane, one through lane and one right-turn lane on the eastbound and westbound Main Street approaches
- Provide protected left-turn phasing on the northbound and southbound SR-111 approaches
- Provide protected + permissive left-turn phasing on the eastbound and westbound Main Street approaches

SR-78 / Brandt Road

- Install a traffic signal
- Provide protected left-turn phasing on the eastbound and westbound SR-78 approaches
- Provide permissive left-turn phasing on the northbound and southbound Brandt Road approaches

SR-111 / SR-78 Westbound Ramps – Del Rio Place

- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound approaches (Westbound SR-78 off-ramp and Del Rio Place)

SR-86 / 1st Street-Main Street

- Restripe the eastbound SR-86 (Main Street) approach to provide one left-turn lane, one through lane and one right-turn lane
- Restripe the westbound Main Street approach to provide two left-turn lanes and one shared through/ right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the northbound and southbound SR-86/1st Street approaches
- Modify the existing traffic signal to provide a right-turn overlap on the eastbound SR-86 (Main Street) approach

SR-86 / Barioni Boulevard

- Restripe the eastbound and westbound Barioni Boulevard approaches to provide one left-turn lane, one through lane and one right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Barioni Boulevard approaches

SR-86 / Aten Road

- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Aten Road approaches
- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-86 approach

Cesar Chavez Boulevard / 2nd Street

- Modify the existing traffic signal to provide a right-turn overlap on the northbound approach (exiting the U.S./Mexico Port-of-Entry)
- Increase the traffic signal cycle length to 120 seconds during the AM peak hour, and 180 seconds during the PM peak hour

14.3.2 Recommended Specific Plan Phase One Roadway Segment Improvements

SR-111 between Main Street Calipatria and Ruegger Road

- Widen SR-111 from Bonita Street to Bowles Road to provide two travel lanes and a buffered Class II bike lane in each direction of travel to match the existing cross-section of SR-111 north of Bonita Street
- Widen SR-111 from Bowles Road to Ruegger Road to a four-lane Divided State Highway

Sinclair Road between Gentry Road and SR-111

- Widen Sinclair Road from Gentry Road to SR-111 to two-lane Major Industrial Collector standards

14.3.3 Recommended Specific Plan Phase Two Intersection Improvements

SR-86 / 66th Avenue

- Widen the eastbound and westbound 66th Avenue approaches to provide one dedicated left-turn lane on each approach
- Provide protected + permissive left-turn phasing on the eastbound and westbound 66th Avenue approaches

SR-111 / Davis Road

- Widen the eastbound Davis Road approach to provide one left-turn lane and one shared left-turn/right-turn lane
- Widen the north leg of the intersection to provide a second northbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to one northbound lane

SR-111 / English Road

- Widen the westbound SR-111 approach to provide a dedicated right-turn lane
- Widen the northbound and southbound English Road approaches to provide a dedicated left-turn lane on each approach

SR-111 / Sinclair Road

- Widen the northbound SR-111 approach to provide a second left-turn lane
- Widen the southbound SR-111 approach to provide a second through lane
- Provide protected left-turn phasing on the northbound and southbound SR-111 approaches

SR-111 / Lindsey Road

- Widen the north and south legs of the intersection to provide a second through lane on SR-111 on the northbound and southbound approaches of the intersection
- Widen the westbound Lindsey Road approach to provide a dedicated right-turn lane

SR-111 / Main Street (Calipatria)

- Widen the northbound SR-111 approach to provide a dedicated right-turn lane
- Widen the southbound SR-111 approach to provide a dedicated right-turn lane
- Provide right-turn overlap phases on all approaches of the intersection

SR-78/86 / Center Street (Forrester Road)

- Restripe the southbound Center Street approach to provide a dedicated right-turn lane
- Modify the existing traffic signal to provide a right-turn overlap on the southbound approach

SR-111 / SR-78 Westbound Ramps – Del Rio Place

- Restripe the eastbound approach (Westbound SR-78 off-ramp) to provide one left-turn lane, one shared left-turn/through lane and one right-turn lane
- Modify the existing traffic signal to provide split phasing on the eastbound and westbound approaches

SR-86 / Kalin Road

- Install a traffic signal
- Widen the SR-86 center median and the eastbound SR-86 bridge over the Westside Main Canal to provide one eastbound left-turn lane
- Widen the southbound Kalin Road approach to provide one left-turn lane, one shared left-turn/through lane and one right-turn lane
- Provide protected + permissive left-turn phasing on the eastbound and westbound SR-86 approaches
- Provide split phasing on the northbound and southbound Kalin Road approaches

SR-86 / I-8 Westbound Ramps

- Restripe the westbound I-8 off-ramp approach to provide one shared left-turn/through/ right lane and two right-turn lanes
- Restripe the center median north of the intersection to provide a third northbound receiving lane on SR-86 to accommodate three westbound right-turn lanes from the westbound I-8 off-ramp

14.3.4 Recommended Specific Plan Phase Two Roadway Segment Improvements

SR-111 between Sinclair Road and Lindsey Road

- Widen SR-111 from Sinclair Road to Lindsey Road to a four-lane Divided State Highway

SR-111 between Lindsey Road and Main Street Calipatria

- Widen SR-111 from Lindsey Road to Young Road a four-lane Divided State Highway
- Widen SR-111 from Young Road to Barbara Street to provide two travel lanes and a buffered Class II bike lane in each direction of travel to match the existing cross-section of SR-111 south of Barbara Street

SR-111 between Ruegger Road and SR-78

- Widen SR-111 from Ruegger Road to SR-78 Westbound Ramps-Del Rio Place to a four-lane Divided State Highway

Gentry Road between Sinclair Road and Lindsey Road

- Widen Gentry Road from Sinclair Road to Lindsey Road to two-lane Major Industrial Collector standards

Sinclair Road between Gentry Road and SR-111

- Widen Sinclair Road from Gentry Road to SR-111 to four-lane Major Industrial Collector standards

Lindsey Road between English Road and SR-111

- Widen Lindsey Road from English Road to SR-111 to two-lane Major Industrial Collector standards

Lindsey Road between SR-111 and Specific Plan East Boundary

- Widen Lindsey Road from SR-111 to Specific Plan East Boundary to two-lane Major Industrial Collector standards

14.3.5 Recommended Specific Plan Phase Three (Buildout) Intersection Improvements

SR-111 / Lincoln Street

- Widen and restripe the northbound SR-111 approach to provide a second left-turn lane
- Widen and restripe the north leg to accommodate the realigned northbound through lane at the intersection
- Remove the existing southbound "pork-chop" island and reconfigure southbound approach to remove the free right-turn and provide a standard right-turn lane
- Restripe the west leg of the intersection to provide two westbound receiving lanes

SR-86 / 66th Avenue

- Widen within the SR-86 center median to provide a second southbound left-turn lane
- Widen the westbound 66th Avenue approach to provide a second right-turn lane
- Widen the east leg of the intersection to provide a second eastbound receiving lane on 66th Avenue for a minimum distance of 300 feet before transitioning back to one eastbound lane

SR-111 / Davis Road

- Widen the northbound SR-111 approach to provide a second through lane*

*The recommended second northbound through lane will be aligned with the second northbound receiving lane that was recommended for Phase Two of the Specific Plan.

SR-111 / English Road

- Restripe the northbound English Road approach to provide one left-turn and one shared left/through/right-turn lane
- Widen the southbound English Road approach to provide a dedicated right-turn lane
- Widen the west leg of the intersection to provide a second westbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to one westbound lane

SR-111 / Main Street (Niland)

- Install a traffic signal
- Provide protected left-turn phasing on the southbound SR-111 approach

SR-111 / Sinclair Road

- Widen the eastbound Sinclair Road approach to provide a second right-turn lane

SR-111 / Lindsey Road

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

SR-78/86 / Lack Road

- Install a traffic signal
- Provide protected left-turn phasing on the eastbound and westbound SR-78/86 approaches
- Provide permissive left-turn phasing on the northbound and southbound Lack Road approaches

SR-78/86 / Center Street (Forrester Road)

- Widen the SR-78/86 westbound approach to provide a dedicated right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the northbound and southbound Center Street approaches

SR-78 / Brandt Road*

- Widen the southbound Brandt Road approach to provide one left-turn lane, one shared left-turn/through lane and one right-turn lane
- Provide split phasing on the northbound and southbound Brandt Road approaches

SR-111 / SR-78 Westbound Ramps – Del Rio Place

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111, and extend the third southbound lane to connect with the southbound right-turn lane at the SR-111 / SR-78 Eastbound Ramps – Shank Road intersection*

*A second southbound through lane is recommended at the SR-111 / SR-78 Eastbound Ramps – Shank Road intersection, and the third southbound lane from the SR-111 / SR-78 Westbound Ramps – Del Rio Place intersection would transition to the southbound right-turn lane for the SR-78 Eastbound Ramps.

SR-111 / SR-78 Eastbound Ramps – Shank Road

- Widen the southbound SR-111 approach to provide a second through lane
- Widen the south leg of the intersection to provide a second southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to one southbound lane

SR-111 / Ben Hulse Highway

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

SR-111 / Worthington Road

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

SR-111 / Aten Road

- Widen the southbound SR-111 approach to provide a third through lane
- Widen the south leg of the intersection to provide a third southbound receiving lane on SR-111 for a minimum distance of 300 feet before transitioning back to two southbound lanes

SR-111 / 2nd Street

- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-111 approach

14.3.6 Recommended Specific Plan Phase Three (Buildout) Roadway Segment Improvements

Gentry Road between Sinclair Road and Lindsey Road

- Widen Gentry Road from Sinclair Road to Lindsey Road to four-lane Major Industrial Collector standards

Gentry Road between Lindsey Road and Eddins Road

- Widen Gentry Road from Sinclair Road to Lindsey Road to two-lane Major Industrial Collector standards

Pound Road between Davis Road and SR-111

- Widen Pound Road from Davis Road to SR-111 to two-lane Major Industrial Collector standards

Eddins Road between English Road and SR-111

- Widen Eddins Road from English Road to SR-111 to two-lane Major Industrial Collector standards

14.3.7 Recommended Specific Plan Phase Three (Buildout) With Reduced Alternative Intersection Improvements

SR-86 / 66th Avenue

- Widen the eastbound and westbound 66th Avenue approaches to provide one dedicated left-turn lane on each approach
- Modify existing traffic signal to provide a right-turn overlap on the westbound 66th Avenue approach

SR-111 / Davis Road

- Install a traffic signal
- Widen the southbound SR-111 approach to provide a dedicated right-turn lane
- Provide protected + permissive left-turn phasing on the northbound SR-111 approach

SR-111 / English Road

- Install a traffic signal
- Widen the eastbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the northbound and southbound English Road approaches to provide a dedicated left-turn lane on each approach
- Provide protected + permissive left-turn phasing on the eastbound and westbound SR-111 approaches
- Provide permissive left-turn phasing on the northbound and southbound English Road approaches

SR-111 / Pound Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane and one shared through/right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound and westbound Pound Road approaches to provide one left-turn lane and one shared through/right-turn lane on each approach
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Pound Road approaches

SR-111 / Sinclair Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound Sinclair Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Sinclair Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Sinclair Road approaches

SR-111 / Lindsey Road

- Install a traffic signal
- Widen the northbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the southbound SR-111 approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the eastbound Lindsey Road approach to provide one left-turn lane, one through lane and one right-turn lane
- Widen the westbound Lindsey Road approach to provide one left-turn lane and one shared through/right-turn lane
- Provide protected + permissive left-turn phasing on the northbound and southbound SR-111 approaches
- Provide permissive left-turn phasing on the eastbound and westbound Lindsey Road approaches

SR-111 / Main Street (Calipatria)

- Install a traffic signal
- Restripe and reconstruct the center median on the north and south legs of the intersection to provide one left-turn lane, one through lane and one shared through/right-turn lane on the northbound and southbound SR-111 approaches
- Restripe and reconstruct the center median on the east and west legs of the intersection to provide one left-turn lane, one through lane and one right-turn lane on the eastbound and westbound Main Street approaches
- Provide protected left-turn phasing on the northbound and southbound SR-111 approaches
- Provide protected + permissive left-turn phasing on the eastbound and westbound Main Street approaches

SR-86 / 1st Street-Main Street

- Restripe the eastbound SR-86 (Main Street) approach to provide one left-turn lane, one through lane and one right-turn lane
- Restripe the westbound Main Street approach to provide two left-turn lanes and one shared through/ right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the northbound and southbound SR-86/1st Street approaches
- Modify the existing traffic signal to provide a right-turn overlap on the eastbound SR-86 (Main Street) approach

SR-86 / Barioni Boulevard

- Restripe the eastbound and westbound Barioni Boulevard approaches to provide one left-turn lane, one through lane and one right-turn lane
- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Barioni Boulevard approaches

SR-86 / Aten Road

- Modify the existing traffic signal to provide protected + permissive left-turn phasing on the eastbound and westbound Aten Road approaches
- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-86 approach

SR-86 / I-8 Westbound Ramps

- Restripe the westbound I-8 off-ramp approach to provide one shared left-turn/through/ right lane and two right-turn lanes
- Restripe the center median north of the intersection to provide a third northbound receiving lane on SR-86 to accommodate three westbound right-turn lanes from the westbound I-8 off-ramp

Cesar Chavez Boulevard / 2nd Street

- Modify the existing traffic signal to provide a right-turn overlap on the northbound approach (exiting the U.S./Mexico Port-of-Entry)
- Increase the traffic signal cycle length to 120 seconds during the AM peak hour, and 180 seconds during the PM peak hour

SR-111 / 2nd Street

- Modify the existing traffic signal to provide a right-turn overlap on the southbound SR-111 approach

14.3.8 Recommended Specific Plan Phase Three (Buildout) With Reduced Alternative Roadway Segment Improvements

All study roadway segments are forecast to operate at an acceptable LOS C or better under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions. Therefore, no additional improvements are required on the study area roadway segments.

14.4 Intersection Queuing Analysis Findings With Recommended Improvements

14.4.1 Specific Plan Phase One Queuing Analysis Findings With Recommended Improvements

The results of the queuing analysis under Future Year 2035 With Specific Plan Phase One conditions with the recommended improvements showed that the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections except for at the following study intersections:

SR-86 / 1st Street-Main Street
- Northbound Left-Turn Lane (AM/PM)

SR-86 / Aten Road
- Eastbound Left-Turn Lane (PM)
- Westbound Left-Turn Lane (PM)

14.4.2 Specific Plan Phase Two Queuing Analysis Findings With Recommended Improvements

The results of the queuing analysis under Future Year 2050 With Specific Plan Phase Two conditions with the recommended improvements showed that the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections except for at the following study intersections:

SR-78/86 / Center Street
- Northbound Left-Turn Lane (AM)
- Southbound Left-Turn Lane (PM)
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (PM)

SR-86 / Kalin Road
- Southbound Right-Turn Lane (AM/PM)

SR-86 / 1st Street-Main Street
- Southbound Left-Turn Lane (AM/PM)
- Eastbound Left-Turn Lane (PM)
- Westbound Left-Turn Lane (PM)

SR-86 / Aten Road
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / I-8 Westbound Ramps
- Southbound Right-Turn Lane (PM)

14.4.3 Specific Plan Phase Three (Buildout) Queuing Analysis Findings With Recommended Improvements

The results of the queuing analysis under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions with the recommended improvements showed that the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections except for at the following study intersections:

SR-111 / Sinclair Road
- Northbound Left-Turn Lane (AM/PM)

SR-78/86 / Lack Road
- Southbound Right-Turn Lane (PM)

SR-78/86 / Center Street
- Southbound Left-Turn Lane (PM)
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (PM)

SR-86 / Kalin Road
- Southbound Right-Turn Lane (AM/PM)

SR-86 / 1st Street-Main Street
- Southbound Left-Turn Lane (AM/PM)
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / Aten Road
- Eastbound Left-Turn Lane (AM/PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / I-8 Westbound Ramps
- Southbound Right-Turn Lane (AM/PM)

In addition, the queuing analysis results under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions with the recommended improvements showed that that excessive queue lengths exceeding 1,000 feet are anticipated on the recommended future left-turn and right-turn lanes at the following intersections:

SR-111 / Main Street Calipatria
- Eastbound Right-Turn Lane (PM)

SR-86 / 1st Street-Main Street
- Northbound Right-Turn Lane (AM/PM)
- Eastbound Right-Turn Lane (PM)
- Westbound Shared Through/Right-Turn Lane (PM)

14.4.4 Specific Plan Phase Three (Buildout) With Reduced Alternative Queuing Analysis Findings With Recommended Improvements

The results of the queuing analysis under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions with the recommended improvements showed that the existing storage lengths are anticipated to accommodate the 95th percentile queue lengths at the study intersections except for at the following study intersections:

SR-86 / 1st Street-Main Street
- Southbound Left-Turn Lane (AM/PM)
- Eastbound Left-Turn Lane (PM)

SR-86 / Aten Road
- Eastbound Left-Turn Lane (PM)
- Westbound Left-Turn Lane (AM/PM)

SR-86 / I-8 Westbound Ramps
- Southbound Right-Turn Lane (PM)

14.5 Turn Bay Lengths Needed With Recommended Improvements

The results of the queuing analysis were used to determine the storage lengths that would be needed for the existing and future left-turn and right-turn lanes at the study intersections with the recommended improvements for each Specific Plan development phase.

The recommended storage lengths of the new or modified left-turn and right-turn lanes on SR-111, SR-86 and SR-78 at the following study intersections where the posted speed is 55 or 65 miles per hour (mph) include the total storage plus deceleration lengths needed per Table 405.2B of the 7th Edition Highway Design Manual (HDM):

- SR-86 / 66th Avenue
- SR-111 / Davis Road
- SR-111 / English Road
- SR-111 / Pound Road
- SR-111 / Sinclair Road
- SR-111 / Lindsey Road
- SR-78/86 / Lack Road
- SR-78 / Brandt Road
- SR-86 / Kalin Road

The total storage plus deceleration length calculations exclude the minimum bay taper lengths needed (110 feet for 55 mph, 130 feet for 65 mph) to provide the total lengths of the left-turn and right-turn lanes prior to the bay tapers.

The turn bay storage lengths needed along State Highway facilities at study intersections in lower speed urbanized areas such as in Calipatria, Westmorland, Brawley, Imperial and El Centro were determined based on the minimum queue storage lengths needed, and deceleration lengths are not considered at these locations, where left-turn and/or right-turn lanes are already provided at most intersections within these urbanized areas.

14.5.1 Specific Plan Phase One Turn Bay Length Needs With Recommended Improvements

Table 31 provides the recommended turn bay lengths of the left-turn and right-turn lanes of the study intersections under Future Year 2035 With Specific Plan Phase One conditions with the recommended improvements.

As shown in Table 31, the recommended turn bay lengths would accommodate the 95th percentile queue lengths during the peak hours except for at the following study intersections:

SR-111 / Main Street Calipatria

- Northbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection

SR-86 / 1st Street – Main Street

- Eastbound Left-Turn Lane: Turn bay length constrained by upstream intersection

Accommodating the 95th percentile queue lengths for the above-listed left-turn lanes is not feasible due to the distances to the next upstream intersections that limit the turn bay lengths that can be provided at these intersections.

14.5.2 Specific Plan Phase Two Turn Bay Length Needs With Recommended Improvements

Table 32 provides the recommended turn bay lengths of the left-turn and right-turn lanes of the study intersections under Future Year 2050 With Specific Plan Phase Two conditions with the recommended improvements.

As shown in Table 32, the recommended turn bay lengths would accommodate the 95th percentile queue lengths during the peak hours except for at the following study intersections:

SR-111 / Main Street Calipatria

- Northbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Northbound Right-Turn Lane: Turn bay length constrained by adjacent development
- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Southbound Right-Turn Lane: Turn bay length constrained by adjacent development

SR-86 / 1st Street – Main Street

- Northbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Eastbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Westbound Left-Turn Lanes (Dual): Turn bay length constrained by upstream intersection

Accommodating the 95th percentile queue lengths for the above-listed left-turn and right-turn lanes is not feasible due to the distances to the next upstream intersections and the adjacent development that limit the turn bay lengths that can be provided at these intersections.

TABLE 31: FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE TURN BAY STORAGE LENGTHS WITH RECOMMENDED IMPROVEMENTS

Study Intersection	Northbound						Southbound						Eastbound						Westbound					
	Left			Right			Left			Right			Left			Right			Left			Right		
	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes
3 SR-111 / Davis Road	7'	385'[2]	1	-	-	-	-	-	-	65'	**450'**	**1**	-	-	1 (LR)	-	-	-	-	-	-	-	-	-
4 SR-111 / English Road	-	-	1 (LTR)	-	-	-	-	-	1 (LTR)	-	-	-	8'	**400'**	**1**	-	-	1 (TR)	0'	**400'**	**1**	-	-	1 (TR)
6 SR-111 / Pound Road	93'	**480'**	**1**	-	-	1 (TR)	0'	**400'**	**1**	62'	**440'**	**1**	62'	**150'**	**1**	-	-	1 (TR)	0'	**150'**	**1**	-	-	1 (TR)
7 SR-111 / Sinclair Road	221'	**600'**	**1**	38'	**420'**	**1**	52'	**430'**	**1**	78'	**460'**	**1**	106'	**200'**	**1**	227'	**230'**	**1**	164'	**200'**	**1**	-	-	1 (TR)
8 SR-111 / Lindsey Road	140'	**520'**	**1**	30'	**410'**	**1**	195'	**580'**	**1**	248'	**630'**	**1**	75'	**200'**	**1**	173'	**200'**	**1**	127'	**200'**	**1**	-	-	1 (TR)
9 SR-111 / Main Street Calipatria	312'	**210'[3,4]**	**1**	-	-	1 (TR)	334'	**210'[3,4]**	**1**	-	-	1 (TR)	151'	**160'**	**1**	128'	**150'**	**1**	137'	**150'[3]**	**1**	80'	**100'[3]**	**1**
14 SR-78 / Brandt Road	-	-	1 (LT)	31'	**50'**	**1**	-	-	1 (LT)	4'	**50'**	**1**	6'	570'[2]	1	3'	570'[2]	1	41'	650'[2]	1	48'	650'[2]	1
15 SR-111 / SR-78 WB Ramps	169'	600'[2]	1	6'	285'[2]	1	26'	225'[2]	1	-	-	1 (TR)	1,156'	1,940'[2,5]	1	97'	185'[2]	1	30'	130'[2]	1	25'	130'[2]	1
18 SR-86 / 1st Street-Main Street	235'	**235'[3]**	**1**	(6)	(6)	**1**	99'	**100'**	**1**	-	-	1 (TR)	180'	165'[2,4]	1	(6)	(6)	**1**	259'	**260'**	**2 [7]**	-	-	1 (TR)
20 SR-86 / Barioni Boulevard	153'	245'[2]	1	-	-	1 (TR)	94'	235'[2]		-	-	1 (TR)	147'	**195'**	**1**	146'	195'[2]	1	114'	**180'**	**1**	83'	180'[2]	1
22 SR-86 / Aten Road	157'	390'[2]	1	119'	305'[2]	1	277'	340'[2]	1	158'	340'[2]	1	323'	**325'**	**1**	-	-	1 (TR)	178'	**180'**	**1**	-	-	1 (TR)

Footnotes:

New or modified storage length and/or turn lane indicated in **bold**.

L = Left; R = Right, T = Through; LTR = Shared left/through/right lane; LT = Shared left/through lane; LR = Shared left/right lane; TR = Shared through/right lane

[1] Total storage + deceleration turn bay length excluding bay taper length per Table 405.2B of the 7th Edition HDM. Storage + deceleration length only applies to turn bays on the State Highway facilities where the posted speed is 55 mph and above, otherwise the turn bay length shown is based on storage length needed.

[2] Same as existing storage + deceleration length.

[3] Intersection located in a lower speed section of a State Highway through urban area.

[4] Storage length needed is constrained by upstream intersection and/or roadway configuration and adjacent development.

[5] Total length of off-ramp from gore point to intersection stop bar.

[6] No turn pocket, transition from through lane to right-turn lane.

[7] One of the two westbound through lanes would transition to a second left-turn lane at the intersection.

TABLE 32: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO TURN BAY STORAGE LENGTHS WITH RECOMMENDED IMPROVEMENTS

Study Intersection	Northbound						Southbound						Eastbound						Westbound					
	Left			Right			Left			Right			Left			Right			Left			Right		
	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes
2 SR-86 / 66th Avenue	30'	760'[2]	1	108'	300'[2]	1	595'	750'[2]	1	99'	260'[2]	1	221'	**225'**	**1**	126'	490'[2]	1	141'	**150'**	**1**	[6]	[6]	1
3 SR-111 / Davis Road	5'	385'[2]	1	-	-	-	-	-	-	74'	**460'**	1	226'	**230'**	1	-	-	1 (LR)	-	-	-	-	-	-
4 SR-111 / English Road	235'	**235'**	**1**	-	-	1 (TR)	169'	**200'**	**1**	-	-	1 (TR)	96'	**480'**	**1**	60'	**440'**	**1**	47'	**400'**	**1**	58'	**440'**	**1**
6 SR-111 / Pound Road	120'	**500'**	**1**	-	-	1 (TR)	0'	**400'**	**1**	52'	**440'**	**1**	96'	**150'**	**1**	-	-	1 (TR)	0'	**150'**	**1**	-	-	1 (TR)
7 SR-111 / Sinclair Road	187'	**570'**	**2**	[6]	[6]	**1**	67'	**450'**	**1**	98'	**480'**	**1**	163'	**200'**	**1**	238'	**240'**	**1**	116'	**200'**	**1**	-	-	1 (TR)
8 SR-111 / Lindsey Road	161'	**550'**	**1**	60'	**440'**	1	163'	**550'**	**1**	120'	**500'**	**1**	138'	**200'**	**1**	210'	**210'**	**1**	251'	**255'**	**1**	87'	**100'**	**1**
9 SR-111 / Main Street Calipatria	258'	**210'[3,4]**	**1**	221'	**100'[3,4]**	**1**	355'	**210'[3,4]**	**1**	367'	**100'[3,4]**	**1**	395'	**400'**	**1**	341'	**345'**	**1**	190'	**200'[3]**	**1**	159'	**160'[3]**	**1**
12 SR-78/86 / Center Street	130'	**130'**	**1**	-	-	1 (TR)	217'	150'[2,4]	1	129'	**130'**	**1**	175'	**175'**	**1**	-	-	1 (TR)	84'	**100'**	**1**	-	-	1 (TR)
14 SR-78 / Brandt Road	-	-	1 (LT)	34'	**50'**	**1**	-	-	1 (LT)	6'	**50'**	**1**	65'	570'[2]	1	4'	570'[2]	1	48'	650'[2]	1	80'	650'[2]	1
15 SR-111 / SR-78 WB Ramps	188'	600'[2]	1	-	-	1 (TR)	72'	225'[2]	1	-	-	1 (TR)	298'	1,940'[2,4]	2 (L, LT)	111'	185'[2]	1	45'	130'[2]	1	37'	130'[2]	1
17 SR-86 / Kalin Road	-	-	1 (LT)	14'	50'[2]	1	141'	**200'**	2 (L, LT)	83'	**100'**	**1**	26'	**650'**	**1**	0'	650'[2]	1	1'	620'[2]	1	23'	600'[2]	1
18 SR-86 / 1st Street-Main Street	333'	**325'[3,4]**	**1**	[6]	[6]	1	139'	**100'[4]**	**1**	-	-	1 (TR)	230'	165'[2,4]	1	[6]	[6]	1	483'	**350'[4]**	**2 [7]**	-	-	1 (TR)
20 SR-86 / Barioni Boulevard	172'	245'[2]	1	-	-	1 (TR)	112'	235'[2]	1	-	-	1 (TR)	206'	**195'[4]**	**1**	174'	195'[2]	1	102'	**180'**	**1**	96'	180'[2]	1
22 SR-86 / Aten Road	294'	390'[2]	1	261'	305'[2]	1	316'	340'[2]	1	252'	340'[2]	1	358'	**360'**	**1**	-	-	1 (TR)	207'	**210'**	**1**	-	-	1 (TR)
28 SR-86 / I-8 WB Ramps	72'	260'[2]	1	-	-	-	-	-	-	552'	**560'**	**1**	-	-	-	-	-	-	252'	1,320'[5]	**1 (LR)**	152'	310'[2]	2

Footnotes:

New or modified storage length and/or turn lane indicated in **bold**.

L = Left; R = Right, T = Through; LTR = Shared left/through/right lane; LT = Shared left/through lane; LR = Shared left/right lane; TR = Shared through/right lane

[1] Total storage + deceleration turn bay length excluding bay taper length per Table 405.2B of the 7th Edition HDM. Storage + deceleration length only applies to turn bays on the State Highway facilities where the posted speed is 55 mph and above, otherwise the turn bay length shown is based on storage length needed.

[2] Same as existing storage + deceleration length.

[3] Intersection located in a lower speed section of a State Highway through urban area.

[4] Storage length needed is constrained by upstream intersection and/or roadway configuration and adjacent development.

[5] Total length of off-ramp from gore point to intersection stop bar.

[6] No turn pocket, transition from through lane to right-turn lane.

[7] One of the two westbound through lanes would transition to a second left-turn lane at the intersection.

14.5.3 Specific Plan Phase Three (Buildout) Turn Bay Length Needs With Recommended Improvements

Table 33 provides the recommended turn bay lengths of the left-turn and right-turn lanes of the study intersections under Future Year 2050 With Specific Plan Phase Three (Buildout) conditions with the recommended improvements.

As shown in Table 33, the recommended turn bay lengths would accommodate the 95th percentile queue lengths during the peak hours except for at the following study intersections:

SR-111 / Main Street Calipatria

- Northbound Left-Turn Lane: Turn bay length constrained by upstream intersection, dual left-turn lanes not feasible due to adjacent development
- Northbound Right-Turn Lane: Turn bay length constrained by adjacent development
- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection, dual left-turn lanes not feasible due to adjacent development
- Southbound Right-Turn Lane: Turn bay length constrained by adjacent development, excessive queue length due to intersection delay
- Eastbound Left-Turn Lane: Excessive queue length due to intersection delay, dual left-turn lanes not feasible due to adjacent development
- Eastbound Right-Turn Lane: Excessive queue length due to intersection delay

SR-86 / 1st Street – Main Street

- Northbound Left-Turn Lane: Turn bay length constrained by upstream intersection, dual left-turn lanes not feasible due to adjacent development
- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Eastbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Westbound Left-Turn Lanes (Dual): Turn bay length constrained by upstream intersection; excessive queue length due to intersection delay

Accommodating the 95th percentile queue lengths for the above-listed left-turn and right-turn lanes is not feasible due to the distances to the next upstream intersections and the adjacent development that limit the turn bay lengths that can be provided at these intersections.

TABLE 33: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE TURN BAY STORAGE LENGTHS WITH RECOMMENDED IMPROVEMENTS

Study Intersection	Northbound						Southbound						Eastbound						Westbound					
	Left			Right			Left			Right			Left			Right			Left			Right		
	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes
1 SR-111 / Lincoln Street	275'	475'[2]	**2**	-	-	-	-	-	-	330'	**330'**	**1**	[6]	[6]	1	[7]	[7]	1	-	-	-	-	-	-
2 SR-86 / 66th Avenue	31'	760'[2]	1	224'	300'[2]	1	624'	750'[2]	**2**	56'	260'[2]	1	248'	**250'**	**1**	90'	490'[2]	1	130'	**150'**	**1**	[7]	[7]	**2**
3 SR-111 / Davis Road	7'	385'[2]	1	-	-	-	-	-	-	75'	**460'**	1	190'	**200'**	1	-	-	1 (LR)	-	-	-	-	-	-
4 SR-111 / English Road	186'	**200'**	**2 (L, LTR)**	-	-	-	239'	**240'**	**1**	112'	**120'**	**1**	139'	**520'**	**1**	47'	**430'**	**1**	87'	**470'**	**1**	240'	**620'**	**1**
5 SR-111 / Main Street Niland	-	-	-	-	-	1 (TR)	109'	150'[2]	1	-	-	-	-	-	-	-	-	-	-	-	1 (LR)	-	-	-
6 SR-111 / Pound Road	167'	**550'**	**1**	-	-	1 (TR)	0'	**400'**	**1**	97'	**480'**	**1**	181'	**200'**	**1**	-	-	1 (TR)	0'	**150'**	**1**	-	-	1 (TR)
7 SR-111 / Sinclair Road	416'	**800'**	**2**	[6]	[6]	**1**	72'	**460'**	**1**	110'	**490'**	**1**	169'	**200'**	**1**	189'	**200'**	**2**	342'	**345'**	**1**	-	-	1 (TR)
8 SR-111 / Lindsey Road	206'	**590'**	**1**	57'	**440'**	1	116'	**500'**	**1**	90'	**470'**	**1**	130'	**200'**	**1**	223'	**225'**	**1**	265'	**265'**	**1**	73'	**100'**	**1**
9 SR-111 / Main Street Calipatria	587'	**210'[3,4]**	**1**	199'	**100'[3,4]**	**1**	587'	**210'[3,4]**	**1**	662'	**100'[3,4]**	**1**	611'	**400'[4]**	**1**	1,101'	**400'[4]**	**1**	217'	**220'[3]**	**1**	247'	**250'[3]**	**1**
11 SR-78/86 / Lack Road	-	-	1 (LT)	35'	**50'**	**1**	-	-	1 (LT)	88'	**100'**	**1**	116'	665'[2]	1	8'	590'[2]	1	10'	665'[2]	1	22'	575'[2]	1
12 SR-78/86 / Center Street	101'	100'[2]	**1**	-	-	1 (TR)	234'	150'[2,4]	1	212'	**150'[4]**	**1**	181'	**180'**	**1**	-	-	1 (TR)	86'	**100'**	**1**	-	-	1 (TR)
14 SR-78 / Brandt Road	-	-	1 (LT)	54'	**60'**	**1**	234'	**235'**	2 (L, LT)	6'	**50'**	**1**	3'	570'[2]	1	3'	570'[2]	1	46'	650'[2]	1	96'	650'[2]	1
15 SR-111 / SR-78 WB Ramps	228'	600'[2]	1	-	-	1 (TR)	58'	225'[2]	1	-	-	1 (TR)	442'	1,940'[2,4]	2 (L, LT)	159'	185'[2]	1	43'	130'[2]	1	39'	130'[2]	1
16 SR-111 / SR-78 EB Ramps	289'	455'[2]	1	-	-	1 (TR)	10'	450'[2]	1	[7]	[7]	1	58'	2,080'[2,5]	1 (LT)	153'	2,080'[2,5]	1	-	-	1 (LT)	11'	50'	1
17 SR-86 / Kalin Road	-	-	1 (LT)	12'	50'[2]	1	228'	**230'**	2 (L, LT)	123'	**125'**	**1**	30'	**650'**	**1**	6'	650'[2]	1	1'	620'[2]	1	49'	600'[2]	1
18 SR-86 / 1st Street-Main Street	335'	**325'[3,4]**	**1**	[7]	[7]	1	182'	**100'[4]**	**1**	-	-	1 (TR)	248'	165'[2,4]	1	[7]	[7]	1	891'	**350'[4]**	**2 [8]**	-	-	1 (TR)
20 SR-86 / Barioni Boulevard	203'	245'[2]	1	-	-	1 (TR)	146'	235'[2]	1	-	-	1 (TR)	225'	**195'[4]**	**1**	185'	195'[2]	1	110'	**180'**	**1**	124'	180'[2]	1
22 SR-86 / Aten Road	225'	390'[2]	1	189'	305'[2]	1	393'	**395'**	**1**	344'	340'[2]	1	360'	**360'**	**1**	-	-	1 (TR)	211'	**210'**	**1**	-	-	1 (TR)
28 SR-86 / I-8 WB Ramps	65'	260'[2]	1	-	-	-	-	-	-	557'	**560'**	**1**	-	-	-	-	-	-	223'	1,320'[5]	**1 (LR)**	150'	310'[2]	2

Footnotes:

New or modified storage length and/or turn lane indicated in **bold**.

L = Left; R = Right, T = Through; LTR = Shared left/through/right lane; LT = Shared left/through lane; LR = Shared left/right lane; TR = Shared through/right lane

[1] Total storage + deceleration turn bay length excluding bay taper length per Table 405.2B of the 7th Edition HDM. Storage + deceleration length only applies to turn bays on the State Highway facilities where the posted speed is 55 mph and above, otherwise the turn bay length shown is based on storage length needed.

[2] Same as existing storage + deceleration length.

[3] Intersection located in a lower speed section of a State Highway through urban area.

[4] Storage length needed is constrained by upstream intersection and/or roadway configuration and adjacent development.

[5] Total length of off-ramp from gore point to intersection stop bar.

[6] No turn pocket, transition from through lane to left-turn lane.

[7] No turn pocket, transition from through lane to right-turn lane.

[8] One of the two westbound through lanes would transition to a second left-turn lane at the intersection.

14.5.4 Specific Plan Phase Three (Buildout) With Reduced Alternative Turn Bay Length Needs With Recommended Improvements

Table 34 provides the recommended turn bay lengths of the left-turn and right-turn lanes of the study intersections under Future Year 2050 With Specific Plan Phase Three (Buildout) With Reduced Alternative conditions with the recommended improvements.

As shown in Table 34, the recommended turn bay lengths would accommodate the 95th percentile queue lengths during the peak hours except for at the following study intersections:

SR-86 / 1st Street – Main Street

- Southbound Left-Turn Lane: Turn bay length constrained by upstream intersection
- Eastbound Left-Turn Lane: Turn bay length constrained by upstream intersection

Accommodating the 95th percentile queue lengths for the above-listed left-turn lanes is not feasible due to the distances to the next upstream intersections that limit the turn bay lengths that can be provided at these intersections.

TABLE 34: FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE TURN BAY STORAGE LENGTHS WITH RECOMMENDED IMPROVEMENTS

Study Intersection		Northbound						Southbound						Eastbound						Westbound					
		Left			Right			Left			Right			Left			Right			Left			Right		
		Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes	Queue Storage Length Needed (feet)	Total Storage + Decel Length[1] (feet)	# Lanes
2	SR-86 / 66th Avenue	32'	760'[2]	1	65'	300'[2]	1	261'	750'[2]	1	34'	260'[2]	1	69'	**100'**	**1**	23'	490'[2]	1	173'	**200'**	**1**	[6]	[6]	1
3	SR-111 / Davis Road	7'	385'[2]	1	-	-	-	-	-	-	52'	**440'**	**1**	-	-	1 (LR)	-	-	-	-	-	-	-	-	-
4	SR-111 / English Road	95'	**150'**	**1**	-	-	1 (TR)	82'	**150'**	**1**	-	-	1 (TR)	47'	**430'**	**1**	17'	**400'**	**1**	21'	**400'**	**1**	27'	**410'**	**1**
6	SR-111 / Pound Road	72'	**460'**	**1**	-	-	1 (TR)	0'	**400'**	**1**	31'	**410'**	**1**	72'	**150'**	**1**	-	-	1 (TR)	0'	**150'**	**1**	-	-	1 (TR)
7	SR-111 / Sinclair Road	106'	**490'**	**1**	28'	**410'**	**1**	40'	**420'**	**1**	59'	**440'**	**1**	93'	**200'**	**1**	92'	**200'**	**1**	73'	**200'**	**1**	-	-	1 (TR)
8	SR-111 / Lindsey Road	70'	**450'**	**1**	32'	**420'**	**1**	47'	**430'**	**1**	32'	**420'**	**1**	56'	**200'**	**1**	91'	**200'**	**1**	102'	**200'**	**1**	-	-	1 (TR)
9	SR-111 / Main Street Calipatria	167'	**170'[3]**	**1**	-	-	1 (TR)	184'	**185'[3]**	**1**	-	-	1 (TR)	119'	**120'**	**1**	86'	**100'**	**1**	120'	**120'[3]**	**1**	72'	**100'[3]**	**1**
18	SR-86 / 1st Street-Main Street	218'	**220'[3]**	**1**	[6]	[6]	**1**	127'	**100'[4]**	**1**	-	-	1 (TR)	205'	165'[2,4]	1	[6]	[6]	**1**	235'	245'[2]	**2** [7]	-	-	1 (TR)
20	SR-86 / Barioni Boulevard	138'	245'[2]	1	-	-	1 (TR)	115'	235'[2]		-	-	1 (TR)	149'	**195'**	**1**	152'	195'[2]	1	104'	**180'**	**1**	74'	180'[2]	1
22	SR-86 / Aten Road	208'	390'[2]	1	124'	305'[2]	1	273'	340'[2]	1	186'	340'[2]	1	335'	**335'**	**1**	-	-	1 (TR)	204'	**210'**	**1**	-	-	1 (TR)
28	SR-86 / I-8 WB Ramps	66'	260'[2]	1	-	-	-	-	-	-	555'	**560'**	**1**	-	-	-	-	-	-	222'	1,320'[5]	**1 (LR)**	136'	310'[2]	2

Footnotes:

New or modified storage length and/or turn lane indicated in **bold**.

L = Left; R = Right, T = Through; LTR = Shared left/through/right lane; LT = Shared left/through lane; LR = Shared left/right lane; TR = Shared through/right lane

[1] Total storage + deceleration turn bay length excluding bay taper length per Table 405.2B of the 7th Edition HDM. Storage + deceleration length only applies to turn bays on the State Highway facilities where the posted speed is 55 mph and above, otherwise the turn bay length shown is based on storage length needed.

[2] Same as existing storage + deceleration length.

[3] Intersection located in a lower speed section of a State Highway through urban area.

[4] Storage length needed is constrained by upstream intersection and/or roadway configuration and adjacent development.

[5] Total length of off-ramp from gore point to intersection stop bar.

[6] No turn pocket, transition from through lane to right-turn lane.

[7] One of the two westbound through lanes would transition to a second left-turn lane at the intersection.

15.0 REFERENCES

1. County of Imperial, Traffic Study and Report Policy, June 29, 2007.

2. County of Imperial, General Plan Circulation and Scenic Highways Element, January 29, 2008.

3. County of Riverside, General Plan Circulation Element, Amended December 12, 2017.

4. County of Riverside, Eastern Coachella Valley Area Plan, September 28, 2021.

5. Transportation Research Board, Highway Capacity Manual 7th Edition, Washington, D.C., 2022

6. Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition, September 2021.

7. Trafficware LLC, Synchro, Version 12, Sugar Land, Texas, 2022

8. Imperial County Transportation Commission, Regional Active Transportation Plan, February 2022

LITHIUM VALLEY SPECIFIC PLAN
LOCAL MOBILITY ANALYSIS APPENDICES

County of Imperial, CA

RICK Job No. 19628-AP
Second Submittal: September 16, 2025

RICK

APPENDIX C-2

EXISTING TRAFFIC VOLUME COUNTS

INTERSECTION TURNING MOVEMENT COUNTS

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: SR-111
E/W: Lincoln Street
Weather: Clear

File Name : 09_CIM_SR111_Linc AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

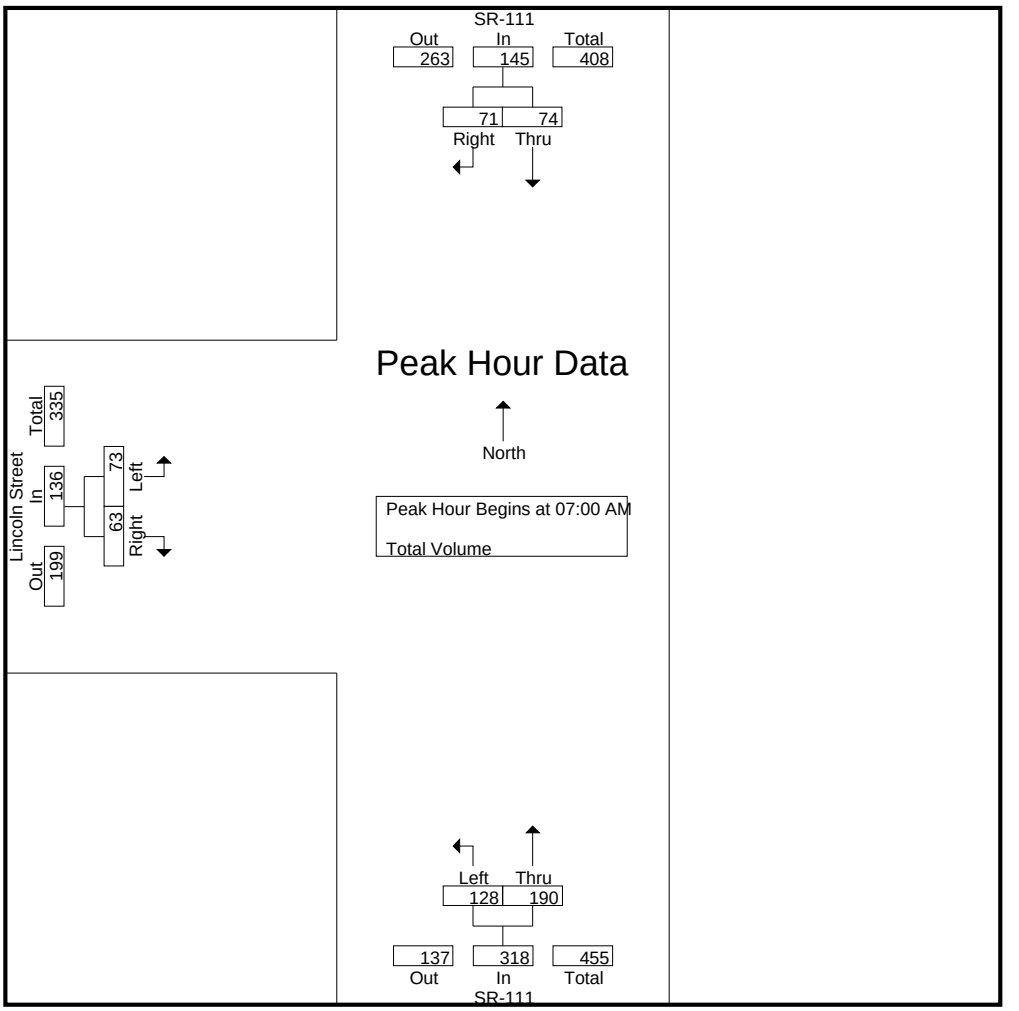
	SR-111 Southbound			SR-111 Northbound			Lincoln Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	25	20	45	38	45	83	20	24	44	172
07:15 AM	13	16	29	37	45	82	28	24	52	163
07:30 AM	20	17	37	28	60	88	10	10	20	145
07:45 AM	16	18	34	25	40	65	15	5	20	119
Total	74	71	145	128	190	318	73	63	136	599
08:00 AM	11	25	36	23	34	57	28	9	37	130
08:15 AM	20	35	55	14	40	54	24	10	34	143
08:30 AM	10	33	43	20	32	52	25	13	38	133
08:45 AM	15	25	40	18	28	46	20	10	30	116
Total	56	118	174	75	134	209	97	42	139	522
Grand Total	130	189	319	203	324	527	170	105	275	1121
Apprch %	40.8	59.2		38.5	61.5		61.8	38.2		
Total %	11.6	16.9	28.5	18.1	28.9	47	15.2	9.4	24.5	

	SR-111 Southbound			SR-111 Northbound			Lincoln Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	**25**	**20**	**45**	**38**	45	83	20	**24**	44	**172**
07:15 AM	13	16	29	37	45	82	**28**	24	**52**	163
07:30 AM	20	17	37	28	**60**	**88**	10	10	20	145
07:45 AM	16	18	34	25	40	65	15	5	20	119
Total Volume	74	71	145	128	190	318	73	63	136	599
% App. Total	51	49		40.3	59.7		53.7	46.3		
PHF	.740	.888	.806	.842	.792	.903	.652	.656	.654	.871

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County of Imperial
N/S: SR-111
E/W: Lincoln Street
Weather: Clear

File Name : 09_CIM_SR111_Linc AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			07:00 AM			08:00 AM		
+0 mins.	11	25	36	**38**	45	83	**28**	9	37
+15 mins.	**20**	**35**	**55**	37	45	82	24	10	34
+30 mins.	10	33	43	28	**60**	**88**	25	**13**	**38**
+45 mins.	15	25	40	25	40	65	20	10	30
Total Volume	56	118	174	128	190	318	97	42	139
% App. Total	32.2	67.8		40.3	59.7		69.8	30.2	
PHF	.700	.843	.791	.842	.792	.903	.866	.808	.914

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County of Imperial
N/S: SR-111
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Weather: Clear

File Name : 09_CIM_SR111_Linc PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

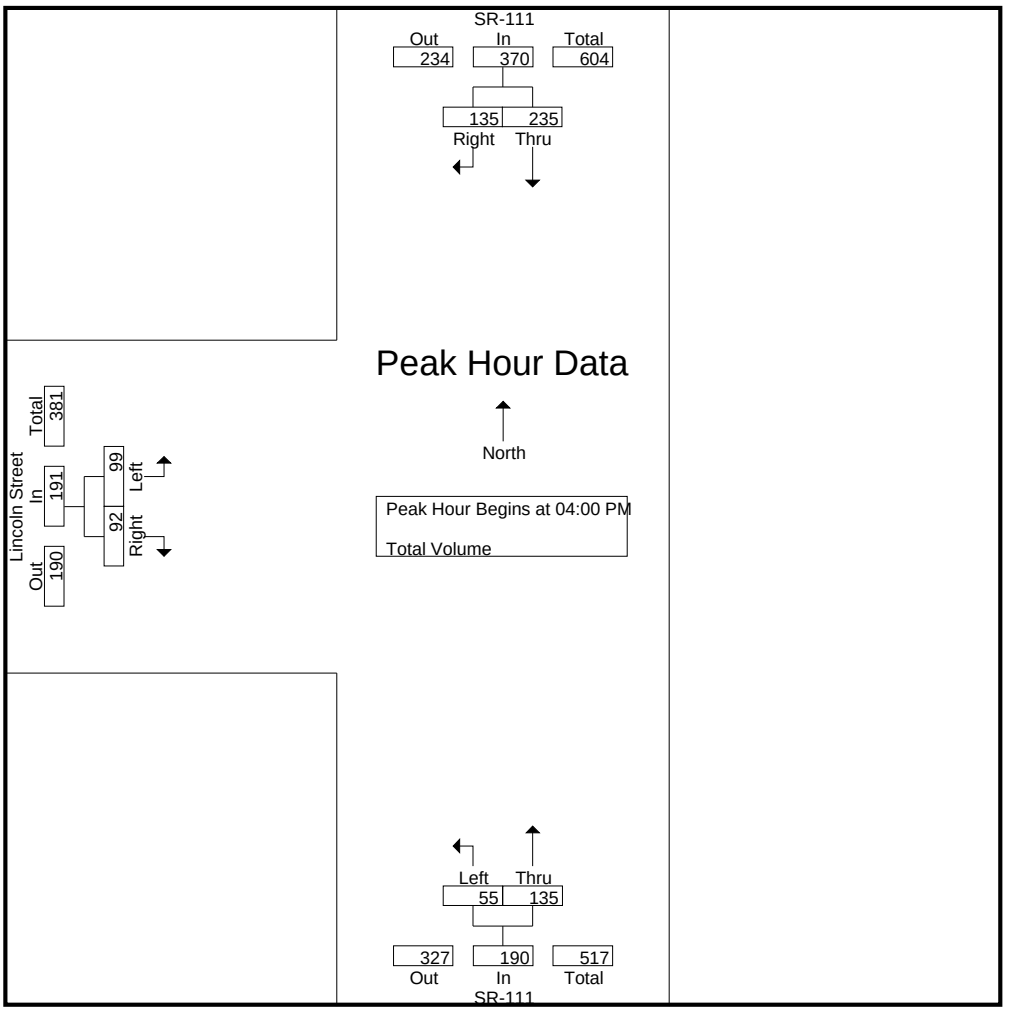
	SR-111 Southbound			SR-111 Northbound			Lincoln Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	59	33	92	12	46	58	32	25	57	207
04:15 PM	56	37	93	12	25	37	24	27	51	181
04:30 PM	58	38	96	12	38	50	23	17	40	186
04:45 PM	62	27	89	19	26	45	20	23	43	177
Total	235	135	370	55	135	190	99	92	191	751
05:00 PM	49	33	82	10	35	45	17	27	44	171
05:15 PM	58	22	80	21	28	49	32	16	48	177
05:30 PM	51	31	82	14	28	42	14	20	34	158
05:45 PM	47	27	74	12	22	34	14	25	39	147
Total	205	113	318	57	113	170	77	88	165	653
Grand Total	440	248	688	112	248	360	176	180	356	1404
Apprch %	64	36		31.1	68.9		49.4	50.6		
Total %	31.3	17.7	49	8	17.7	25.6	12.5	12.8	25.4	

	SR-111 Southbound			SR-111 Northbound			Lincoln Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	59	33	92	12	**46**	**58**	**32**	25	**57**	**207**
04:15 PM	56	37	93	12	25	37	24	**27**	51	181
04:30 PM	58	**38**	**96**	12	38	50	23	17	40	186
04:45 PM	**62**	27	89	**19**	26	45	20	23	43	177
Total Volume	235	135	370	55	135	190	99	92	191	751
% App. Total	63.5	36.5		28.9	71.1		51.8	48.2		
PHF	.948	.888	.964	.724	.734	.819	.773	.852	.838	.907

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County of Imperial
N/S: SR-111
E/W: Lincoln Street
Weather: Clear

File Name : 09_CIM_SR111_Linc PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	59	33	92	12	**46**	**58**	**32**	25	**57**
+15 mins.	56	37	93	12	25	37	24	**27**	51
+30 mins.	58	**38**	**96**	12	38	50	23	17	40
+45 mins.	**62**	27	89	**19**	26	45	20	23	43
Total Volume	235	135	370	55	135	190	99	92	191
% App. Total	63.5	36.5		28.9	71.1		51.8	48.2	
PHF	.948	.888	.964	.724	.734	.819	.773	.852	.838

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County of Imperial
N/S: SR-86
E/W: 66th Avenue
Weather: Clear

File Name : 10_CIM_SR86_66th AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

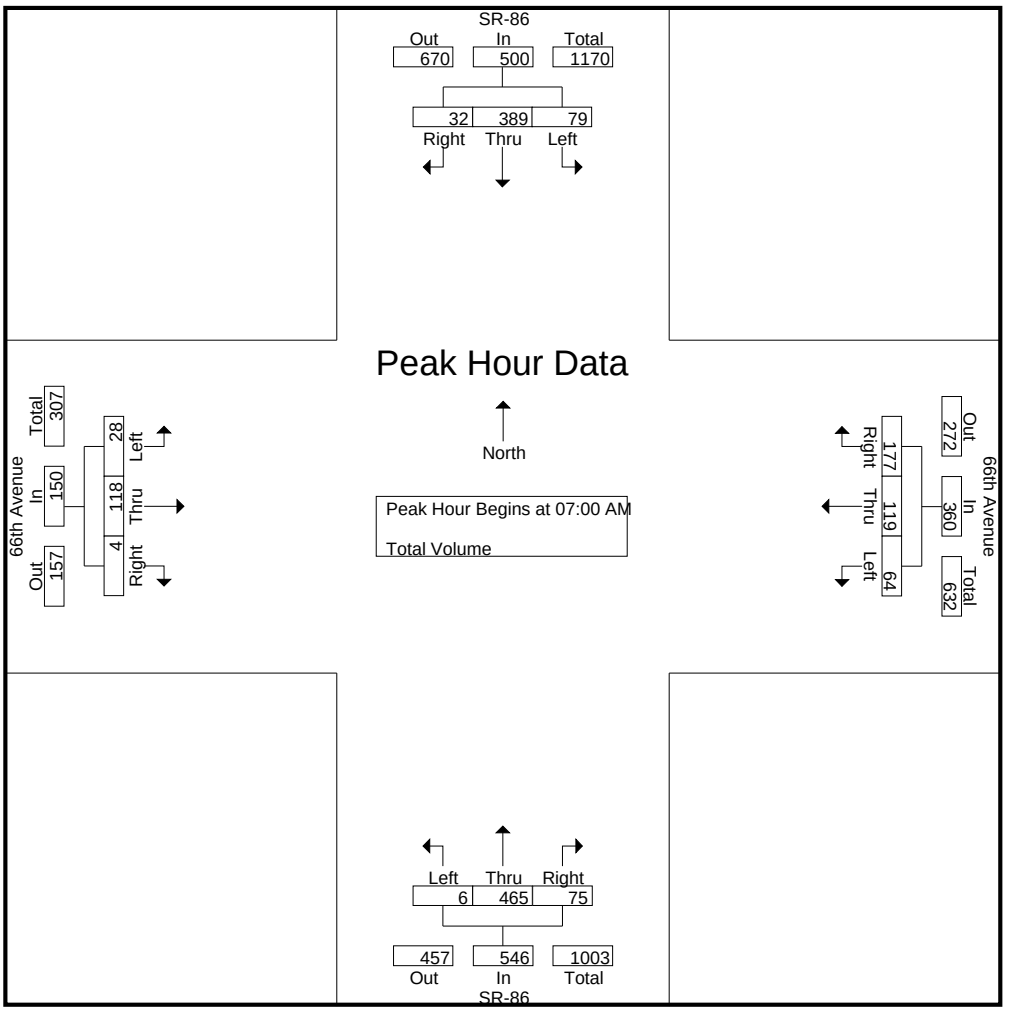
	SR-86 Southbound				66th Avenue Westbound				SR-86 Northbound				66th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	21	83	3	107	18	35	39	92	1	96	14	111	8	44	4	56	366
07:15 AM	19	108	7	134	12	25	51	88	0	137	19	156	7	36	0	43	421
07:30 AM	18	86	9	113	19	34	52	105	3	113	18	134	9	11	0	20	372
07:45 AM	21	112	13	146	15	25	35	75	2	119	24	145	4	27	0	31	397
Total	79	389	32	500	64	119	177	360	6	465	75	546	28	118	4	150	1556
08:00 AM	14	60	5	79	21	36	47	104	0	86	30	116	5	19	2	26	325
08:15 AM	16	98	7	121	17	30	36	83	2	98	21	121	10	33	2	45	370
08:30 AM	21	70	6	97	12	51	24	87	1	91	15	107	5	20	1	26	317
08:45 AM	28	96	5	129	16	44	21	81	1	91	18	110	9	31	2	42	362
Total	79	324	23	426	66	161	128	355	4	366	84	454	29	103	7	139	1374
Grand Total	158	713	55	926	130	280	305	715	10	831	159	1000	57	221	11	289	2930
Apprch %	17.1	77	5.9		18.2	39.2	42.7		1	83.1	15.9		19.7	76.5	3.8		
Total %	5.4	24.3	1.9	31.6	4.4	9.6	10.4	24.4	0.3	28.4	5.4	34.1	1.9	7.5	0.4	9.9	

	SR-86 Southbound				66th Avenue Westbound				SR-86 Northbound				66th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	**21**	83	3	107	18	**35**	39	92	1	96	14	111	8	**44**	**4**	**56**	366
07:15 AM	19	108	7	134	12	25	51	88	0	**137**	19	**156**	7	36	0	43	**421**
07:30 AM	18	86	9	113	**19**	34	**52**	**105**	**3**	113	18	134	**9**	11	0	20	372
07:45 AM	21	**112**	**13**	**146**	15	25	35	75	2	119	**24**	145	4	27	0	31	397
Total Volume	79	389	32	500	64	119	177	360	6	465	75	546	28	118	4	150	1556
% App. Total	15.8	77.8	6.4		17.8	33.1	49.2		1.1	85.2	13.7		18.7	78.7	2.7		
PHF	.940	.868	.615	.856	.842	.850	.851	.857	.500	.849	.781	.875	.778	.670	.250	.670	.924

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County of Imperial
N/S: SR-86
E/W: 66th Avenue
Weather: Clear

File Name : 10_CIM_SR86_66th AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:15 AM				07:00 AM			
+0 mins.	**21**	83	3	107	12	25	51	88	0	**137**	19	**156**	8	**44**	**4**	**56**
+15 mins.	19	108	7	134	19	34	**52**	**105**	**3**	113	18	134	7	36	0	43
+30 mins.	18	86	9	113	15	25	35	75	2	119	24	145	**9**	11	0	20
+45 mins.	21	**112**	**13**	**146**	**21**	**36**	47	104	0	86	**30**	116	4	27	0	31
Total Volume	79	389	32	500	67	120	185	372	5	455	91	551	28	118	4	150
% App. Total	15.8	77.8	6.4		18	32.3	49.7		0.9	82.6	16.5		18.7	78.7	2.7	
PHF	.940	.868	.615	.856	.798	.833	.889	.886	.417	.830	.758	.883	.778	.670	.250	.670

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County of Imperial
N/S: SR-86
E/W: 66th Avenue
Weather: Clear

File Name : 10_CIM_SR86_66th PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

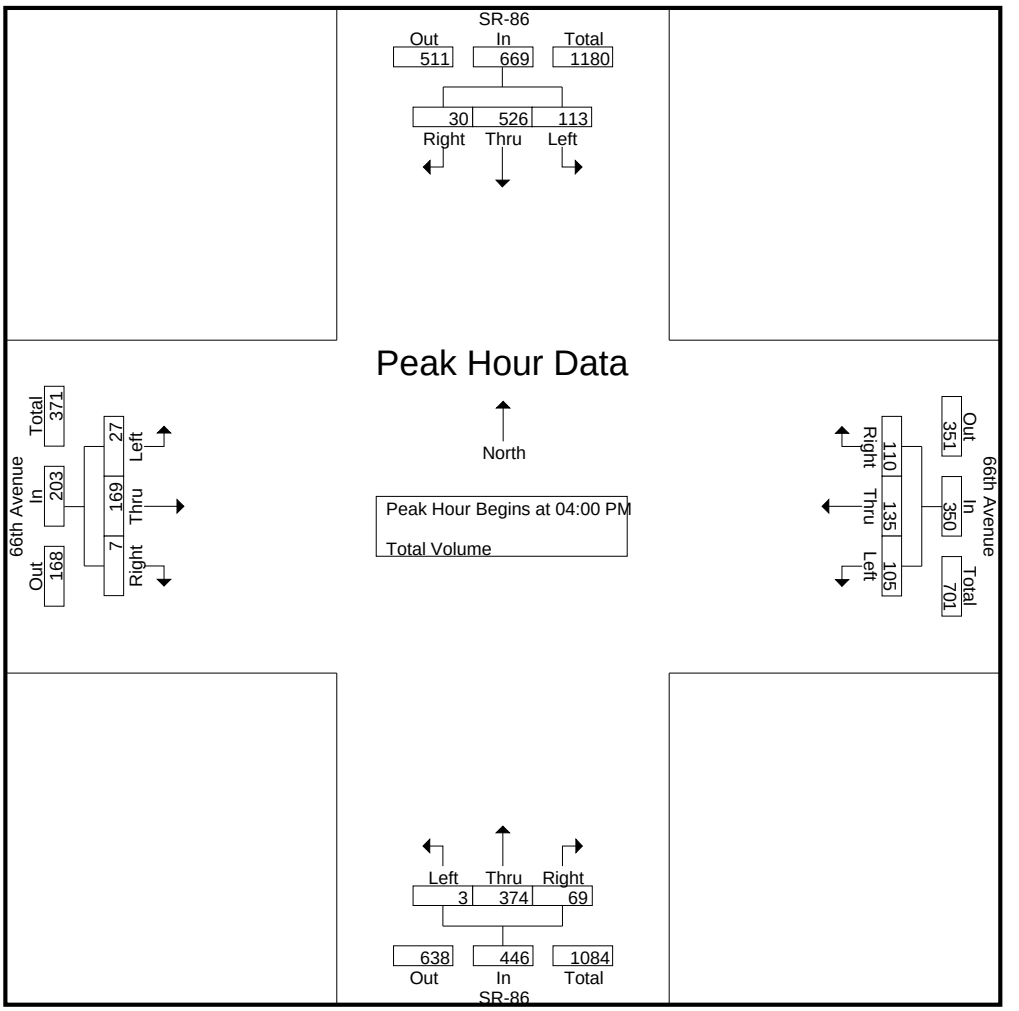
	SR-86 Southbound				66th Avenue Westbound				SR-86 Northbound				66th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	15	121	6	142	33	47	33	113	0	120	20	140	6	68	4	78	473
04:15 PM	39	139	7	185	29	32	31	92	2	87	17	106	6	32	2	40	423
04:30 PM	30	117	11	158	20	32	25	77	0	91	16	107	5	31	0	36	378
04:45 PM	29	149	6	184	23	24	21	68	1	76	16	93	10	38	1	49	394
Total	113	526	30	669	105	135	110	350	3	374	69	446	27	169	7	203	1668
05:00 PM	29	128	5	162	28	29	22	79	1	115	14	130	21	39	3	63	434
05:15 PM	27	155	10	192	26	31	31	88	0	102	15	117	9	46	1	56	453
05:30 PM	25	105	15	145	24	20	18	62	0	129	12	141	5	22	1	28	376
05:45 PM	37	130	6	173	23	16	19	58	1	91	13	105	3	46	1	50	386
Total	118	518	36	672	101	96	90	287	2	437	54	493	38	153	6	197	1649
Grand Total	231	1044	66	1341	206	231	200	637	5	811	123	939	65	322	13	400	3317
Apprch %	17.2	77.9	4.9		32.3	36.3	31.4		0.5	86.4	13.1		16.2	80.5	3.2		
Total %	7	31.5	2	40.4	6.2	7	6	19.2	0.2	24.4	3.7	28.3	2	9.7	0.4	12.1	

	SR-86 Southbound				66th Avenue Westbound				SR-86 Northbound				66th Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	15	121	6	142	**33**	**47**	**33**	**113**	0	**120**	**20**	**140**	6	**68**	**4**	**78**	**473**
04:15 PM	**39**	139	7	**185**	29	32	31	92	**2**	87	17	106	6	32	2	40	423
04:30 PM	30	117	**11**	158	20	32	25	77	0	91	16	107	5	31	0	36	378
04:45 PM	29	**149**	6	184	23	24	21	68	1	76	16	93	**10**	38	1	49	394
Total Volume	113	526	30	669	105	135	110	350	3	374	69	446	27	169	7	203	1668
% App. Total	16.9	78.6	4.5		30	38.6	31.4		0.7	83.9	15.5		13.3	83.3	3.4		
PHF	.724	.883	.682	.904	.795	.718	.833	.774	.375	.779	.863	.796	.675	.621	.438	.651	.882

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County of Imperial
N/S: SR-86
E/W: 66th Avenue
Weather: Clear

File Name : 10_CIM_SR86_66th PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				05:00 PM				04:30 PM			
+0 mins.	**30**	117	**11**	158	**33**	**47**	**33**	**113**	**1**	115	14	130	5	31	0	36
+15 mins.	29	149	6	184	29	32	31	92	0	102	**15**	117	10	38	1	49
+30 mins.	29	128	5	162	20	32	25	77	0	**129**	12	**141**	**21**	39	**3**	**63**
+45 mins.	27	**155**	10	**192**	23	24	21	68	1	91	13	105	9	**46**	1	56
Total Volume	115	549	32	696	105	135	110	350	2	437	54	493	45	154	5	204
% App. Total	16.5	78.9	4.6		30	38.6	31.4		0.4	88.6	11		22.1	75.5	2.5	
PHF	.958	.885	.727	.906	.795	.718	.833	.774	.500	.847	.900	.874	.536	.837	.417	.810

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County of Imperial
N/S: SR-111
E/W: Davis Road
Weather: Clear

File Name : 01_CIM_SR111_Dav AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

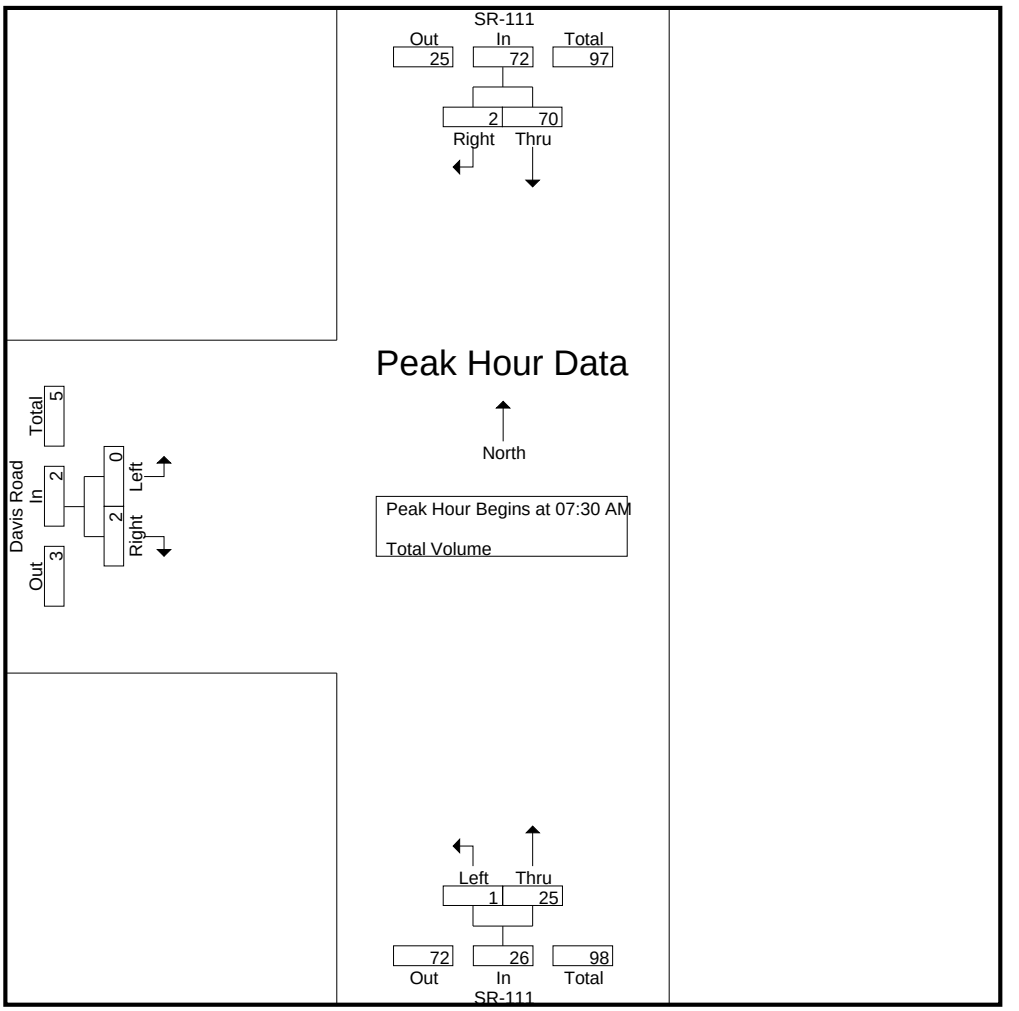
	SR-111 Southbound			SR-111 Northbound			Davis Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	9	0	9	0	3	3	0	0	0	12
07:15 AM	10	0	10	0	9	9	0	0	0	19
07:30 AM	19	0	19	0	11	11	0	1	1	31
07:45 AM	20	1	21	1	7	8	0	0	0	29
Total	58	1	59	1	30	31	0	1	1	91
08:00 AM	14	1	15	0	4	4	0	0	0	19
08:15 AM	17	0	17	0	3	3	0	1	1	21
08:30 AM	7	0	7	0	8	8	0	0	0	15
08:45 AM	14	0	14	0	13	13	0	0	0	27
Total	52	1	53	0	28	28	0	1	1	82
Grand Total	110	2	112	1	58	59	0	2	2	173
Apprch %	98.2	1.8		1.7	98.3		0	100		
Total %	63.6	1.2	64.7	0.6	33.5	34.1	0	1.2	1.2	

	SR-111 Southbound			SR-111 Northbound			Davis Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	19	0	19	0	**11**	**11**	0	**1**	**1**	**31**
07:45 AM	**20**	**1**	**21**	**1**	7	8	0	0	0	29
08:00 AM	14	1	15	0	4	4	0	0	0	19
08:15 AM	17	0	17	0	3	3	0	1	1	21
Total Volume	70	2	72	1	25	26	0	2	2	100
% App. Total	97.2	2.8		3.8	96.2		0	100		
PHF	.875	.500	.857	.250	.568	.591	.000	.500	.500	.806

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County of Imperial
N/S: SR-111
E/W: Davis Road
Weather: Clear

File Name : 01_CIM_SR111_Dav AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:15 AM			07:30 AM		
+0 mins.	19	0	19	0	9	9	0	**1**	**1**
+15 mins.	**20**	**1**	**21**	0	**11**	**11**	0	0	0
+30 mins.	14	1	15	**1**	7	8	0	0	0
+45 mins.	17	0	17	0	4	4	0	1	1
Total Volume	70	2	72	1	31	32	0	2	2
% App. Total	97.2	2.8		3.1	96.9		0	100	
PHF	.875	.500	.857	.250	.705	.727	.000	.500	.500

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County of Imperial
N/S: SR-111
E/W: Davis Road
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File Name : 01_CIM_SR111_Dav PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

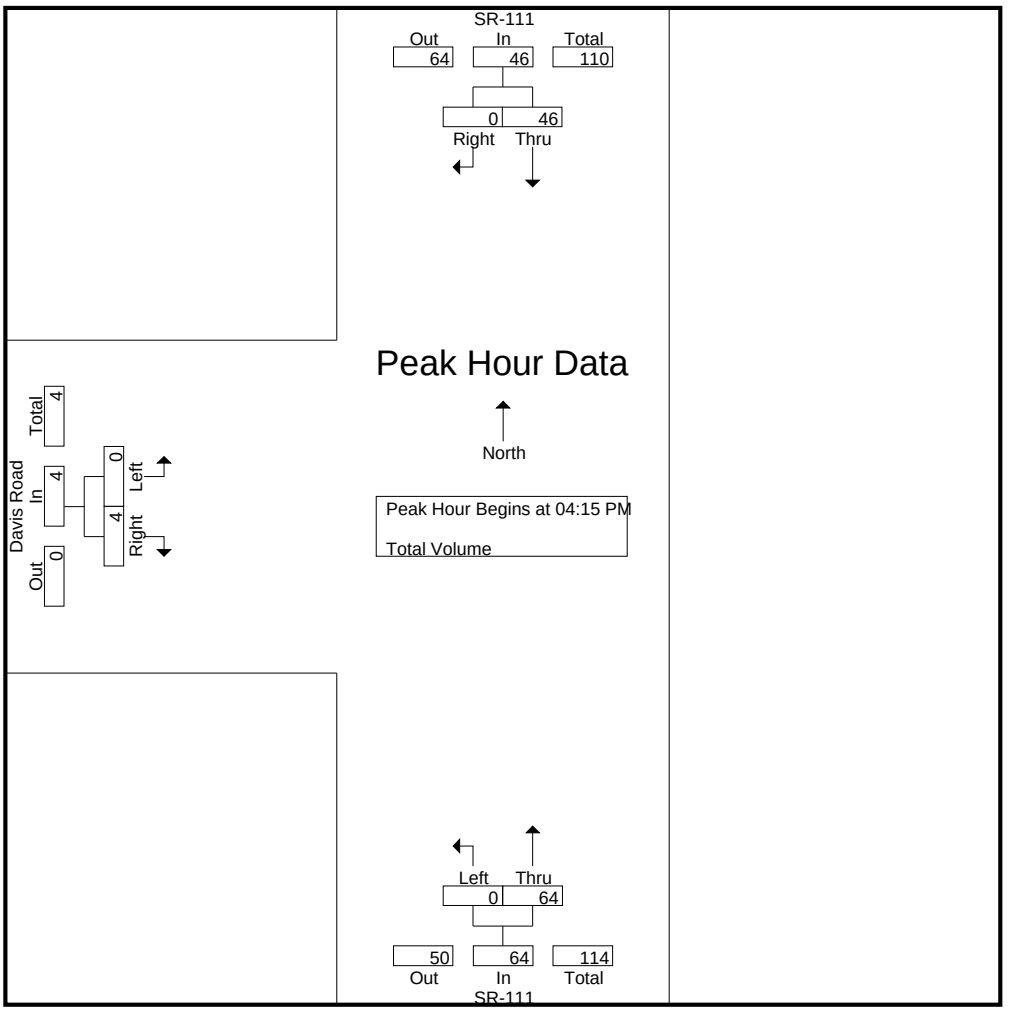
	SR-111 Southbound			SR-111 Northbound			Davis Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	7	0	7	0	13	13	0	0	0	20
04:15 PM	15	0	15	0	11	11	0	3	3	29
04:30 PM	9	0	9	0	19	19	0	1	1	29
04:45 PM	11	0	11	0	22	22	0	0	0	33
Total	42	0	42	0	65	65	0	4	4	111
05:00 PM	11	0	11	0	12	12	0	0	0	23
05:15 PM	10	0	10	0	13	13	0	0	0	23
05:30 PM	7	0	7	0	12	12	0	0	0	19
05:45 PM	10	0	10	0	7	7	0	0	0	17
Total	38	0	38	0	44	44	0	0	0	82
Grand Total	80	0	80	0	109	109	0	4	4	193
Apprch %	100	0		0	100		0	100		
Total %	41.5	0	41.5	0	56.5	56.5	0	2.1	2.1	

	SR-111 Southbound			SR-111 Northbound			Davis Road Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	**15**	0	**15**	0	11	11	0	**3**	**3**	29
04:30 PM	9	0	9	0	19	19	0	1	1	29
04:45 PM	11	0	11	0	**22**	**22**	0	0	0	**33**
05:00 PM	11	0	11	0	12	12	0	0	0	23
Total Volume	46	0	46	0	64	64	0	4	4	114
% App. Total	100	0		0	100		0	100		
PHF	.767	.000	.767	.000	.727	.727	.000	.333	.333	.864

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County of Imperial
N/S: SR-111
E/W: Davis Road
Weather: Clear

File Name : 01_CIM_SR111_Dav PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:30 PM			04:00 PM		
+0 mins.	**15**	0	**15**	0	19	19	0	0	0
+15 mins.	9	0	9	0	**22**	**22**	0	**3**	**3**
+30 mins.	11	0	11	0	12	12	0	1	1
+45 mins.	11	0	11	0	13	13	0	0	0
Total Volume	46	0	46	0	66	66	0	4	4
% App. Total	100	0		0	100		0	100	
PHF	.767	.000	.767	.000	.750	.750	.000	.333	.333

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County of Imperial
N/S: English Road
E/W: SR-111
Weather: Clear

File Name : 02_CIM_Eng_SR111 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

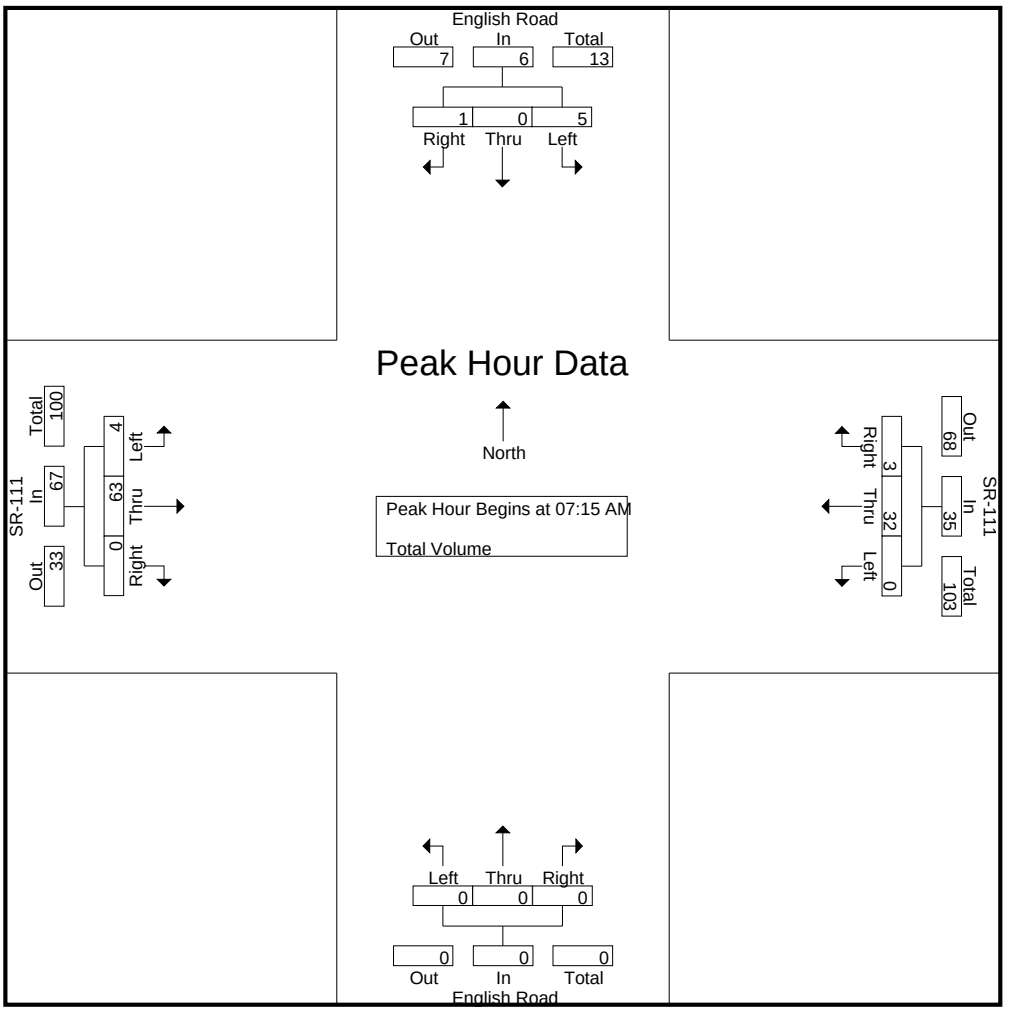
	English Road Southbound				SR-111 Westbound				English Road Northbound				SR-111 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	8	0	8	11
07:15 AM	2	0	0	2	0	10	0	10	0	0	0	0	1	11	0	12	24
07:30 AM	2	0	0	2	0	11	1	12	0	0	0	0	0	19	0	19	33
07:45 AM	1	0	1	2	0	9	0	9	0	0	0	0	1	20	0	21	32
Total	5	0	1	6	0	33	1	34	0	0	0	0	2	58	0	60	100
08:00 AM	0	0	0	0	0	2	2	4	0	0	0	0	2	13	0	15	19
08:15 AM	1	0	0	1	0	5	1	6	0	0	0	0	2	14	0	16	23
08:30 AM	3	0	0	3	0	11	0	11	0	0	0	0	2	7	0	9	23
08:45 AM	1	0	0	1	0	10	2	12	1	0	0	1	1	14	0	15	29
Total	5	0	0	5	0	28	5	33	1	0	0	1	7	48	0	55	94
Grand Total	10	0	1	11	0	61	6	67	1	0	0	1	9	106	0	115	194
Apprch %	90.9	0	9.1		0	91	9		100	0	0		7.8	92.2	0		
Total %	5.2	0	0.5	5.7	0	31.4	3.1	34.5	0.5	0	0	0.5	4.6	54.6	0	59.3	

	English Road Southbound				SR-111 Westbound				English Road Northbound				SR-111 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	**2**	0	0	**2**	0	10	0	10	0	0	0	0	1	11	0	12	24
07:30 AM	2	0	0	2	0	**11**	1	**12**	0	0	0	0	0	19	0	19	**33**
07:45 AM	1	0	**1**	2	0	9	0	9	0	0	0	0	1	**20**	0	**21**	32
08:00 AM	0	0	0	0	0	2	**2**	4	0	0	0	0	**2**	13	0	15	19
Total Volume	5	0	1	6	0	32	3	35	0	0	0	0	4	63	0	67	108
% App. Total	83.3	0	16.7		0	91.4	8.6		0	0	0		6	94	0		
PHF	.625	.000	.250	.750	.000	.727	.375	.729	.000	.000	.000	.000	.500	.788	.000	.798	.818

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County of Imperial
N/S: English Road
E/W: SR-111
Weather: Clear

File Name : 02_CIM_Eng_SR111 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				08:00 AM				07:30 AM			
+0 mins.	0	0	0	0	0	10	0	10	0	0	0	0	0	19	0	19
+15 mins.	**2**	0	0	**2**	0	**11**	1	**12**	0	0	0	0	1	**20**	0	**21**
+30 mins.	2	0	0	2	0	9	0	9	0	0	0	0	**2**	13	0	15
+45 mins.	1	0	**1**	2	0	2	**2**	4	**1**	0	0	**1**	2	14	0	16
Total Volume	5	0	1	6	0	32	3	35	1	0	0	1	5	66	0	71
% App. Total	83.3	0	16.7		0	91.4	8.6		100	0	0		7	93	0	
PHF	.625	.000	.250	.750	.000	.727	.375	.729	.250	.000	.000	.250	.625	.825	.000	.845

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County of Imperial
N/S: English Road
E/W: SR-111
Weather: Clear

File Name : 02_CIM_Eng_SR111 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

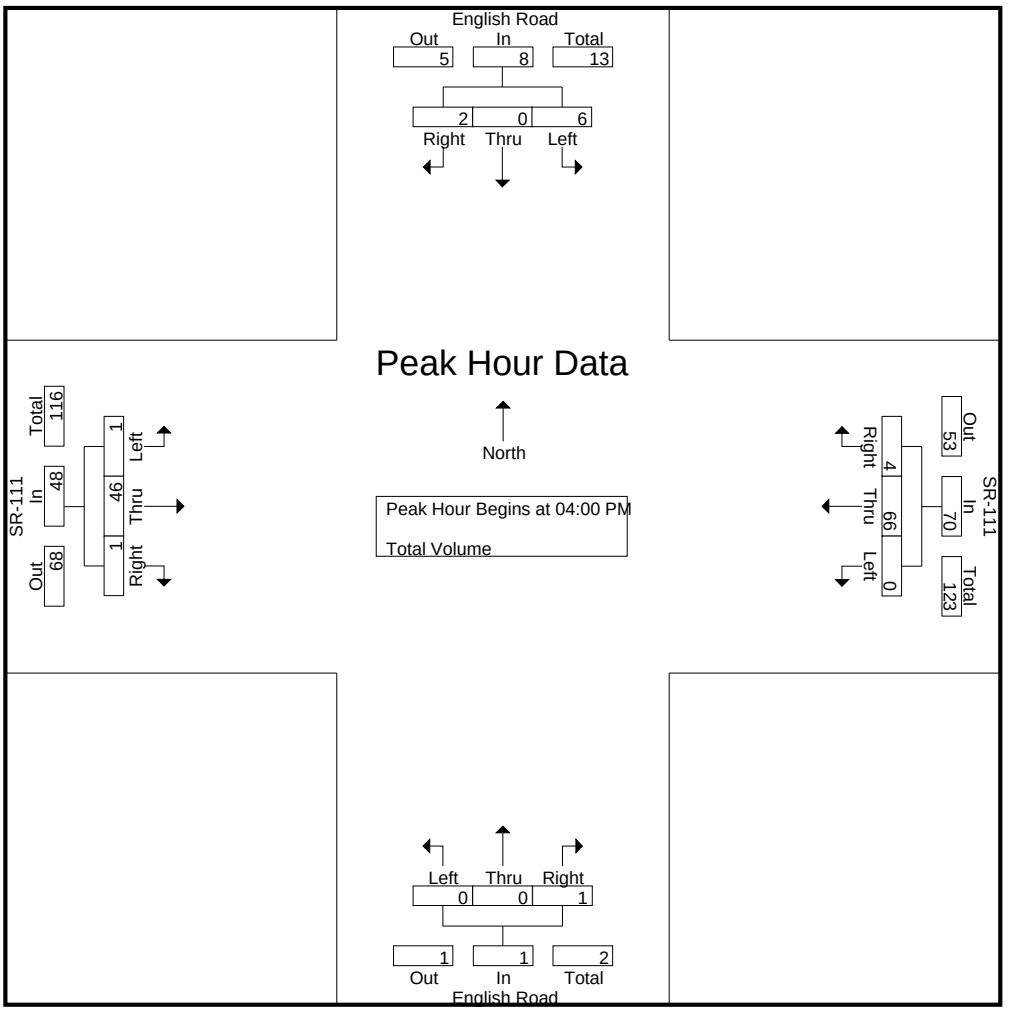
	English Road Southbound				SR-111 Westbound				English Road Northbound				SR-111 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	1	2	0	14	1	15	0	0	0	0	0	8	0	8	25
04:15 PM	3	0	1	4	0	9	1	10	0	0	0	0	0	16	0	16	30
04:30 PM	2	0	0	2	0	19	2	21	0	0	0	0	1	12	0	13	36
04:45 PM	0	0	0	0	0	24	0	24	0	0	1	1	0	10	1	11	36
Total	6	0	2	8	0	66	4	70	0	0	1	1	1	46	1	48	127
05:00 PM	0	0	0	0	0	11	1	12	0	0	1	1	1	10	0	11	24
05:15 PM	1	0	1	2	0	16	0	16	0	0	0	0	0	10	0	10	28
05:30 PM	1	0	0	1	0	10	1	11	0	0	0	0	0	8	0	8	20
05:45 PM	1	0	0	1	0	6	1	7	0	0	0	0	0	11	0	11	19
Total	3	0	1	4	0	43	3	46	0	0	1	1	1	39	0	40	91
Grand Total	9	0	3	12	0	109	7	116	0	0	2	2	2	85	1	88	218
Apprch %	75	0	25		0	94	6		0	0	100		2.3	96.6	1.1		
Total %	4.1	0	1.4	5.5	0	50	3.2	53.2	0	0	0.9	0.9	0.9	39	0.5	40.4	

	English Road Southbound				SR-111 Westbound				English Road Northbound				SR-111 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	0	**1**	2	0	14	1	15	0	0	0	0	0	8	0	8	25
04:15 PM	**3**	0	1	**4**	0	9	1	10	0	0	0	0	0	**16**	0	**16**	30
04:30 PM	2	0	0	2	0	19	**2**	21	0	0	0	0	**1**	12	0	13	**36**
04:45 PM	0	0	0	0	0	**24**	0	**24**	0	0	**1**	**1**	0	10	**1**	11	36
Total Volume	6	0	2	8	0	66	4	70	0	0	1	1	1	46	1	48	127
% App. Total	75	0	25		0	94.3	5.7		0	0	100		2.1	95.8	2.1		
PHF	.500	.000	.500	.500	.000	.688	.500	.729	.000	.000	.250	.250	.250	.719	.250	.750	.882

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County of Imperial
N/S: English Road
E/W: SR-111
Weather: Clear

File Name : 02_CIM_Eng_SR111 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:15 PM				04:15 PM			
+0 mins.	1	0	**1**	2	0	19	**2**	21	0	0	0	0	0	**16**	0	**16**
+15 mins.	**3**	0	1	**4**	0	**24**	0	**24**	0	0	0	0	**1**	12	0	13
+30 mins.	2	0	0	2	0	11	1	12	0	0	**1**	**1**	0	10	**1**	11
+45 mins.	0	0	0	0	0	16	0	16	0	0	1	1	1	10	0	11
Total Volume	6	0	2	8	0	70	3	73	0	0	2	2	2	48	1	51
% App. Total	75	0	25		0	95.9	4.1		0	0	100		3.9	94.1	2	
PHF	.500	.000	.500	.500	.000	.729	.375	.760	.000	.000	.500	.500	.500	.750	.250	.797

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County of Imperial
N/S: SR-111
E/W: Main Street
Weather: Clear

File Name : 03_CIM_SR111_Main AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

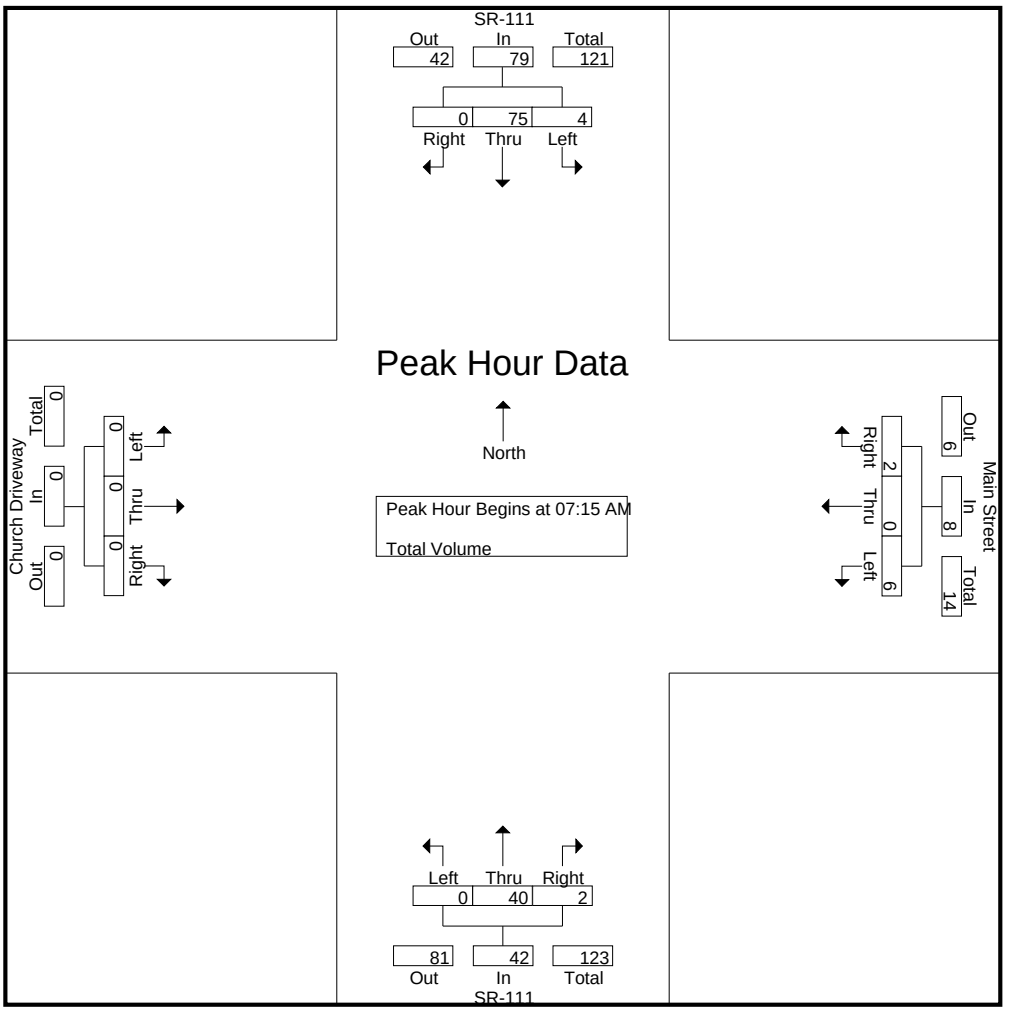
	SR-111 Southbound				Main Street Westbound				SR-111 Northbound				Church Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	12	0	13	1	0	2	3	0	6	1	7	0	0	0	0	23
07:15 AM	0	16	0	16	0	0	0	0	0	10	0	10	0	0	0	0	26
07:30 AM	1	23	0	24	3	0	0	3	0	14	0	14	0	0	0	0	41
07:45 AM	3	24	0	27	1	0	1	2	0	8	1	9	0	0	0	0	38
Total	5	75	0	80	5	0	3	8	0	38	2	40	0	0	0	0	128
08:00 AM	0	12	0	12	2	0	1	3	0	8	1	9	0	0	0	0	24
08:15 AM	2	9	0	11	1	0	2	3	0	7	0	7	0	0	0	0	21
08:30 AM	1	16	0	17	0	0	0	0	1	11	0	12	0	0	0	0	29
08:45 AM	4	16	0	20	0	0	3	3	0	14	1	15	0	0	1	1	39
Total	7	53	0	60	3	0	6	9	1	40	2	43	0	0	1	1	113
Grand Total	12	128	0	140	8	0	9	17	1	78	4	83	0	0	1	1	241
Apprch %	8.6	91.4	0		47.1	0	52.9		1.2	94	4.8		0	0	100		
Total %	5	53.1	0	58.1	3.3	0	3.7	7.1	0.4	32.4	1.7	34.4	0	0	0.4	0.4	

	SR-111 Southbound				Main Street Westbound				SR-111 Northbound				Church Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	16	0	16	0	0	0	0	0	10	0	10	0	0	0	0	26
07:30 AM	1	23	0	24	**3**	0	0	**3**	0	**14**	0	**14**	0	0	0	0	**41**
07:45 AM	**3**	**24**	0	**27**	1	0	**1**	2	0	8	**1**	9	0	0	0	0	38
08:00 AM	0	12	0	12	2	0	1	3	0	8	1	9	0	0	0	0	24
Total Volume	4	75	0	79	6	0	2	8	0	40	2	42	0	0	0	0	129
% App. Total	5.1	94.9	0		75	0	25		0	95.2	4.8		0	0	0		
PHF	.333	.781	.000	.731	.500	.000	.500	.667	.000	.714	.500	.750	.000	.000	.000	.000	.787

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County of Imperial
N/S: SR-111
E/W: Main Street
Weather: Clear

File Name : 03_CIM_SR111_Main AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				08:00 AM				08:00 AM			
+0 mins.	1	12	0	13	**3**	0	0	**3**	0	8	**1**	9	0	0	0	0
+15 mins.	0	16	0	16	1	0	1	2	0	7	0	7	0	0	0	0
+30 mins.	1	23	0	24	2	0	1	3	**1**	11	0	12	0	0	0	0
+45 mins.	**3**	**24**	0	**27**	1	0	**2**	3	0	**14**	1	**15**	0	0	**1**	**1**
Total Volume	5	75	0	80	7	0	4	11	1	40	2	43	0	0	1	1
% App. Total	6.2	93.8	0		63.6	0	36.4		2.3	93	4.7		0	0	100	
PHF	.417	.781	.000	.741	.583	.000	.500	.917	.250	.714	.500	.717	.000	.000	.250	.250

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County of Imperial
N/S: SR-111
E/W: Main Street
Weather: Clear

File Name : 03_CIM_SR111_Main PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

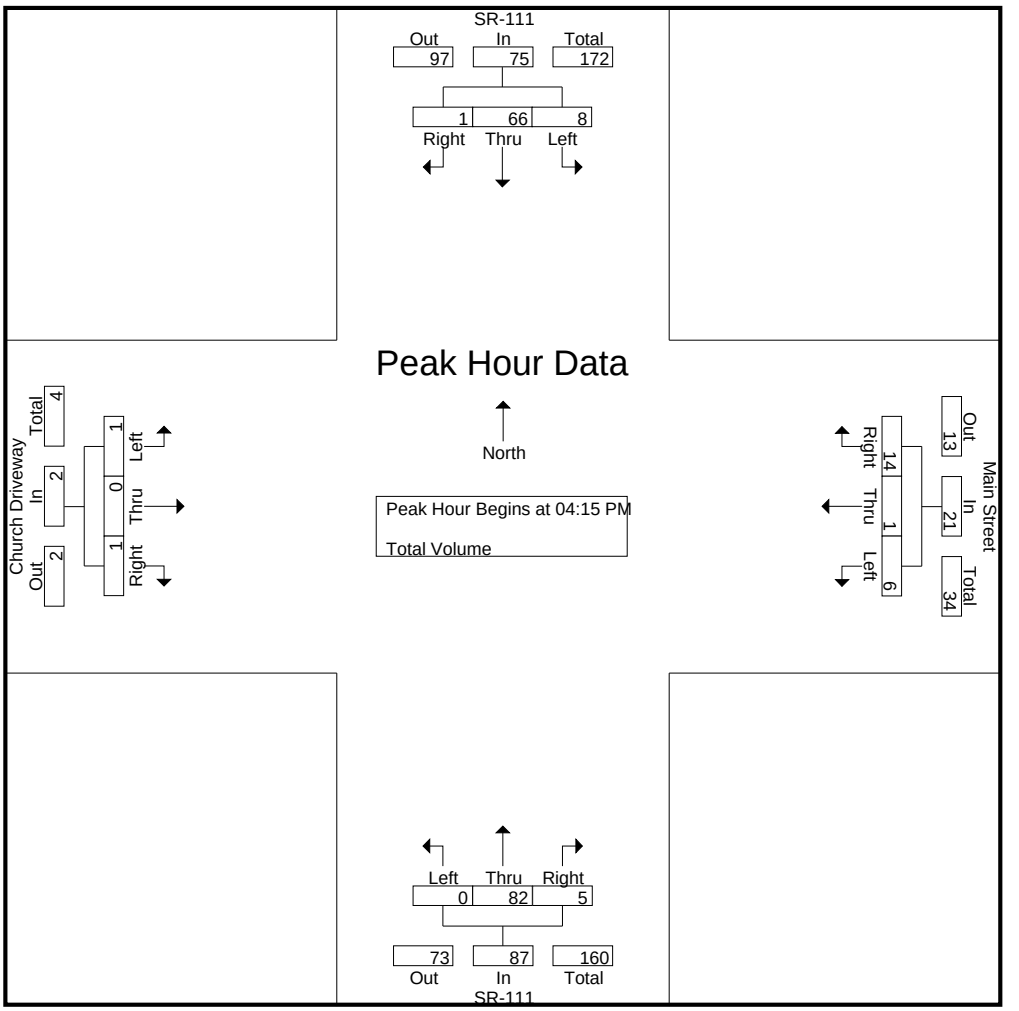
	SR-111 Southbound				Main Street Westbound				SR-111 Northbound				Church Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	14	0	15	1	0	1	2	0	12	1	13	0	0	0	0	30
04:15 PM	2	18	0	20	1	0	4	5	0	21	1	22	0	0	0	0	47
04:30 PM	1	15	1	17	1	1	4	6	0	25	1	26	0	0	1	1	50
04:45 PM	2	15	0	17	2	0	1	3	0	24	2	26	1	0	0	1	47
Total	6	62	1	69	5	1	10	16	0	82	5	87	1	0	1	2	174
05:00 PM	3	18	0	21	2	0	5	7	0	12	1	13	0	0	0	0	41
05:15 PM	3	15	0	18	1	0	2	3	0	15	0	15	0	0	0	0	36
05:30 PM	2	7	0	9	2	0	4	6	0	14	1	15	0	0	0	0	30
05:45 PM	3	14	0	17	1	1	3	5	0	10	0	10	0	0	0	0	32
Total	11	54	0	65	6	1	14	21	0	51	2	53	0	0	0	0	139
Grand Total	17	116	1	134	11	2	24	37	0	133	7	140	1	0	1	2	313
Apprch %	12.7	86.6	0.7		29.7	5.4	64.9		0	95	5		50	0	50		
Total %	5.4	37.1	0.3	42.8	3.5	0.6	7.7	11.8	0	42.5	2.2	44.7	0.3	0	0.3	0.6	

	SR-111 Southbound				Main Street Westbound				SR-111 Northbound				Church Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	2	**18**	0	20	1	0	4	5	0	21	1	22	0	0	0	0	47
04:30 PM	1	15	**1**	17	1	**1**	4	6	0	**25**	1	**26**	0	0	**1**	**1**	**50**
04:45 PM	2	15	0	17	**2**	0	1	3	0	24	**2**	26	**1**	0	0	1	47
05:00 PM	**3**	18	0	**21**	2	0	**5**	**7**	0	12	1	13	0	0	0	0	41
Total Volume	8	66	1	75	6	1	14	21	0	82	5	87	1	0	1	2	185
% App. Total	10.7	88	1.3		28.6	4.8	66.7		0	94.3	5.7		50	0	50		
PHF	.667	.917	.250	.893	.750	.250	.700	.750	.000	.820	.625	.837	.250	.000	.250	.500	.925

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County of Imperial
N/S: SR-111
E/W: Main Street
Weather: Clear

File Name : 03_CIM_SR111_Main PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:00 PM				04:00 PM			
+0 mins.	2	**18**	0	20	1	0	4	5	0	12	1	13	0	0	0	0
+15 mins.	1	15	**1**	17	1	**1**	4	6	0	21	1	22	0	0	0	0
+30 mins.	2	15	0	17	**2**	0	1	3	0	**25**	1	**26**	0	0	**1**	**1**
+45 mins.	**3**	18	0	**21**	2	0	**5**	**7**	0	24	**2**	26	**1**	0	0	1
Total Volume	8	66	1	75	6	1	14	21	0	82	5	87	1	0	1	2
% App. Total	10.7	88	1.3		28.6	4.8	66.7		0	94.3	5.7		50	0	50	
PHF	.667	.917	.250	.893	.750	.250	.700	.750	.000	.820	.625	.837	.250	.000	.250	.500

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County of Imperial
N/S: SR-111
E/W: Sinclair Road
Weather: Clear

File Name : 04_CIM_SR111_Sinc AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

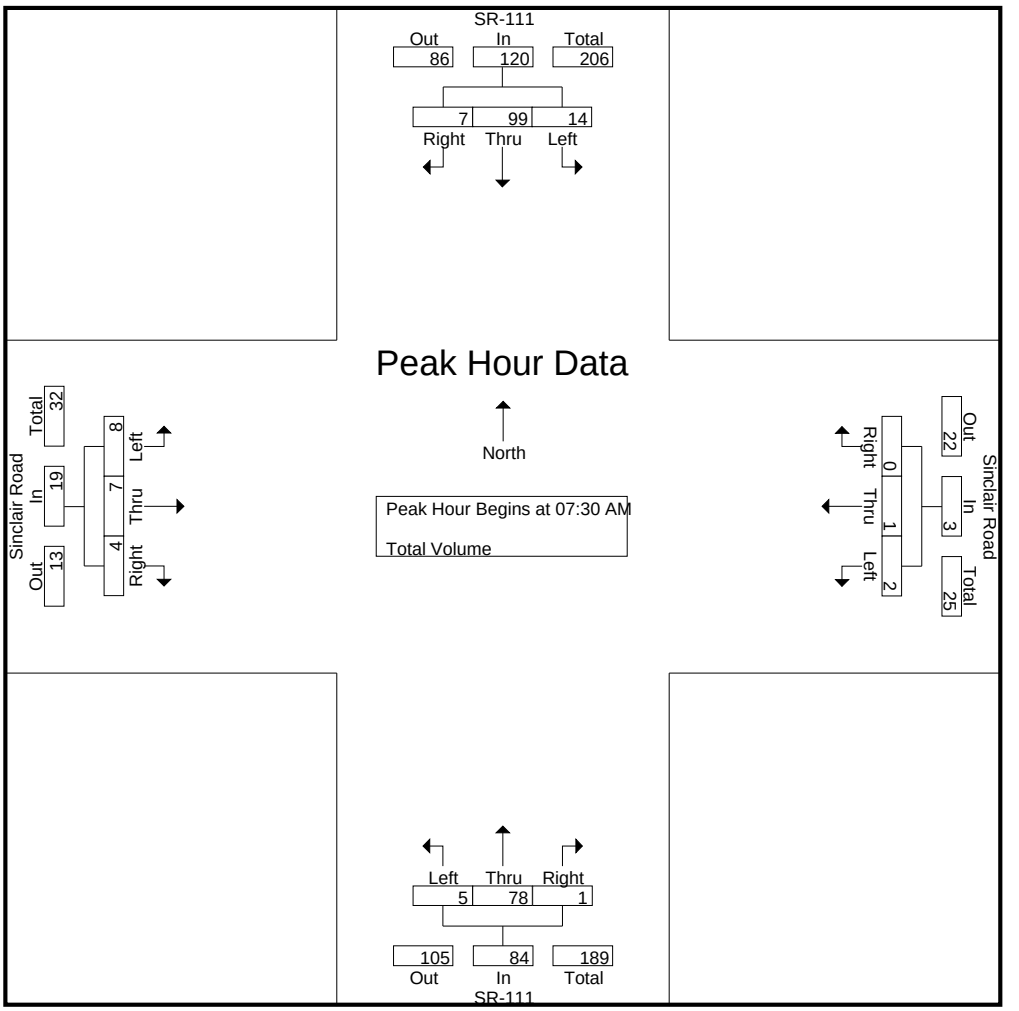
	SR-111 Southbound				Sinclair Road Westbound				SR-111 Northbound				Sinclair Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	14	3	19	0	1	0	1	1	17	0	18	0	0	1	1	39
07:15 AM	2	9	1	12	0	0	1	1	0	21	0	21	3	0	1	4	38
07:30 AM	6	28	3	37	0	1	0	1	2	25	0	27	2	0	0	2	67
07:45 AM	5	32	3	40	1	0	0	1	2	19	0	21	3	3	1	7	69
Total	15	83	10	108	1	2	1	4	5	82	0	87	8	3	3	14	213
08:00 AM	0	20	0	20	0	0	0	0	0	13	1	14	0	1	1	2	36
08:15 AM	3	19	1	23	1	0	0	1	1	21	0	22	3	3	2	8	54
08:30 AM	1	26	1	28	0	1	2	3	1	26	2	29	0	0	0	0	60
08:45 AM	0	22	2	24	0	0	0	0	1	18	1	20	1	0	0	1	45
Total	4	87	4	95	1	1	2	4	3	78	4	85	4	4	3	11	195
Grand Total	19	170	14	203	2	3	3	8	8	160	4	172	12	7	6	25	408
Apprch %	9.4	83.7	6.9		25	37.5	37.5		4.7	93	2.3		48	28	24		
Total %	4.7	41.7	3.4	49.8	0.5	0.7	0.7	2	2	39.2	1	42.2	2.9	1.7	1.5	6.1	

	SR-111 Southbound				Sinclair Road Westbound				SR-111 Northbound				Sinclair Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**6**	28	**3**	37	0	**1**	0	**1**	**2**	**25**	0	**27**	2	0	0	2	67
07:45 AM	5	**32**	3	**40**	**1**	0	0	1	2	19	0	21	**3**	**3**	1	7	**69**
08:00 AM	0	20	0	20	0	0	0	0	0	13	**1**	14	0	1	1	2	36
08:15 AM	3	19	1	23	1	0	0	1	1	21	0	22	3	3	**2**	**8**	54
Total Volume	14	99	7	120	2	1	0	3	5	78	1	84	8	7	4	19	226
% App. Total	11.7	82.5	5.8		66.7	33.3	0		6	92.9	1.2		42.1	36.8	21.1		
PHF	.583	.773	.583	.750	.500	.250	.000	.750	.625	.780	.250	.778	.667	.583	.500	.594	.819

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
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County of Imperial
N/S: SR-111
E/W: Sinclair Road
Weather: Clear

File Name : 04_CIM_SR111_Sinc AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:45 AM				07:00 AM				07:30 AM			
+0 mins.	**6**	28	**3**	37	**1**	0	0	1	1	17	0	18	2	0	0	2
+15 mins.	5	**32**	3	**40**	0	0	0	0	0	21	0	21	**3**	**3**	1	7
+30 mins.	0	20	0	20	1	0	0	1	**2**	**25**	0	**27**	0	1	1	2
+45 mins.	3	19	1	23	0	**1**	**2**	**3**	2	19	0	21	3	3	**2**	**8**
Total Volume	14	99	7	120	2	1	2	5	5	82	0	87	8	7	4	19
% App. Total	11.7	82.5	5.8		40	20	40		5.7	94.3	0		42.1	36.8	21.1	
PHF	.583	.773	.583	.750	.500	.250	.250	.417	.625	.820	.000	.806	.667	.583	.500	.594

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County of Imperial
N/S: SR-111
E/W: Sinclair Road
Weather: Clear

File Name : 04_CIM_SR111_Sinc PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

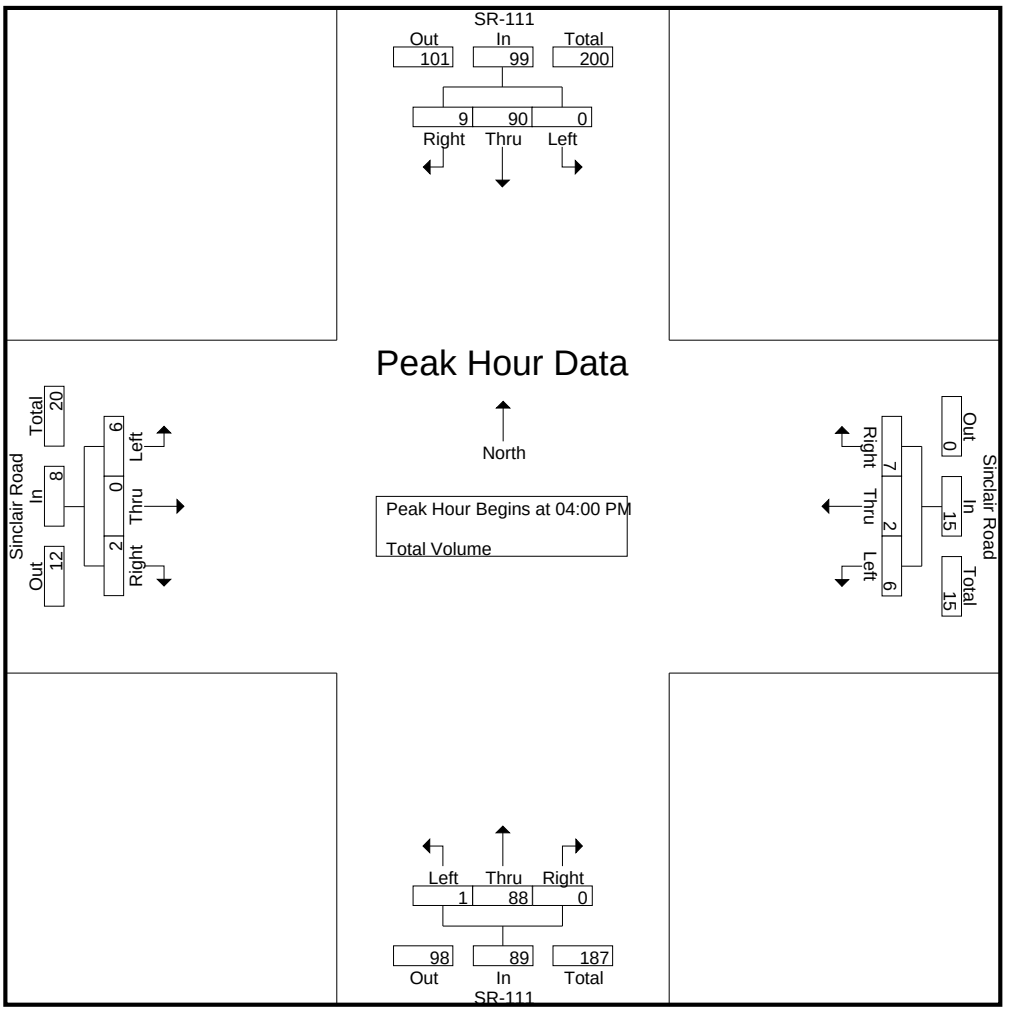
	SR-111 Southbound				Sinclair Road Westbound				SR-111 Northbound				Sinclair Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	19	2	21	5	0	2	7	0	19	0	19	1	0	2	3	50
04:15 PM	0	28	4	32	1	0	3	4	0	16	0	16	3	0	0	3	55
04:30 PM	0	21	3	24	0	2	0	2	1	25	0	26	1	0	0	1	53
04:45 PM	0	22	0	22	0	0	2	2	0	28	0	28	1	0	0	1	53
Total	0	90	9	99	6	2	7	15	1	88	0	89	6	0	2	8	211
05:00 PM	0	20	1	21	0	0	2	2	0	17	0	17	2	0	2	4	44
05:15 PM	0	18	1	19	0	0	2	2	2	19	0	21	2	0	2	4	46
05:30 PM	0	12	1	13	0	0	1	1	0	19	0	19	2	0	2	4	37
05:45 PM	0	20	2	22	0	0	0	0	4	12	0	16	1	2	0	3	41
Total	0	70	5	75	0	0	5	5	6	67	0	73	7	2	6	15	168
Grand Total	0	160	14	174	6	2	12	20	7	155	0	162	13	2	8	23	379
Apprch %	0	92	8		30	10	60		4.3	95.7	0		56.5	8.7	34.8		
Total %	0	42.2	3.7	45.9	1.6	0.5	3.2	5.3	1.8	40.9	0	42.7	3.4	0.5	2.1	6.1	

	SR-111 Southbound				Sinclair Road Westbound				SR-111 Northbound				Sinclair Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	19	2	21	**5**	0	2	**7**	0	19	0	19	1	0	**2**	**3**	50
04:15 PM	0	**28**	**4**	**32**	1	0	**3**	4	0	16	0	16	**3**	0	0	3	**55**
04:30 PM	0	21	3	24	0	**2**	0	2	**1**	25	0	26	1	0	0	1	53
04:45 PM	0	22	0	22	0	0	2	2	0	**28**	0	**28**	1	0	0	1	53
Total Volume	0	90	9	99	6	2	7	15	1	88	0	89	6	0	2	8	211
% App. Total	0	90.9	9.1		40	13.3	46.7		1.1	98.9	0		75	0	25		
PHF	.000	.804	.563	.773	.300	.250	.583	.536	.250	.786	.000	.795	.500	.000	.250	.667	.959

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County of Imperial
N/S: SR-111
E/W: Sinclair Road
Weather: Clear

File Name : 04_CIM_SR111_Sinc PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:30 PM				05:00 PM			
+0 mins.	0	19	2	21	**5**	0	2	**7**	1	25	0	26	**2**	0	**2**	**4**
+15 mins.	0	**28**	**4**	**32**	1	0	**3**	4	0	**28**	0	**28**	2	0	2	4
+30 mins.	0	21	3	24	0	**2**	0	2	0	17	0	17	2	0	2	4
+45 mins.	0	22	0	22	0	0	2	2	**2**	19	0	21	1	**2**	0	3
Total Volume	0	90	9	99	6	2	7	15	3	89	0	92	7	2	6	15
% App. Total	0	90.9	9.1		40	13.3	46.7		3.3	96.7	0		46.7	13.3	40	
PHF	.000	.804	.563	.773	.300	.250	.583	.536	.375	.795	.000	.821	.875	.250	.750	.938

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County of Imperial
N/S: SR-111
E/W: Main Street/Main Street (SR-115)
Weather: Clear

File Name : 05_CIM_SR111_SR115 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

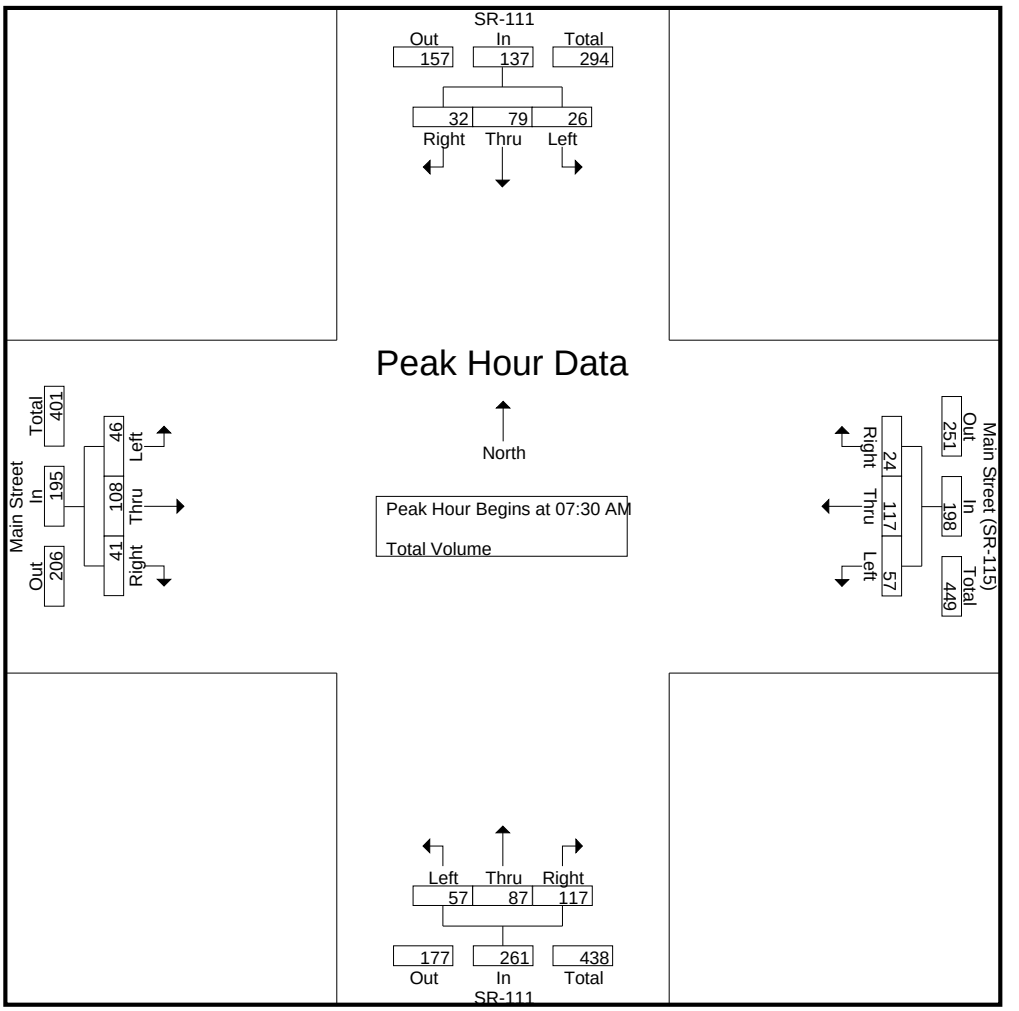
	SR-111 Southbound				Main Street (SR-115) Westbound				SR-111 Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	11	5	19	13	15	5	33	11	22	20	53	6	6	4	16	121
07:15 AM	7	17	6	30	12	11	8	31	10	19	35	64	5	18	6	29	154
07:30 AM	7	16	11	34	12	19	6	37	7	18	35	60	8	8	6	22	153
07:45 AM	8	19	6	33	16	40	4	60	21	23	39	83	12	21	9	42	218
Total	25	63	28	116	53	85	23	161	49	82	129	260	31	53	25	109	646
08:00 AM	6	25	11	42	13	47	9	69	19	17	25	61	14	49	16	79	251
08:15 AM	5	19	4	28	16	11	5	32	10	29	18	57	12	30	10	52	169
08:30 AM	8	17	7	32	8	12	8	28	8	17	9	34	8	7	5	20	114
08:45 AM	3	16	7	26	4	3	5	12	6	16	8	30	4	7	5	16	84
Total	22	77	29	128	41	73	27	141	43	79	60	182	38	93	36	167	618
Grand Total	47	140	57	244	94	158	50	302	92	161	189	442	69	146	61	276	1264
Apprch %	19.3	57.4	23.4		31.1	52.3	16.6		20.8	36.4	42.8		25	52.9	22.1		
Total %	3.7	11.1	4.5	19.3	7.4	12.5	4	23.9	7.3	12.7	15	35	5.5	11.6	4.8	21.8	

	SR-111 Southbound				Main Street (SR-115) Westbound				SR-111 Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	7	16	**11**	34	12	19	6	37	7	18	35	60	8	8	6	22	153
07:45 AM	**8**	19	6	33	**16**	40	4	60	**21**	23	**39**	**83**	12	21	9	42	218
08:00 AM	6	**25**	11	**42**	13	**47**	**9**	**69**	19	17	25	61	**14**	**49**	**16**	**79**	**251**
08:15 AM	5	19	4	28	16	11	5	32	10	**29**	18	57	12	30	10	52	169
Total Volume	26	79	32	137	57	117	24	198	57	87	117	261	46	108	41	195	791
% App. Total	19	57.7	23.4		28.8	59.1	12.1		21.8	33.3	44.8		23.6	55.4	21		
PHF	.813	.790	.727	.815	.891	.622	.667	.717	.679	.750	.750	.786	.821	.551	.641	.617	.788

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PO Box 1178
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(951) 268-6268

County of Imperial
N/S: SR-111
E/W: Main Street/Main Street (SR-115)
Weather: Clear

File Name : 05_CIM_SR111_SR115 AM
Site Code : 12525114
Start Date : 2/6/2025



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:15 AM				07:30 AM			
+0 mins.	7	17	6	30	12	19	6	37	10	19	35	64	8	8	6	22
+15 mins.	7	16	**11**	34	**16**	40	4	60	7	18	35	60	12	21	9	42
+30 mins.	**8**	19	6	33	13	**47**	**9**	**69**	**21**	**23**	**39**	**83**	**14**	**49**	**16**	**79**
+45 mins.	6	**25**	11	**42**	16	11	5	32	19	17	25	61	12	30	10	52
Total Volume	28	77	34	139	57	117	24	198	57	77	134	268	46	108	41	195
% App. Total	20.1	55.4	24.5		28.8	59.1	12.1		21.3	28.7	50		23.6	55.4	21	
PHF	.875	.770	.773	.827	.891	.622	.667	.717	.679	.837	.859	.807	.821	.551	.641	.617

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County of Imperial
N/S: SR-111
E/W: Main Street/Main Street (SR-115)
Weather: Clear

File Name : 05_CIM_SR111_SR115 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

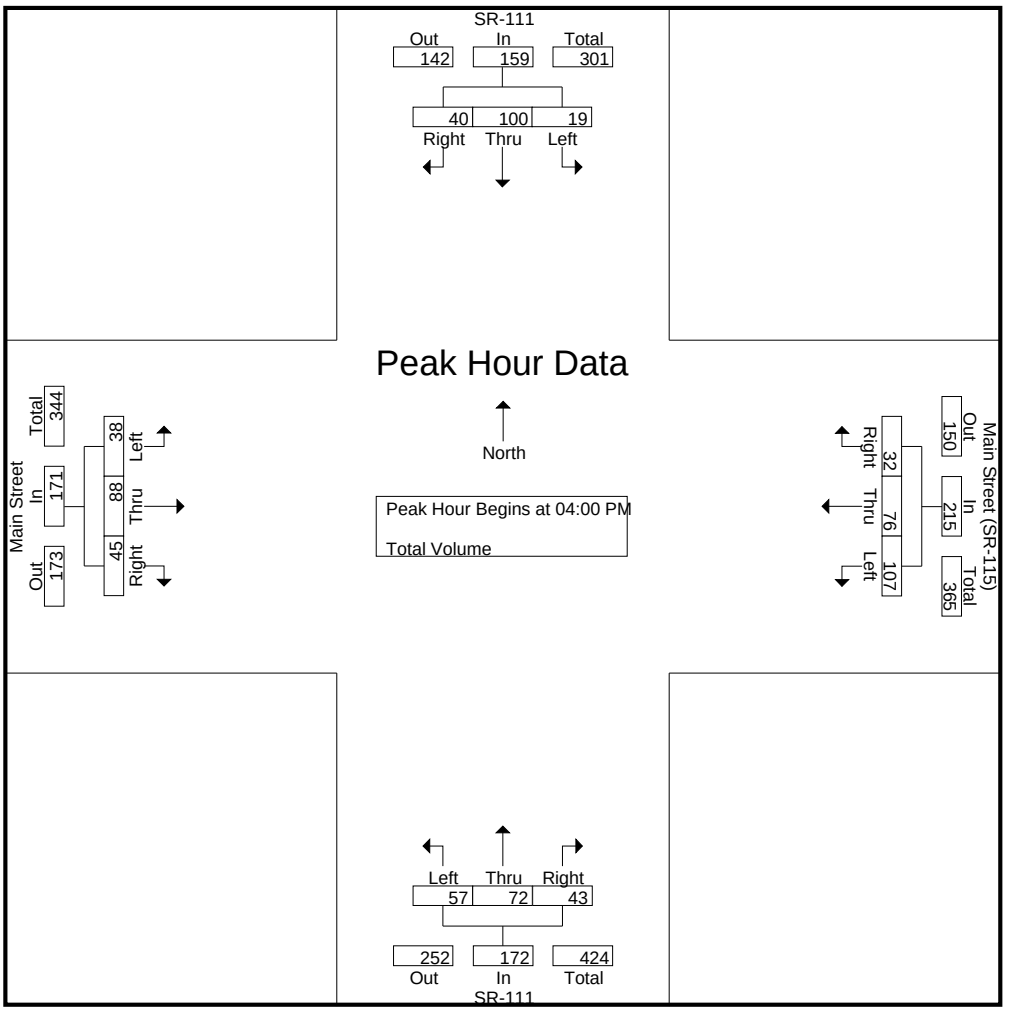
	SR-111 Southbound				Main Street (SR-115) Westbound				SR-111 Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	22	8	33	43	20	9	72	14	16	13	43	11	27	11	49	197
04:15 PM	3	26	11	40	17	26	5	48	14	12	9	35	11	22	15	48	171
04:30 PM	9	28	9	46	36	18	12	66	16	20	10	46	9	20	10	39	197
04:45 PM	4	24	12	40	11	12	6	29	13	24	11	48	7	19	9	35	152
Total	19	100	40	159	107	76	32	215	57	72	43	172	38	88	45	171	717
05:00 PM	12	21	9	42	15	15	6	36	12	20	13	45	14	27	15	56	179
05:15 PM	6	12	9	27	13	18	6	37	12	17	13	42	6	14	4	24	130
05:30 PM	4	16	9	29	20	13	5	38	9	19	5	33	10	11	11	32	132
05:45 PM	4	21	8	33	15	16	7	38	10	20	10	40	4	16	8	28	139
Total	26	70	35	131	63	62	24	149	43	76	41	160	34	68	38	140	580
Grand Total	45	170	75	290	170	138	56	364	100	148	84	332	72	156	83	311	1297
Apprch %	15.5	58.6	25.9		46.7	37.9	15.4		30.1	44.6	25.3		23.2	50.2	26.7		
Total %	3.5	13.1	5.8	22.4	13.1	10.6	4.3	28.1	7.7	11.4	6.5	25.6	5.6	12	6.4	24	

	SR-111 Southbound				Main Street (SR-115) Westbound				SR-111 Northbound				Main Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	3	22	8	33	**43**	20	9	**72**	14	16	**13**	43	**11**	**27**	11	**49**	**197**
04:15 PM	3	26	11	40	17	**26**	5	48	14	12	9	35	11	22	**15**	48	171
04:30 PM	**9**	**28**	9	**46**	36	18	**12**	66	**16**	20	10	46	9	20	10	39	197
04:45 PM	4	24	**12**	40	11	12	6	29	13	**24**	11	**48**	7	19	9	35	152
Total Volume	19	100	40	159	107	76	32	215	57	72	43	172	38	88	45	171	717
% App. Total	11.9	62.9	25.2		49.8	35.3	14.9		33.1	41.9	25		22.2	51.5	26.3		
PHF	.528	.893	.833	.864	.622	.731	.667	.747	.891	.750	.827	.896	.864	.815	.750	.872	.910

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County of Imperial
N/S: SR-111
E/W: Main Street/Main Street (SR-115)
Weather: Clear

File Name : 05_CIM_SR111_SR115 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:30 PM				04:15 PM			
+0 mins.	3	26	11	40	**43**	20	9	**72**	**16**	20	10	46	11	22	**15**	48
+15 mins.	9	**28**	9	**46**	17	**26**	5	48	13	**24**	11	**48**	9	20	10	39
+30 mins.	4	24	**12**	40	36	18	**12**	66	12	20	**13**	45	7	19	9	35
+45 mins.	**12**	21	9	42	11	12	6	29	12	17	13	42	**14**	**27**	15	**56**
Total Volume	28	99	41	168	107	76	32	215	53	81	47	181	41	88	49	178
% App. Total	16.7	58.9	24.4		49.8	35.3	14.9		29.3	44.8	26		23	49.4	27.5	
PHF	.583	.884	.854	.913	.622	.731	.667	.747	.828	.844	.904	.943	.732	.815	.817	.795

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County of Imperial
N/S: SR-86
E/W: SR-78
Weather: Clear

File Name : 11_CIM_SR86_SR78 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

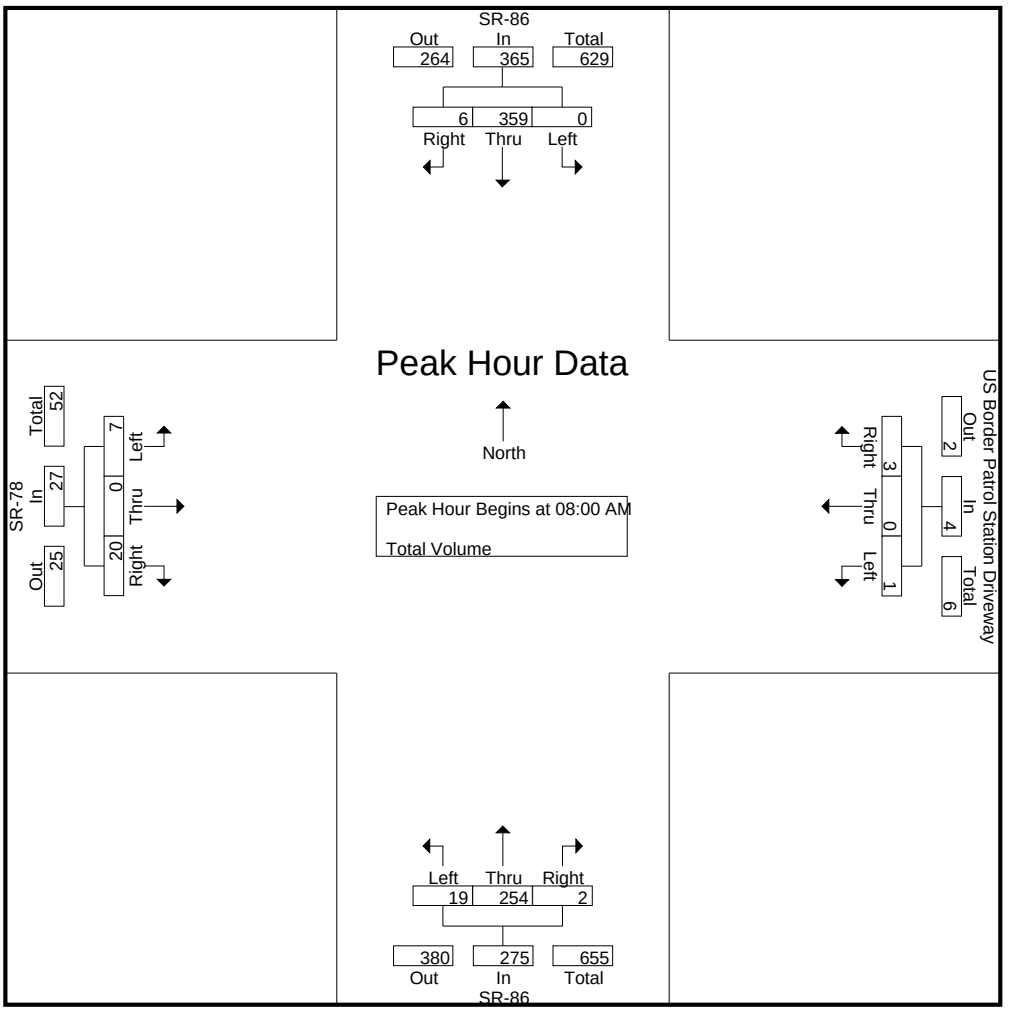
	SR-86 Southbound				US Border Patrol Station Driveway Westbound				SR-86 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	88	1	90	0	0	0	0	3	56	0	59	0	0	7	7	156
07:15 AM	1	84	1	86	0	0	0	0	1	48	0	49	3	0	2	5	140
07:30 AM	1	86	0	87	0	0	0	0	4	69	0	73	2	0	3	5	165
07:45 AM	0	92	3	95	0	1	0	1	4	59	1	64	1	0	7	8	168
Total	3	350	5	358	0	1	0	1	12	232	1	245	6	0	19	25	629
08:00 AM	0	88	0	88	0	0	0	0	1	48	0	49	1	0	3	4	141
08:15 AM	0	92	2	94	1	0	1	2	7	65	1	73	3	0	2	5	174
08:30 AM	0	75	3	78	0	0	0	0	5	60	0	65	1	0	8	9	152
08:45 AM	0	104	1	105	0	0	2	2	6	81	1	88	2	0	7	9	204
Total	0	359	6	365	1	0	3	4	19	254	2	275	7	0	20	27	671
Grand Total	3	709	11	723	1	1	3	5	31	486	3	520	13	0	39	52	1300
Apprch %	0.4	98.1	1.5		20	20	60		6	93.5	0.6		25	0	75		
Total %	0.2	54.5	0.8	55.6	0.1	0.1	0.2	0.4	2.4	37.4	0.2	40	1	0	3	4	

	SR-86 Southbound				US Border Patrol Station Driveway Westbound				SR-86 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	88	0	88	0	0	0	0	1	48	0	49	1	0	3	4	141
08:15 AM	0	92	2	94	**1**	0	1	**2**	**7**	65	**1**	73	**3**	0	2	5	174
08:30 AM	0	75	**3**	78	0	0	0	0	5	60	0	65	1	0	**8**	**9**	152
08:45 AM	0	**104**	1	**105**	0	0	**2**	2	6	**81**	1	**88**	2	0	7	9	**204**
Total Volume	0	359	6	365	1	0	3	4	19	254	2	275	7	0	20	27	671
% App. Total	0	98.4	1.6		25	0	75		6.9	92.4	0.7		25.9	0	74.1		
PHF	.000	.863	.500	.869	.250	.000	.375	.500	.679	.784	.500	.781	.583	.000	.625	.750	.822

Counts Unlimited, Inc.
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County of Imperial
N/S: SR-86
E/W: SR-78
Weather: Clear

File Name : 11_CIM_SR86_SR78 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	88	0	88	0	0	0	0	1	48	0	49	1	0	3	4
+15 mins.	0	92	2	94	**1**	0	1	**2**	**7**	65	**1**	73	**3**	0	2	5
+30 mins.	0	75	**3**	78	0	0	0	0	5	60	0	65	1	0	**8**	**9**
+45 mins.	0	**104**	1	**105**	0	0	**2**	2	6	**81**	1	**88**	2	0	7	9
Total Volume	0	359	6	365	1	0	3	4	19	254	2	275	7	0	20	27
% App. Total	0	98.4	1.6		25	0	75		6.9	92.4	0.7		25.9	0	74.1	
PHF	.000	.863	.500	.869	.250	.000	.375	.500	.679	.784	.500	.781	.583	.000	.625	.750

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County of Imperial
N/S: SR-86
E/W: SR-78
Weather: Clear

File Name : 11_CIM_SR86_SR78 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

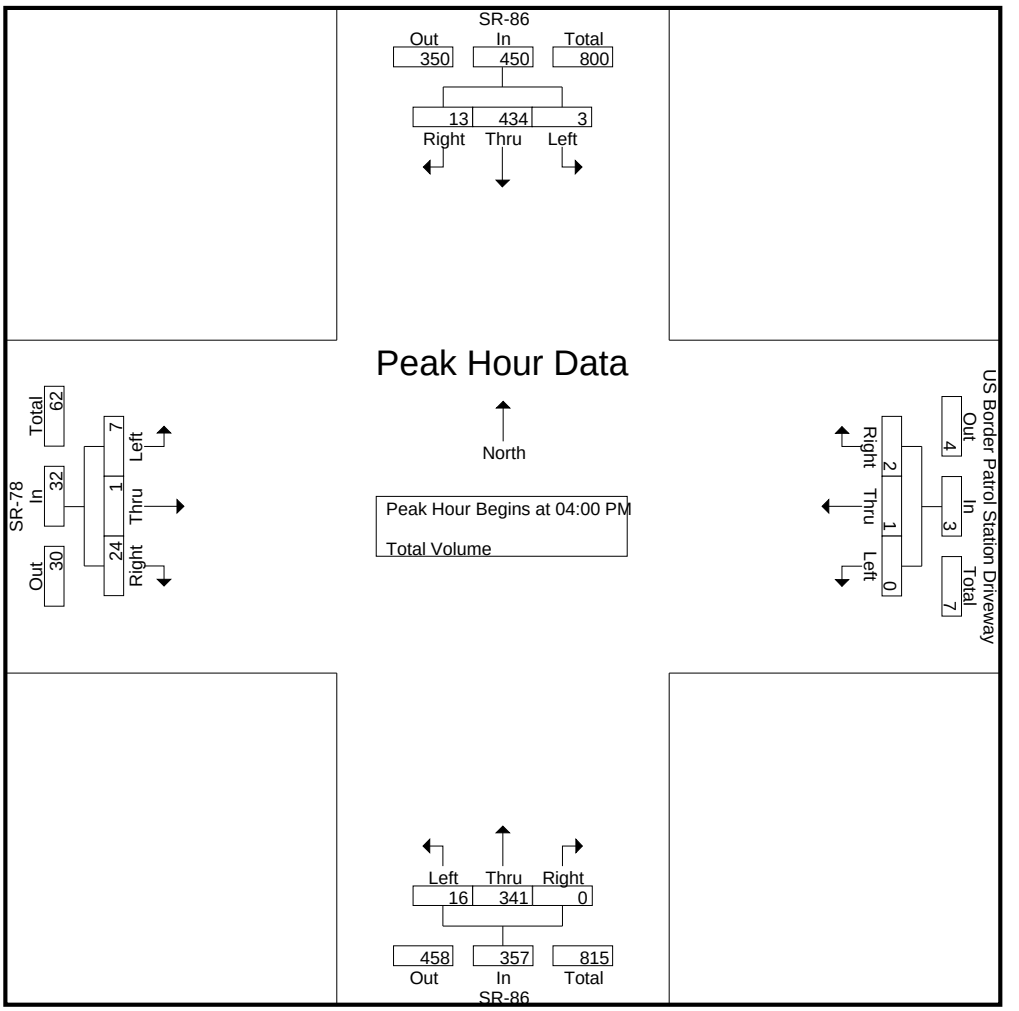
	SR-86 Southbound				US Border Patrol Station Driveway Westbound				SR-86 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	107	5	112	0	0	0	0	4	85	0	89	0	0	6	6	207
04:15 PM	2	115	4	121	0	0	1	1	3	94	0	97	3	1	5	9	228
04:30 PM	1	119	2	122	0	1	0	1	5	86	0	91	1	0	8	9	223
04:45 PM	0	93	2	95	0	0	1	1	4	76	0	80	3	0	5	8	184
Total	3	434	13	450	0	1	2	3	16	341	0	357	7	1	24	32	842
05:00 PM	0	85	2	87	0	0	0	0	4	84	1	89	2	0	3	5	181
05:15 PM	0	103	6	109	0	0	0	0	1	72	0	73	2	0	11	13	195
05:30 PM	1	95	0	96	0	0	1	1	2	67	0	69	2	0	5	7	173
05:45 PM	0	78	2	80	0	0	1	1	3	111	0	114	0	0	2	2	197
Total	1	361	10	372	0	0	2	2	10	334	1	345	6	0	21	27	746
Grand Total	4	795	23	822	0	1	4	5	26	675	1	702	13	1	45	59	1588
Apprch %	0.5	96.7	2.8		0	20	80		3.7	96.2	0.1		22	1.7	76.3		
Total %	0.3	50.1	1.4	51.8	0	0.1	0.3	0.3	1.6	42.5	0.1	44.2	0.8	0.1	2.8	3.7	

	SR-86 Southbound				US Border Patrol Station Driveway Westbound				SR-86 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	107	**5**	112	0	0	0	0	4	85	0	89	0	0	6	6	207
04:15 PM	**2**	115	4	121	0	0	**1**	**1**	3	**94**	0	**97**	**3**	**1**	5	**9**	**228**
04:30 PM	1	**119**	2	**122**	0	**1**	0	1	**5**	86	0	91	1	0	**8**	9	223
04:45 PM	0	93	2	95	0	0	1	1	4	76	0	80	3	0	5	8	184
Total Volume	3	434	13	450	0	1	2	3	16	341	0	357	7	1	24	32	842
% App. Total	0.7	96.4	2.9		0	33.3	66.7		4.5	95.5	0		21.9	3.1	75		
PHF	.375	.912	.650	.922	.000	.250	.500	.750	.800	.907	.000	.920	.583	.250	.750	.889	.923

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County of Imperial
N/S: SR-86
E/W: SR-78
Weather: Clear

File Name : 11_CIM_SR86_SR78 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:30 PM			
+0 mins.	0	107	**5**	112	0	0	0	0	4	85	0	89	1	0	8	9
+15 mins.	**2**	115	4	121	0	0	**1**	**1**	3	**94**	0	**97**	**3**	0	5	8
+30 mins.	1	**119**	2	**122**	0	**1**	0	1	**5**	86	0	91	2	0	3	5
+45 mins.	0	93	2	95	0	0	1	1	4	76	0	80	2	0	**11**	**13**
Total Volume	3	434	13	450	0	1	2	3	16	341	0	357	8	0	27	35
% App. Total	0.7	96.4	2.9		0	33.3	66.7		4.5	95.5	0		22.9	0	77.1	
PHF	.375	.912	.650	.922	.000	.250	.500	.750	.800	.907	.000	.920	.667	.000	.614	.673

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County of Imperial
N/S: Lack Road
E/W: SR-78 & SR-86
Weather: Clear

File Name : 06_CIM_Lack_SR-78 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

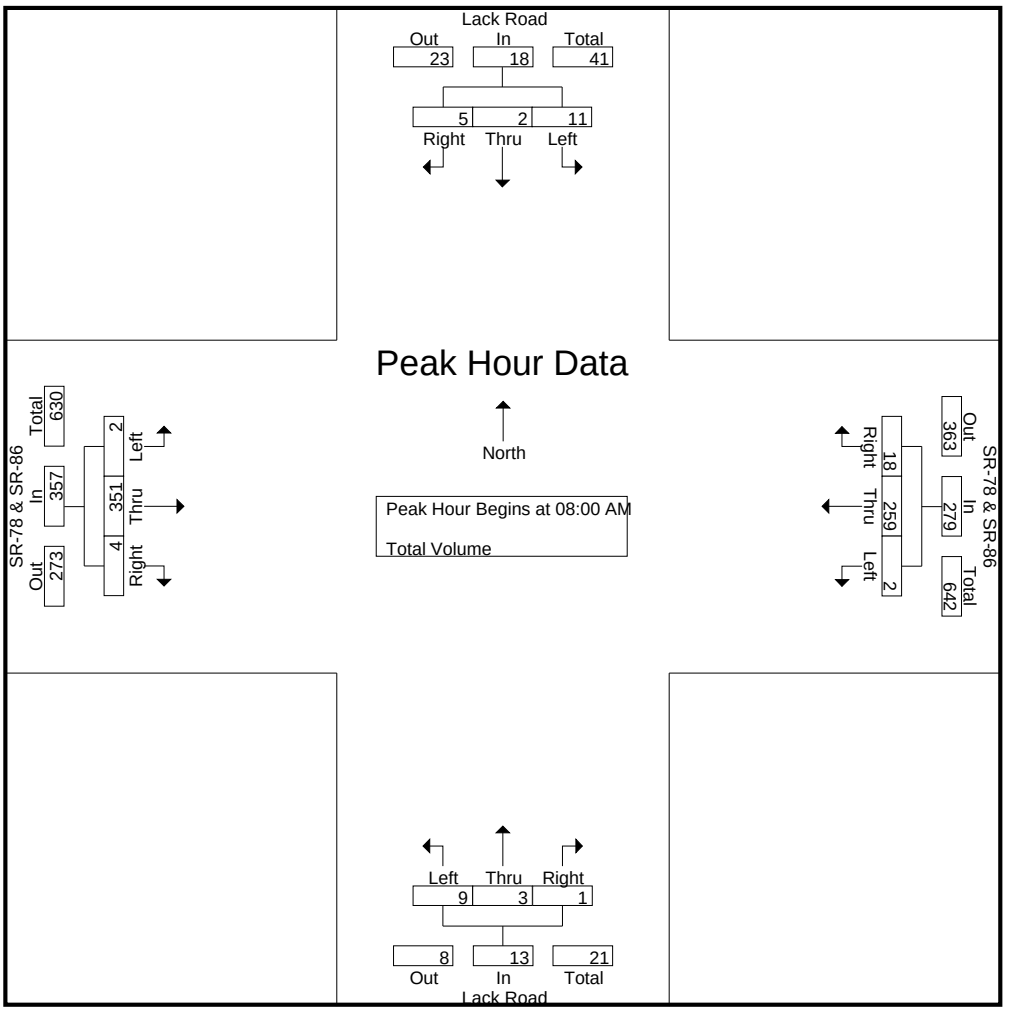
	Lack Road Southbound				SR-78 & SR-86 Westbound				Lack Road Northbound				SR-78 & SR-86 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	0	1	3	0	69	5	74	0	1	0	1	0	54	1	55	133
07:15 AM	0	0	0	0	1	65	6	72	1	2	0	3	1	85	0	86	161
07:30 AM	1	0	0	1	0	70	4	74	4	0	0	4	0	83	0	83	162
07:45 AM	0	0	0	0	0	59	5	64	3	1	0	4	0	72	0	72	140
Total	3	0	1	4	1	263	20	284	8	4	0	12	1	294	1	296	596
08:00 AM	3	0	1	4	1	52	10	63	3	1	0	4	1	97	0	98	169
08:15 AM	6	2	1	9	1	67	3	71	2	1	0	3	0	75	1	76	159
08:30 AM	2	0	0	2	0	74	3	77	2	1	0	3	0	88	3	91	173
08:45 AM	0	0	3	3	0	66	2	68	2	0	1	3	1	91	0	92	166
Total	11	2	5	18	2	259	18	279	9	3	1	13	2	351	4	357	667
Grand Total	14	2	6	22	3	522	38	563	17	7	1	25	3	645	5	653	1263
Apprch %	63.6	9.1	27.3		0.5	92.7	6.7		68	28	4		0.5	98.8	0.8		
Total %	1.1	0.2	0.5	1.7	0.2	41.3	3	44.6	1.3	0.6	0.1	2	0.2	51.1	0.4	51.7	

	Lack Road Southbound				SR-78 & SR-86 Westbound				Lack Road Northbound				SR-78 & SR-86 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	3	0	1	4	**1**	52	**10**	63	**3**	**1**	0	**4**	**1**	**97**	0	**98**	169
08:15 AM	**6**	**2**	1	**9**	1	67	3	71	2	1	0	3	0	75	1	76	159
08:30 AM	2	0	0	2	0	**74**	3	**77**	2	1	0	3	0	88	**3**	91	**173**
08:45 AM	0	0	**3**	3	0	66	2	68	2	0	**1**	3	1	91	0	92	166
Total Volume	11	2	5	18	2	259	18	279	9	3	1	13	2	351	4	357	667
% App. Total	61.1	11.1	27.8		0.7	92.8	6.5		69.2	23.1	7.7		0.6	98.3	1.1		
PHF	.458	.250	.417	.500	.500	.875	.450	.906	.750	.750	.250	.813	.500	.905	.333	.911	.964

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County of Imperial
N/S: Lack Road
E/W: SR-78 & SR-86
Weather: Clear

File Name : 06_CIM_Lack_SR-78 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:00 AM				07:15 AM				08:00 AM			
+0 mins.	3	0	1	4	0	69	5	**74**	1	**2**	0	3	**1**	**97**	0	**98**
+15 mins.	**6**	**2**	1	**9**	**1**	65	**6**	72	**4**	0	0	**4**	0	75	1	76
+30 mins.	2	0	0	2	0	**70**	4	74	3	1	0	4	0	88	**3**	91
+45 mins.	0	0	**3**	3	0	59	5	64	3	1	0	4	1	91	0	92
Total Volume	11	2	5	18	1	263	20	284	11	4	0	15	2	351	4	357
% App. Total	61.1	11.1	27.8		0.4	92.6	7		73.3	26.7	0		0.6	98.3	1.1	
PHF	.458	.250	.417	.500	.250	.939	.833	.959	.688	.500	.000	.938	.500	.905	.333	.911

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County of Imperial
N/S: Lack Road
E/W: SR-78 & SR-86
Weather: Clear

File Name : 06_CIM_Lack_SR-78 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

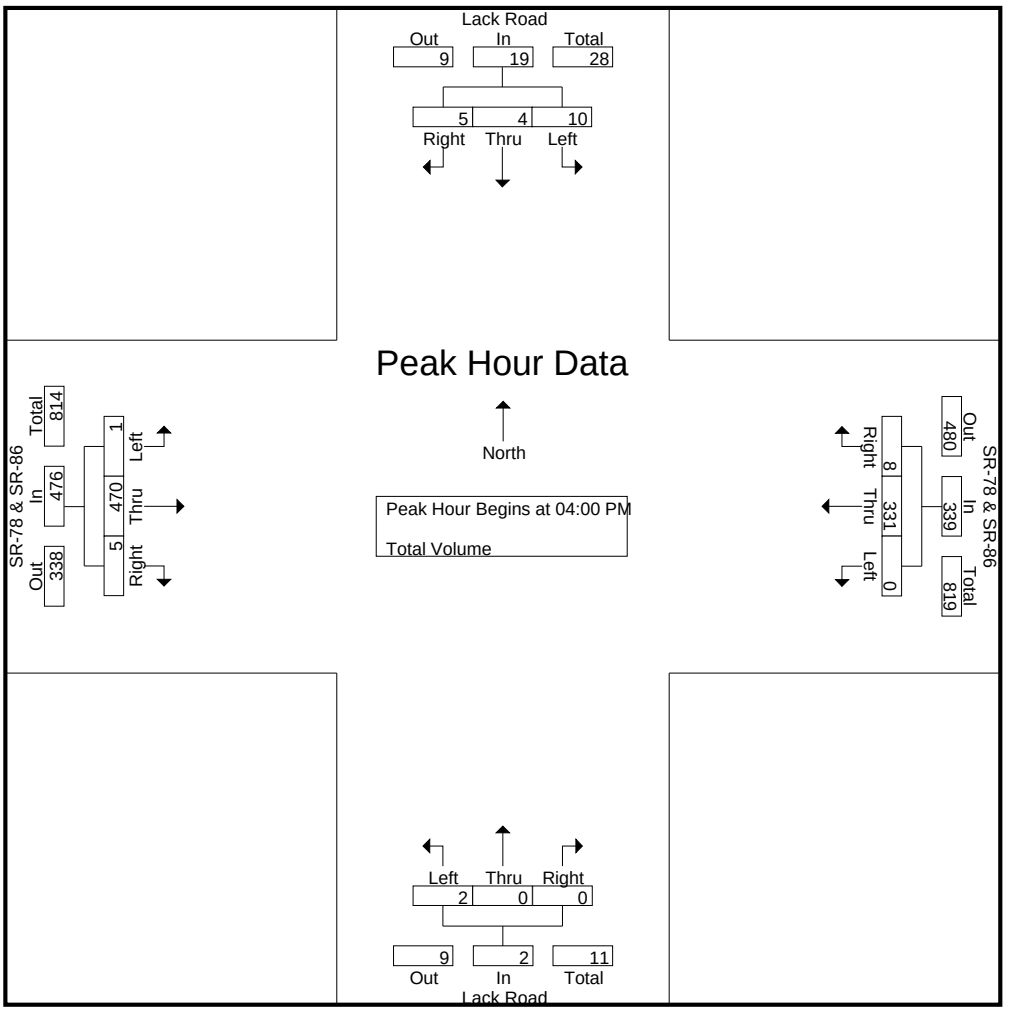
	Lack Road Southbound				SR-78 & SR-86 Westbound				Lack Road Northbound				SR-78 & SR-86 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	0	2	6	0	92	2	94	0	0	0	0	0	143	4	147	247
04:15 PM	3	0	2	5	0	84	3	87	0	0	0	0	1	112	0	113	205
04:30 PM	1	3	1	5	0	72	2	74	1	0	0	1	0	94	0	94	174
04:45 PM	2	1	0	3	0	83	1	84	1	0	0	1	0	121	1	122	210
Total	10	4	5	19	0	331	8	339	2	0	0	2	1	470	5	476	836
05:00 PM	2	0	0	2	0	71	2	73	1	1	0	2	0	92	0	92	169
05:15 PM	3	0	0	3	1	69	0	70	1	0	0	1	0	86	0	86	160
05:30 PM	0	1	0	1	0	98	0	98	1	1	0	2	0	112	1	113	214
05:45 PM	1	0	0	1	0	66	0	66	1	0	1	2	0	92	1	93	162
Total	6	1	0	7	1	304	2	307	4	2	1	7	0	382	2	384	705
Grand Total	16	5	5	26	1	635	10	646	6	2	1	9	1	852	7	860	1541
Apprch %	61.5	19.2	19.2		0.2	98.3	1.5		66.7	22.2	11.1		0.1	99.1	0.8		
Total %	1	0.3	0.3	1.7	0.1	41.2	0.6	41.9	0.4	0.1	0.1	0.6	0.1	55.3	0.5	55.8	

	Lack Road Southbound				SR-78 & SR-86 Westbound				Lack Road Northbound				SR-78 & SR-86 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**4**	0	**2**	**6**	0	**92**	2	**94**	0	0	0	0	0	**143**	**4**	**147**	**247**
04:15 PM	3	0	2	5	0	84	**3**	87	0	0	0	0	**1**	112	0	113	205
04:30 PM	1	**3**	1	5	0	72	2	74	**1**	0	0	**1**	0	94	0	94	174
04:45 PM	2	1	0	3	0	83	1	84	1	0	0	1	0	121	1	122	210
Total Volume	10	4	5	19	0	331	8	339	2	0	0	2	1	470	5	476	836
% App. Total	52.6	21.1	26.3		0	97.6	2.4		100	0	0		0.2	98.7	1.1		
PHF	.625	.333	.625	.792	.000	.899	.667	.902	.500	.000	.000	.500	.250	.822	.313	.810	.846

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County of Imperial
N/S: Lack Road
E/W: SR-78 & SR-86
Weather: Clear

File Name : 06_CIM_Lack_SR-78 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				05:00 PM				04:00 PM			
+0 mins.	**4**	0	**2**	**6**	0	**92**	2	**94**	**1**	**1**	0	**2**	0	**143**	**4**	**147**
+15 mins.	3	0	2	5	0	84	**3**	87	1	0	0	1	**1**	112	0	113
+30 mins.	1	**3**	1	5	0	72	2	74	1	1	0	2	0	94	0	94
+45 mins.	2	1	0	3	0	83	1	84	1	0	**1**	2	0	121	1	122
Total Volume	10	4	5	19	0	331	8	339	4	2	1	7	1	470	5	476
% App. Total	52.6	21.1	26.3		0	97.6	2.4		57.1	28.6	14.3		0.2	98.7	1.1	
PHF	.625	.333	.625	.792	.000	.899	.667	.902	1.000	.500	.250	.875	.250	.822	.313	.810

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County of Imperial
N/S: Center Street
E/W: SR-78
Weather: Clear

File Name : 07_CIM_Cen_SR-78 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

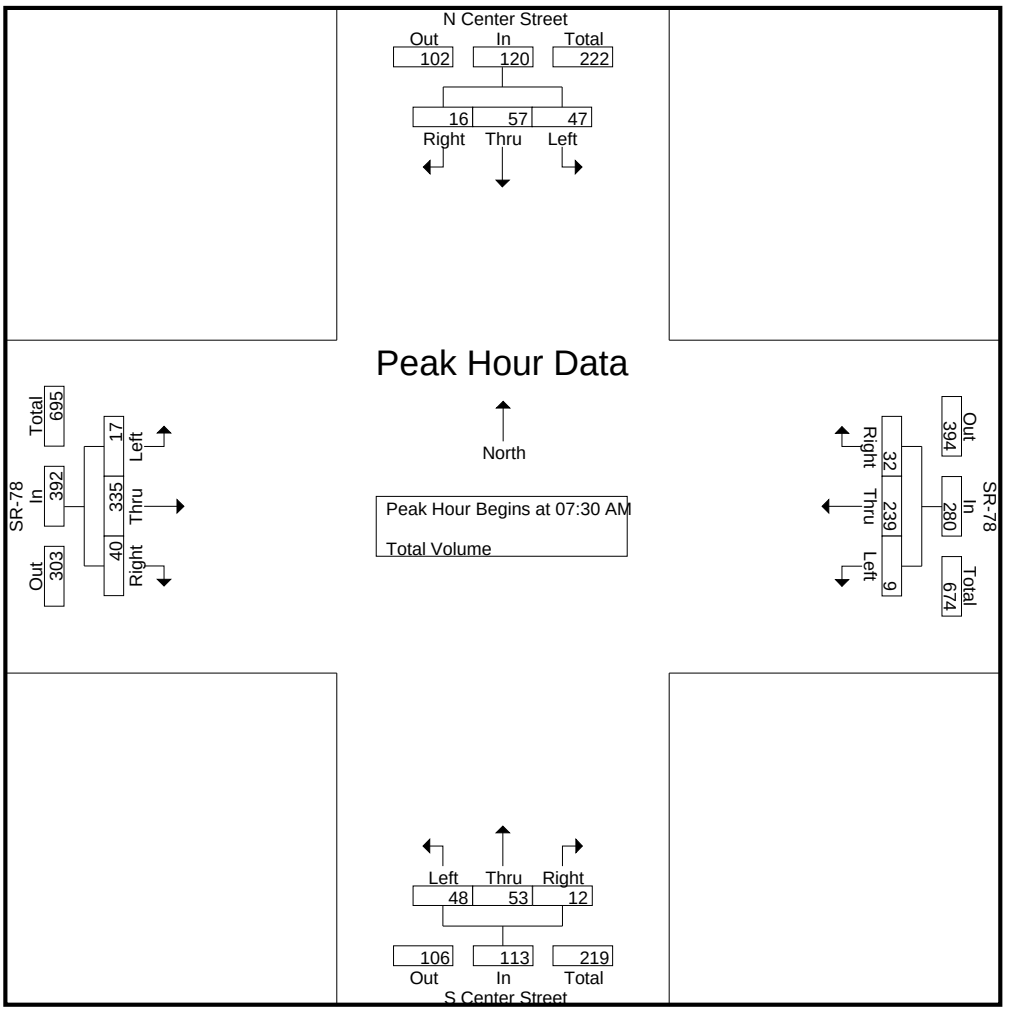
	N Center Street Southbound				SR-78 Westbound				S Center Street Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	4	13	19	1	65	6	72	10	6	2	18	1	65	2	68	177
07:15 AM	5	7	3	15	1	60	4	65	7	9	4	20	2	75	6	83	183
07:30 AM	15	9	7	31	2	64	6	72	11	9	3	23	5	69	14	88	214
07:45 AM	16	21	1	38	3	49	8	60	16	18	5	39	6	82	15	103	240
Total	38	41	24	103	7	238	24	269	44	42	14	100	14	291	37	342	814
08:00 AM	9	17	4	30	1	55	8	64	10	15	1	26	5	88	4	97	217
08:15 AM	7	10	4	21	3	71	10	84	11	11	3	25	1	96	7	104	234
08:30 AM	4	8	3	15	0	44	2	46	15	1	3	19	3	75	4	82	162
08:45 AM	6	4	4	14	4	54	5	63	15	11	2	28	6	78	8	92	197
Total	26	39	15	80	8	224	25	257	51	38	9	98	15	337	23	375	810
Grand Total	64	80	39	183	15	462	49	526	95	80	23	198	29	628	60	717	1624
Apprch %	35	43.7	21.3		2.9	87.8	9.3		48	40.4	11.6		4	87.6	8.4		
Total %	3.9	4.9	2.4	11.3	0.9	28.4	3	32.4	5.8	4.9	1.4	12.2	1.8	38.7	3.7	44.2	

	N Center Street Southbound				SR-78 Westbound				S Center Street Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	15	9	**7**	31	2	64	6	72	11	9	3	23	5	69	14	88	214
07:45 AM	**16**	**21**	1	**38**	**3**	49	8	60	**16**	**18**	**5**	**39**	**6**	82	**15**	103	**240**
08:00 AM	9	17	4	30	1	55	8	64	10	15	1	26	5	88	4	97	217
08:15 AM	7	10	4	21	3	**71**	**10**	**84**	11	11	3	25	1	**96**	7	**104**	234
Total Volume	47	57	16	120	9	239	32	280	48	53	12	113	17	335	40	392	905
% App. Total	39.2	47.5	13.3		3.2	85.4	11.4		42.5	46.9	10.6		4.3	85.5	10.2		
PHF	.734	.679	.571	.789	.750	.842	.800	.833	.750	.736	.600	.724	.708	.872	.667	.942	.943

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County of Imperial
N/S: Center Street
E/W: SR-78
Weather: Clear

File Name : 07_CIM_Cen_SR-78 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	15	9	**7**	31	2	64	6	72	11	9	3	23	5	69	14	88
+15 mins.	**16**	**21**	1	**38**	**3**	49	8	60	**16**	**18**	**5**	**39**	**6**	82	**15**	103
+30 mins.	9	17	4	30	1	55	8	64	10	15	1	26	5	88	4	97
+45 mins.	7	10	4	21	3	**71**	**10**	**84**	11	11	3	25	1	**96**	7	**104**
Total Volume	47	57	16	120	9	239	32	280	48	53	12	113	17	335	40	392
% App. Total	39.2	47.5	13.3		3.2	85.4	11.4		42.5	46.9	10.6		4.3	85.5	10.2	
PHF	.734	.679	.571	.789	.750	.842	.800	.833	.750	.736	.600	.724	.708	.872	.667	.942

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County of Imperial
N/S: Center Street
E/W: SR-78
Weather: Clear

File Name : 07_CIM_Cen_SR-78 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

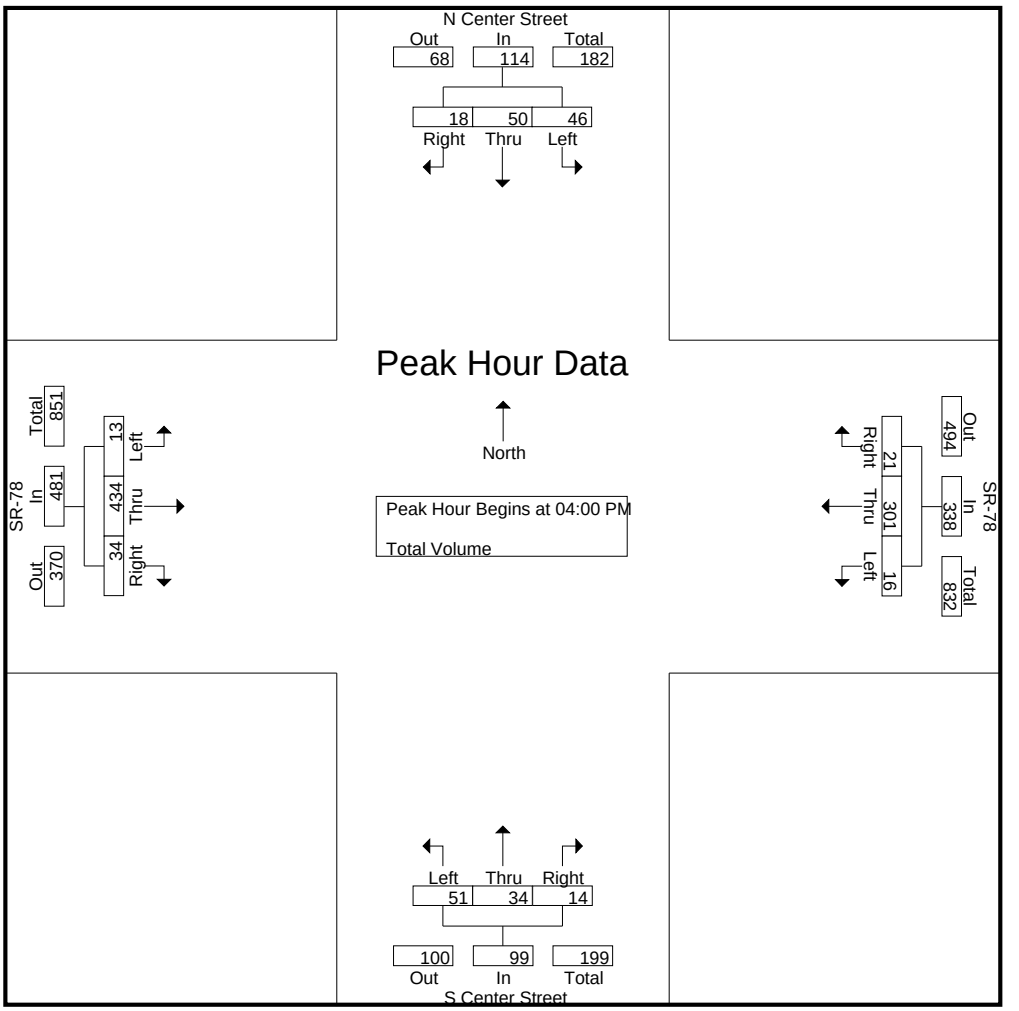
	N Center Street Southbound				SR-78 Westbound				S Center Street Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	12	17	2	31	7	82	4	93	11	8	3	22	4	110	15	129	275
04:15 PM	14	7	6	27	3	87	5	95	12	10	3	25	4	116	9	129	276
04:30 PM	10	13	2	25	3	59	10	72	14	8	4	26	3	84	5	92	215
04:45 PM	10	13	8	31	3	73	2	78	14	8	4	26	2	124	5	131	266
Total	46	50	18	114	16	301	21	338	51	34	14	99	13	434	34	481	1032
05:00 PM	16	9	5	30	5	72	3	80	7	10	2	19	5	98	10	113	242
05:15 PM	15	19	5	39	2	72	5	79	14	9	6	29	3	75	5	83	230
05:30 PM	16	12	7	35	1	63	6	70	14	15	4	33	4	102	8	114	252
05:45 PM	7	11	2	20	2	64	11	77	17	5	1	23	2	99	8	109	229
Total	54	51	19	124	10	271	25	306	52	39	13	104	14	374	31	419	953
Grand Total	100	101	37	238	26	572	46	644	103	73	27	203	27	808	65	900	1985
Apprch %	42	42.4	15.5		4	88.8	7.1		50.7	36	13.3		3	89.8	7.2		
Total %	5	5.1	1.9	12	1.3	28.8	2.3	32.4	5.2	3.7	1.4	10.2	1.4	40.7	3.3	45.3	

	N Center Street Southbound				SR-78 Westbound				S Center Street Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	12	**17**	2	**31**	**7**	82	4	93	11	8	3	22	**4**	110	**15**	129	275
04:15 PM	**14**	7	6	27	3	**87**	5	**95**	12	**10**	3	25	4	116	9	129	**276**
04:30 PM	10	13	2	25	3	59	**10**	72	**14**	8	**4**	**26**	3	84	5	92	215
04:45 PM	10	13	**8**	31	3	73	2	78	14	8	4	26	2	**124**	5	**131**	266
Total Volume	46	50	18	114	16	301	21	338	51	34	14	99	13	434	34	481	1032
% App. Total	40.4	43.9	15.8		4.7	89.1	6.2		51.5	34.3	14.1		2.7	90.2	7.1		
PHF	.821	.735	.563	.919	.571	.865	.525	.889	.911	.850	.875	.952	.813	.875	.567	.918	.935

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County of Imperial
N/S: Center Street
E/W: SR-78
Weather: Clear

File Name : 07_CIM_Cen_SR-78 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:00 PM				04:45 PM				04:00 PM			
+0 mins.	10	13	**8**	31	**7**	82	4	93	**14**	8	4	26	**4**	110	**15**	129
+15 mins.	**16**	9	5	30	3	**87**	5	**95**	7	10	2	19	4	116	9	129
+30 mins.	15	**19**	5	**39**	3	59	**10**	72	14	9	**6**	29	3	84	5	92
+45 mins.	16	12	7	35	3	73	2	78	14	**15**	4	**33**	2	**124**	5	**131**
Total Volume	57	53	25	135	16	301	21	338	49	42	16	107	13	434	34	481
% App. Total	42.2	39.3	18.5		4.7	89.1	6.2		45.8	39.3	15		2.7	90.2	7.1	
PHF	.891	.697	.781	.865	.571	.865	.525	.889	.875	.700	.667	.811	.813	.875	.567	.918

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County of Imperial
N/S: SR-86 & SR-78
E/W: SR-78
Weather: Clear

File Name : 12_CIM_SR86_SR78 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

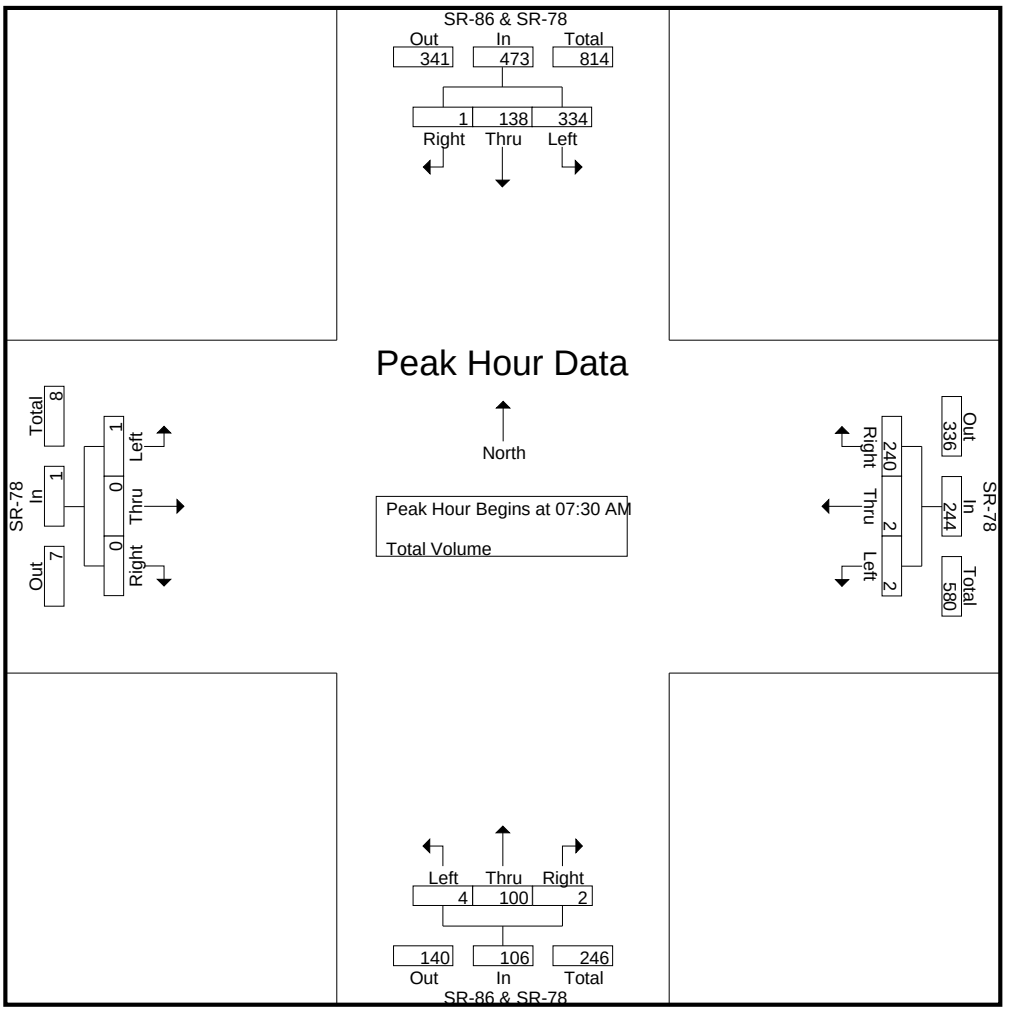
	SR-86 & SR-78 Southbound				SR-78 Westbound				SR-86 & SR-78 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	54	11	0	65	2	0	63	65	1	21	1	23	1	1	0	2	155
07:15 AM	73	20	0	93	0	0	70	70	0	23	1	24	0	0	0	0	187
07:30 AM	71	25	1	97	1	0	65	66	1	23	0	24	1	0	0	1	188
07:45 AM	79	42	0	121	1	0	48	49	1	25	1	27	0	0	0	0	197
Total	277	98	1	376	4	0	246	250	3	92	3	98	2	1	0	3	727
08:00 AM	90	39	0	129	0	2	67	69	0	23	1	24	0	0	0	0	222
08:15 AM	94	32	0	126	0	0	60	60	2	29	0	31	0	0	0	0	217
08:30 AM	62	24	0	86	0	0	40	40	0	19	0	19	0	0	0	0	145
08:45 AM	73	31	2	106	0	0	52	52	0	17	1	18	0	0	0	0	176
Total	319	126	2	447	0	2	219	221	2	88	2	92	0	0	0	0	760
Grand Total	596	224	3	823	4	2	465	471	5	180	5	190	2	1	0	3	1487
Apprch %	72.4	27.2	0.4		0.8	0.4	98.7		2.6	94.7	2.6		66.7	33.3	0		
Total %	40.1	15.1	0.2	55.3	0.3	0.1	31.3	31.7	0.3	12.1	0.3	12.8	0.1	0.1	0	0.2	

	SR-86 & SR-78 Southbound				SR-78 Westbound				SR-86 & SR-78 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	71	25	**1**	97	**1**	0	65	66	1	23	0	24	**1**	0	0	**1**	188
07:45 AM	79	**42**	0	121	1	0	48	49	1	25	**1**	27	0	0	0	0	197
08:00 AM	90	39	0	**129**	0	**2**	**67**	**69**	0	23	1	24	0	0	0	0	**222**
08:15 AM	**94**	32	0	126	0	0	60	60	**2**	**29**	0	**31**	0	0	0	0	217
Total Volume	334	138	1	473	2	2	240	244	4	100	2	106	1	0	0	1	824
% App. Total	70.6	29.2	0.2		0.8	0.8	98.4		3.8	94.3	1.9		100	0	0		
PHF	.888	.821	.250	.917	.500	.250	.896	.884	.500	.862	.500	.855	.250	.000	.000	.250	.928

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County of Imperial
N/S: SR-86 & SR-78
E/W: SR-78
Weather: Clear

File Name : 12_CIM_SR86_SR78 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:30 AM				07:00 AM			
+0 mins.	71	25	**1**	97	0	0	**70**	**70**	1	23	0	24	**1**	**1**	0	**2**
+15 mins.	79	**42**	0	121	**1**	0	65	66	1	25	**1**	27	0	0	0	0
+30 mins.	90	39	0	**129**	1	0	48	49	0	23	1	24	1	0	0	1
+45 mins.	**94**	32	0	126	0	**2**	67	69	**2**	**29**	0	**31**	0	0	0	0
Total Volume	334	138	1	473	2	2	250	254	4	100	2	106	2	1	0	3
% App. Total	70.6	29.2	0.2		0.8	0.8	98.4		3.8	94.3	1.9		66.7	33.3	0	
PHF	.888	.821	.250	.917	.500	.250	.893	.907	.500	.862	.500	.855	.500	.250	.000	.375

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County of Imperial
N/S: SR-86 & SR-78
E/W: SR-78
Weather: Clear

File Name : 12_CIM_SR86_SR78 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

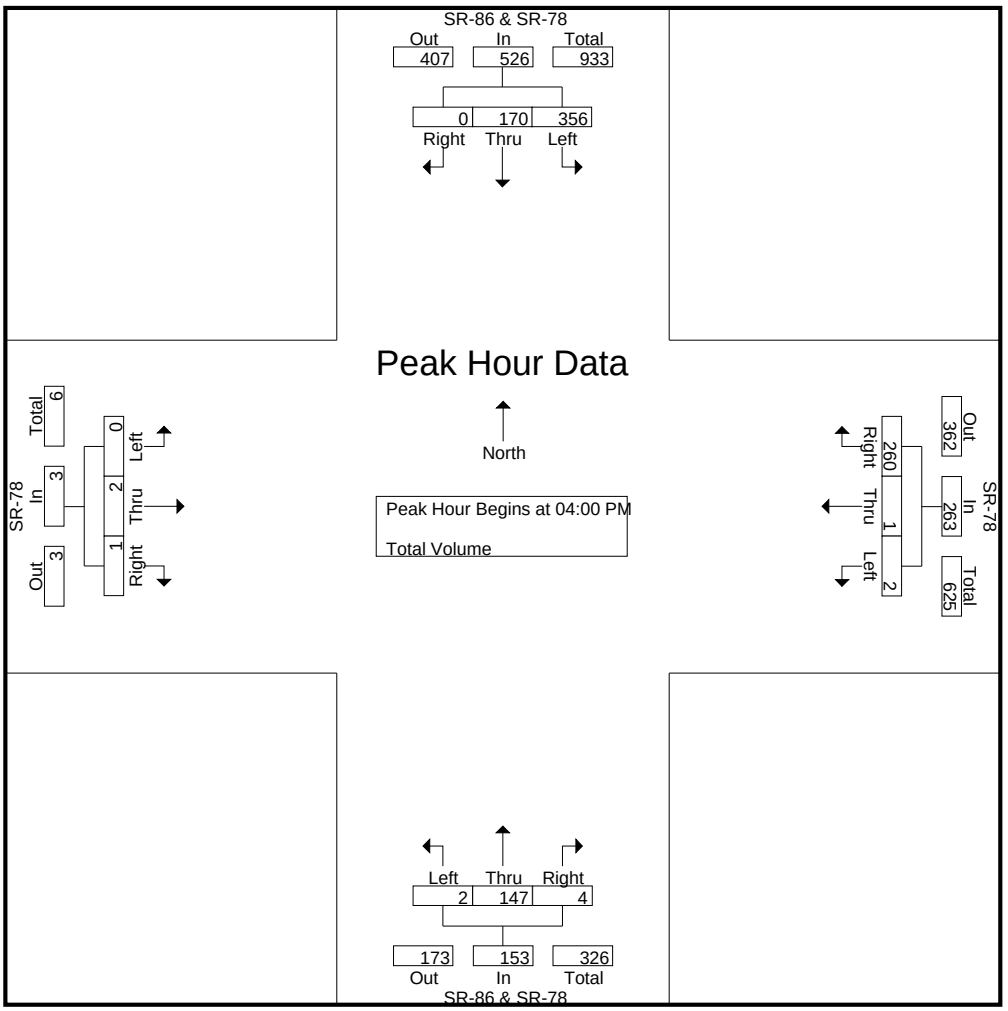
	SR-86 & SR-78 Southbound				SR-78 Westbound				SR-86 & SR-78 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	78	45	0	123	0	1	69	70	0	45	1	46	0	0	1	1	240
04:15 PM	90	51	0	141	0	0	59	59	1	34	1	36	0	1	0	1	237
04:30 PM	84	37	0	121	1	0	59	60	0	37	1	38	0	1	0	1	220
04:45 PM	104	37	0	141	1	0	73	74	1	31	1	33	0	0	0	0	248
Total	356	170	0	526	2	1	260	263	2	147	4	153	0	2	1	3	945
05:00 PM	98	42	0	140	2	0	56	58	0	29	1	30	0	0	0	0	228
05:15 PM	80	29	0	109	1	3	68	72	0	39	0	39	0	2	1	3	223
05:30 PM	67	37	0	104	2	1	62	65	0	28	0	28	0	0	0	0	197
05:45 PM	99	34	0	133	0	1	63	64	0	27	1	28	0	0	0	0	225
Total	344	142	0	486	5	5	249	259	0	123	2	125	0	2	1	3	873
Grand Total	700	312	0	1012	7	6	509	522	2	270	6	278	0	4	2	6	1818
Apprch %	69.2	30.8	0		1.3	1.1	97.5		0.7	97.1	2.2		0	66.7	33.3		
Total %	38.5	17.2	0	55.7	0.4	0.3	28	28.7	0.1	14.9	0.3	15.3	0	0.2	0.1	0.3	

	SR-86 & SR-78 Southbound				SR-78 Westbound				SR-86 & SR-78 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	78	45	0	123	0	**1**	69	70	0	**45**	**1**	**46**	0	0	**1**	**1**	240
04:15 PM	90	**51**	0	**141**	0	0	59	59	**1**	34	1	36	0	**1**	0	1	237
04:30 PM	84	37	0	121	**1**	0	59	60	0	37	1	38	0	1	0	1	220
04:45 PM	**104**	37	0	141	1	0	**73**	**74**	1	31	1	33	0	0	0	0	**248**
Total Volume	356	170	0	526	2	1	260	263	2	147	4	153	0	2	1	3	945
% App. Total	67.7	32.3	0		0.8	0.4	98.9		1.3	96.1	2.6		0	66.7	33.3		
PHF	.856	.833	.000	.933	.500	.250	.890	.889	.500	.817	1.00	.832	.000	.500	.250	.750	.953

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County of Imperial
N/S: SR-86 & SR-78
E/W: SR-78
Weather: Clear

File Name : 12_CIM_SR86_SR78 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:45 PM				04:00 PM				04:30 PM			
+0 mins.	90	**51**	0	**141**	1	0	**73**	**74**	0	**45**	**1**	**46**	0	1	0	1
+15 mins.	84	37	0	121	**2**	0	56	58	**1**	34	1	36	0	0	0	0
+30 mins.	**104**	37	0	141	1	**3**	68	72	0	37	1	38	0	0	0	0
+45 mins.	98	42	0	140	2	1	62	65	1	31	1	33	0	**2**	**1**	**3**
Total Volume	376	167	0	543	6	4	259	269	2	147	4	153	0	3	1	4
% App. Total	69.2	30.8	0		2.2	1.5	96.3		1.3	96.1	2.6		0	75	25	
PHF	.904	.819	.000	.963	.750	.333	.887	.909	.500	.817	1.000	.832	.000	.375	.250	.333

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County of Imperial
N/S: Brandt Road
E/W: SR-78
Weather: Clear

File Name : 08_CIM_Brandt_SR-78 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

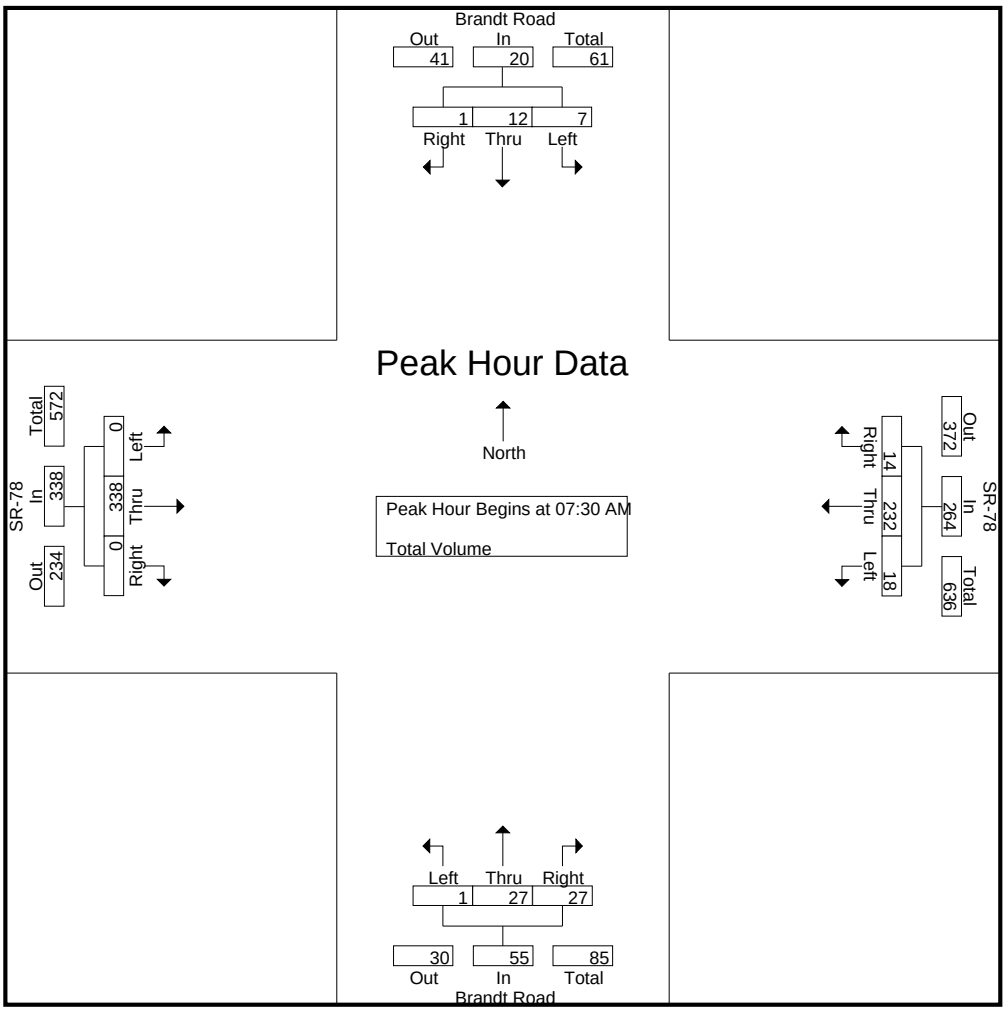
	Brandt Road Southbound				SR-78 Westbound				Brandt Road Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	0	0	5	1	66	2	69	0	11	4	15	0	51	0	51	140
07:15 AM	2	8	0	10	1	68	1	70	0	5	3	8	0	69	0	69	157
07:30 AM	1	0	0	1	4	64	3	71	0	11	2	13	0	75	0	75	160
07:45 AM	5	6	1	12	3	57	3	63	1	11	14	26	0	83	0	83	184
Total	13	14	1	28	9	255	9	273	1	38	23	62	0	278	0	278	641
08:00 AM	0	2	0	2	3	56	5	64	0	3	8	11	0	81	0	81	158
08:15 AM	1	4	0	5	8	55	3	66	0	2	3	5	0	99	0	99	175
08:30 AM	0	3	0	3	3	44	1	48	2	4	4	10	0	59	1	60	121
08:45 AM	7	3	0	10	1	48	7	56	0	2	4	6	1	71	0	72	144
Total	8	12	0	20	15	203	16	234	2	11	19	32	1	310	1	312	598
Grand Total	21	26	1	48	24	458	25	507	3	49	42	94	1	588	1	590	1239
Apprch %	43.8	54.2	2.1		4.7	90.3	4.9		3.2	52.1	44.7		0.2	99.7	0.2		
Total %	1.7	2.1	0.1	3.9	1.9	37	2	40.9	0.2	4	3.4	7.6	0.1	47.5	0.1	47.6	

	Brandt Road Southbound				SR-78 Westbound				Brandt Road Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	1	0	0	1	4	**64**	3	**71**	0	**11**	2	13	0	75	0	75	160
07:45 AM	**5**	**6**	**1**	**12**	3	57	3	63	**1**	11	**14**	**26**	0	83	0	83	**184**
08:00 AM	0	2	0	2	3	56	**5**	64	0	3	8	11	0	81	0	81	158
08:15 AM	1	4	0	5	**8**	55	3	66	0	2	3	5	0	**99**	0	**99**	175
Total Volume	7	12	1	20	18	232	14	264	1	27	27	55	0	338	0	338	677
% App. Total	35	60	5		6.8	87.9	5.3		1.8	49.1	49.1		0	100	0		
PHF	.350	.500	.250	.417	.563	.906	.700	.930	.250	.614	.482	.529	.000	.854	.000	.854	.920

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County of Imperial
N/S: Brandt Road
E/W: SR-78
Weather: Clear

File Name : 08_CIM_Brandt_SR-78 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:30 AM			
+0 mins.	**5**	0	0	5	1	66	2	69	0	**11**	4	15	0	75	0	75
+15 mins.	2	**8**	0	10	1	**68**	1	70	0	5	3	8	0	83	0	83
+30 mins.	1	0	0	1	**4**	64	**3**	**71**	0	11	2	13	0	81	0	81
+45 mins.	5	6	**1**	**12**	3	57	3	63	**1**	11	**14**	**26**	0	**99**	0	**99**
Total Volume	13	14	1	28	9	255	9	273	1	38	23	62	0	338	0	338
% App. Total	46.4	50	3.6		3.3	93.4	3.3		1.6	61.3	37.1		0	100	0	
PHF	.650	.438	.250	.583	.563	.938	.750	.961	.250	.864	.411	.596	.000	.854	.000	.854

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County of Imperial
N/S: Brandt Road
E/W: SR-78
Weather: Clear

File Name : 08_CIM_Brandt_SR-78 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

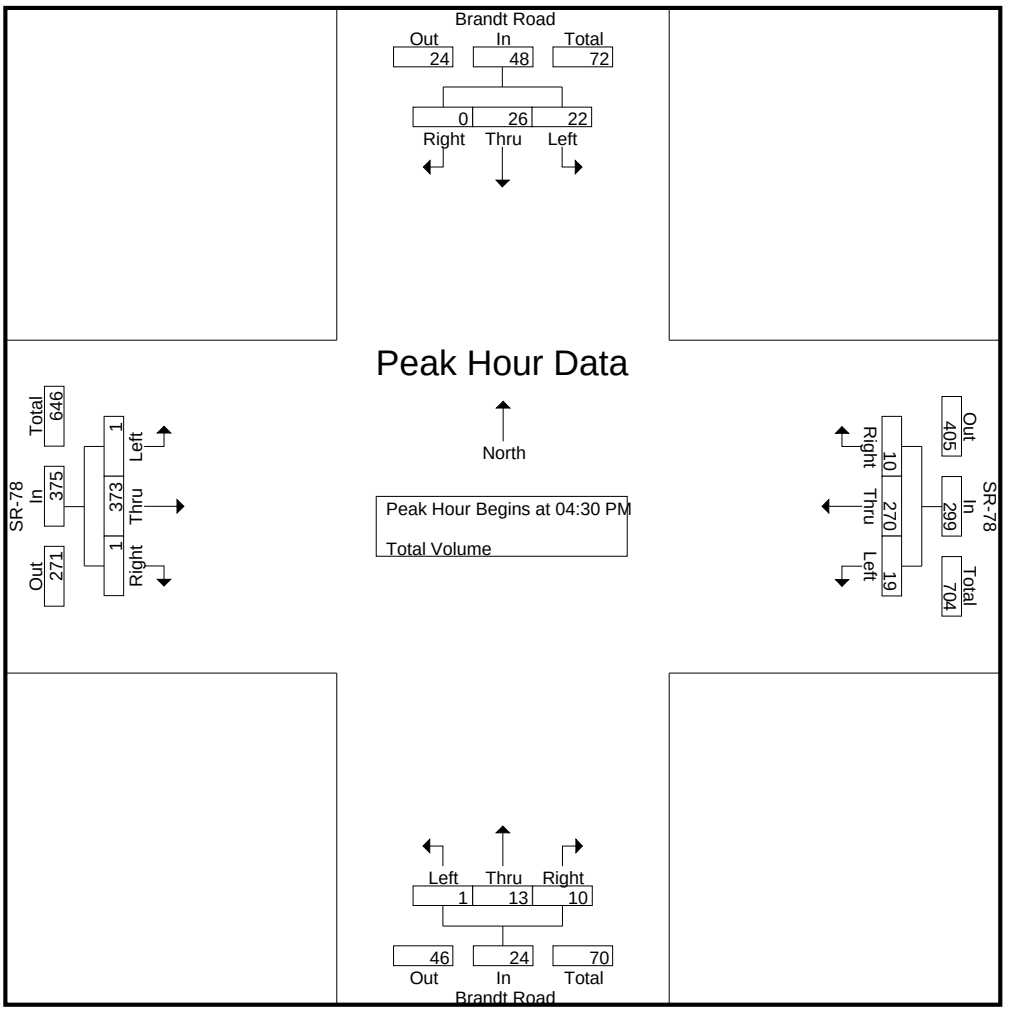
	Brandt Road Southbound				SR-78 Westbound				Brandt Road Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	8	0	12	9	70	0	79	0	3	1	4	0	80	0	80	175
04:15 PM	2	1	0	3	7	57	1	65	0	1	0	1	0	91	0	91	160
04:30 PM	8	7	0	15	9	69	3	81	0	5	1	6	1	81	0	82	184
04:45 PM	6	2	0	8	6	67	1	74	0	2	4	6	0	105	1	106	194
Total	20	18	0	38	31	263	5	299	0	11	6	17	1	357	1	359	713
05:00 PM	1	8	0	9	1	66	3	70	1	2	4	7	0	106	0	106	192
05:15 PM	7	9	0	16	3	68	3	74	0	4	1	5	0	81	0	81	176
05:30 PM	4	6	0	10	4	66	3	73	0	6	0	6	0	63	0	63	152
05:45 PM	7	8	1	16	4	65	1	70	0	4	1	5	0	94	1	95	186
Total	19	31	1	51	12	265	10	287	1	16	6	23	0	344	1	345	706
Grand Total	39	49	1	89	43	528	15	586	1	27	12	40	1	701	2	704	1419
Apprch %	43.8	55.1	1.1		7.3	90.1	2.6		2.5	67.5	30		0.1	99.6	0.3		
Total %	2.7	3.5	0.1	6.3	3	37.2	1.1	41.3	0.1	1.9	0.8	2.8	0.1	49.4	0.1	49.6	

	Brandt Road Southbound				SR-78 Westbound				Brandt Road Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**8**	7	0	15	**9**	**69**	**3**	**81**	0	**5**	1	6	**1**	81	0	82	184
04:45 PM	6	2	0	8	6	67	1	74	0	2	**4**	6	0	105	**1**	**106**	**194**
05:00 PM	1	8	0	9	1	66	3	70	**1**	2	4	**7**	0	**106**	0	106	192
05:15 PM	7	**9**	0	**16**	3	68	3	74	0	4	1	5	0	81	0	81	176
Total Volume	22	26	0	48	19	270	10	299	1	13	10	24	1	373	1	375	746
% App. Total	45.8	54.2	0		6.4	90.3	3.3		4.2	54.2	41.7		0.3	99.5	0.3		
PHF	.688	.722	.000	.750	.528	.978	.833	.923	.250	.650	.625	.857	.250	.880	.250	.884	.961

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County of Imperial
N/S: Brandt Road
E/W: SR-78
Weather: Clear

File Name : 08_CIM_Brandt_SR-78 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				04:15 PM			
+0 mins.	1	8	0	9	**9**	**70**	0	79	0	**5**	1	6	0	91	0	91
+15 mins.	**7**	**9**	0	**16**	7	57	1	65	0	2	**4**	6	**1**	81	0	82
+30 mins.	4	6	0	10	9	69	**3**	**81**	**1**	2	4	**7**	0	105	**1**	**106**
+45 mins.	7	8	**1**	16	6	67	1	74	0	4	1	5	0	**106**	0	106
Total Volume	19	31	1	51	31	263	5	299	1	13	10	24	1	383	1	385
% App. Total	37.3	60.8	2		10.4	88	1.7		4.2	54.2	41.7		0.3	99.5	0.3	
PHF	.679	.861	.250	.797	.861	.939	.417	.923	.250	.650	.625	.857	.250	.903	.250	.908

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: SR-111
E/W: SR-78 WB Ramps/Del Rio Place
Weather: Clear

File Name : 13_CIM_SR111_SR-78W AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

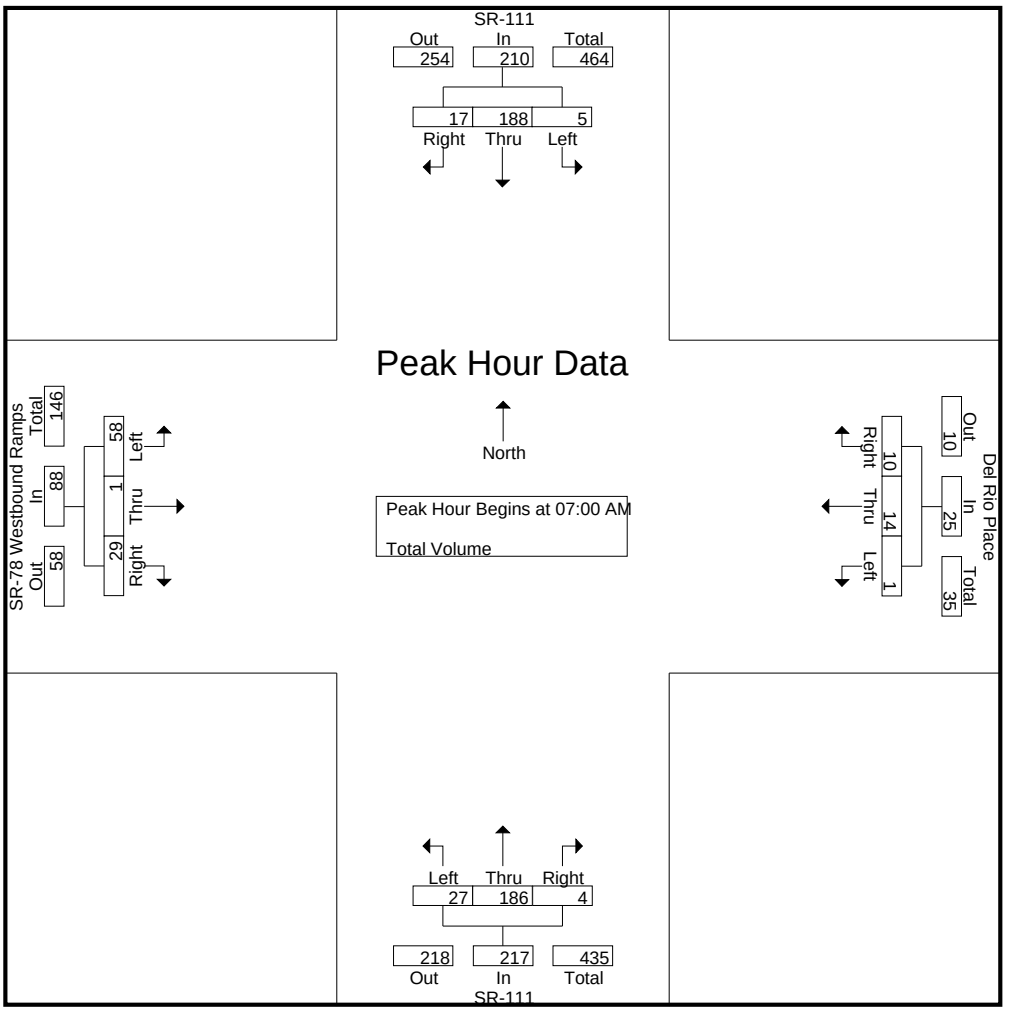
	SR-111 Southbound				Del Rio Place Westbound				SR-111 Northbound				SR-78 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	40	2	43	0	4	1	5	6	50	2	58	12	0	4	16	122
07:15 AM	1	50	4	55	0	5	3	8	7	40	0	47	9	0	5	14	124
07:30 AM	1	49	4	54	1	2	2	5	4	57	0	61	16	0	7	23	143
07:45 AM	2	49	7	58	0	3	4	7	10	39	2	51	21	1	13	35	151
Total	5	188	17	210	1	14	10	25	27	186	4	217	58	1	29	88	540
08:00 AM	2	37	1	40	0	1	0	1	4	29	1	34	16	2	4	22	97
08:15 AM	2	69	7	78	4	0	1	5	6	31	4	41	11	1	7	19	143
08:30 AM	0	41	5	46	0	2	4	6	2	18	3	23	13	1	1	15	90
08:45 AM	1	43	4	48	1	3	2	6	6	20	7	33	9	2	3	14	101
Total	5	190	17	212	5	6	7	18	18	98	15	131	49	6	15	70	431
Grand Total	10	378	34	422	6	20	17	43	45	284	19	348	107	7	44	158	971
Apprch %	2.4	89.6	8.1		14	46.5	39.5		12.9	81.6	5.5		67.7	4.4	27.8		
Total %	1	38.9	3.5	43.5	0.6	2.1	1.8	4.4	4.6	29.2	2	35.8	11	0.7	4.5	16.3	

	SR-111 Southbound				Del Rio Place Westbound				SR-111 Northbound				SR-78 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	40	2	43	0	4	1	5	6	50	**2**	58	12	0	4	16	122
07:15 AM	1	**50**	4	55	0	**5**	3	**8**	7	40	0	47	9	0	5	14	124
07:30 AM	1	49	4	54	**1**	2	2	5	4	**57**	0	**61**	16	0	7	23	143
07:45 AM	**2**	49	**7**	**58**	0	3	**4**	7	**10**	39	2	51	**21**	**1**	**13**	**35**	**151**
Total Volume	5	188	17	210	1	14	10	25	27	186	4	217	58	1	29	88	540
% App. Total	2.4	89.5	8.1		4	56	40		12.4	85.7	1.8		65.9	1.1	33		
PHF	.625	.940	.607	.905	.250	.700	.625	.781	.675	.816	.500	.889	.690	.250	.558	.629	.894

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PO Box 1178
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County of Imperial
N/S: SR-111
E/W: SR-78 WB Ramps/Del Rio Place
Weather: Clear

File Name : 13_CIM_SR111_SR-78W AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:00 AM				07:30 AM			
+0 mins.	1	49	4	54	0	4	1	5	6	50	**2**	58	16	0	7	23
+15 mins.	**2**	49	**7**	58	0	**5**	3	**8**	7	40	0	47	**21**	1	**13**	**35**
+30 mins.	2	37	1	40	**1**	2	2	5	4	**57**	0	**61**	16	**2**	4	22
+45 mins.	2	**69**	7	**78**	0	3	**4**	7	**10**	39	2	51	11	1	7	19
Total Volume	7	204	19	230	1	14	10	25	27	186	4	217	64	4	31	99
% App. Total	3	88.7	8.3		4	56	40		12.4	85.7	1.8		64.6	4	31.3	
PHF	.875	.739	.679	.737	.250	.700	.625	.781	.675	.816	.500	.889	.762	.500	.596	.707

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County of Imperial
N/S: SR-111
E/W: SR-78 WB Ramps/Del Rio Place
Weather: Clear

File Name : 13_CIM_SR111_SR-78W PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

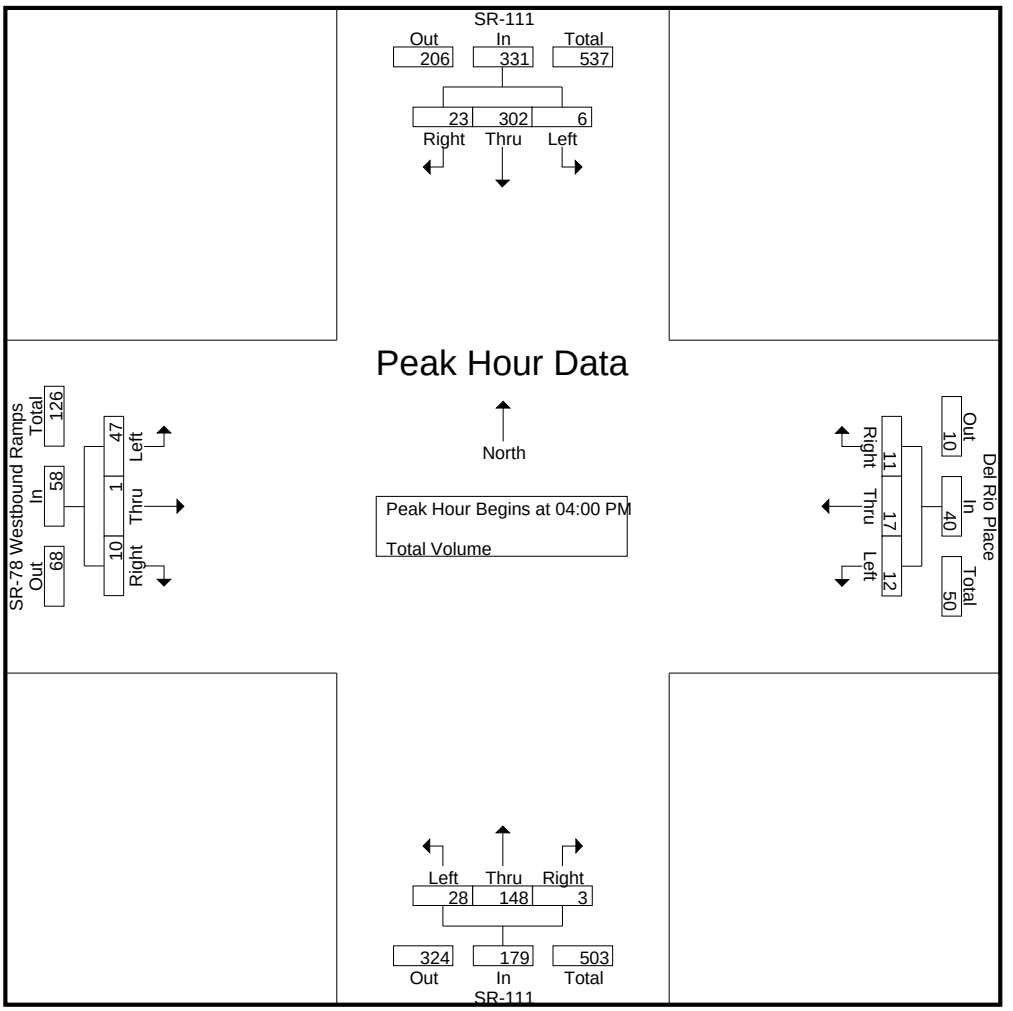
	SR-111 Southbound				Del Rio Place Westbound				SR-111 Northbound				SR-78 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	84	11	96	5	8	4	17	2	41	0	43	8	0	1	9	165
04:15 PM	1	62	2	65	1	4	2	7	10	30	1	41	14	1	4	19	132
04:30 PM	1	81	3	85	2	3	2	7	9	42	1	52	15	0	2	17	161
04:45 PM	3	75	7	85	4	2	3	9	7	35	1	43	10	0	3	13	150
Total	6	302	23	331	12	17	11	40	28	148	3	179	47	1	10	58	608
05:00 PM	3	45	8	56	2	2	3	7	5	49	1	55	11	0	4	15	133
05:15 PM	0	45	7	52	2	4	2	8	7	27	0	34	8	0	4	12	106
05:30 PM	0	43	2	45	3	10	4	17	4	26	0	30	10	0	1	11	103
05:45 PM	0	41	10	51	0	3	2	5	4	35	1	40	9	0	3	12	108
Total	3	174	27	204	7	19	11	37	20	137	2	159	38	0	12	50	450
Grand Total	9	476	50	535	19	36	22	77	48	285	5	338	85	1	22	108	1058
Apprch %	1.7	89	9.3		24.7	46.8	28.6		14.2	84.3	1.5		78.7	0.9	20.4		
Total %	0.9	45	4.7	50.6	1.8	3.4	2.1	7.3	4.5	26.9	0.5	31.9	8	0.1	2.1	10.2	

	SR-111 Southbound				Del Rio Place Westbound				SR-111 Northbound				SR-78 Westbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	**84**	**11**	**96**	**5**	**8**	**4**	**17**	2	41	0	43	8	0	1	9	**165**
04:15 PM	1	62	2	65	1	4	2	7	**10**	30	**1**	41	14	**1**	**4**	**19**	132
04:30 PM	1	81	3	85	2	3	2	7	9	**42**	1	**52**	**15**	0	2	17	161
04:45 PM	**3**	75	7	85	4	2	3	9	7	35	1	43	10	0	3	13	150
Total Volume	6	302	23	331	12	17	11	40	28	148	3	179	47	1	10	58	608
% App. Total	1.8	91.2	6.9		30	42.5	27.5		15.6	82.7	1.7		81	1.7	17.2		
PHF	.500	.899	.523	.862	.600	.531	.688	.588	.700	.881	.750	.861	.783	.250	.625	.763	.921

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PO Box 1178
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County of Imperial
N/S: SR-111
E/W: SR-78 WB Ramps/Del Rio Place
Weather: Clear

File Name : 13_CIM_SR111_SR-78W PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:45 PM				04:15 PM				04:15 PM			
+0 mins.	1	**84**	**11**	**96**	**4**	2	3	9	**10**	30	**1**	41	14	**1**	**4**	**19**
+15 mins.	1	62	2	65	2	2	3	7	9	42	1	52	**15**	0	2	17
+30 mins.	1	81	3	85	2	4	2	8	7	35	1	43	10	0	3	13
+45 mins.	**3**	75	7	85	3	**10**	**4**	**17**	5	**49**	1	**55**	11	0	4	15
Total Volume	6	302	23	331	11	18	12	41	31	156	4	191	50	1	13	64
% App. Total	1.8	91.2	6.9		26.8	43.9	29.3		16.2	81.7	2.1		78.1	1.6	20.3	
PHF	.500	.899	.523	.862	.688	.450	.750	.603	.775	.796	1.000	.868	.833	.250	.813	.842

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County of Imperial
N/S: SR-111/Old Hwy 111
E/W: SR-78 EB Ramps/ Shank Road
Weather: Clear

File Name : 14_CIM_SR111_SR-78E AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

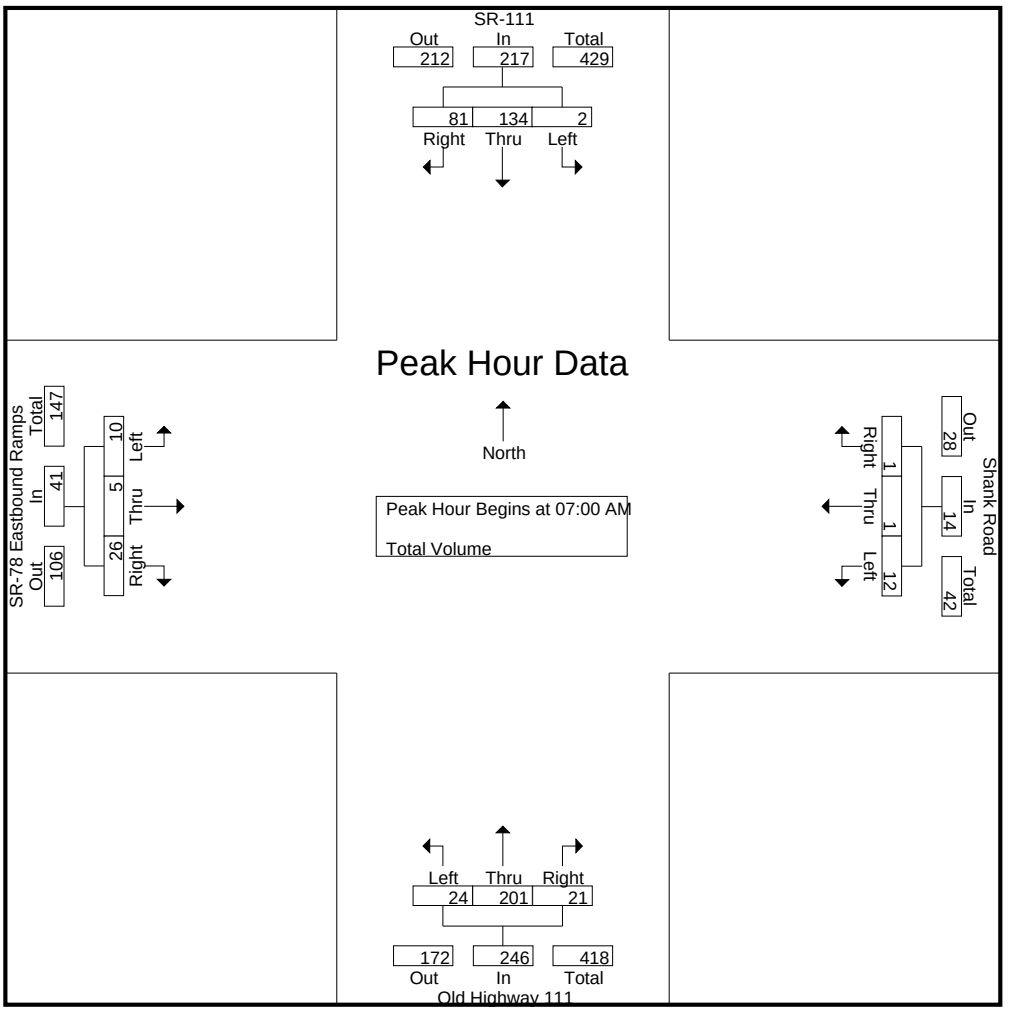
	SR-111 Southbound				Shank Road Westbound				Old Highway 111 Northbound				SR-78 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	23	21	44	3	0	0	3	6	55	6	67	3	0	3	6	120
07:15 AM	1	30	24	55	4	0	0	4	7	44	7	58	3	3	2	8	125
07:30 AM	0	34	22	56	1	0	0	1	5	56	3	64	2	1	5	8	129
07:45 AM	1	47	14	62	4	1	1	6	6	46	5	57	2	1	16	19	144
Total	2	134	81	217	12	1	1	14	24	201	21	246	10	5	26	41	518
08:00 AM	0	28	12	40	2	2	0	4	6	35	5	46	1	0	9	10	100
08:15 AM	0	55	24	79	2	1	1	4	2	35	3	40	2	3	4	9	132
08:30 AM	0	29	17	46	1	0	1	2	4	20	7	31	3	1	1	5	84
08:45 AM	0	34	13	47	4	0	0	4	7	35	2	44	2	2	5	9	104
Total	0	146	66	212	9	3	2	14	19	125	17	161	8	6	19	33	420
Grand Total	2	280	147	429	21	4	3	28	43	326	38	407	18	11	45	74	938
Apprch %	0.5	65.3	34.3		75	14.3	10.7		10.6	80.1	9.3		24.3	14.9	60.8		
Total %	0.2	29.9	15.7	45.7	2.2	0.4	0.3	3	4.6	34.8	4.1	43.4	1.9	1.2	4.8	7.9	

	SR-111 Southbound				Shank Road Westbound				Old Highway 111 Northbound				SR-78 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	23	21	44	3	0	0	3	6	55	6	**67**	**3**	0	3	6	120
07:15 AM	**1**	30	**24**	55	**4**	0	0	4	**7**	44	**7**	58	3	**3**	2	8	125
07:30 AM	0	34	22	56	1	0	0	1	5	**56**	3	64	2	1	5	8	129
07:45 AM	1	**47**	14	**62**	4	**1**	**1**	**6**	6	46	5	57	2	1	**16**	**19**	**144**
Total Volume	2	134	81	217	12	1	1	14	24	201	21	246	10	5	26	41	518
% App. Total	0.9	61.8	37.3		85.7	7.1	7.1		9.8	81.7	8.5		24.4	12.2	63.4		
PHF	.500	.713	.844	.875	.750	.250	.250	.583	.857	.897	.750	.918	.833	.417	.406	.539	.899

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PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: SR-111/Old Hwy 111
E/W: SR-78 EB Ramps/ Shank Road
Weather: Clear

File Name : 14_CIM_SR111_SR-78E AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:45 AM				07:00 AM				07:30 AM			
+0 mins.	0	34	22	56	**4**	1	**1**	**6**	6	55	6	**67**	**2**	1	5	8
+15 mins.	**1**	47	14	62	2	**2**	0	4	**7**	44	**7**	58	2	1	**16**	**19**
+30 mins.	0	28	12	40	2	1	1	4	5	**56**	3	64	1	0	9	10
+45 mins.	0	**55**	**24**	**79**	1	0	1	2	6	46	5	57	2	**3**	4	9
Total Volume	1	164	72	237	9	4	3	16	24	201	21	246	7	5	34	46
% App. Total	0.4	69.2	30.4		56.2	25	18.8		9.8	81.7	8.5		15.2	10.9	73.9	
PHF	.250	.745	.750	.750	.563	.500	.750	.667	.857	.897	.750	.918	.875	.417	.531	.605

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County of Imperial
N/S: SR-111/Old Hwy 111
E/W: SR-78 EB Ramps/ Shank Road
Weather: Clear

File Name : 14_CIM_SR111_SR-78E PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

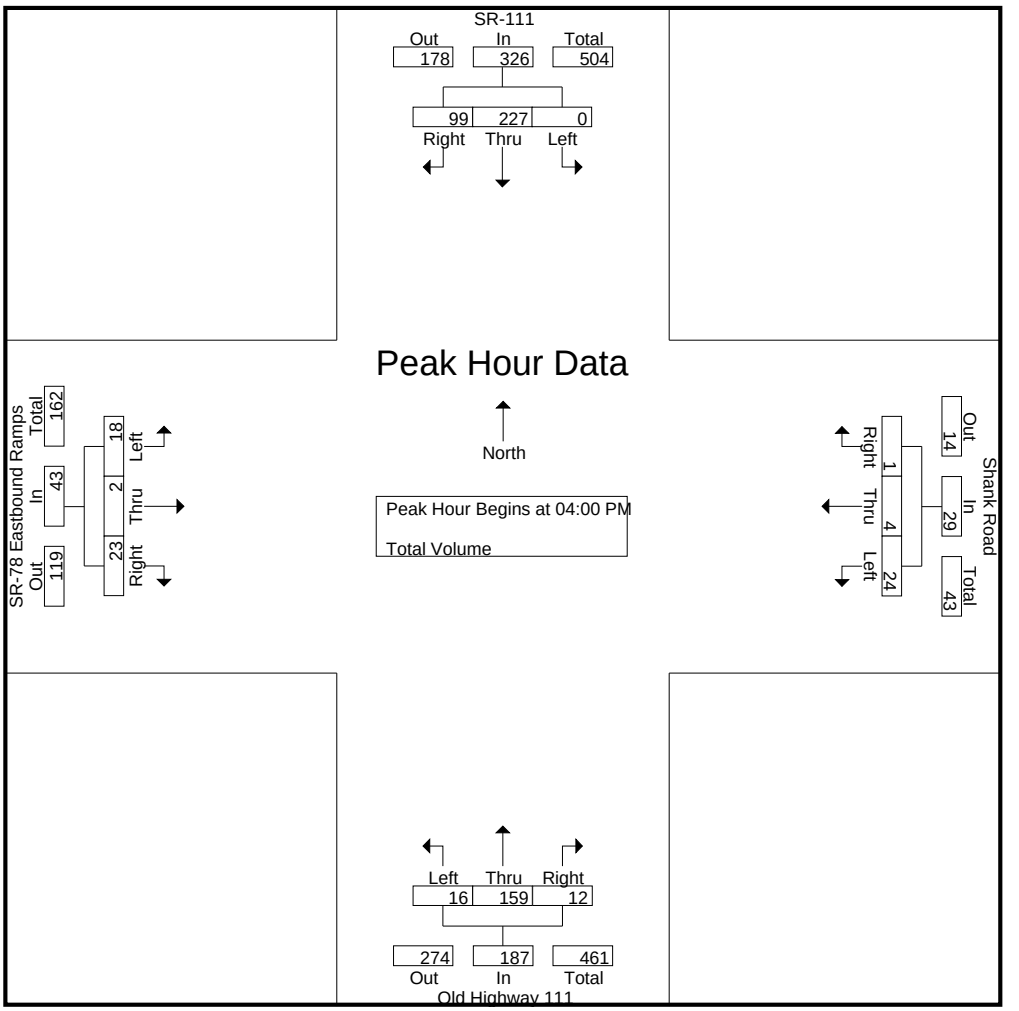
	SR-111 Southbound				Shank Road Westbound				Old Highway 111 Northbound				SR-78 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	56	30	86	8	2	0	10	4	36	2	42	5	1	7	13	151
04:15 PM	0	49	21	70	2	0	1	3	3	36	2	41	4	1	3	8	122
04:30 PM	0	63	21	84	3	1	0	4	7	44	5	56	8	0	11	19	163
04:45 PM	0	59	27	86	11	1	0	12	2	43	3	48	1	0	2	3	149
Total	0	227	99	326	24	4	1	29	16	159	12	187	18	2	23	43	585
05:00 PM	0	35	15	50	2	0	0	2	2	47	2	51	4	1	5	10	113
05:15 PM	0	32	19	51	2	0	0	2	2	32	2	36	2	0	3	5	94
05:30 PM	0	34	13	47	4	0	0	4	1	22	1	24	7	0	7	14	89
05:45 PM	0	33	12	45	3	0	0	3	1	39	2	42	3	0	8	11	101
Total	0	134	59	193	11	0	0	11	6	140	7	153	16	1	23	40	397
Grand Total	0	361	158	519	35	4	1	40	22	299	19	340	34	3	46	83	982
Apprch %	0	69.6	30.4		87.5	10	2.5		6.5	87.9	5.6		41	3.6	55.4		
Total %	0	36.8	16.1	52.9	3.6	0.4	0.1	4.1	2.2	30.4	1.9	34.6	3.5	0.3	4.7	8.5	

	SR-111 Southbound				Shank Road Westbound				Old Highway 111 Northbound				SR-78 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	56	**30**	**86**	8	**2**	0	10	4	36	2	42	5	**1**	7	13	151
04:15 PM	0	49	21	70	2	0	**1**	3	3	36	2	41	4	1	3	8	122
04:30 PM	0	**63**	21	84	3	1	0	4	**7**	**44**	**5**	**56**	**8**	0	**11**	**19**	**163**
04:45 PM	0	59	27	86	**11**	1	0	**12**	2	43	3	48	1	0	2	3	149
Total Volume	0	227	99	326	24	4	1	29	16	159	12	187	18	2	23	43	585
% App. Total	0	69.6	30.4		82.8	13.8	3.4		8.6	85	6.4		41.9	4.7	53.5		
PHF	.000	.901	.825	.948	.545	.500	.250	.604	.571	.903	.600	.835	.563	.500	.523	.566	.897

Counts Unlimited, Inc.
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Corona, CA 92878
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County of Imperial
N/S: SR-111/Old Hwy 111
E/W: SR-78 EB Ramps/ Shank Road
Weather: Clear

File Name : 14_CIM_SR111_SR-78E PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:15 PM				04:00 PM			
+0 mins.	0	56	**30**	**86**	8	**2**	0	10	3	36	2	41	5	**1**	7	13
+15 mins.	0	49	21	70	2	0	**1**	3	**7**	44	**5**	**56**	4	1	3	8
+30 mins.	0	**63**	21	84	3	1	0	4	2	43	3	48	**8**	0	**11**	**19**
+45 mins.	0	59	27	86	**11**	1	0	**12**	2	**47**	2	51	1	0	2	3
Total Volume	0	227	99	326	24	4	1	29	14	170	12	196	18	2	23	43
% App. Total	0	69.6	30.4		82.8	13.8	3.4		7.1	86.7	6.1		41.9	4.7	53.5	
PHF	.000	.901	.825	.948	.545	.500	.250	.604	.500	.904	.600	.875	.563	.500	.523	.566

Counts Unlimited, Inc.
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County of Imperial
N/S: Kalin Road
E/W: SR-86
Weather: Clear

File Name : 15_CIM_Kalin_SR86 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

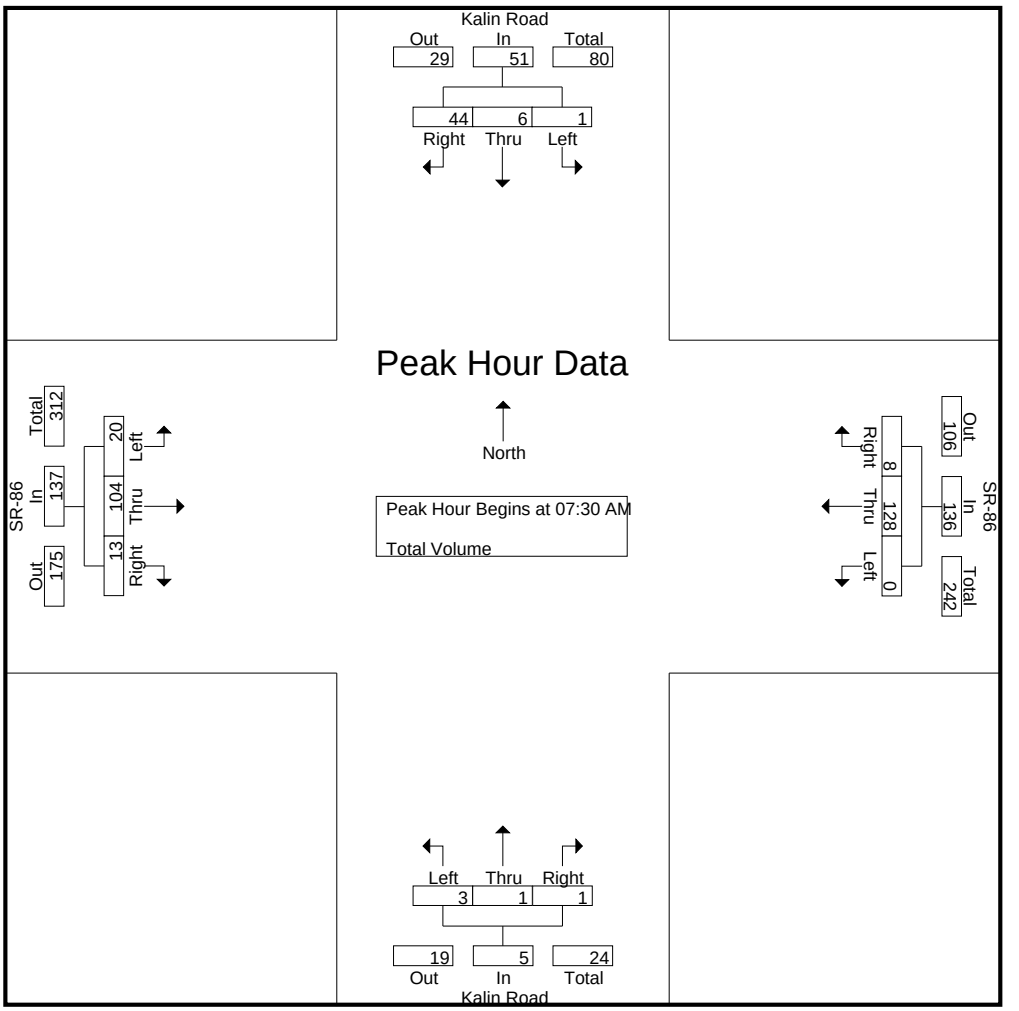
	Kalin Road Southbound				SR-86 Westbound				Kalin Road Northbound				SR-86 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	3	4	8	0	14	1	15	0	4	0	4	2	21	2	25	52
07:15 AM	2	2	6	10	0	19	0	19	1	3	0	4	3	22	2	27	60
07:30 AM	0	2	14	16	0	22	2	24	1	0	0	1	3	23	3	29	70
07:45 AM	1	2	16	19	0	37	3	40	1	0	1	2	6	30	5	41	102
Total	4	9	40	53	0	92	6	98	3	7	1	11	14	96	12	122	284
08:00 AM	0	2	7	9	0	35	2	37	0	1	0	1	5	24	2	31	78
08:15 AM	0	0	7	7	0	34	1	35	1	0	0	1	6	27	3	36	79
08:30 AM	1	0	3	4	1	24	0	25	5	0	0	5	6	17	4	27	61
08:45 AM	0	1	4	5	0	30	1	31	0	5	1	6	6	19	3	28	70
Total	1	3	21	25	1	123	4	128	6	6	1	13	23	87	12	122	288
Grand Total	5	12	61	78	1	215	10	226	9	13	2	24	37	183	24	244	572
Apprch %	6.4	15.4	78.2		0.4	95.1	4.4		37.5	54.2	8.3		15.2	75	9.8		
Total %	0.9	2.1	10.7	13.6	0.2	37.6	1.7	39.5	1.6	2.3	0.3	4.2	6.5	32	4.2	42.7	

	Kalin Road Southbound				SR-86 Westbound				Kalin Road Northbound				SR-86 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	**2**	14	16	0	22	2	24	**1**	0	0	1	3	23	3	29	70
07:45 AM	**1**	2	**16**	**19**	0	**37**	**3**	**40**	1	0	**1**	**2**	**6**	**30**	**5**	**41**	**102**
08:00 AM	0	2	7	9	0	35	2	37	0	**1**	0	1	5	24	2	31	78
08:15 AM	0	0	7	7	0	34	1	35	1	0	0	1	6	27	3	36	79
Total Volume	1	6	44	51	0	128	8	136	3	1	1	5	20	104	13	137	329
% App. Total	2	11.8	86.3		0	94.1	5.9		60	20	20		14.6	75.9	9.5		
PHF	.250	.750	.688	.671	.000	.865	.667	.850	.750	.250	.250	.625	.833	.867	.650	.835	.806

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County of Imperial
N/S: Kalin Road
E/W: SR-86
Weather: Clear

File Name : 15_CIM_Kalin_SR86 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				08:00 AM				07:30 AM			
+0 mins.	**2**	**2**	6	10	0	**37**	**3**	**40**	0	1	0	1	3	23	3	29
+15 mins.	0	2	14	16	0	35	2	37	1	0	0	1	**6**	**30**	**5**	**41**
+30 mins.	1	2	**16**	**19**	0	34	1	35	**5**	0	0	5	5	24	2	31
+45 mins.	0	2	7	9	**1**	24	0	25	0	**5**	**1**	**6**	6	27	3	36
Total Volume	3	8	43	54	1	130	6	137	6	6	1	13	20	104	13	137
% App. Total	5.6	14.8	79.6		0.7	94.9	4.4		46.2	46.2	7.7		14.6	75.9	9.5	
PHF	.375	1.000	.672	.711	.250	.878	.500	.856	.300	.300	.250	.542	.833	.867	.650	.835

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County of Imperial
N/S: Kalin Road
E/W: SR-86
Weather: Clear

File Name : 15_CIM_Kalin_SR86 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

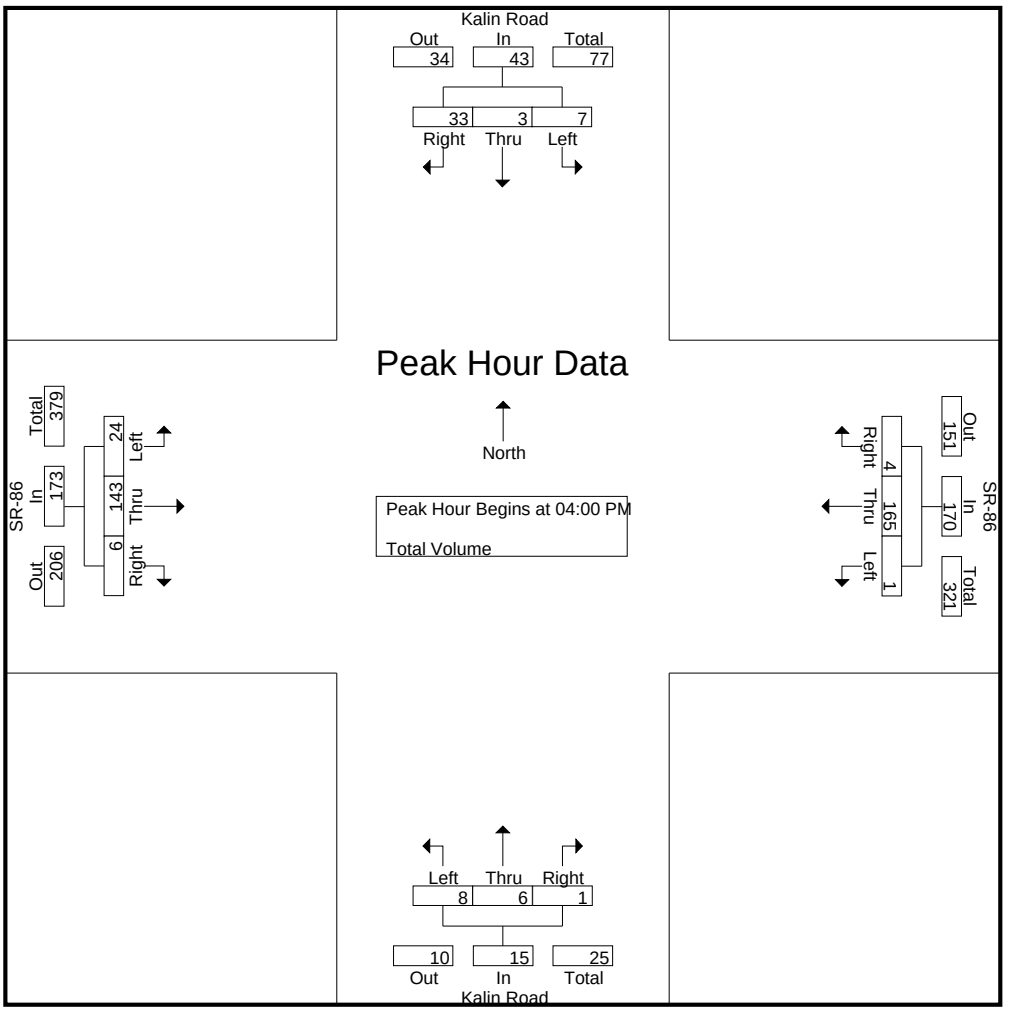
	Kalin Road Southbound				SR-86 Westbound				Kalin Road Northbound				SR-86 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	2	10	14	0	40	2	42	4	2	1	7	4	41	2	47	110
04:15 PM	1	0	6	7	0	52	1	53	2	4	0	6	3	37	0	40	106
04:30 PM	2	1	11	14	1	34	1	36	0	0	0	0	12	35	3	50	100
04:45 PM	2	0	6	8	0	39	0	39	2	0	0	2	5	30	1	36	85
Total	7	3	33	43	1	165	4	170	8	6	1	15	24	143	6	173	401
05:00 PM	2	0	3	5	0	45	1	46	3	0	0	3	7	24	0	31	85
05:15 PM	0	0	7	7	0	29	1	30	1	2	1	4	2	40	1	43	84
05:30 PM	0	0	8	8	0	38	2	40	3	0	0	3	8	32	1	41	92
05:45 PM	0	0	4	4	0	36	0	36	2	0	0	2	1	23	1	25	67
Total	2	0	22	24	0	148	4	152	9	2	1	12	18	119	3	140	328
Grand Total	9	3	55	67	1	313	8	322	17	8	2	27	42	262	9	313	729
Apprch %	13.4	4.5	82.1		0.3	97.2	2.5		63	29.6	7.4		13.4	83.7	2.9		
Total %	1.2	0.4	7.5	9.2	0.1	42.9	1.1	44.2	2.3	1.1	0.3	3.7	5.8	35.9	1.2	42.9	

	Kalin Road Southbound				SR-86 Westbound				Kalin Road Northbound				SR-86 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**2**	**2**	10	**14**	0	40	**2**	42	**4**	2	**1**	**7**	4	**41**	2	47	**110**
04:15 PM	1	0	6	7	0	**52**	1	**53**	2	**4**	0	6	3	37	0	40	106
04:30 PM	2	1	**11**	14	**1**	34	1	36	0	0	0	0	**12**	35	**3**	**50**	100
04:45 PM	2	0	6	8	0	39	0	39	2	0	0	2	5	30	1	36	85
Total Volume	7	3	33	43	1	165	4	170	8	6	1	15	24	143	6	173	401
% App. Total	16.3	7	76.7		0.6	97.1	2.4		53.3	40	6.7		13.9	82.7	3.5		
PHF	.875	.375	.750	.768	.250	.793	.500	.802	.500	.375	.250	.536	.500	.872	.500	.865	.911

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County of Imperial
N/S: Kalin Road
E/W: SR-86
Weather: Clear

File Name : 15_CIM_Kalin_SR86 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:00 PM				04:00 PM			
+0 mins.	**2**	**2**	10	**14**	0	**52**	**1**	**53**	**4**	2	**1**	**7**	4	**41**	2	47
+15 mins.	1	0	6	7	**1**	34	1	36	2	**4**	0	6	3	37	0	40
+30 mins.	2	1	**11**	14	0	39	0	39	0	0	0	0	**12**	35	**3**	**50**
+45 mins.	2	0	6	8	0	45	1	46	2	0	0	2	5	30	1	36
Total Volume	7	3	33	43	1	170	3	174	8	6	1	15	24	143	6	173
% App. Total	16.3	7	76.7		0.6	97.7	1.7		53.3	40	6.7		13.9	82.7	3.5	
PHF	.875	.375	.750	.768	.250	.817	.750	.821	.500	.375	.250	.536	.500	.872	.500	.865

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County of Imperial
N/S: 1st Street
E/W: Main Street (SR-86)
Weather: Clear

File Name : 16_CIM_1st St_SR86 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

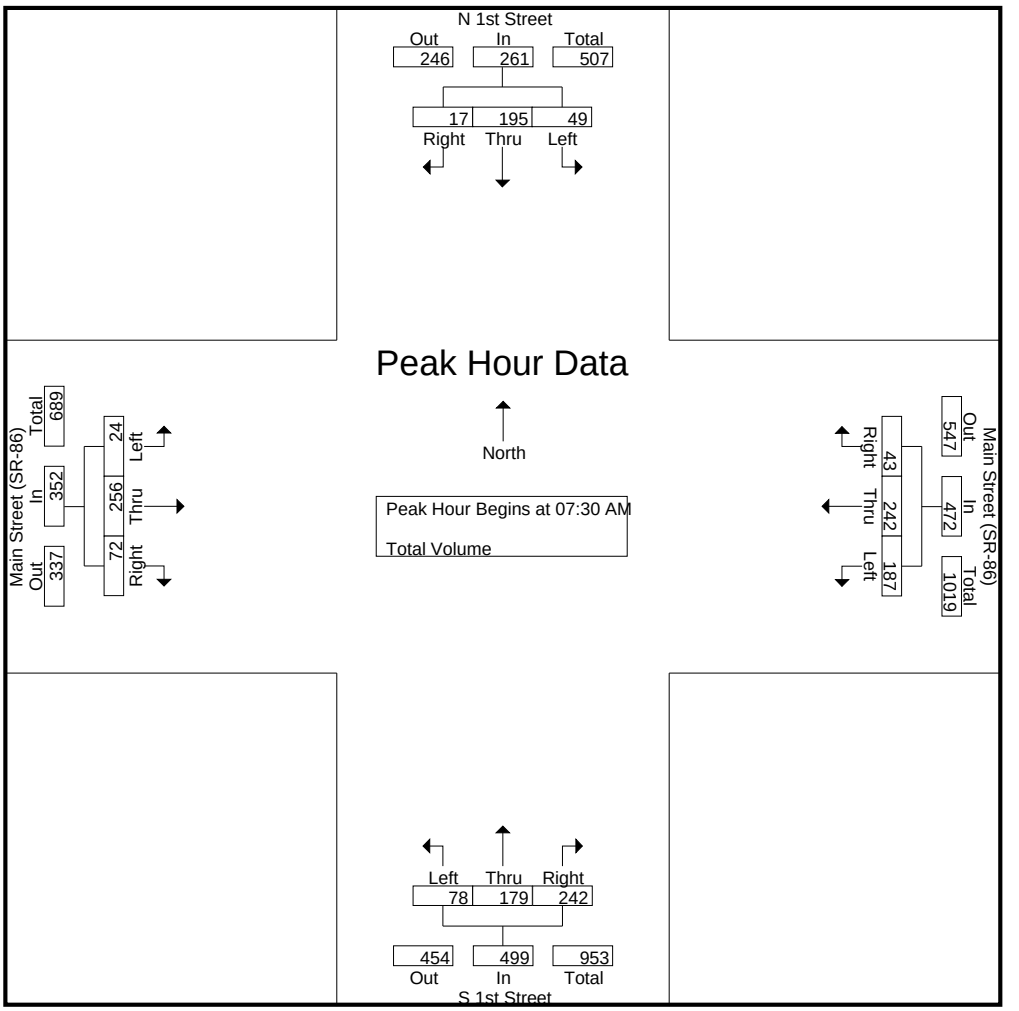
	N 1st Street Southbound				Main Street (SR-86) Westbound				S 1st Street Northbound				Main Street (SR-86) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	10	15	1	26	23	26	4	53	13	13	23	49	2	21	9	32	160
07:15 AM	6	32	2	40	23	22	7	52	9	26	44	79	1	39	13	53	224
07:30 AM	5	39	2	46	32	45	2	79	18	45	57	120	4	48	14	66	311
07:45 AM	19	48	7	74	49	59	12	120	21	53	79	153	8	80	15	103	450
Total	40	134	12	186	127	152	25	304	61	137	203	401	15	188	51	254	1145
08:00 AM	13	68	5	86	59	74	18	151	23	49	64	136	4	59	15	78	451
08:15 AM	12	40	3	55	47	64	11	122	16	32	42	90	8	69	28	105	372
08:30 AM	14	27	5	46	35	45	9	89	13	22	28	63	3	68	18	89	287
08:45 AM	9	31	4	44	31	37	8	76	19	24	33	76	4	54	19	77	273
Total	48	166	17	231	172	220	46	438	71	127	167	365	19	250	80	349	1383
Grand Total	88	300	29	417	299	372	71	742	132	264	370	766	34	438	131	603	2528
Apprch %	21.1	71.9	7		40.3	50.1	9.6		17.2	34.5	48.3		5.6	72.6	21.7		
Total %	3.5	11.9	1.1	16.5	11.8	14.7	2.8	29.4	5.2	10.4	14.6	30.3	1.3	17.3	5.2	23.9	

	N 1st Street Southbound				Main Street (SR-86) Westbound				S 1st Street Northbound				Main Street (SR-86) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	39	2	46	32	45	2	79	18	45	57	120	4	48	14	66	311
07:45 AM	**19**	48	**7**	74	49	59	12	120	21	**53**	**79**	**153**	**8**	**80**	15	103	450
08:00 AM	13	**68**	5	**86**	**59**	**74**	**18**	**151**	**23**	49	64	136	4	59	15	78	**451**
08:15 AM	12	40	3	55	47	64	11	122	16	32	42	90	8	69	**28**	**105**	372
Total Volume	49	195	17	261	187	242	43	472	78	179	242	499	24	256	72	352	1584
% App. Total	18.8	74.7	6.5		39.6	51.3	9.1		15.6	35.9	48.5		6.8	72.7	20.5		
PHF	.645	.717	.607	.759	.792	.818	.597	.781	.848	.844	.766	.815	.750	.800	.643	.838	.878

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County of Imperial
N/S: 1st Street
E/W: Main Street (SR-86)
Weather: Clear

File Name : 16_CIM_1st St_SR86 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	5	39	2	46	49	59	12	120	18	45	57	120	**8**	**80**	15	103
+15 mins.	**19**	48	**7**	74	**59**	**74**	**18**	**151**	21	**53**	**79**	**153**	4	59	15	78
+30 mins.	13	**68**	5	**86**	47	64	11	122	**23**	49	64	136	8	69	**28**	**105**
+45 mins.	12	40	3	55	35	45	9	89	16	32	42	90	3	68	18	89
Total Volume	49	195	17	261	190	242	50	482	78	179	242	499	23	276	76	375
% App. Total	18.8	74.7	6.5		39.4	50.2	10.4		15.6	35.9	48.5		6.1	73.6	20.3	
PHF	.645	.717	.607	.759	.805	.818	.694	.798	.848	.844	.766	.815	.719	.863	.679	.893

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County of Imperial
N/S: 1st Street
E/W: Main Street (SR-86)
Weather: Clear

File Name : 16_CIM_1st St_SR86 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

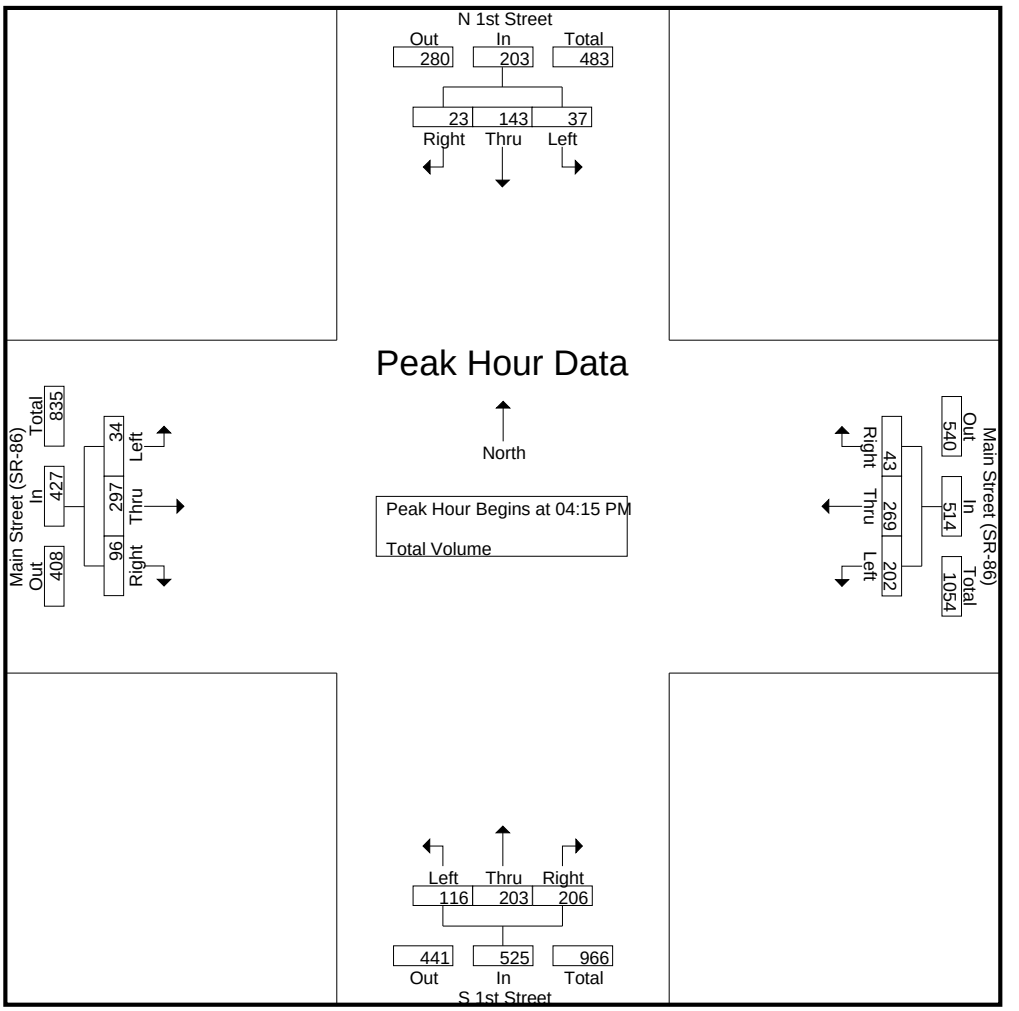
	N 1st Street Southbound				Main Street (SR-86) Westbound				S 1st Street Northbound				Main Street (SR-86) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	10	38	1	49	73	70	8	151	39	32	53	124	8	78	33	119	443
04:15 PM	12	33	5	50	46	52	9	107	38	44	54	136	8	72	24	104	397
04:30 PM	13	37	9	59	51	91	11	153	25	52	55	132	10	71	25	106	450
04:45 PM	6	32	4	42	48	57	5	110	25	45	45	115	7	75	22	104	371
Total	41	140	19	200	218	270	33	521	127	173	207	507	33	296	104	433	1661
05:00 PM	6	41	5	52	57	69	18	144	28	62	52	142	9	79	25	113	451
05:15 PM	13	31	2	46	46	66	11	123	38	40	34	112	6	58	23	87	368
05:30 PM	11	38	4	53	38	68	9	115	36	48	49	133	5	60	31	96	397
05:45 PM	16	40	6	62	48	54	7	109	20	44	47	111	10	68	19	97	379
Total	46	150	17	213	189	257	45	491	122	194	182	498	30	265	98	393	1595
Grand Total	87	290	36	413	407	527	78	1012	249	367	389	1005	63	561	202	826	3256
Apprch %	21.1	70.2	8.7		40.2	52.1	7.7		24.8	36.5	38.7		7.6	67.9	24.5		
Total %	2.7	8.9	1.1	12.7	12.5	16.2	2.4	31.1	7.6	11.3	11.9	30.9	1.9	17.2	6.2	25.4	

	N 1st Street Southbound				Main Street (SR-86) Westbound				S 1st Street Northbound				Main Street (SR-86) Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	12	33	5	50	46	52	9	107	**38**	44	54	136	8	72	24	104	397
04:30 PM	**13**	37	**9**	**59**	51	**91**	11	**153**	25	52	**55**	132	**10**	71	**25**	106	450
04:45 PM	6	32	4	42	48	57	5	110	25	45	45	115	7	75	22	104	371
05:00 PM	6	**41**	5	52	**57**	69	**18**	144	28	**62**	52	**142**	9	**79**	25	**113**	**451**
Total Volume	37	143	23	203	202	269	43	514	116	203	206	525	34	297	96	427	1669
% App. Total	18.2	70.4	11.3		39.3	52.3	8.4		22.1	38.7	39.2		8	69.6	22.5		
PHF	.712	.872	.639	.860	.886	.739	.597	.840	.763	.819	.936	.924	.850	.940	.960	.945	.925

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County of Imperial
N/S: 1st Street
E/W: Main Street (SR-86)
Weather: Clear

File Name : 16_CIM_1st St_SR86 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				04:15 PM				04:00 PM			
+0 mins.	6	**41**	5	52	51	**91**	11	**153**	**38**	44	54	136	8	**78**	**33**	**119**
+15 mins.	13	31	2	46	48	57	5	110	25	52	**55**	132	8	72	24	104
+30 mins.	11	38	4	53	**57**	69	**18**	144	25	45	45	115	**10**	71	25	106
+45 mins.	**16**	40	**6**	**62**	46	66	11	123	28	**62**	52	**142**	7	75	22	104
Total Volume	46	150	17	213	202	283	45	530	116	203	206	525	33	296	104	433
% App. Total	21.6	70.4	8		38.1	53.4	8.5		22.1	38.7	39.2		7.6	68.4	24	
PHF	.719	.915	.708	.859	.886	.777	.625	.866	.763	.819	.936	.924	.825	.949	.788	.910

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County of Imperial
N/S: SR-111
E/W: SR-78
Weather: Clear

File Name : 17_CIM_SR111_SR86 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

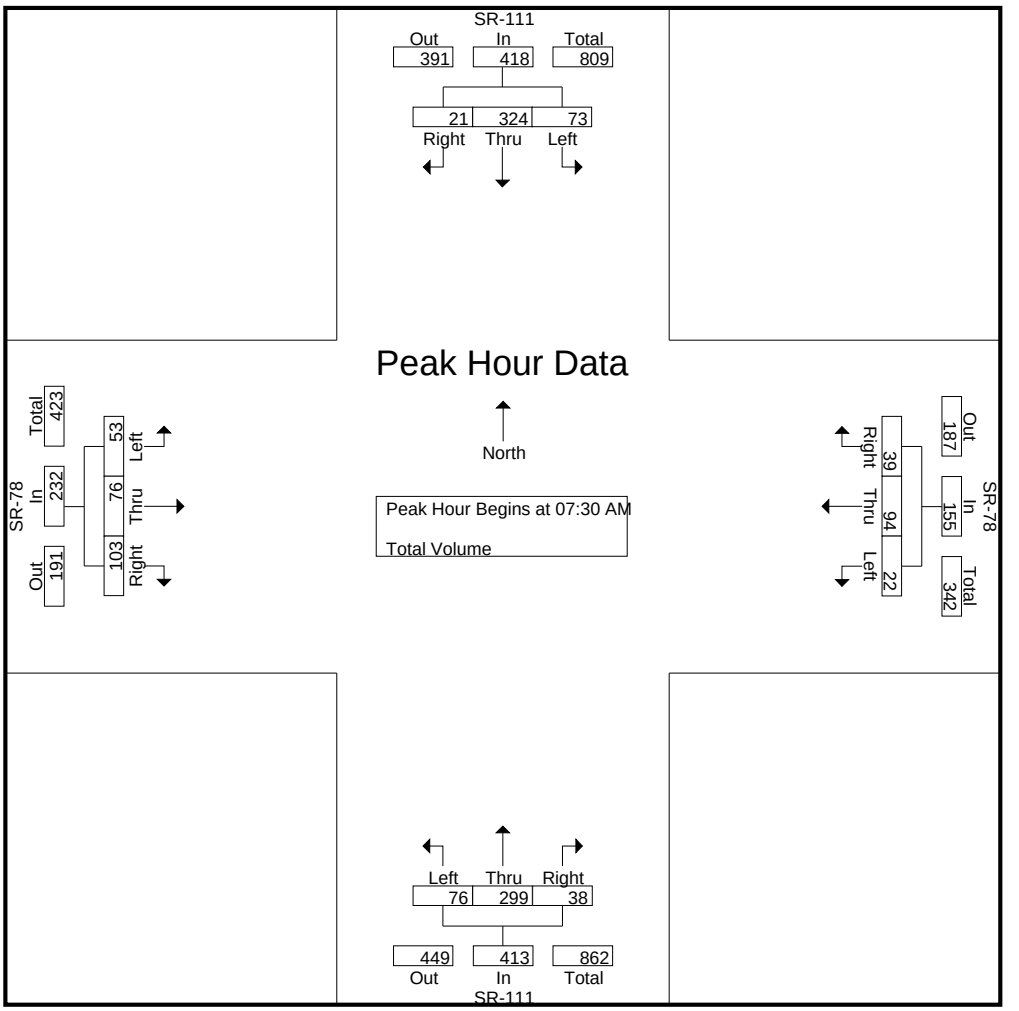
	SR-111 Southbound				SR-78 Westbound				SR-111 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	7	53	5	65	4	9	9	22	12	87	11	110	6	24	27	57	254
07:15 AM	11	78	4	93	2	18	11	31	16	74	15	105	6	12	24	42	271
07:30 AM	15	93	2	110	2	12	7	21	24	90	10	124	11	18	28	57	312
07:45 AM	21	77	7	105	1	21	6	28	20	87	10	117	13	20	29	62	312
Total	54	301	18	373	9	60	33	102	72	338	46	456	36	74	108	218	1149
08:00 AM	18	80	3	101	5	29	15	49	13	70	12	95	14	18	21	53	298
08:15 AM	19	74	9	102	14	32	11	57	19	52	6	77	15	20	25	60	296
08:30 AM	10	83	5	98	7	15	9	31	16	46	4	66	10	17	25	52	247
08:45 AM	21	69	5	95	5	17	9	31	7	44	2	53	8	9	23	40	219
Total	68	306	22	396	31	93	44	168	55	212	24	291	47	64	94	205	1060
Grand Total	122	607	40	769	40	153	77	270	127	550	70	747	83	138	202	423	2209
Apprch %	15.9	78.9	5.2		14.8	56.7	28.5		17	73.6	9.4		19.6	32.6	47.8		
Total %	5.5	27.5	1.8	34.8	1.8	6.9	3.5	12.2	5.7	24.9	3.2	33.8	3.8	6.2	9.1	19.1	

	SR-111 Southbound				SR-78 Westbound				SR-111 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	15	**93**	2	**110**	2	12	7	21	**24**	**90**	10	**124**	11	18	28	57	**312**
07:45 AM	**21**	77	7	105	1	21	6	28	20	87	10	117	13	**20**	**29**	**62**	312
08:00 AM	18	80	3	101	5	29	**15**	49	13	70	**12**	95	14	18	21	53	298
08:15 AM	19	74	**9**	102	**14**	**32**	11	**57**	19	52	6	77	**15**	20	25	60	296
Total Volume	73	324	21	418	22	94	39	155	76	299	38	413	53	76	103	232	1218
% App. Total	17.5	77.5	5		14.2	60.6	25.2		18.4	72.4	9.2		22.8	32.8	44.4		
PHF	.869	.871	.583	.950	.393	.734	.650	.680	.792	.831	.792	.833	.883	.950	.888	.935	.976

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County of Imperial
N/S: SR-111
E/W: SR-78
Weather: Clear

File Name : 17_CIM_SR111_SR86 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				08:00 AM				07:00 AM				07:30 AM			
+0 mins.	15	**93**	2	**110**	5	29	**15**	49	12	87	11	110	11	18	28	57
+15 mins.	**21**	77	7	105	**14**	**32**	11	**57**	16	74	**15**	105	13	**20**	**29**	**62**
+30 mins.	18	80	3	101	7	15	9	31	**24**	**90**	10	**124**	14	18	21	53
+45 mins.	19	74	**9**	102	5	17	9	31	20	87	10	117	**15**	20	25	60
Total Volume	73	324	21	418	31	93	44	168	72	338	46	456	53	76	103	232
% App. Total	17.5	77.5	5		18.5	55.4	26.2		15.8	74.1	10.1		22.8	32.8	44.4	
PHF	.869	.871	.583	.950	.554	.727	.733	.737	.750	.939	.767	.919	.883	.950	.888	.935

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County of Imperial
N/S: SR-111
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Weather: Clear

File Name : 17_CIM_SR111_SR86 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

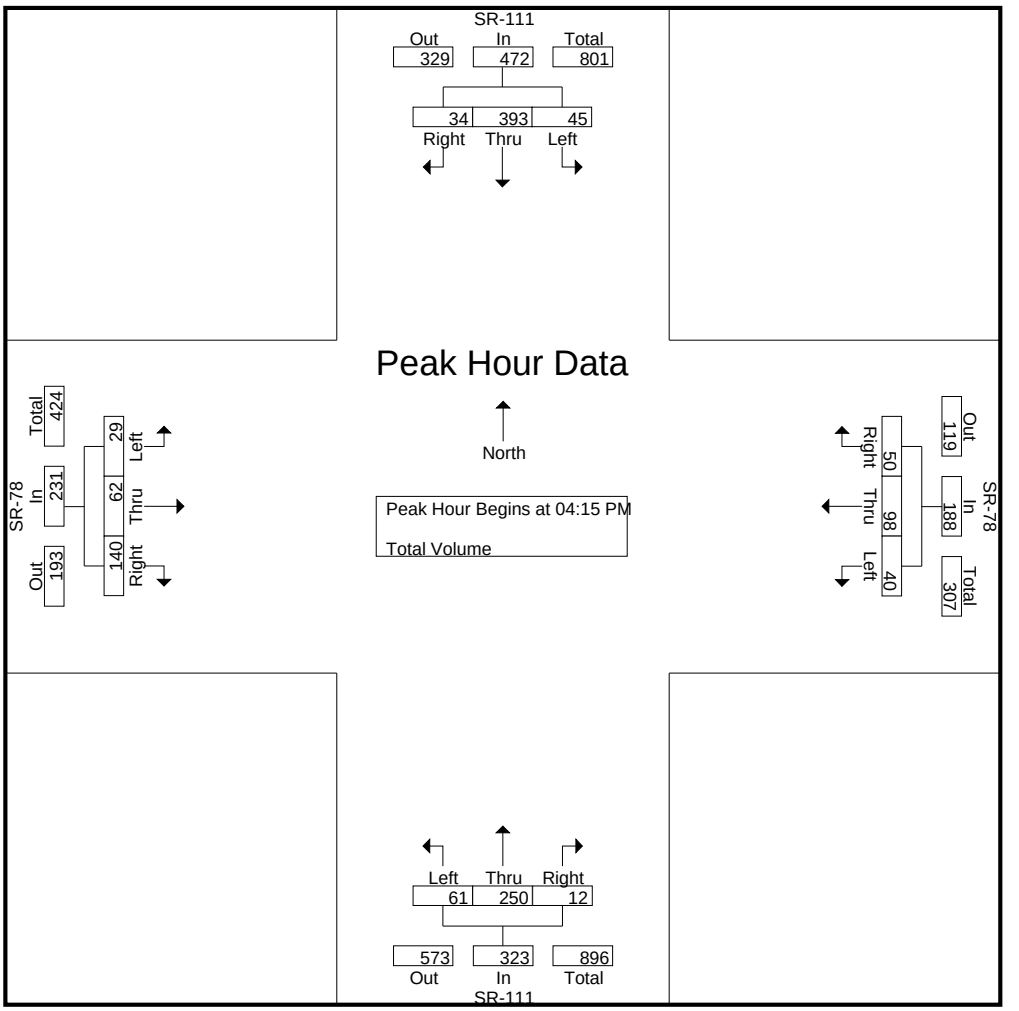
	SR-111 Southbound				SR-78 Westbound				SR-111 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	14	94	8	116	12	27	6	45	14	64	5	83	4	10	34	48	292
04:15 PM	10	94	12	116	16	16	14	46	20	54	3	77	10	17	36	63	302
04:30 PM	8	80	9	97	9	35	14	58	20	52	4	76	7	20	35	62	293
04:45 PM	8	114	8	130	9	24	11	44	12	68	3	83	8	12	24	44	301
Total	40	382	37	459	46	102	45	193	66	238	15	319	29	59	129	217	1188
05:00 PM	19	105	5	129	6	23	11	40	9	76	2	87	4	13	45	62	318
05:15 PM	12	79	3	94	11	10	11	32	19	70	12	101	6	15	25	46	273
05:30 PM	11	64	6	81	7	14	5	26	17	63	3	83	7	5	28	40	230
05:45 PM	9	79	6	94	3	17	9	29	16	60	0	76	7	13	23	43	242
Total	51	327	20	398	27	64	36	127	61	269	17	347	24	46	121	191	1063
Grand Total	91	709	57	857	73	166	81	320	127	507	32	666	53	105	250	408	2251
Apprch %	10.6	82.7	6.7		22.8	51.9	25.3		19.1	76.1	4.8		13	25.7	61.3		
Total %	4	31.5	2.5	38.1	3.2	7.4	3.6	14.2	5.6	22.5	1.4	29.6	2.4	4.7	11.1	18.1	

	SR-111 Southbound				SR-78 Westbound				SR-111 Northbound				SR-78 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	10	94	**12**	116	**16**	16	**14**	46	**20**	54	3	77	**10**	17	36	**63**	302
04:30 PM	8	80	9	97	9	**35**	14	**58**	20	52	**4**	76	7	**20**	35	62	293
04:45 PM	8	**114**	8	**130**	9	24	11	44	12	68	3	83	8	12	24	44	301
05:00 PM	**19**	105	5	129	6	23	11	40	9	**76**	2	**87**	4	13	**45**	62	**318**
Total Volume	45	393	34	472	40	98	50	188	61	250	12	323	29	62	140	231	1214
% App. Total	9.5	83.3	7.2		21.3	52.1	26.6		18.9	77.4	3.7		12.6	26.8	60.6		
PHF	.592	.862	.708	.908	.625	.700	.893	.810	.763	.822	.750	.928	.725	.775	.778	.917	.954

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County of Imperial
N/S: SR-111
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Weather: Clear

File Name : 17_CIM_SR111_SR86 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				04:45 PM				04:15 PM			
+0 mins.	10	94	**12**	116	12	27	6	45	12	68	3	83	**10**	17	36	**63**
+15 mins.	8	80	9	97	**16**	16	**14**	46	9	**76**	2	87	7	**20**	35	62
+30 mins.	8	**114**	8	**130**	9	**35**	14	**58**	**19**	70	**12**	**101**	8	12	24	44
+45 mins.	**19**	105	5	129	9	24	11	44	17	63	3	83	4	13	**45**	62
Total Volume	45	393	34	472	46	102	45	193	57	277	20	354	29	62	140	231
% App. Total	9.5	83.3	7.2		23.8	52.8	23.3		16.1	78.2	5.6		12.6	26.8	60.6	
PHF	.592	.862	.708	.908	.719	.729	.804	.832	.750	.911	.417	.876	.725	.775	.778	.917

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County of Imperial
N/S: SR-86
E/W: Barioni Boulevard
Weather: Clear

File Name : 18_CIM_SR86_Bar AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

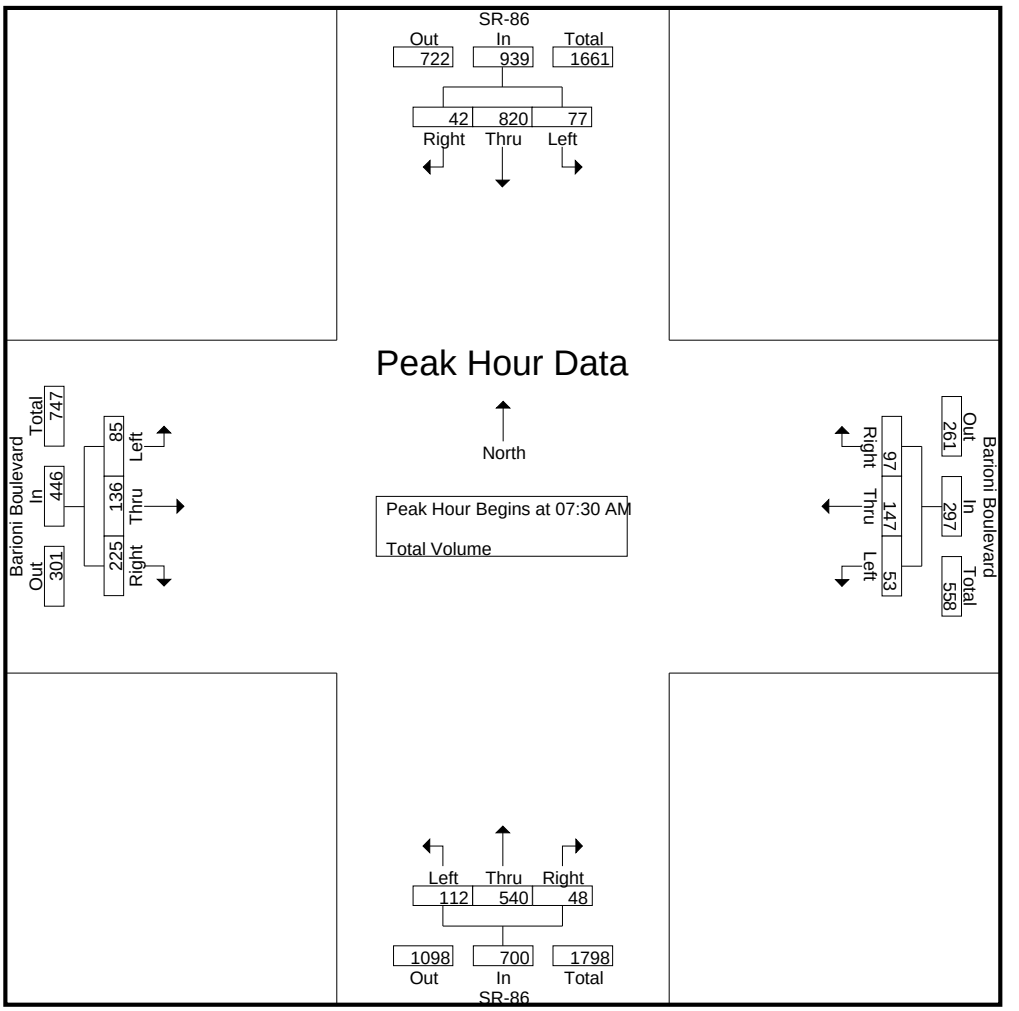
	SR-86 Southbound				Barioni Boulevard Westbound				SR-86 Northbound				Barioni Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	8	94	10	112	9	18	6	33	14	89	11	114	8	19	22	49	308
07:15 AM	3	184	9	196	13	19	9	41	12	98	11	121	5	32	50	87	445
07:30 AM	12	238	13	263	17	26	22	65	21	139	15	175	15	35	59	109	612
07:45 AM	32	240	4	276	19	46	28	93	31	153	13	197	22	42	66	130	696
Total	55	756	36	847	58	109	65	232	78	479	50	607	50	128	197	375	2061
08:00 AM	19	192	8	219	9	32	20	61	32	132	15	179	32	27	48	107	566
08:15 AM	14	150	17	181	8	43	27	78	28	116	5	149	16	32	52	100	508
08:30 AM	15	142	10	167	10	24	18	52	12	97	13	122	9	22	36	67	408
08:45 AM	11	162	6	179	11	18	7	36	13	92	3	108	4	23	30	57	380
Total	59	646	41	746	38	117	72	227	85	437	36	558	61	104	166	331	1862
Grand Total	114	1402	77	1593	96	226	137	459	163	916	86	1165	111	232	363	706	3923
Apprch %	7.2	88	4.8		20.9	49.2	29.8		14	78.6	7.4		15.7	32.9	51.4		
Total %	2.9	35.7	2	40.6	2.4	5.8	3.5	11.7	4.2	23.3	2.2	29.7	2.8	5.9	9.3	18	

	SR-86 Southbound				Barioni Boulevard Westbound				SR-86 Northbound				Barioni Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	12	238	13	263	17	26	22	65	21	139	**15**	175	15	35	59	109	612
07:45 AM	**32**	**240**	4	**276**	**19**	**46**	**28**	**93**	31	**153**	13	**197**	22	**42**	**66**	**130**	**696**
08:00 AM	19	192	8	219	9	32	20	61	**32**	132	15	179	**32**	27	48	107	566
08:15 AM	14	150	**17**	181	8	43	27	78	28	116	5	149	16	32	52	100	508
Total Volume	77	820	42	939	53	147	97	297	112	540	48	700	85	136	225	446	2382
% App. Total	8.2	87.3	4.5		17.8	49.5	32.7		16	77.1	6.9		19.1	30.5	50.4		
PHF	.602	.854	.618	.851	.697	.799	.866	.798	.875	.882	.800	.888	.664	.810	.852	.858	.856

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County of Imperial
N/S: SR-86
E/W: Barioni Boulevard
Weather: Clear

File Name : 18_CIM_SR86_Bar AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	3	184	9	196	17	26	22	65	21	139	**15**	175	15	35	59	109
+15 mins.	12	238	**13**	263	**19**	**46**	**28**	**93**	31	**153**	13	**197**	22	**42**	**66**	**130**
+30 mins.	**32**	**240**	4	**276**	9	32	20	61	**32**	132	15	179	**32**	27	48	107
+45 mins.	19	192	8	219	8	43	27	78	28	116	5	149	16	32	52	100
Total Volume	66	854	34	954	53	147	97	297	112	540	48	700	85	136	225	446
% App. Total	6.9	89.5	3.6		17.8	49.5	32.7		16	77.1	6.9		19.1	30.5	50.4	
PHF	.516	.890	.654	.864	.697	.799	.866	.798	.875	.882	.800	.888	.664	.810	.852	.858

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County of Imperial
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Weather: Clear

File Name : 18_CIM_SR86_Bar PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

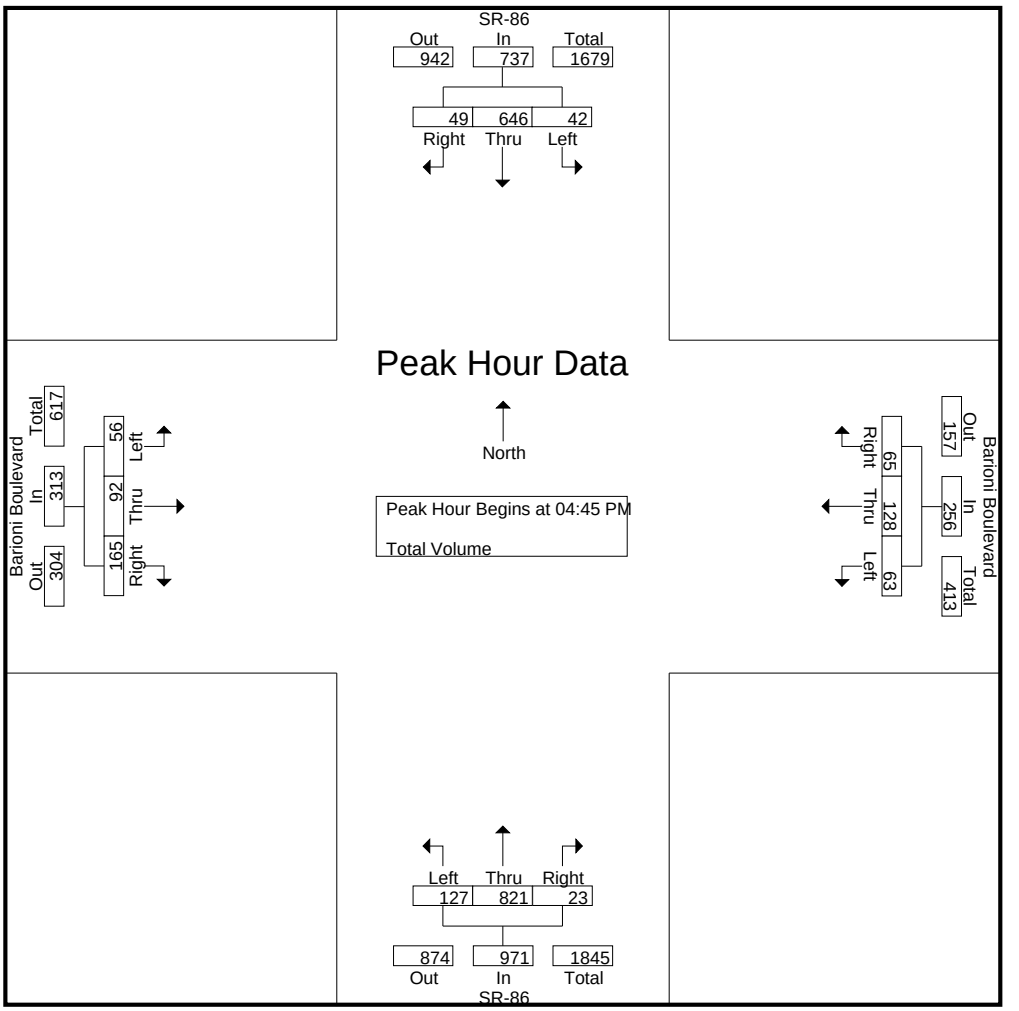
	SR-86 Southbound				Barioni Boulevard Westbound				SR-86 Northbound				Barioni Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	10	177	9	196	23	30	15	68	34	186	6	226	23	20	30	73	563
04:15 PM	14	170	6	190	13	31	20	64	35	178	8	221	14	23	38	75	550
04:30 PM	16	165	20	201	17	27	13	57	34	181	2	217	8	21	45	74	549
04:45 PM	8	141	14	163	13	28	13	54	21	192	7	220	9	25	31	65	502
Total	48	653	49	750	66	116	61	243	124	737	23	884	54	89	144	287	2164
05:00 PM	11	152	11	174	14	23	17	54	32	224	4	260	17	22	31	70	558
05:15 PM	12	171	11	194	14	30	18	62	37	221	5	263	10	24	48	82	601
05:30 PM	11	182	13	206	22	47	17	86	37	184	7	228	20	21	55	96	616
05:45 PM	10	136	10	156	11	14	13	38	20	162	5	187	9	33	42	84	465
Total	44	641	45	730	61	114	65	240	126	791	21	938	56	100	176	332	2240
Grand Total	92	1294	94	1480	127	230	126	483	250	1528	44	1822	110	189	320	619	4404
Apprch %	6.2	87.4	6.4		26.3	47.6	26.1		13.7	83.9	2.4		17.8	30.5	51.7		
Total %	2.1	29.4	2.1	33.6	2.9	5.2	2.9	11	5.7	34.7	1	41.4	2.5	4.3	7.3	14.1	

	SR-86 Southbound				Barioni Boulevard Westbound				SR-86 Northbound				Barioni Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	8	141	**14**	163	13	28	13	54	21	192	**7**	220	9	**25**	31	65	502
05:00 PM	11	152	11	174	14	23	17	54	32	**224**	4	260	17	22	31	70	558
05:15 PM	**12**	171	11	194	14	30	**18**	62	**37**	221	5	**263**	10	24	48	82	601
05:30 PM	11	**182**	13	**206**	**22**	**47**	17	**86**	37	184	7	228	**20**	21	**55**	**96**	**616**
Total Volume	42	646	49	737	63	128	65	256	127	821	23	971	56	92	165	313	2277
% App. Total	5.7	87.7	6.6		24.6	50	25.4		13.1	84.6	2.4		17.9	29.4	52.7		
PHF	.875	.887	.875	.894	.716	.681	.903	.744	.858	.916	.821	.923	.700	.920	.750	.815	.924

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County of Imperial
N/S: SR-86
E/W: Barioni Boulevard
Weather: Clear

File Name : 18_CIM_SR86_Bar PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:45 PM				04:45 PM				05:00 PM			
+0 mins.	10	**177**	9	196	13	28	13	54	21	192	**7**	220	17	22	31	70
+15 mins.	14	170	6	190	14	23	17	54	32	**224**	4	260	10	24	48	82
+30 mins.	**16**	165	**20**	**201**	14	30	**18**	62	**37**	221	5	**263**	**20**	21	**55**	**96**
+45 mins.	8	141	14	163	**22**	**47**	17	**86**	37	184	7	228	9	**33**	42	84
Total Volume	48	653	49	750	63	128	65	256	127	821	23	971	56	100	176	332
% App. Total	6.4	87.1	6.5		24.6	50	25.4		13.1	84.6	2.4		16.9	30.1	53	
PHF	.750	.922	.613	.933	.716	.681	.903	.744	.858	.916	.821	.923	.700	.758	.800	.865

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County of Imperial
N/S: SR-111
E/W: Worthington Road
Weather: Clear

File Name : 19_CIM_SR111_Worth AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

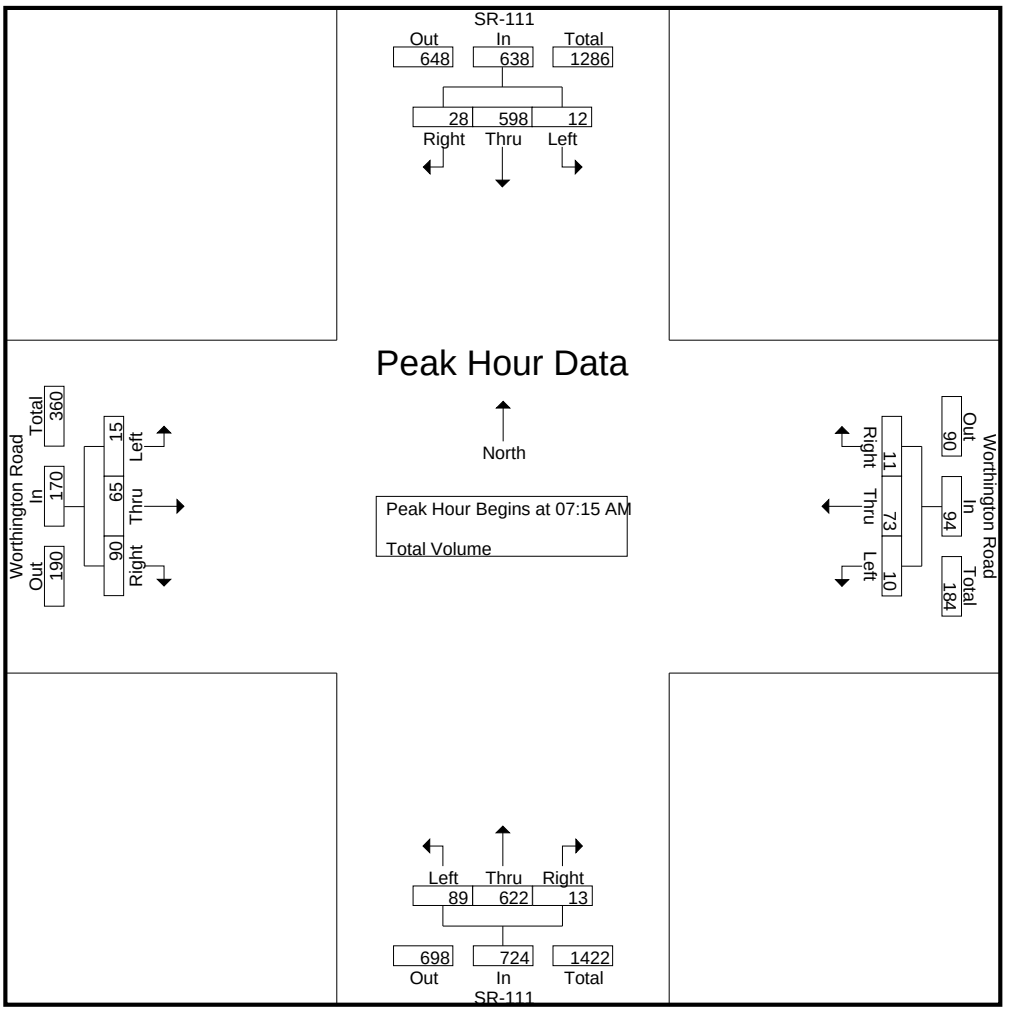
	SR-111 Southbound				Worthington Road Westbound				SR-111 Northbound				Worthington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	72	1	74	0	12	5	17	18	124	1	143	5	11	14	30	264
07:15 AM	1	147	6	154	3	16	2	21	31	178	2	211	3	11	19	33	419
07:30 AM	2	166	8	176	3	16	5	24	19	171	4	194	3	24	29	56	450
07:45 AM	4	153	9	166	3	23	2	28	20	159	3	182	5	14	27	46	422
Total	8	538	24	570	9	67	14	90	88	632	10	730	16	60	89	165	1555
08:00 AM	5	132	5	142	1	18	2	21	19	114	4	137	4	16	15	35	335
08:15 AM	1	132	6	139	2	14	2	18	12	96	2	110	2	11	18	31	298
08:30 AM	0	148	5	153	5	8	0	13	8	104	5	117	0	15	20	35	318
08:45 AM	1	123	2	126	1	11	2	14	14	99	4	117	1	11	19	31	288
Total	7	535	18	560	9	51	6	66	53	413	15	481	7	53	72	132	1239
Grand Total	15	1073	42	1130	18	118	20	156	141	1045	25	1211	23	113	161	297	2794
Apprch %	1.3	95	3.7		11.5	75.6	12.8		11.6	86.3	2.1		7.7	38	54.2		
Total %	0.5	38.4	1.5	40.4	0.6	4.2	0.7	5.6	5	37.4	0.9	43.3	0.8	4	5.8	10.6	

	SR-111 Southbound				Worthington Road Westbound				SR-111 Northbound				Worthington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	147	6	154	**3**	16	2	21	**31**	**178**	2	**211**	3	11	19	33	419
07:30 AM	2	**166**	8	**176**	3	16	**5**	24	19	171	**4**	194	3	**24**	**29**	**56**	**450**
07:45 AM	4	153	**9**	166	3	**23**	2	**28**	20	159	3	182	**5**	14	27	46	422
08:00 AM	**5**	132	5	142	1	18	2	21	19	114	4	137	4	16	15	35	335
Total Volume	12	598	28	638	10	73	11	94	89	622	13	724	15	65	90	170	1626
% App. Total	1.9	93.7	4.4		10.6	77.7	11.7		12.3	85.9	1.8		8.8	38.2	52.9		
PHF	.600	.901	.778	.906	.833	.793	.550	.839	.718	.874	.813	.858	.750	.677	.776	.759	.903

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County of Imperial
N/S: SR-111
E/W: Worthington Road
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File Name : 19_CIM_SR111_Worth AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	1	147	6	154	**3**	16	2	21	18	124	1	143	3	11	19	33
+15 mins.	2	**166**	8	**176**	3	16	**5**	24	**31**	**178**	2	**211**	3	**24**	**29**	**56**
+30 mins.	4	153	**9**	166	3	**23**	2	**28**	19	171	**4**	194	**5**	14	27	46
+45 mins.	**5**	132	5	142	1	18	2	21	20	159	3	182	4	16	15	35
Total Volume	12	598	28	638	10	73	11	94	88	632	10	730	15	65	90	170
% App. Total	1.9	93.7	4.4		10.6	77.7	11.7		12.1	86.6	1.4		8.8	38.2	52.9	
PHF	.600	.901	.778	.906	.833	.793	.550	.839	.710	.888	.625	.865	.750	.677	.776	.759

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County of Imperial
N/S: SR-111
E/W: Worthington Road
Weather: Clear

File Name : 19_CIM_SR111_Worth PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

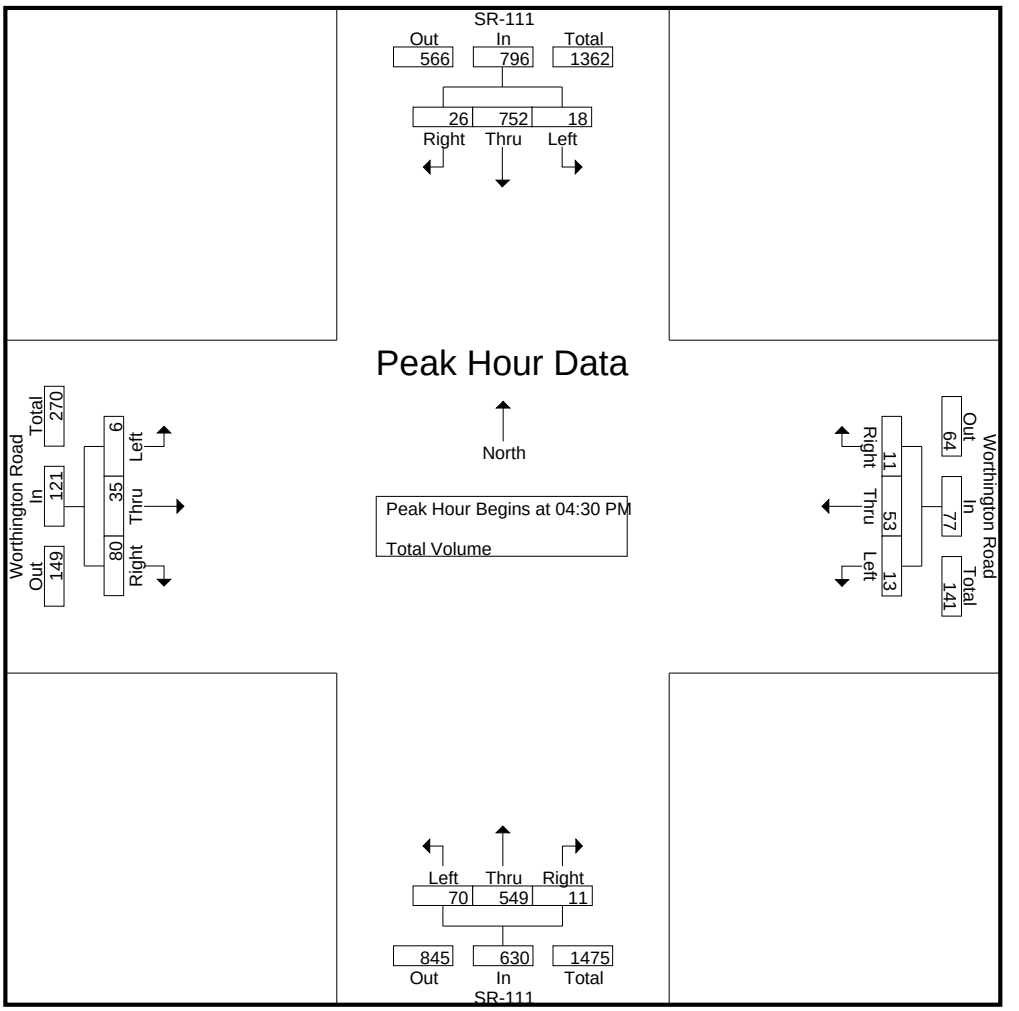
	SR-111 Southbound				Worthington Road Westbound				SR-111 Northbound				Worthington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	229	7	238	2	16	1	19	17	125	7	149	3	15	18	36	442
04:15 PM	3	188	10	201	2	8	2	12	7	123	3	133	6	12	13	31	377
04:30 PM	1	171	3	175	4	11	3	18	12	142	3	157	0	10	24	34	384
04:45 PM	8	170	1	179	3	12	3	18	11	122	3	136	4	10	16	30	363
Total	14	758	21	793	11	47	9	67	47	512	16	575	13	47	71	131	1566
05:00 PM	4	194	8	206	3	19	4	26	25	114	5	144	1	9	23	33	409
05:15 PM	5	217	14	236	3	11	1	15	22	171	0	193	1	6	17	24	468
05:30 PM	5	160	4	169	4	10	0	14	15	127	3	145	1	10	32	43	371
05:45 PM	2	120	4	126	3	8	2	13	16	125	2	143	3	9	18	30	312
Total	16	691	30	737	13	48	7	68	78	537	10	625	6	34	90	130	1560
Grand Total	30	1449	51	1530	24	95	16	135	125	1049	26	1200	19	81	161	261	3126
Apprch %	2	94.7	3.3		17.8	70.4	11.9		10.4	87.4	2.2		7.3	31	61.7		
Total %	1	46.4	1.6	48.9	0.8	3	0.5	4.3	4	33.6	0.8	38.4	0.6	2.6	5.2	8.3	

	SR-111 Southbound				Worthington Road Westbound				SR-111 Northbound				Worthington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	171	3	175	**4**	11	3	18	12	142	3	157	0	**10**	**24**	**34**	384
04:45 PM	**8**	170	1	179	3	12	3	18	11	122	3	136	**4**	10	16	30	363
05:00 PM	4	194	8	206	3	**19**	**4**	**26**	**25**	114	**5**	144	1	9	23	33	409
05:15 PM	5	**217**	**14**	**236**	3	11	1	15	22	**171**	0	**193**	1	6	17	24	**468**
Total Volume	18	752	26	796	13	53	11	77	70	549	11	630	6	35	80	121	1624
% App. Total	2.3	94.5	3.3		16.9	68.8	14.3		11.1	87.1	1.7		5	28.9	66.1		
PHF	.563	.866	.464	.843	.813	.697	.688	.740	.700	.803	.550	.816	.375	.875	.833	.890	.868

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County of Imperial
N/S: SR-111
E/W: Worthington Road
Weather: Clear

File Name : 19_CIM_SR111_Worth PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:00 PM			
+0 mins.	1	171	3	175	**4**	11	3	18	12	142	3	157	3	**15**	18	**36**
+15 mins.	**8**	170	1	179	3	12	3	18	11	122	3	136	**6**	12	13	31
+30 mins.	4	194	8	206	3	**19**	**4**	**26**	**25**	114	**5**	144	0	10	**24**	34
+45 mins.	5	**217**	**14**	**236**	3	11	1	15	22	**171**	0	**193**	4	10	16	30
Total Volume	18	752	26	796	13	53	11	77	70	549	11	630	13	47	71	131
% App. Total	2.3	94.5	3.3		16.9	68.8	14.3		11.1	87.1	1.7		9.9	35.9	54.2	
PHF	.563	.866	.464	.843	.813	.697	.688	.740	.700	.803	.550	.816	.542	.783	.740	.910

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County of Imperial
N/S: SR-86
E/W: Aten Road
Weather: Clear

File Name : 20_CIM_SR86_Aten AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

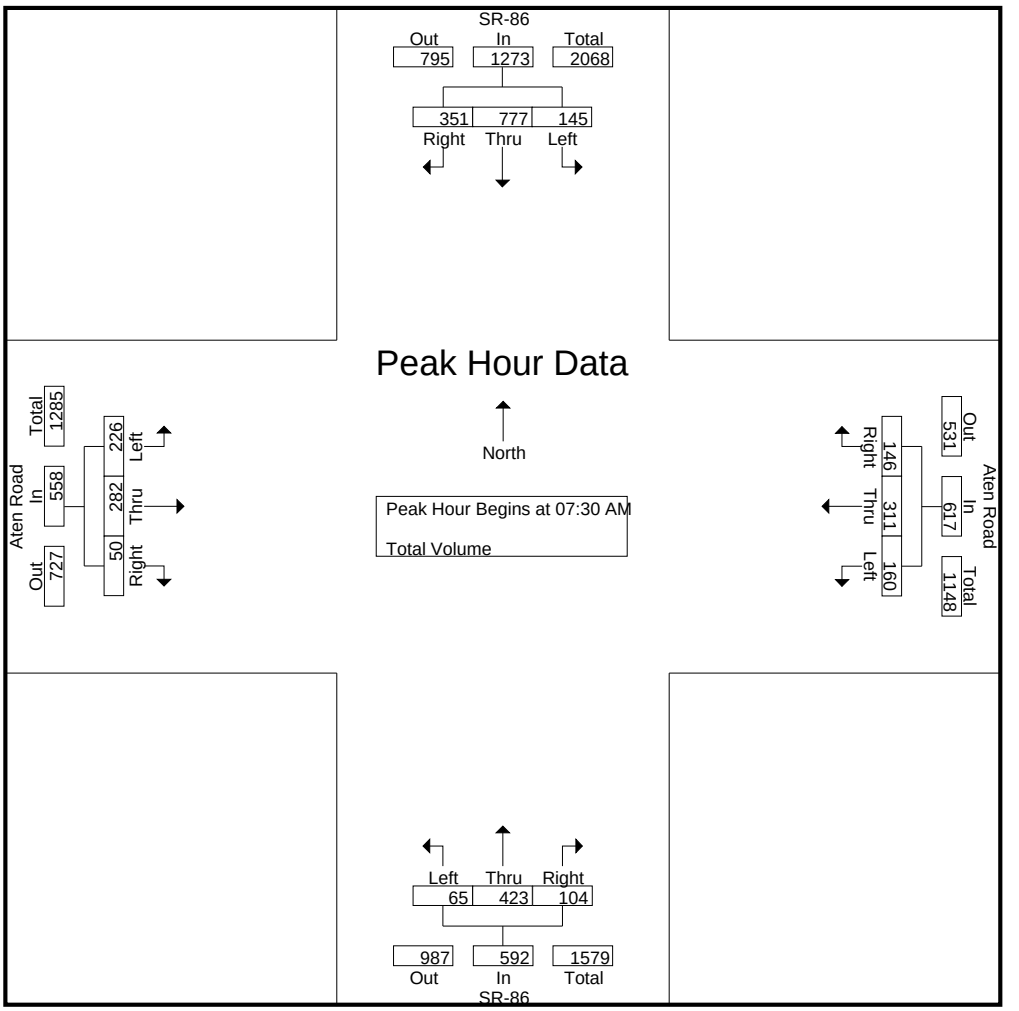
	SR-86 Southbound				Aten Road Westbound				SR-86 Northbound				Aten Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	13	106	29	148	24	33	30	87	10	72	7	89	38	32	13	83	407
07:15 AM	19	144	44	207	24	70	29	123	10	81	13	104	49	72	11	132	566
07:30 AM	29	196	96	321	43	81	36	160	9	110	26	145	64	77	15	156	782
07:45 AM	55	245	114	414	40	104	44	188	19	125	23	167	53	110	8	171	940
Total	116	691	283	1090	131	288	139	558	48	388	69	505	204	291	47	542	2695
08:00 AM	37	179	70	286	48	76	33	157	16	102	26	144	64	59	19	142	729
08:15 AM	24	157	71	252	29	50	33	112	21	86	29	136	45	36	8	89	589
08:30 AM	30	162	47	239	24	52	21	97	12	101	18	131	30	37	12	79	546
08:45 AM	22	139	50	211	40	57	20	117	23	92	24	139	34	54	20	108	575
Total	113	637	238	988	141	235	107	483	72	381	97	550	173	186	59	418	2439
Grand Total	229	1328	521	2078	272	523	246	1041	120	769	166	1055	377	477	106	960	5134
Apprch %	11	63.9	25.1		26.1	50.2	23.6		11.4	72.9	15.7		39.3	49.7	11		
Total %	4.5	25.9	10.1	40.5	5.3	10.2	4.8	20.3	2.3	15	3.2	20.5	7.3	9.3	2.1	18.7	

	SR-86 Southbound				Aten Road Westbound				SR-86 Northbound				Aten Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	29	196	96	321	43	81	36	160	9	110	26	145	**64**	77	15	156	782
07:45 AM	**55**	**245**	**114**	**414**	40	**104**	**44**	**188**	19	**125**	23	**167**	53	**110**	8	**171**	**940**
08:00 AM	37	179	70	286	**48**	76	33	157	16	102	26	144	64	59	**19**	142	729
08:15 AM	24	157	71	252	29	50	33	112	**21**	86	**29**	136	45	36	8	89	589
Total Volume	145	777	351	1273	160	311	146	617	65	423	104	592	226	282	50	558	3040
% App. Total	11.4	61	27.6		25.9	50.4	23.7		11	71.5	17.6		40.5	50.5	9		
PHF	.659	.793	.770	.769	.833	.748	.830	.820	.774	.846	.897	.886	.883	.641	.658	.816	.809

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County of Imperial
N/S: SR-86
E/W: Aten Road
Weather: Clear

File Name : 20_CIM_SR86_Aten AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:30 AM				07:15 AM			
+0 mins.	29	196	96	321	24	70	29	123	9	110	26	145	49	72	11	132
+15 mins.	**55**	**245**	**114**	**414**	43	81	36	160	19	**125**	23	**167**	**64**	77	15	156
+30 mins.	37	179	70	286	40	**104**	**44**	**188**	16	102	26	144	53	**110**	8	**171**
+45 mins.	24	157	71	252	**48**	76	33	157	**21**	86	**29**	136	64	59	**19**	142
Total Volume	145	777	351	1273	155	331	142	628	65	423	104	592	230	318	53	601
% App. Total	11.4	61	27.6		24.7	52.7	22.6		11	71.5	17.6		38.3	52.9	8.8	
PHF	.659	.793	.770	.769	.807	.796	.807	.835	.774	.846	.897	.886	.898	.723	.697	.879

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County of Imperial
N/S: SR-86
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File Name : 20_CIM_SR86_Aten PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

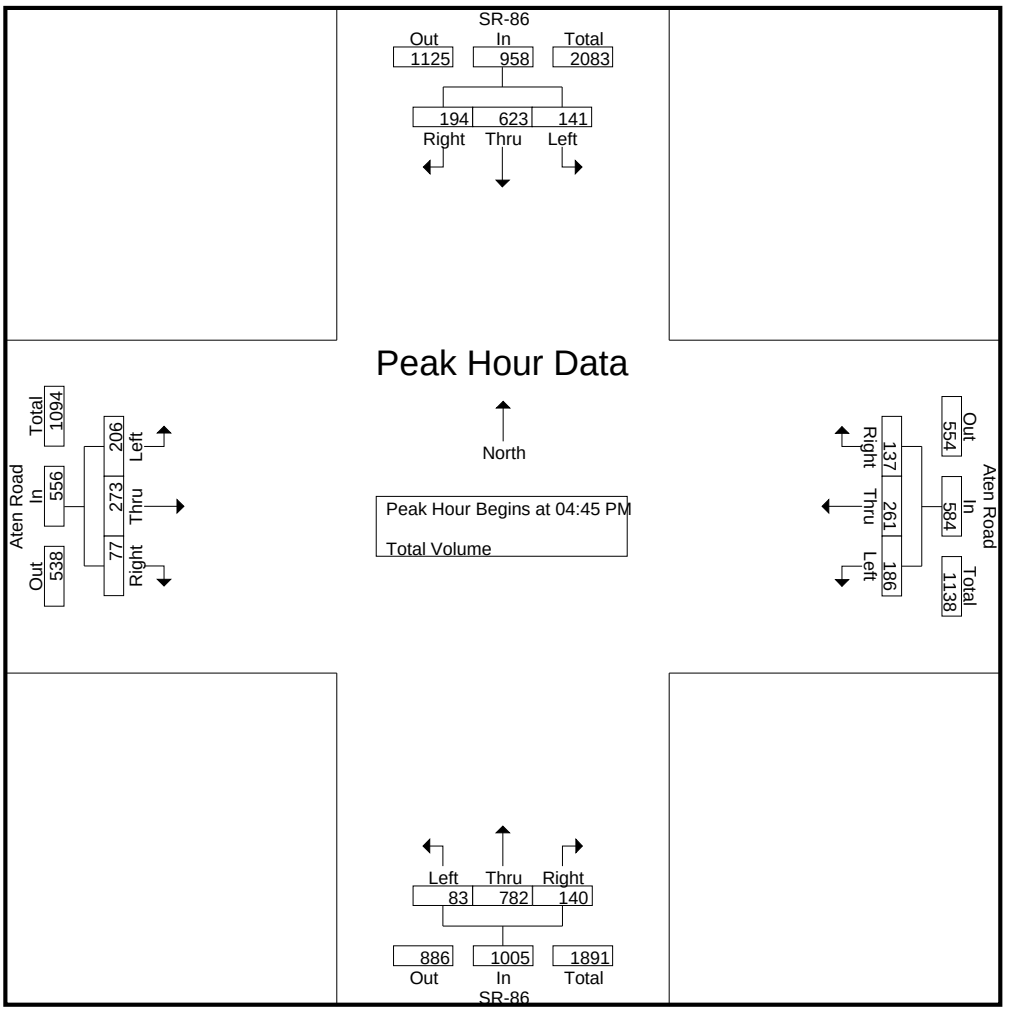
	SR-86 Southbound				Aten Road Westbound				SR-86 Northbound				Aten Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	43	178	71	292	49	77	40	166	24	191	40	255	50	59	27	136	849
04:15 PM	29	156	54	239	41	54	22	117	24	186	32	242	52	64	17	133	731
04:30 PM	24	164	51	239	39	67	28	134	22	177	23	222	36	57	17	110	705
04:45 PM	26	166	47	239	48	68	30	146	18	184	40	242	47	62	17	126	753
Total	122	664	223	1009	177	266	120	563	88	738	135	961	185	242	78	505	3038
05:00 PM	32	141	40	213	48	63	26	137	21	237	39	297	50	77	23	150	797
05:15 PM	49	165	49	263	47	67	51	165	22	200	29	251	58	76	21	155	834
05:30 PM	34	151	58	243	43	63	30	136	22	161	32	215	51	58	16	125	719
05:45 PM	24	186	41	251	45	54	34	133	19	166	26	211	38	45	15	98	693
Total	139	643	188	970	183	247	141	571	84	764	126	974	197	256	75	528	3043
Grand Total	261	1307	411	1979	360	513	261	1134	172	1502	261	1935	382	498	153	1033	6081
Apprch %	13.2	66	20.8		31.7	45.2	23		8.9	77.6	13.5		37	48.2	14.8		
Total %	4.3	21.5	6.8	32.5	5.9	8.4	4.3	18.6	2.8	24.7	4.3	31.8	6.3	8.2	2.5	17	

	SR-86 Southbound				Aten Road Westbound				SR-86 Northbound				Aten Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	26	**166**	47	239	**48**	**68**	30	146	18	184	**40**	242	47	62	17	126	753
05:00 PM	32	141	40	213	48	63	26	137	21	**237**	39	**297**	50	**77**	**23**	150	797
05:15 PM	**49**	165	49	**263**	47	67	**51**	**165**	**22**	200	29	251	**58**	76	21	**155**	**834**
05:30 PM	34	151	**58**	243	43	63	30	136	22	161	32	215	51	58	16	125	719
Total Volume	141	623	194	958	186	261	137	584	83	782	140	1005	206	273	77	556	3103
% App. Total	14.7	65	20.3		31.8	44.7	23.5		8.3	77.8	13.9		37.1	49.1	13.8		
PHF	.719	.938	.836	.911	.969	.960	.672	.885	.943	.825	.875	.846	.888	.886	.837	.897	.930

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County of Imperial
N/S: SR-86
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File Name : 20_CIM_SR86_Aten PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:45 PM				04:30 PM				04:45 PM			
+0 mins.	**43**	**178**	**71**	**292**	**48**	**68**	30	146	**22**	177	23	222	47	62	17	126
+15 mins.	29	156	54	239	48	63	26	137	18	184	**40**	242	50	**77**	**23**	150
+30 mins.	24	164	51	239	47	67	**51**	**165**	21	**237**	39	**297**	**58**	76	21	**155**
+45 mins.	26	166	47	239	43	63	30	136	22	200	29	251	51	58	16	125
Total Volume	122	664	223	1009	186	261	137	584	83	798	131	1012	206	273	77	556
% App. Total	12.1	65.8	22.1		31.8	44.7	23.5		8.2	78.9	12.9		37.1	49.1	13.8	
PHF	.709	.933	.785	.864	.969	.960	.672	.885	.943	.842	.819	.852	.888	.886	.837	.897

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County of Imperial
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Site Code : 12525114
Start Date : 2/6/2025
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Groups Printed- Total Volume

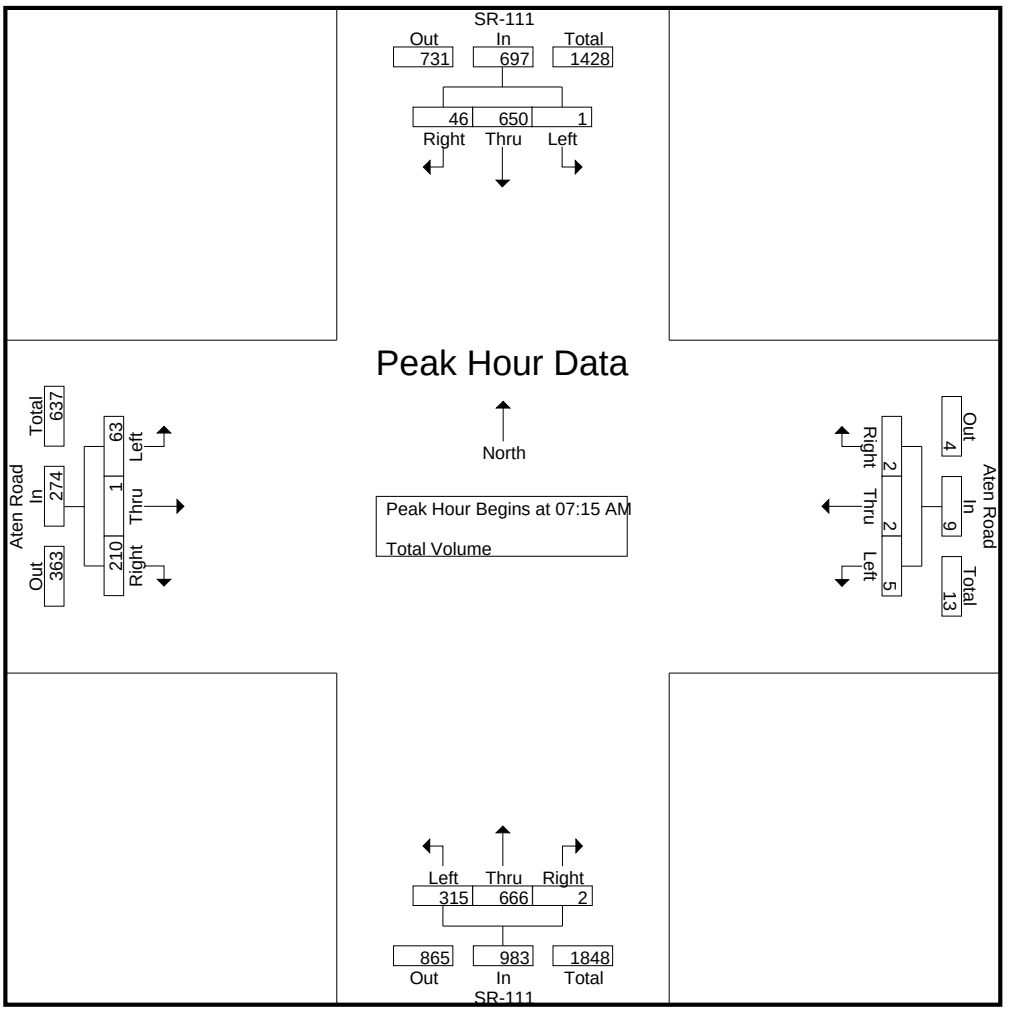
	SR-111 Southbound				Aten Road Westbound				SR-111 Northbound				Aten Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	93	6	99	0	0	0	0	58	122	0	180	11	1	32	44	323
07:15 AM	0	131	10	141	1	1	1	3	53	213	0	266	12	0	37	49	459
07:30 AM	0	189	12	201	2	0	0	2	70	185	0	255	24	1	77	102	560
07:45 AM	0	179	15	194	1	1	0	2	115	142	1	258	15	0	48	63	517
Total	0	592	43	635	4	2	1	7	296	662	1	959	62	2	194	258	1859
08:00 AM	1	151	9	161	1	0	1	2	77	126	1	204	12	0	48	60	427
08:15 AM	0	132	13	145	0	1	0	1	55	105	1	161	6	0	28	34	341
08:30 AM	0	168	14	182	1	0	0	1	48	101	2	151	10	2	38	50	384
08:45 AM	0	142	13	155	2	0	1	3	81	118	0	199	7	1	31	39	396
Total	1	593	49	643	4	1	2	7	261	450	4	715	35	3	145	183	1548
Grand Total	1	1185	92	1278	8	3	3	14	557	1112	5	1674	97	5	339	441	3407
Apprch %	0.1	92.7	7.2		57.1	21.4	21.4		33.3	66.4	0.3		22	1.1	76.9		
Total %	0	34.8	2.7	37.5	0.2	0.1	0.1	0.4	16.3	32.6	0.1	49.1	2.8	0.1	10	12.9	

	SR-111 Southbound				Aten Road Westbound				SR-111 Northbound				Aten Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	131	10	141	1	**1**	**1**	**3**	53	**213**	0	**266**	12	0	37	49	459
07:30 AM	0	**189**	12	**201**	**2**	0	0	2	70	185	0	255	**24**	**1**	**77**	**102**	**560**
07:45 AM	0	179	**15**	194	1	1	0	2	**115**	142	**1**	258	15	0	48	63	517
08:00 AM	**1**	151	9	161	1	0	1	2	77	126	1	204	12	0	48	60	427
Total Volume	1	650	46	697	5	2	2	9	315	666	2	983	63	1	210	274	1963
% App. Total	0.1	93.3	6.6		55.6	22.2	22.2		32	67.8	0.2		23	0.4	76.6		
PHF	.250	.860	.767	.867	.625	.500	.500	.750	.685	.782	.500	.924	.656	.250	.682	.672	.876

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County of Imperial
N/S: SR-111
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File Name : 21_CIM_SR111_Aten AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	**189**	12	**201**	1	**1**	**1**	**3**	53	**213**	0	**266**	12	0	37	49
+15 mins.	0	179	**15**	194	**2**	0	0	2	70	185	0	255	**24**	**1**	**77**	**102**
+30 mins.	**1**	151	9	161	1	1	0	2	**115**	142	**1**	258	15	0	48	63
+45 mins.	0	132	13	145	1	0	1	2	77	126	1	204	12	0	48	60
Total Volume	1	651	49	701	5	2	2	9	315	666	2	983	63	1	210	274
% App. Total	0.1	92.9	7		55.6	22.2	22.2		32	67.8	0.2		23	0.4	76.6	
PHF	.250	.861	.817	.872	.625	.500	.500	.750	.685	.782	.500	.924	.656	.250	.682	.672

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Site Code : 12525114
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Groups Printed- Total Volume

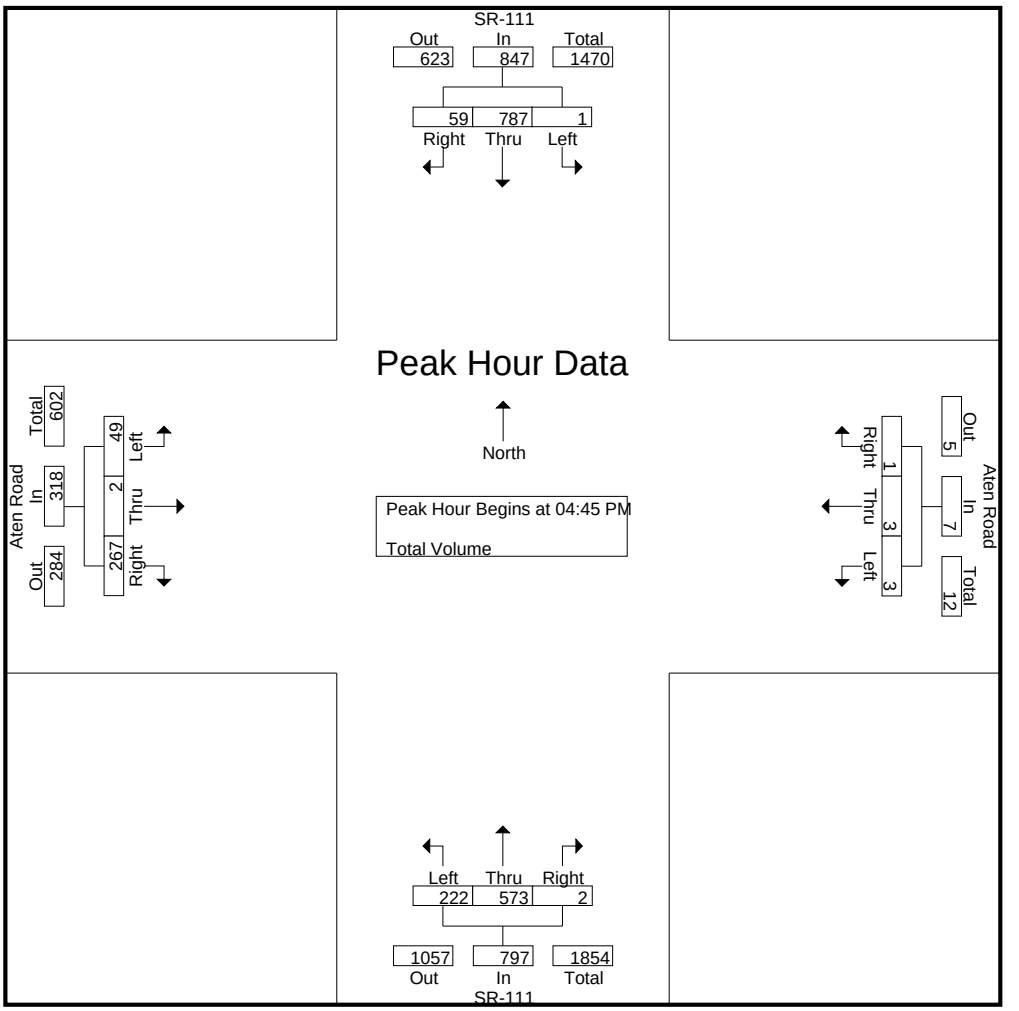
	SR-111 Southbound				Aten Road Westbound				SR-111 Northbound				Aten Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	222	23	245	1	0	0	1	43	128	1	172	16	0	53	69	487
04:15 PM	0	190	18	208	0	1	0	1	54	124	1	179	16	0	65	81	469
04:30 PM	1	176	13	190	1	1	0	2	58	127	2	187	11	3	69	83	462
04:45 PM	0	197	14	211	1	0	0	1	48	130	1	179	11	2	43	56	447
Total	1	785	68	854	3	2	0	5	203	509	5	717	54	5	230	289	1865
05:00 PM	0	169	20	189	1	1	0	2	50	145	0	195	14	0	90	104	490
05:15 PM	0	230	15	245	1	1	0	2	60	151	1	212	19	0	70	89	548
05:30 PM	1	191	10	202	0	1	1	2	64	147	0	211	5	0	64	69	484
05:45 PM	1	138	13	152	0	0	1	1	28	127	0	155	7	0	57	64	372
Total	2	728	58	788	2	3	2	7	202	570	1	773	45	0	281	326	1894
Grand Total	3	1513	126	1642	5	5	2	12	405	1079	6	1490	99	5	511	615	3759
Apprch %	0.2	92.1	7.7		41.7	41.7	16.7		27.2	72.4	0.4		16.1	0.8	83.1		
Total %	0.1	40.3	3.4	43.7	0.1	0.1	0.1	0.3	10.8	28.7	0.2	39.6	2.6	0.1	13.6	16.4	

	SR-111 Southbound				Aten Road Westbound				SR-111 Northbound				Aten Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	197	14	211	**1**	0	0	1	48	130	**1**	179	11	**2**	43	56	447
05:00 PM	0	169	**20**	189	1	**1**	0	**2**	50	145	0	195	14	0	**90**	**104**	490
05:15 PM	0	**230**	15	**245**	1	1	0	2	60	**151**	1	**212**	**19**	0	70	89	**548**
05:30 PM	**1**	191	10	202	0	1	**1**	2	**64**	147	0	211	5	0	64	69	484
Total Volume	1	787	59	847	3	3	1	7	222	573	2	797	49	2	267	318	1969
% App. Total	0.1	92.9	7		42.9	42.9	14.3		27.9	71.9	0.3		15.4	0.6	84		
PHF	.250	.855	.738	.864	.750	.750	.250	.875	.867	.949	.500	.940	.645	.250	.742	.764	.898

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County of Imperial
N/S: SR-111
E/W: Aten Road
Weather: Clear

File Name : 21_CIM_SR111_Aten PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:45 PM				04:30 PM			
+0 mins.	0	**222**	**23**	**245**	**1**	**1**	0	**2**	48	130	**1**	179	11	**3**	69	83
+15 mins.	0	190	18	208	1	0	0	1	50	145	0	195	11	2	43	56
+30 mins.	**1**	176	13	190	1	1	0	2	60	**151**	1	**212**	14	0	**90**	**104**
+45 mins.	0	197	14	211	1	1	0	2	**64**	147	0	211	**19**	0	70	89
Total Volume	1	785	68	854	4	3	0	7	222	573	2	797	55	5	272	332
% App. Total	0.1	91.9	8		57.1	42.9	0		27.9	71.9	0.3		16.6	1.5	81.9	
PHF	.250	.884	.739	.871	1.000	.750	.000	.875	.867	.949	.500	.940	.724	.417	.756	.798

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County of Imperial
N/S: Imperial Avenue (SR-86)
E/W: Adams Avenue
Weather: Clear

File Name : 22_CIM_SR86_Adams AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

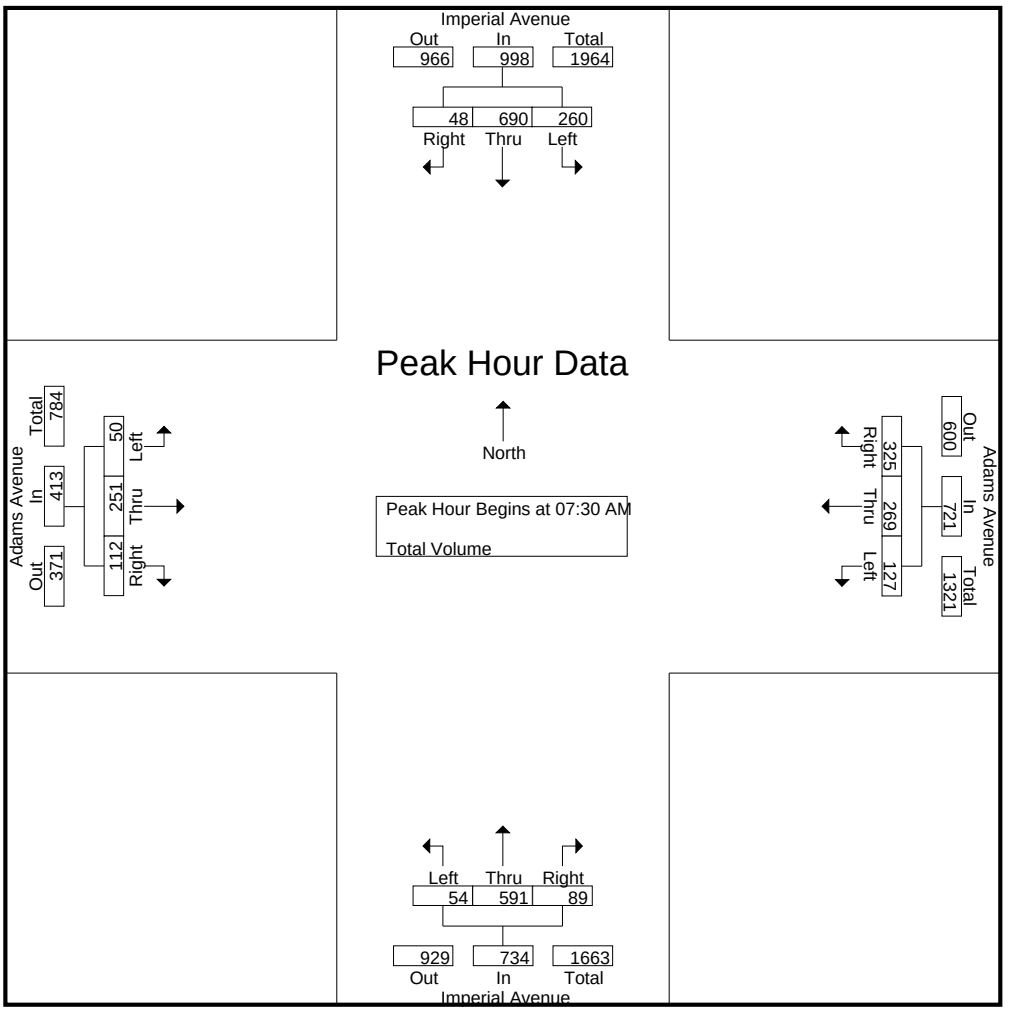
	Imperial Avenue Southbound				Adams Avenue Westbound				Imperial Avenue Northbound				Adams Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	27	74	5	106	12	32	30	74	8	81	8	97	6	41	9	56	333
07:15 AM	32	134	9	175	16	55	52	123	11	96	11	118	6	44	24	74	490
07:30 AM	59	207	15	281	38	79	61	178	14	115	23	152	11	54	33	98	709
07:45 AM	87	176	13	276	43	97	85	225	16	183	27	226	11	90	40	141	868
Total	205	591	42	838	109	263	228	600	49	475	69	593	34	229	106	369	2400
08:00 AM	64	143	10	217	18	49	86	153	16	188	23	227	15	65	19	99	696
08:15 AM	50	164	10	224	28	44	93	165	8	105	16	129	13	42	20	75	593
08:30 AM	74	146	9	229	20	27	66	113	11	150	19	180	16	27	15	58	580
08:45 AM	62	137	8	207	15	36	83	134	12	125	15	152	3	36	18	57	550
Total	250	590	37	877	81	156	328	565	47	568	73	688	47	170	72	289	2419
Grand Total	455	1181	79	1715	190	419	556	1165	96	1043	142	1281	81	399	178	658	4819
Apprch %	26.5	68.9	4.6		16.3	36	47.7		7.5	81.4	11.1		12.3	60.6	27.1		
Total %	9.4	24.5	1.6	35.6	3.9	8.7	11.5	24.2	2	21.6	2.9	26.6	1.7	8.3	3.7	13.7	

	Imperial Avenue Southbound				Adams Avenue Westbound				Imperial Avenue Northbound				Adams Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	59	**207**	**15**	**281**	38	79	61	178	14	115	23	152	11	54	33	98	709
07:45 AM	**87**	176	13	276	**43**	**97**	85	**225**	**16**	183	**27**	226	11	**90**	**40**	**141**	**868**
08:00 AM	64	143	10	217	18	49	86	153	16	**188**	23	**227**	**15**	65	19	99	696
08:15 AM	50	164	10	224	28	44	**93**	165	8	105	16	129	13	42	20	75	593
Total Volume	260	690	48	998	127	269	325	721	54	591	89	734	50	251	112	413	2866
% App. Total	26.1	69.1	4.8		17.6	37.3	45.1		7.4	80.5	12.1		12.1	60.8	27.1		
PHF	.747	.833	.800	.888	.738	.693	.874	.801	.844	.786	.824	.808	.833	.697	.700	.732	.825

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County of Imperial
N/S: Imperial Avenue (SR-86)
E/W: Adams Avenue
Weather: Clear

File Name : 22_CIM_SR86_Adams AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:45 AM				07:30 AM			
+0 mins.	59	**207**	**15**	**281**	38	79	61	178	**16**	183	**27**	226	11	54	33	98
+15 mins.	**87**	176	13	276	**43**	**97**	85	**225**	16	**188**	23	**227**	11	**90**	**40**	**141**
+30 mins.	64	143	10	217	18	49	86	153	8	105	16	129	**15**	65	19	99
+45 mins.	50	164	10	224	28	44	**93**	165	11	150	19	180	13	42	20	75
Total Volume	260	690	48	998	127	269	325	721	51	626	85	762	50	251	112	413
% App. Total	26.1	69.1	4.8		17.6	37.3	45.1		6.7	82.2	11.2		12.1	60.8	27.1	
PHF	.747	.833	.800	.888	.738	.693	.874	.801	.797	.832	.787	.839	.833	.697	.700	.732

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County of Imperial
N/S: Imperial Avenue (SR-86)
E/W: Adams Avenue
Weather: Clear

File Name : 22_CIM_SR86_Adams PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

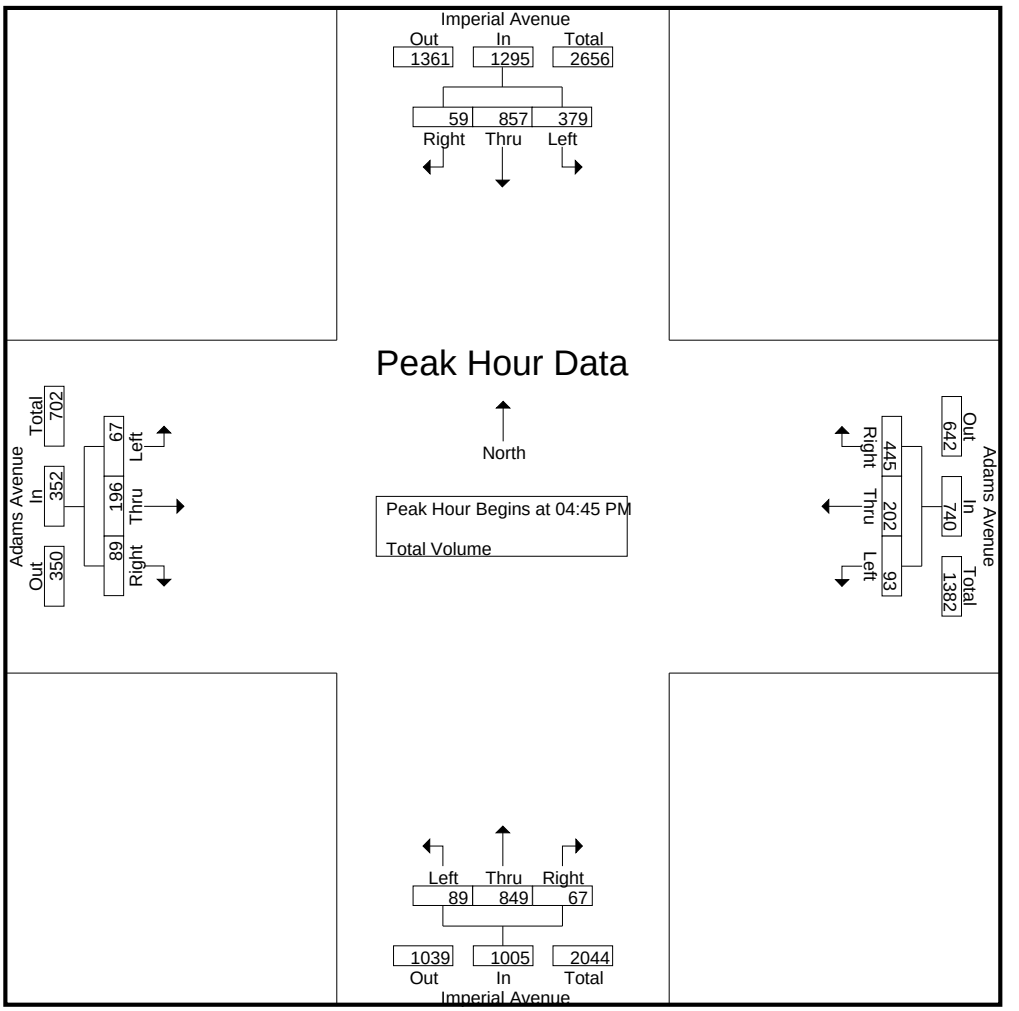
	Imperial Avenue Southbound				Adams Avenue Westbound				Imperial Avenue Northbound				Adams Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	91	222	11	324	19	49	105	173	20	209	22	251	17	34	23	74	822
04:15 PM	83	219	11	313	27	49	116	192	19	205	18	242	17	61	23	101	848
04:30 PM	83	213	12	308	28	49	103	180	16	188	20	224	23	53	13	89	801
04:45 PM	97	214	22	333	17	41	83	141	19	202	19	240	21	55	21	97	811
Total	354	868	56	1278	91	188	407	686	74	804	79	957	78	203	80	361	3282
05:00 PM	102	203	9	314	25	53	122	200	25	212	11	248	22	40	20	82	844
05:15 PM	105	227	15	347	28	44	128	200	17	222	17	256	8	42	20	70	873
05:30 PM	75	213	13	301	23	64	112	199	28	213	20	261	16	59	28	103	864
05:45 PM	80	178	11	269	32	46	97	175	25	194	14	233	20	44	27	91	768
Total	362	821	48	1231	108	207	459	774	95	841	62	998	66	185	95	346	3349
Grand Total	716	1689	104	2509	199	395	866	1460	169	1645	141	1955	144	388	175	707	6631
Apprch %	28.5	67.3	4.1		13.6	27.1	59.3		8.6	84.1	7.2		20.4	54.9	24.8		
Total %	10.8	25.5	1.6	37.8	3	6	13.1	22	2.5	24.8	2.1	29.5	2.2	5.9	2.6	10.7	

	Imperial Avenue Southbound				Adams Avenue Westbound				Imperial Avenue Northbound				Adams Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	97	214	**22**	333	17	41	83	141	19	202	19	240	21	55	21	97	811
05:00 PM	102	203	9	314	25	53	122	**200**	25	212	11	248	**22**	40	20	82	844
05:15 PM	**105**	**227**	15	**347**	**28**	44	**128**	200	17	**222**	17	256	8	42	20	70	**873**
05:30 PM	75	213	13	301	23	**64**	112	199	**28**	213	**20**	**261**	16	**59**	**28**	**103**	864
Total Volume	379	857	59	1295	93	202	445	740	89	849	67	1005	67	196	89	352	3392
% App. Total	29.3	66.2	4.6		12.6	27.3	60.1		8.9	84.5	6.7		19	55.7	25.3		
PHF	.902	.944	.670	.933	.830	.789	.869	.925	.795	.956	.838	.963	.761	.831	.795	.854	.971

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County of Imperial
N/S: Imperial Avenue (SR-86)
E/W: Adams Avenue
Weather: Clear

File Name : 22_CIM_SR86_Adams PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				05:00 PM				04:45 PM				04:15 PM			
+0 mins.	83	213	12	308	25	53	122	**200**	19	202	19	240	17	**61**	**23**	**101**
+15 mins.	97	214	**22**	333	28	44	**128**	200	25	212	11	248	**23**	53	13	89
+30 mins.	102	203	9	314	23	**64**	112	199	17	**222**	17	256	21	55	21	97
+45 mins.	**105**	**227**	15	**347**	**32**	46	97	175	**28**	213	**20**	**261**	22	40	20	82
Total Volume	387	857	58	1302	108	207	459	774	89	849	67	1005	83	209	77	369
% App. Total	29.7	65.8	4.5		14	26.7	59.3		8.9	84.5	6.7		22.5	56.6	20.9	
PHF	.921	.944	.659	.938	.844	.809	.896	.968	.795	.956	.838	.963	.902	.857	.837	.913

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County of Imperial
N/S: SR-111
E/W: Evan Hewes Highway
Weather: Clear

File Name : 23_CIM_SR111_EH Hwy AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

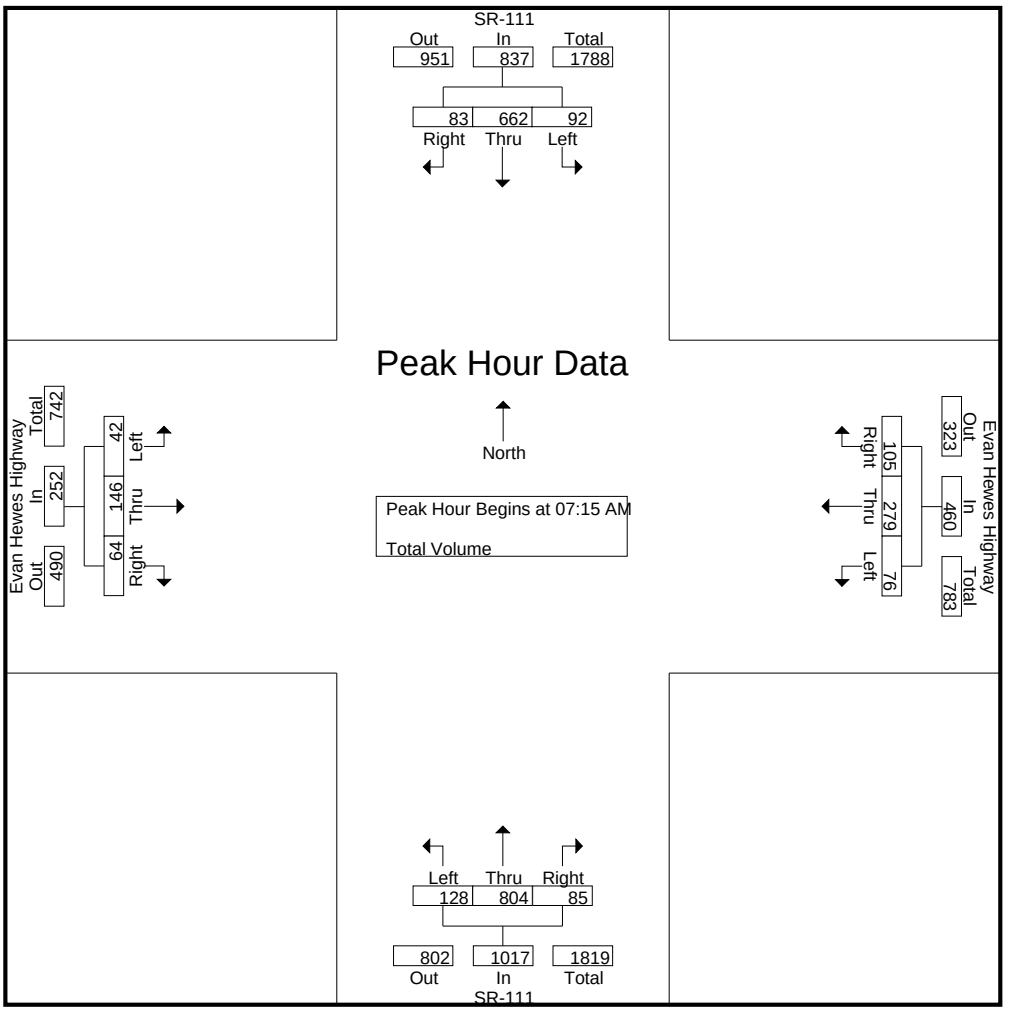
	SR-111 Southbound				Evan Hewes Highway Westbound				SR-111 Northbound				Evan Hewes Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	16	95	7	118	17	31	17	65	22	197	14	233	9	22	6	37	453
07:15 AM	21	116	19	156	15	69	22	106	28	201	17	246	13	29	9	51	559
07:30 AM	27	194	27	248	19	56	35	110	37	242	19	298	7	28	18	53	709
07:45 AM	25	188	26	239	30	93	25	148	34	196	23	253	12	55	22	89	729
Total	89	593	79	761	81	249	99	429	121	836	73	1030	41	134	55	230	2450
08:00 AM	19	164	11	194	12	61	23	96	29	165	26	220	10	34	15	59	569
08:15 AM	9	121	13	143	12	68	15	95	36	116	17	169	12	30	17	59	466
08:30 AM	14	191	9	214	16	41	21	78	28	143	13	184	4	26	10	40	516
08:45 AM	8	146	9	163	13	41	22	76	32	162	16	210	8	31	12	51	500
Total	50	622	42	714	53	211	81	345	125	586	72	783	34	121	54	209	2051
Grand Total	139	1215	121	1475	134	460	180	774	246	1422	145	1813	75	255	109	439	4501
Apprch %	9.4	82.4	8.2		17.3	59.4	23.3		13.6	78.4	8		17.1	58.1	24.8		
Total %	3.1	27	2.7	32.8	3	10.2	4	17.2	5.5	31.6	3.2	40.3	1.7	5.7	2.4	9.8	

	SR-111 Southbound				Evan Hewes Highway Westbound				SR-111 Northbound				Evan Hewes Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	21	116	19	156	15	69	22	106	28	201	17	246	**13**	29	9	51	559
07:30 AM	**27**	**194**	**27**	**248**	19	56	**35**	110	**37**	**242**	19	**298**	7	28	18	53	709
07:45 AM	25	188	26	239	**30**	**93**	25	**148**	34	196	23	253	12	**55**	**22**	**89**	**729**
08:00 AM	19	164	11	194	12	61	23	96	29	165	**26**	220	10	34	15	59	569
Total Volume	92	662	83	837	76	279	105	460	128	804	85	1017	42	146	64	252	2566
% App. Total	11	79.1	9.9		16.5	60.7	22.8		12.6	79.1	8.4		16.7	57.9	25.4		
PHF	.852	.853	.769	.844	.633	.750	.750	.777	.865	.831	.817	.853	.808	.664	.727	.708	.880

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County of Imperial
N/S: SR-111
E/W: Evan Hewes Highway
Weather: Clear

File Name : 23_CIM_SR111_EH Hwy AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:30 AM			
+0 mins.	21	116	19	156	15	69	22	106	22	197	14	233	7	28	18	53
+15 mins.	**27**	**194**	**27**	**248**	19	56	**35**	110	28	201	17	246	**12**	**55**	**22**	**89**
+30 mins.	25	188	26	239	**30**	**93**	25	**148**	**37**	**242**	19	**298**	10	34	15	59
+45 mins.	19	164	11	194	12	61	23	96	34	196	**23**	253	12	30	17	59
Total Volume	92	662	83	837	76	279	105	460	121	836	73	1030	41	147	72	260
% App. Total	11	79.1	9.9		16.5	60.7	22.8		11.7	81.2	7.1		15.8	56.5	27.7	
PHF	.852	.853	.769	.844	.633	.750	.750	.777	.818	.864	.793	.864	.854	.668	.818	.730

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County of Imperial
N/S: SR-111
E/W: Evan Hewes Highway
Weather: Clear

File Name : 23_CIM_SR111_EH Hwy PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

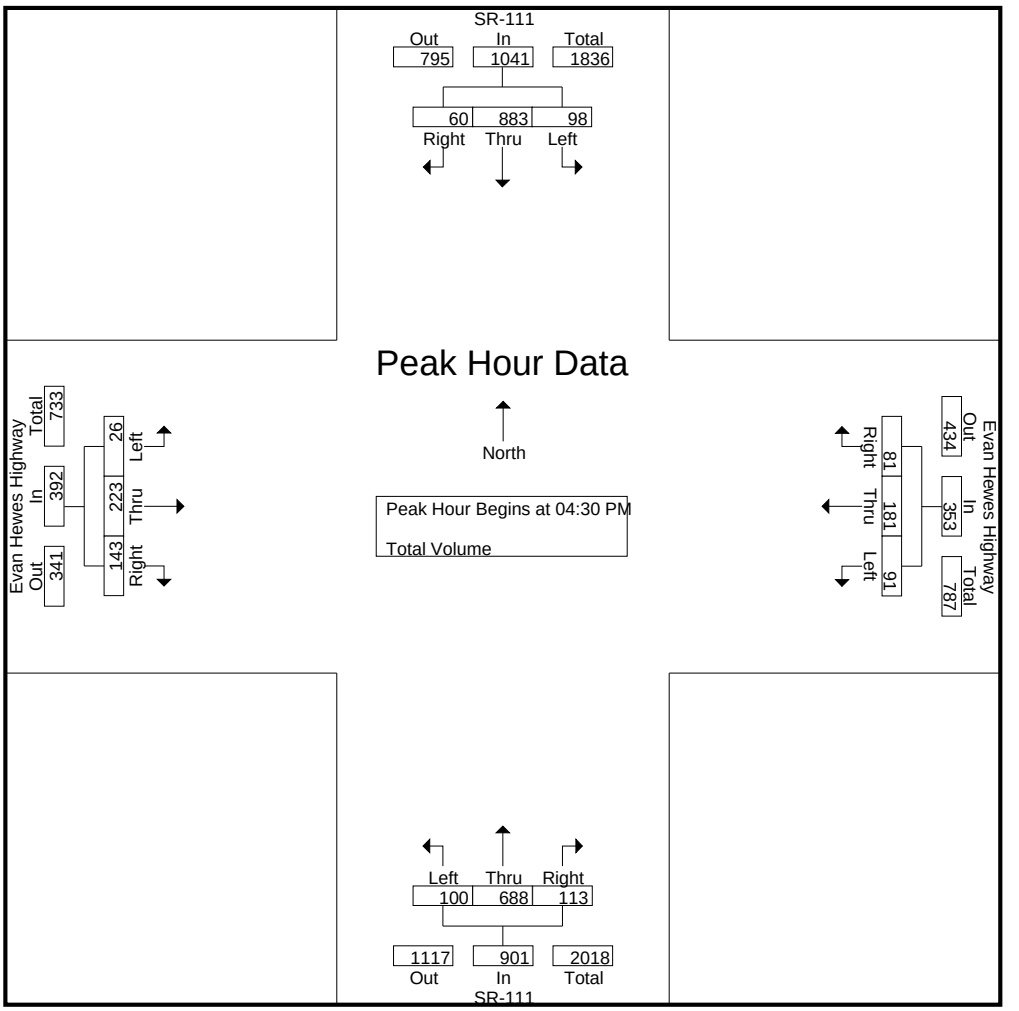
	SR-111 Southbound				Evan Hewes Highway Westbound				SR-111 Northbound				Evan Hewes Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	20	229	24	273	24	50	17	91	28	150	17	195	10	51	35	96	655
04:15 PM	24	216	14	254	15	44	10	69	35	157	28	220	14	55	32	101	644
04:30 PM	16	232	15	263	14	46	25	85	18	163	20	201	7	40	39	86	635
04:45 PM	19	203	13	235	27	51	21	99	31	156	36	223	3	49	25	77	634
Total	79	880	66	1025	80	191	73	344	112	626	101	839	34	195	131	360	2568
05:00 PM	25	190	18	233	21	46	19	86	29	158	27	214	8	78	45	131	664
05:15 PM	38	258	14	310	29	38	16	83	22	211	30	263	8	56	34	98	754
05:30 PM	26	208	10	244	29	36	15	80	18	160	25	203	10	45	27	82	609
05:45 PM	26	171	10	207	17	37	13	67	23	141	18	182	5	44	21	70	526
Total	115	827	52	994	96	157	63	316	92	670	100	862	31	223	127	381	2553
Grand Total	194	1707	118	2019	176	348	136	660	204	1296	201	1701	65	418	258	741	5121
Apprch %	9.6	84.5	5.8		26.7	52.7	20.6		12	76.2	11.8		8.8	56.4	34.8		
Total %	3.8	33.3	2.3	39.4	3.4	6.8	2.7	12.9	4	25.3	3.9	33.2	1.3	8.2	5	14.5	

	SR-111 Southbound				Evan Hewes Highway Westbound				SR-111 Northbound				Evan Hewes Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	16	232	15	263	14	46	**25**	85	18	163	20	201	7	40	39	86	635
04:45 PM	19	203	13	235	27	**51**	21	**99**	**31**	156	**36**	223	3	49	25	77	634
05:00 PM	25	190	**18**	233	21	46	19	86	29	158	27	214	**8**	**78**	**45**	**131**	664
05:15 PM	**38**	**258**	14	**310**	**29**	38	16	83	22	**211**	30	**263**	8	56	34	98	**754**
Total Volume	98	883	60	1041	91	181	81	353	100	688	113	901	26	223	143	392	2687
% App. Total	9.4	84.8	5.8		25.8	51.3	22.9		11.1	76.4	12.5		6.6	56.9	36.5		
PHF	.645	.856	.833	.840	.784	.887	.810	.891	.806	.815	.785	.856	.813	.715	.794	.748	.891

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County of Imperial
N/S: SR-111
E/W: Evan Hewes Highway
Weather: Clear

File Name : 23_CIM_SR111_EH Hwy PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:45 PM				04:15 PM			
+0 mins.	16	232	15	263	14	46	**25**	85	**31**	156	**36**	223	**14**	55	32	101
+15 mins.	19	203	13	235	27	**51**	21	**99**	29	158	27	214	7	40	39	86
+30 mins.	25	190	**18**	233	21	46	19	86	22	**211**	30	**263**	3	49	25	77
+45 mins.	**38**	**258**	14	**310**	**29**	38	16	83	18	160	25	203	8	**78**	**45**	**131**
Total Volume	98	883	60	1041	91	181	81	353	100	685	118	903	32	222	141	395
% App. Total	9.4	84.8	5.8		25.8	51.3	22.9		11.1	75.9	13.1		8.1	56.2	35.7	
PHF	.645	.856	.833	.840	.784	.887	.810	.891	.806	.812	.819	.858	.571	.712	.783	.754

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County of Imperial
N/S: Forrester Road
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 24_CIM_For_8W AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

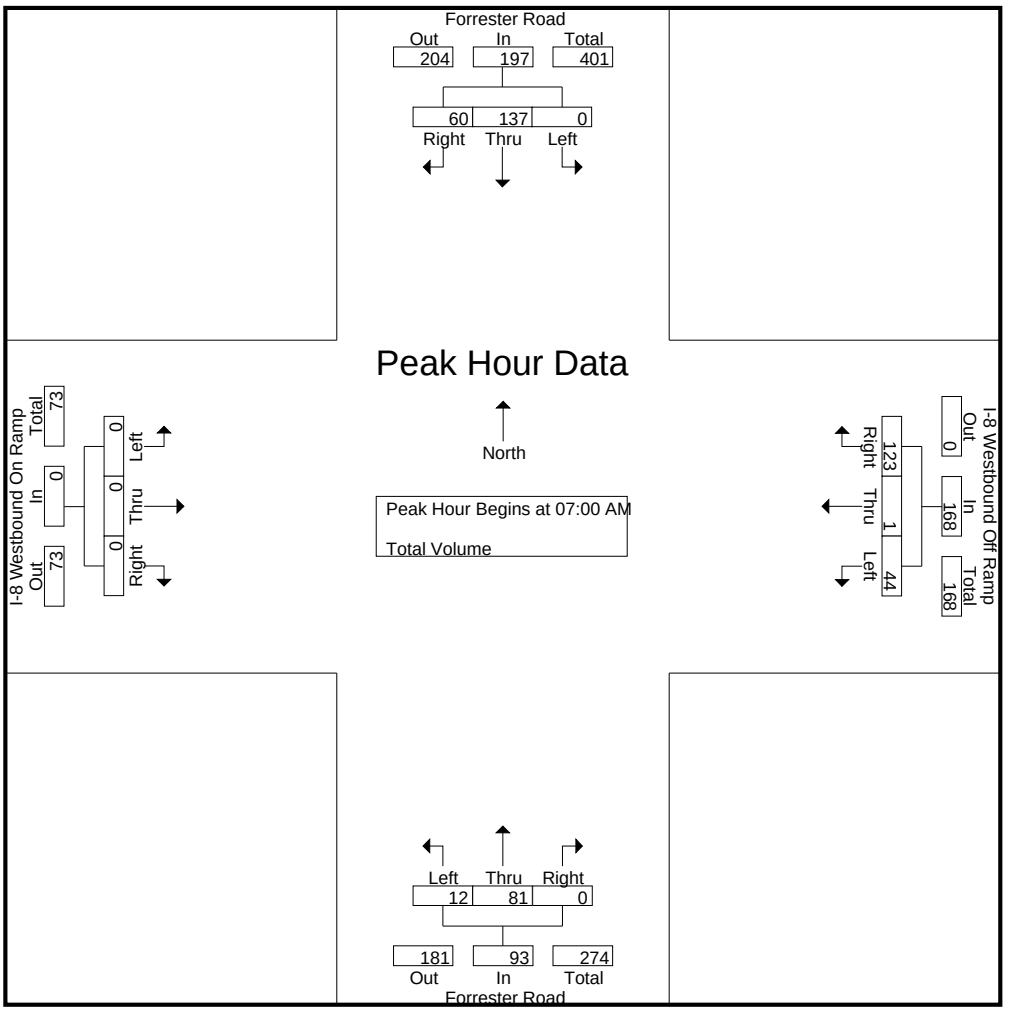
	Forrester Road Southbound				I-8 Westbound Off Ramp Westbound				Forrester Road Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	22	11	33	6	0	44	50	3	17	0	20	0	0	0	0	103
07:15 AM	0	22	15	37	2	1	27	30	1	24	0	25	0	0	0	0	92
07:30 AM	0	37	11	48	15	0	30	45	3	21	0	24	0	0	0	0	117
07:45 AM	0	56	23	79	21	0	22	43	5	19	0	24	0	0	0	0	146
Total	0	137	60	197	44	1	123	168	12	81	0	93	0	0	0	0	458
08:00 AM	0	19	24	43	6	0	24	30	3	23	0	26	0	0	0	0	99
08:15 AM	0	19	22	41	9	0	19	28	1	24	0	25	0	0	0	0	94
08:30 AM	0	22	19	41	2	0	17	19	4	22	0	26	0	0	0	0	86
08:45 AM	0	27	23	50	11	0	15	26	2	21	0	23	0	0	0	0	99
Total	0	87	88	175	28	0	75	103	10	90	0	100	0	0	0	0	378
Grand Total	0	224	148	372	72	1	198	271	22	171	0	193	0	0	0	0	836
Apprch %	0	60.2	39.8		26.6	0.4	73.1		11.4	88.6	0		0	0	0		
Total %	0	26.8	17.7	44.5	8.6	0.1	23.7	32.4	2.6	20.5	0	23.1	0	0	0	0	

	Forrester Road Southbound				I-8 Westbound Off Ramp Westbound				Forrester Road Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	22	11	33	6	0	**44**	**50**	3	17	0	20	0	0	0	0	103
07:15 AM	0	22	15	37	2	**1**	27	30	1	**24**	0	**25**	0	0	0	0	92
07:30 AM	0	37	11	48	15	0	30	45	3	21	0	24	0	0	0	0	117
07:45 AM	0	**56**	**23**	**79**	**21**	0	22	43	**5**	19	0	24	0	0	0	0	**146**
Total Volume	0	137	60	197	44	1	123	168	12	81	0	93	0	0	0	0	458
% App. Total	0	69.5	30.5		26.2	0.6	73.2		12.9	87.1	0		0	0	0		
PHF	.000	.612	.652	.623	.524	.250	.699	.840	.600	.844	.000	.930	.000	.000	.000	.000	.784

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County of Imperial
N/S: Forrester Road
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 24_CIM_For_8W AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:45 AM				07:00 AM			
+0 mins.	0	37	11	48	6	0	**44**	**50**	**5**	19	0	24	0	0	0	0
+15 mins.	0	**56**	23	**79**	2	**1**	27	30	3	23	0	**26**	0	0	0	0
+30 mins.	0	19	**24**	43	15	0	30	45	1	**24**	0	25	0	0	0	0
+45 mins.	0	19	22	41	**21**	0	22	43	4	22	0	26	0	0	0	0
Total Volume	0	131	80	211	44	1	123	168	13	88	0	101	0	0	0	0
% App. Total	0	62.1	37.9		26.2	0.6	73.2		12.9	87.1	0		0	0	0	
PHF	.000	.585	.833	.668	.524	.250	.699	.840	.650	.917	.000	.971	.000	.000	.000	.000

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County of Imperial
N/S: Forrester Road
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 24_CIM_For_8W PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

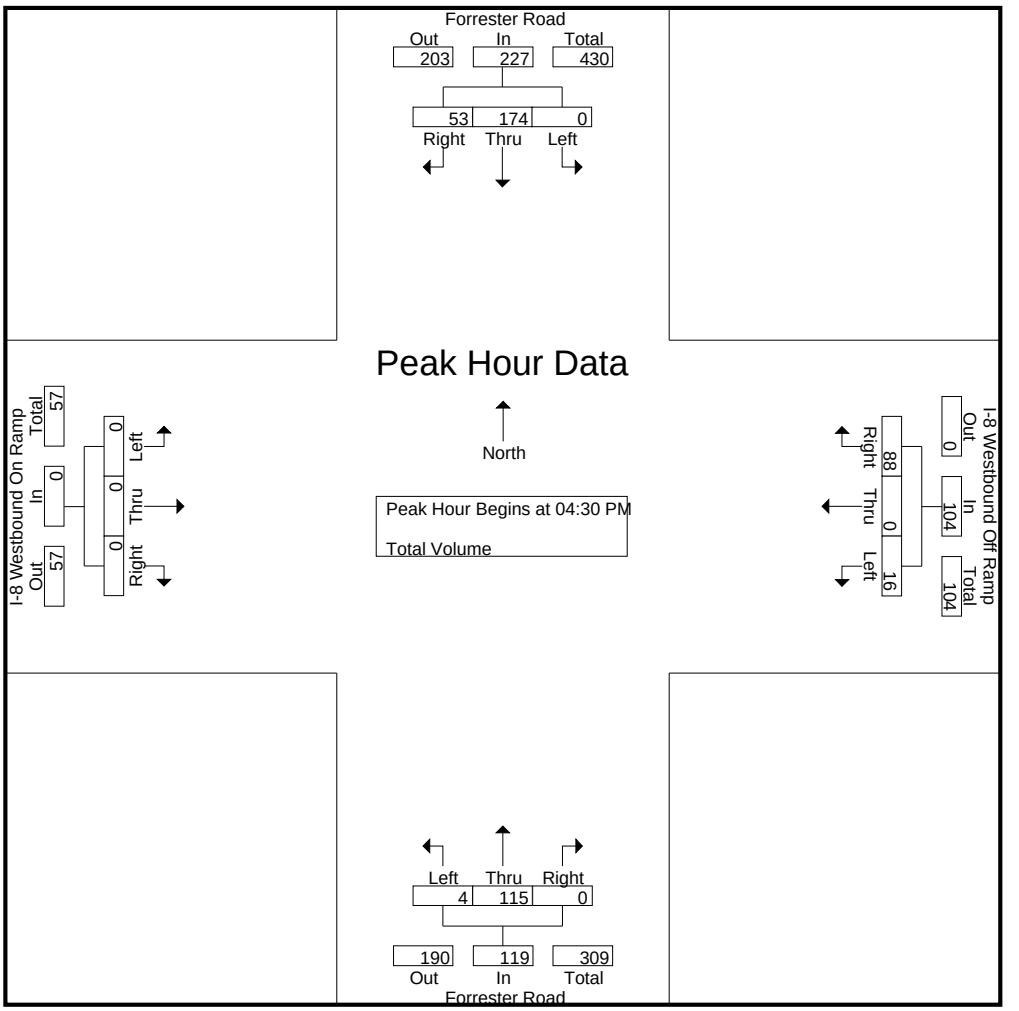
	Forrester Road Southbound				I-8 Westbound Off Ramp Westbound				Forrester Road Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	25	17	42	1	0	27	28	3	22	0	25	0	0	0	0	95
04:15 PM	0	39	21	60	5	0	20	25	0	24	0	24	0	0	0	0	109
04:30 PM	0	45	13	58	7	0	21	28	0	21	0	21	0	0	0	0	107
04:45 PM	0	41	10	51	1	0	19	20	1	32	0	33	0	0	0	0	104
Total	0	150	61	211	14	0	87	101	4	99	0	103	0	0	0	0	415
05:00 PM	0	49	14	63	3	0	23	26	2	26	0	28	0	0	0	0	117
05:15 PM	0	39	16	55	5	0	25	30	1	36	0	37	0	0	0	0	122
05:30 PM	0	28	17	45	4	0	23	27	0	17	0	17	0	0	0	0	89
05:45 PM	0	21	7	28	3	0	17	20	1	22	0	23	0	0	0	0	71
Total	0	137	54	191	15	0	88	103	4	101	0	105	0	0	0	0	399
Grand Total	0	287	115	402	29	0	175	204	8	200	0	208	0	0	0	0	814
Apprch %	0	71.4	28.6		14.2	0	85.8		3.8	96.2	0		0	0	0		
Total %	0	35.3	14.1	49.4	3.6	0	21.5	25.1	1	24.6	0	25.6	0	0	0	0	

	Forrester Road Southbound				I-8 Westbound Off Ramp Westbound				Forrester Road Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	45	13	58	**7**	0	21	28	0	21	0	21	0	0	0	0	107
04:45 PM	0	41	10	51	1	0	19	20	1	32	0	33	0	0	0	0	104
05:00 PM	0	**49**	14	**63**	3	0	23	26	**2**	26	0	28	0	0	0	0	117
05:15 PM	0	39	**16**	55	5	0	**25**	**30**	1	**36**	0	**37**	0	0	0	0	**122**
Total Volume	0	174	53	227	16	0	88	104	4	115	0	119	0	0	0	0	450
% App. Total	0	76.7	23.3		15.4	0	84.6		3.4	96.6	0		0	0	0		
PHF	.000	.888	.828	.901	.571	.000	.880	.867	.500	.799	.000	.804	.000	.000	.000	.000	.922

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County of Imperial
N/S: Forrester Road
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 24_CIM_For_8W PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:30 PM				04:30 PM				04:00 PM			
+0 mins.	0	39	**21**	60	**7**	0	21	28	0	21	0	21	0	0	0	0
+15 mins.	0	45	13	58	1	0	19	20	1	32	0	33	0	0	0	0
+30 mins.	0	41	10	51	3	0	23	26	**2**	26	0	28	0	0	0	0
+45 mins.	0	**49**	14	**63**	5	0	**25**	**30**	1	**36**	0	**37**	0	0	0	0
Total Volume	0	174	58	232	16	0	88	104	4	115	0	119	0	0	0	0
% App. Total	0	75	25		15.4	0	84.6		3.4	96.6	0		0	0	0	
PHF	.000	.888	.690	.921	.571	.000	.880	.867	.500	.799	.000	.804	.000	.000	.000	.000

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County of Imperial
N/S: Forrester Road
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 25_CIM_For_8E AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

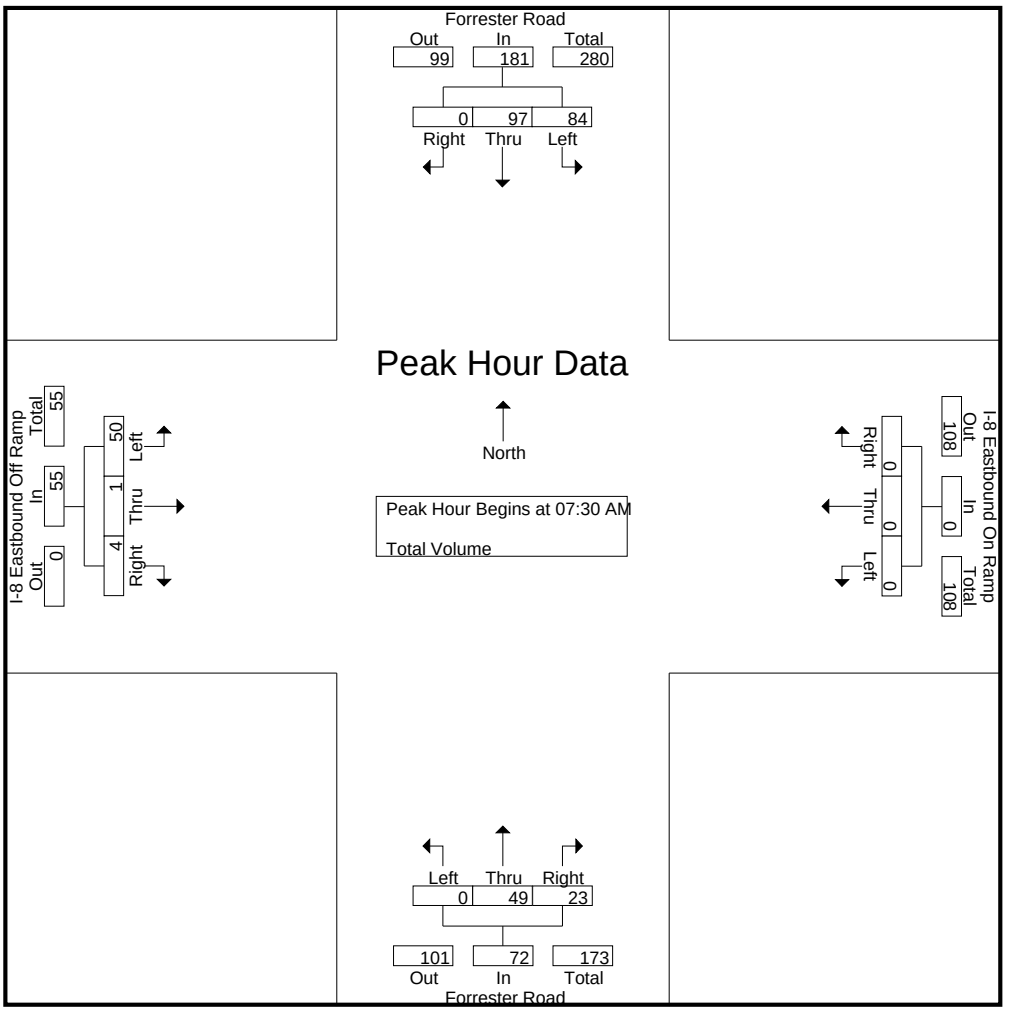
	Forrester Road Southbound				I-8 Eastbound On Ramp Westbound				Forrester Road Northbound				I-8 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	16	12	0	28	0	0	0	0	0	8	1	9	12	0	0	12	49
07:15 AM	14	10	0	24	0	0	0	0	0	11	1	12	14	0	4	18	54
07:30 AM	24	25	0	49	0	0	0	0	0	10	5	15	14	0	0	14	78
07:45 AM	35	43	0	78	0	0	0	0	0	11	4	15	13	1	3	17	110
Total	89	90	0	179	0	0	0	0	0	40	11	51	53	1	7	61	291
08:00 AM	11	15	0	26	0	0	0	0	0	16	12	28	10	0	0	10	64
08:15 AM	14	14	0	28	0	0	0	0	0	12	2	14	13	0	1	14	56
08:30 AM	15	9	0	24	0	0	0	0	0	14	4	18	14	1	1	16	58
08:45 AM	20	16	0	36	0	0	0	0	0	9	3	12	13	0	1	14	62
Total	60	54	0	114	0	0	0	0	0	51	21	72	50	1	3	54	240
Grand Total	149	144	0	293	0	0	0	0	0	91	32	123	103	2	10	115	531
Apprch %	50.9	49.1	0		0	0	0		0	74	26		89.6	1.7	8.7		
Total %	28.1	27.1	0	55.2	0	0	0	0	0	17.1	6	23.2	19.4	0.4	1.9	21.7	

	Forrester Road Southbound				I-8 Eastbound On Ramp Westbound				Forrester Road Northbound				I-8 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	24	25	0	49	0	0	0	0	0	10	5	15	**14**	0	0	14	78
07:45 AM	**35**	**43**	0	**78**	0	0	0	0	0	11	4	15	13	**1**	**3**	**17**	**110**
08:00 AM	11	15	0	26	0	0	0	0	0	**16**	**12**	**28**	10	0	0	10	64
08:15 AM	14	14	0	28	0	0	0	0	0	12	2	14	13	0	1	14	56
Total Volume	84	97	0	181	0	0	0	0	0	49	23	72	50	1	4	55	308
% App. Total	46.4	53.6	0		0	0	0		0	68.1	31.9		90.9	1.8	7.3		
PHF	.600	.564	.000	.580	.000	.000	.000	.000	.000	.766	.479	.643	.893	.250	.333	.809	.700

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County of Imperial
N/S: Forrester Road
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 25_CIM_For_8E AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:45 AM				07:00 AM			
+0 mins.	24	25	0	49	0	0	0	0	0	11	4	15	12	0	0	12
+15 mins.	**35**	**43**	0	**78**	0	0	0	0	0	**16**	**12**	**28**	**14**	0	**4**	**18**
+30 mins.	11	15	0	26	0	0	0	0	0	12	2	14	14	0	0	14
+45 mins.	14	14	0	28	0	0	0	0	0	14	4	18	13	**1**	3	17
Total Volume	84	97	0	181	0	0	0	0	0	53	22	75	53	1	7	61
% App. Total	46.4	53.6	0		0	0	0		0	70.7	29.3		86.9	1.6	11.5	
PHF	.600	.564	.000	.580	.000	.000	.000	.000	.000	.828	.458	.670	.946	.250	.438	.847

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County of Imperial
N/S: Forrester Road
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 25_CIM_For_8E PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

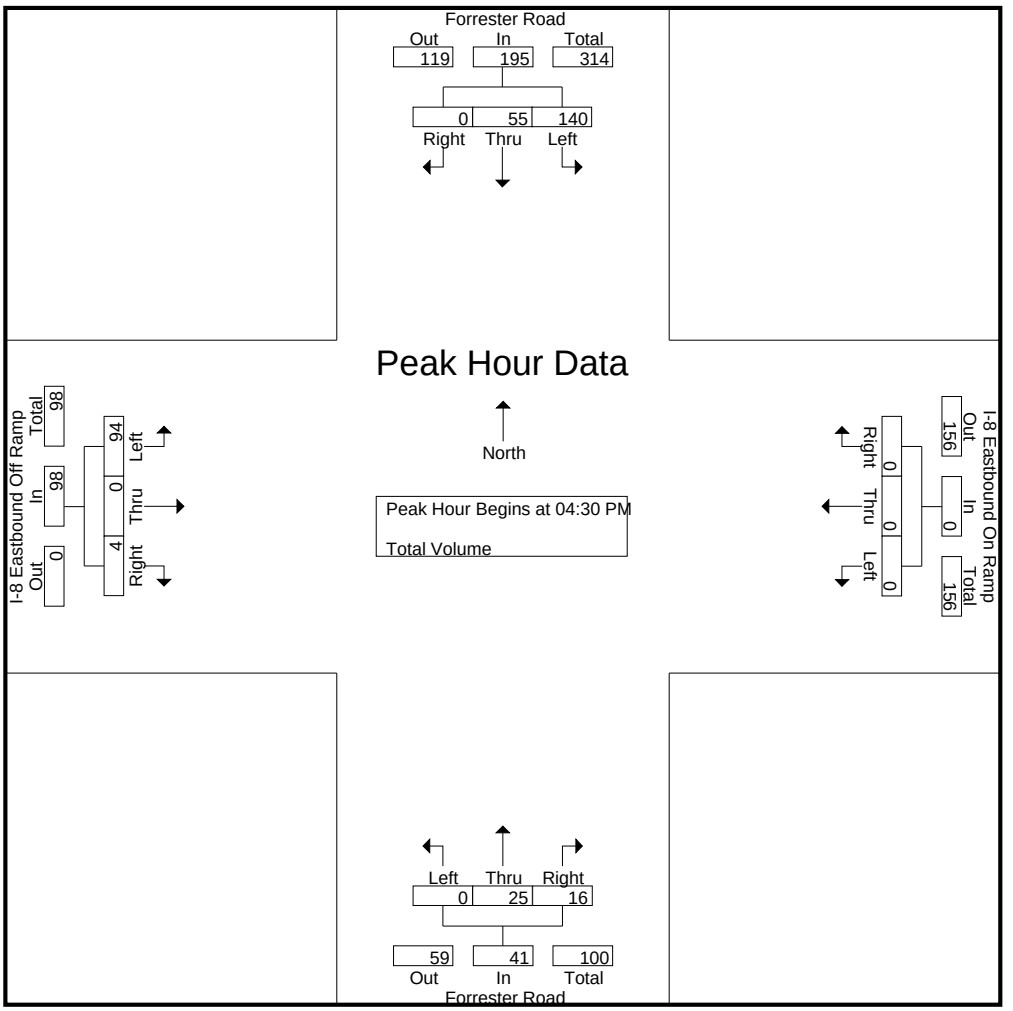
	Forrester Road Southbound				I-8 Eastbound On Ramp Westbound				Forrester Road Northbound				I-8 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	4	0	26	0	0	0	0	0	5	2	7	19	0	0	19	52
04:15 PM	26	13	0	39	0	0	0	0	0	8	5	13	17	0	3	20	72
04:30 PM	41	16	0	57	0	0	0	0	0	4	6	10	18	0	1	19	86
04:45 PM	33	7	0	40	0	0	0	0	0	9	3	12	23	0	1	24	76
Total	122	40	0	162	0	0	0	0	0	26	16	42	77	0	5	82	286
05:00 PM	39	15	0	54	0	0	0	0	0	5	3	8	24	0	1	25	87
05:15 PM	27	17	0	44	0	0	0	0	0	7	4	11	29	0	1	30	85
05:30 PM	24	8	0	32	0	0	0	0	0	3	2	5	14	0	0	14	51
05:45 PM	20	4	0	24	0	0	0	0	0	4	3	7	20	0	0	20	51
Total	110	44	0	154	0	0	0	0	0	19	12	31	87	0	2	89	274
Grand Total	232	84	0	316	0	0	0	0	0	45	28	73	164	0	7	171	560
Apprch %	73.4	26.6	0		0	0	0		0	61.6	38.4		95.9	0	4.1		
Total %	41.4	15	0	56.4	0	0	0	0	0	8	5	13	29.3	0	1.2	30.5	

	Forrester Road Southbound				I-8 Eastbound On Ramp Westbound				Forrester Road Northbound				I-8 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**41**	16	0	**57**	0	0	0	0	0	4	**6**	10	18	0	**1**	19	86
04:45 PM	33	7	0	40	0	0	0	0	0	**9**	3	**12**	23	0	1	24	76
05:00 PM	39	15	0	54	0	0	0	0	0	5	3	8	24	0	1	25	**87**
05:15 PM	27	**17**	0	44	0	0	0	0	0	7	4	11	**29**	0	1	**30**	85
Total Volume	140	55	0	195	0	0	0	0	0	25	16	41	94	0	4	98	334
% App. Total	71.8	28.2	0		0	0	0		0	61	39		95.9	0	4.1		
PHF	.854	.809	.000	.855	.000	.000	.000	.000	.000	.694	.667	.854	.810	.000	1.00	.817	.960

Counts Unlimited, Inc.
PO Box 1178
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County of Imperial
N/S: Forrester Road
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 25_CIM_For_8E PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:15 PM				04:30 PM			
+0 mins.	**41**	16	0	**57**	0	0	0	0	0	8	5	**13**	18	0	**1**	19
+15 mins.	33	7	0	40	0	0	0	0	0	4	**6**	10	23	0	1	24
+30 mins.	39	15	0	54	0	0	0	0	0	**9**	3	12	24	0	1	25
+45 mins.	27	**17**	0	44	0	0	0	0	0	5	3	8	**29**	0	1	**30**
Total Volume	140	55	0	195	0	0	0	0	0	26	17	43	94	0	4	98
% App. Total	71.8	28.2	0		0	0	0		0	60.5	39.5		95.9	0	4.1	
PHF	.854	.809	.000	.855	.000	.000	.000	.000	.000	.722	.708	.827	.810	.000	1.000	.817

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County of Imperial
N/S: Imperial Boulevard
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 26_CIM_Imp_8W AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

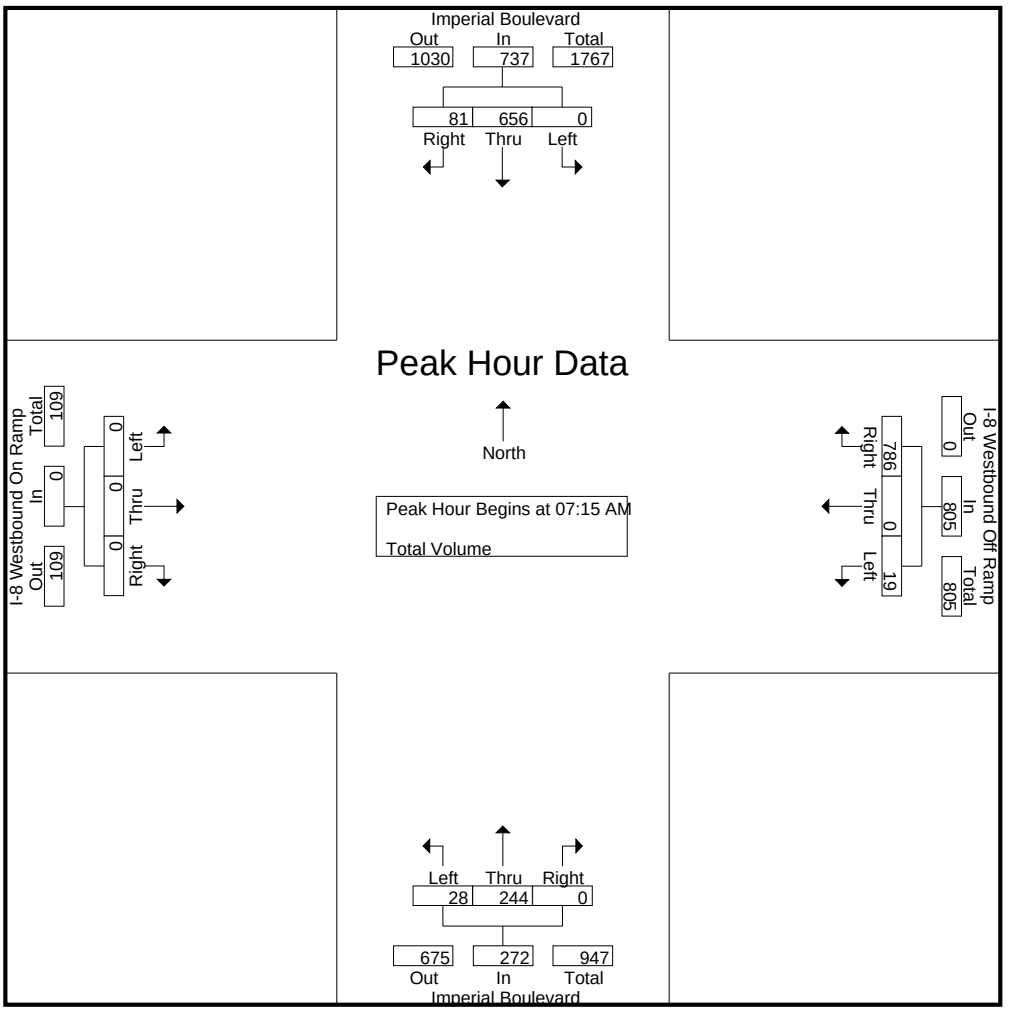
	Imperial Boulevard Southbound				I-8 Westbound Off Ramp Westbound				Imperial Boulevard Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	49	18	67	3	0	80	83	0	31	0	31	0	0	0	0	181
07:15 AM	0	111	20	131	8	0	171	179	6	35	0	41	0	0	0	0	351
07:30 AM	0	189	20	209	3	0	225	228	10	83	0	93	0	0	0	0	530
07:45 AM	0	223	26	249	5	0	265	270	11	81	0	92	0	0	0	0	611
Total	0	572	84	656	19	0	741	760	27	230	0	257	0	0	0	0	1673
08:00 AM	0	133	15	148	3	0	125	128	1	45	0	46	0	0	0	0	322
08:15 AM	0	128	13	141	5	0	115	120	5	41	0	46	0	0	0	0	307
08:30 AM	0	115	14	129	2	0	111	113	3	25	0	28	0	0	0	0	270
08:45 AM	0	111	14	125	2	0	126	128	2	25	0	27	0	0	0	0	280
Total	0	487	56	543	12	0	477	489	11	136	0	147	0	0	0	0	1179
Grand Total	0	1059	140	1199	31	0	1218	1249	38	366	0	404	0	0	0	0	2852
Apprch %	0	88.3	11.7		2.5	0	97.5		9.4	90.6	0		0	0	0		
Total %	0	37.1	4.9	42	1.1	0	42.7	43.8	1.3	12.8	0	14.2	0	0	0	0	

	Imperial Boulevard Southbound				I-8 Westbound Off Ramp Westbound				Imperial Boulevard Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	111	20	131	**8**	0	171	179	6	35	0	41	0	0	0	0	351
07:30 AM	0	189	20	209	3	0	225	228	10	**83**	0	**93**	0	0	0	0	530
07:45 AM	0	**223**	**26**	**249**	5	0	**265**	**270**	**11**	81	0	92	0	0	0	0	**611**
08:00 AM	0	133	15	148	3	0	125	128	1	45	0	46	0	0	0	0	322
Total Volume	0	656	81	737	19	0	786	805	28	244	0	272	0	0	0	0	1814
% App. Total	0	89	11		2.4	0	97.6		10.3	89.7	0		0	0	0		
PHF	.000	.735	.779	.740	.594	.000	.742	.745	.636	.735	.000	.731	.000	.000	.000	.000	.742

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County of Imperial
N/S: Imperial Boulevard
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 26_CIM_Imp_8W AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:30 AM				07:00 AM			
+0 mins.	0	189	20	209	**8**	0	171	179	10	**83**	0	**93**	0	0	0	0
+15 mins.	0	**223**	**26**	**249**	3	0	225	228	**11**	81	0	92	0	0	0	0
+30 mins.	0	133	15	148	5	0	**265**	**270**	1	45	0	46	0	0	0	0
+45 mins.	0	128	13	141	3	0	125	128	5	41	0	46	0	0	0	0
Total Volume	0	673	74	747	19	0	786	805	27	250	0	277	0	0	0	0
% App. Total	0	90.1	9.9		2.4	0	97.6		9.7	90.3	0		0	0	0	
PHF	.000	.754	.712	.750	.594	.000	.742	.745	.614	.753	.000	.745	.000	.000	.000	.000

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County of Imperial
N/S: Imperial Boulevard
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 26_CIM_Imp_8W PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

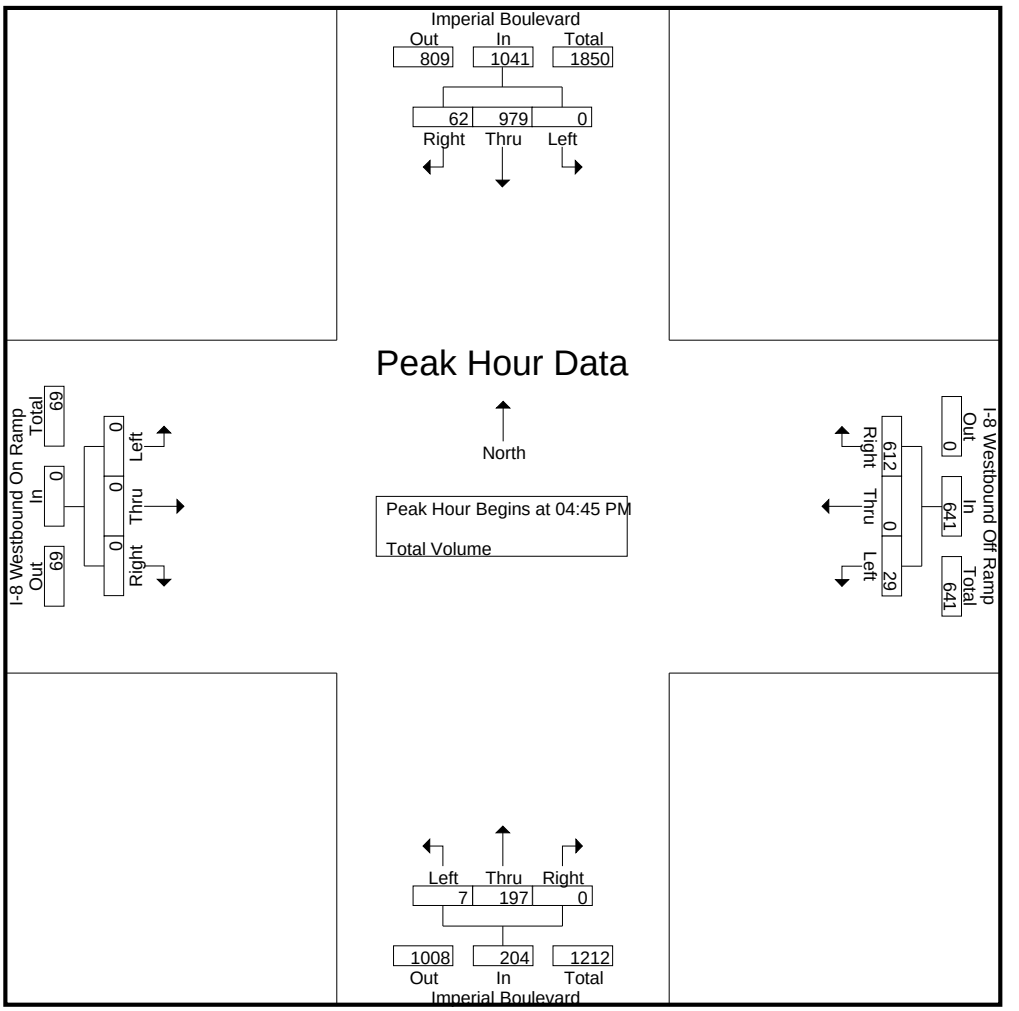
	Imperial Boulevard Southbound				I-8 Westbound Off Ramp Westbound				Imperial Boulevard Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	207	16	223	7	1	135	143	5	51	0	56	0	0	0	0	422
04:15 PM	0	229	16	245	12	0	113	125	5	37	0	42	0	0	0	0	412
04:30 PM	0	204	18	222	8	0	153	161	8	45	0	53	0	0	0	0	436
04:45 PM	0	213	12	225	5	0	141	146	0	58	0	58	0	0	0	0	429
Total	0	853	62	915	32	1	542	575	18	191	0	209	0	0	0	0	1699
05:00 PM	0	261	19	280	10	0	175	185	3	41	0	44	0	0	0	0	509
05:15 PM	0	274	17	291	6	0	156	162	2	53	0	55	0	0	0	0	508
05:30 PM	0	231	14	245	8	0	140	148	2	45	0	47	0	0	0	0	440
05:45 PM	0	223	19	242	6	0	121	127	2	47	0	49	0	0	0	0	418
Total	0	989	69	1058	30	0	592	622	9	186	0	195	0	0	0	0	1875
Grand Total	0	1842	131	1973	62	1	1134	1197	27	377	0	404	0	0	0	0	3574
Apprch %	0	93.4	6.6		5.2	0.1	94.7		6.7	93.3	0		0	0	0		
Total %	0	51.5	3.7	55.2	1.7	0	31.7	33.5	0.8	10.5	0	11.3	0	0	0	0	

	Imperial Boulevard Southbound				I-8 Westbound Off Ramp Westbound				Imperial Boulevard Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	213	12	225	5	0	141	146	0	**58**	0	**58**	0	0	0	0	429
05:00 PM	0	261	**19**	280	**10**	0	**175**	**185**	**3**	41	0	44	0	0	0	0	**509**
05:15 PM	0	**274**	17	**291**	6	0	156	162	2	53	0	55	0	0	0	0	508
05:30 PM	0	231	14	245	8	0	140	148	2	45	0	47	0	0	0	0	440
Total Volume	0	979	62	1041	29	0	612	641	7	197	0	204	0	0	0	0	1886
% App. Total	0	94	6		4.5	0	95.5		3.4	96.6	0		0	0	0		
PHF	.000	.893	.816	.894	.725	.000	.874	.866	.583	.849	.000	.879	.000	.000	.000	.000	.926

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County of Imperial
N/S: Imperial Boulevard
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 26_CIM_Imp_8W PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:30 PM				04:30 PM				04:00 PM			
+0 mins.	0	261	**19**	280	8	0	153	161	**8**	45	0	53	0	0	0	0
+15 mins.	0	**274**	17	**291**	5	0	141	146	0	**58**	0	**58**	0	0	0	0
+30 mins.	0	231	14	245	**10**	0	**175**	**185**	3	41	0	44	0	0	0	0
+45 mins.	0	223	19	242	6	0	156	162	2	53	0	55	0	0	0	0
Total Volume	0	989	69	1058	29	0	625	654	13	197	0	210	0	0	0	0
% App. Total	0	93.5	6.5		4.4	0	95.6		6.2	93.8	0		0	0	0	
PHF	.000	.902	.908	.909	.725	.000	.893	.884	.406	.849	.000	.905	.000	.000	.000	.000

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County of Imperial
N/S: Imperial Boulevard
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 27_CIM_Imp_8E AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

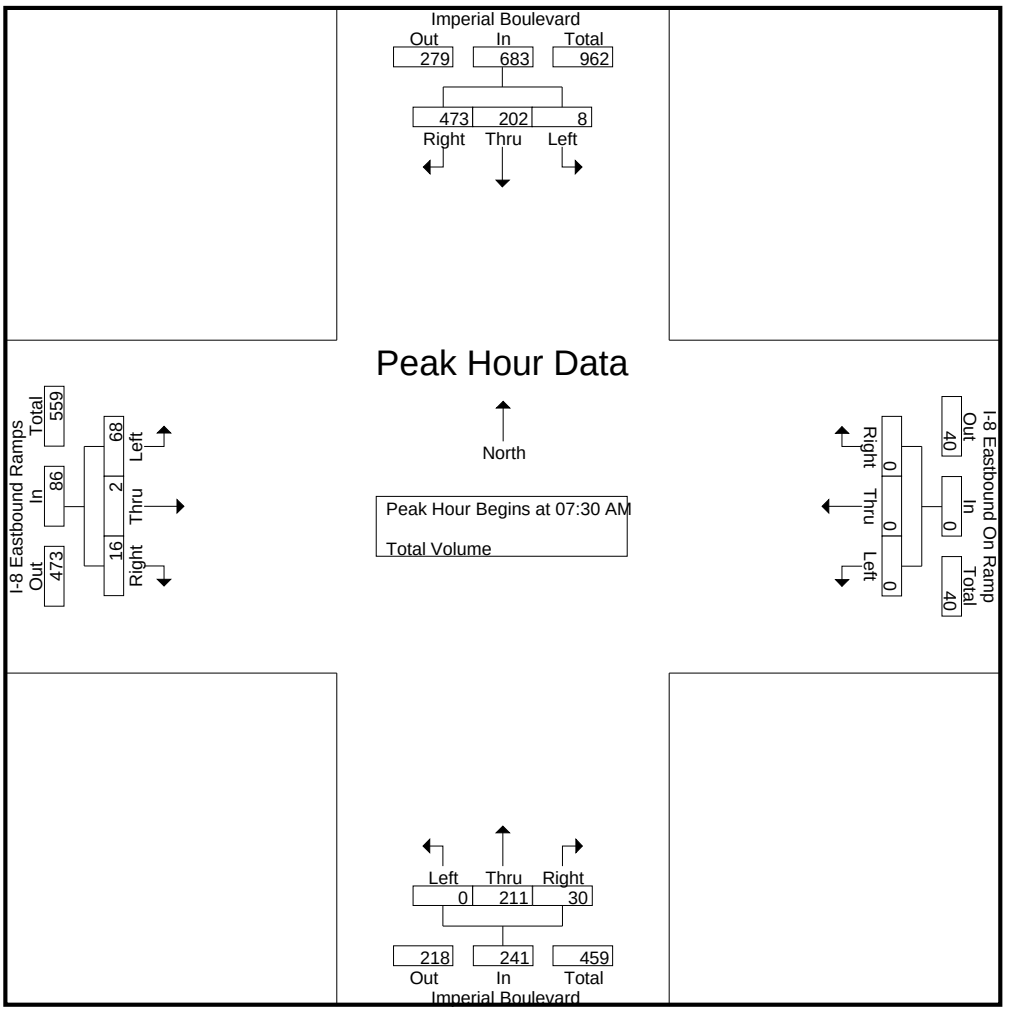
	Imperial Boulevard Southbound				I-8 Eastbound On Ramp Westbound				Imperial Boulevard Northbound				I-8 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	12	39	51	0	0	0	0	0	27	7	34	8	0	2	10	95
07:15 AM	2	26	91	119	0	0	0	0	0	33	7	40	5	0	0	5	164
07:30 AM	0	44	145	189	0	0	0	0	0	74	7	81	20	0	4	24	294
07:45 AM	3	65	159	227	0	0	0	0	0	76	12	88	16	1	5	22	337
Total	5	147	434	586	0	0	0	0	0	210	33	243	49	1	11	61	890
08:00 AM	1	40	94	135	0	0	0	0	0	27	5	32	19	1	5	25	192
08:15 AM	4	53	75	132	0	0	0	0	0	34	6	40	13	0	2	15	187
08:30 AM	0	27	93	120	0	0	0	0	0	19	6	25	7	1	6	14	159
08:45 AM	0	29	84	113	0	0	0	0	0	14	4	18	13	0	4	17	148
Total	5	149	346	500	0	0	0	0	0	94	21	115	52	2	17	71	686
Grand Total	10	296	780	1086	0	0	0	0	0	304	54	358	101	3	28	132	1576
Apprch %	0.9	27.3	71.8		0	0	0		0	84.9	15.1		76.5	2.3	21.2		
Total %	0.6	18.8	49.5	68.9	0	0	0	0	0	19.3	3.4	22.7	6.4	0.2	1.8	8.4	

	Imperial Boulevard Southbound				I-8 Eastbound On Ramp Westbound				Imperial Boulevard Northbound				I-8 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	44	145	189	0	0	0	0	0	74	7	81	**20**	0	4	24	294
07:45 AM	3	**65**	**159**	**227**	0	0	0	0	0	**76**	**12**	**88**	16	**1**	**5**	22	**337**
08:00 AM	1	40	94	135	0	0	0	0	0	27	5	32	19	1	5	**25**	192
08:15 AM	**4**	53	75	132	0	0	0	0	0	34	6	40	13	0	2	15	187
Total Volume	8	202	473	683	0	0	0	0	0	211	30	241	68	2	16	86	1010
% App. Total	1.2	29.6	69.3		0	0	0		0	87.6	12.4		79.1	2.3	18.6		
PHF	.500	.777	.744	.752	.000	.000	.000	.000	.000	.694	.625	.685	.850	.500	.800	.860	.749

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County of Imperial
N/S: Imperial Boulevard
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 27_CIM_Imp_8E AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:00 AM				07:30 AM			
+0 mins.	0	44	145	189	0	0	0	0	0	27	7	34	**20**	0	4	24
+15 mins.	3	**65**	**159**	**227**	0	0	0	0	0	33	7	40	16	**1**	**5**	22
+30 mins.	1	40	94	135	0	0	0	0	0	74	7	81	19	1	5	**25**
+45 mins.	**4**	53	75	132	0	0	0	0	0	**76**	**12**	**88**	13	0	2	15
Total Volume	8	202	473	683	0	0	0	0	0	210	33	243	68	2	16	86
% App. Total	1.2	29.6	69.3		0	0	0		0	86.4	13.6		79.1	2.3	18.6	
PHF	.500	.777	.744	.752	.000	.000	.000	.000	.000	.691	.688	.690	.850	.500	.800	.860

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County of Imperial
N/S: Imperial Boulevard
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 27_CIM_Imp_8E PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

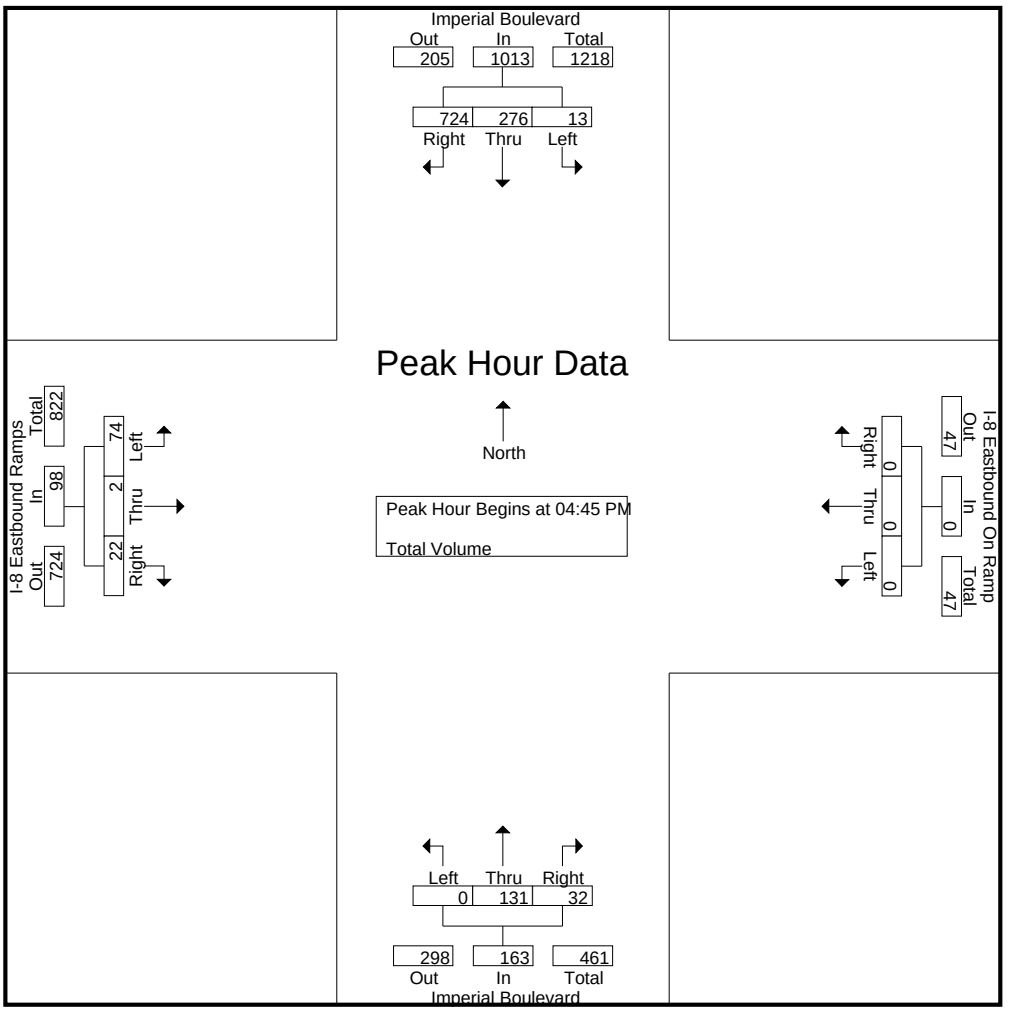
	Imperial Boulevard Southbound				I-8 Eastbound On Ramp Westbound				Imperial Boulevard Northbound				I-8 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	3	66	155	224	0	0	0	0	0	28	4	32	27	0	5	32	288
04:15 PM	0	72	170	242	0	0	0	0	0	25	10	35	17	0	12	29	306
04:30 PM	1	43	169	213	0	0	0	0	0	31	6	37	21	0	8	29	279
04:45 PM	2	58	159	219	0	0	0	0	0	35	8	43	24	1	7	32	294
Total	6	239	653	898	0	0	0	0	0	119	28	147	89	1	32	122	1167
05:00 PM	3	76	193	272	0	0	0	0	0	29	7	36	18	0	6	24	332
05:15 PM	2	72	202	276	0	0	0	0	0	32	7	39	21	0	2	23	338
05:30 PM	6	70	170	246	0	0	0	0	0	35	10	45	11	1	7	19	310
05:45 PM	2	55	167	224	0	0	0	0	0	35	5	40	12	0	3	15	279
Total	13	273	732	1018	0	0	0	0	0	131	29	160	62	1	18	81	1259
Grand Total	19	512	1385	1916	0	0	0	0	0	250	57	307	151	2	50	203	2426
Apprch %	1	26.7	72.3		0	0	0		0	81.4	18.6		74.4	1	24.6		
Total %	0.8	21.1	57.1	79	0	0	0	0	0	10.3	2.3	12.7	6.2	0.1	2.1	8.4	

	Imperial Boulevard Southbound				I-8 Eastbound On Ramp Westbound				Imperial Boulevard Northbound				I-8 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	2	58	159	219	0	0	0	0	0	**35**	8	43	**24**	**1**	**7**	**32**	294
05:00 PM	3	**76**	193	272	0	0	0	0	0	29	7	36	18	0	6	24	332
05:15 PM	2	72	**202**	**276**	0	0	0	0	0	32	7	39	21	0	2	23	**338**
05:30 PM	**6**	70	170	246	0	0	0	0	0	35	**10**	**45**	11	1	7	19	310
Total Volume	13	276	724	1013	0	0	0	0	0	131	32	163	74	2	22	98	1274
% App. Total	1.3	27.2	71.5		0	0	0		0	80.4	19.6		75.5	2	22.4		
PHF	.542	.908	.896	.918	.000	.000	.000	.000	.000	.936	.800	.906	.771	.500	.786	.766	.942

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County of Imperial
N/S: Imperial Boulevard
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 27_CIM_Imp_8E PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:45 PM				04:00 PM			
+0 mins.	3	**76**	193	272	0	0	0	0	0	**35**	8	43	**27**	0	5	**32**
+15 mins.	2	72	**202**	**276**	0	0	0	0	0	29	7	36	17	0	**12**	29
+30 mins.	**6**	70	170	246	0	0	0	0	0	32	7	39	21	0	8	29
+45 mins.	2	55	167	224	0	0	0	0	0	35	**10**	**45**	24	**1**	7	32
Total Volume	13	273	732	1018	0	0	0	0	0	131	32	163	89	1	32	122
% App. Total	1.3	26.8	71.9		0	0	0		0	80.4	19.6		73	0.8	26.2	
PHF	.542	.898	.906	.922	.000	.000	.000	.000	.000	.936	.800	.906	.824	.250	.667	.953

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County of Imperial
N/S: SR-111
E/W: Heber Road
Weather: Clear

File Name : 28_CIM_SR111_Heber AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

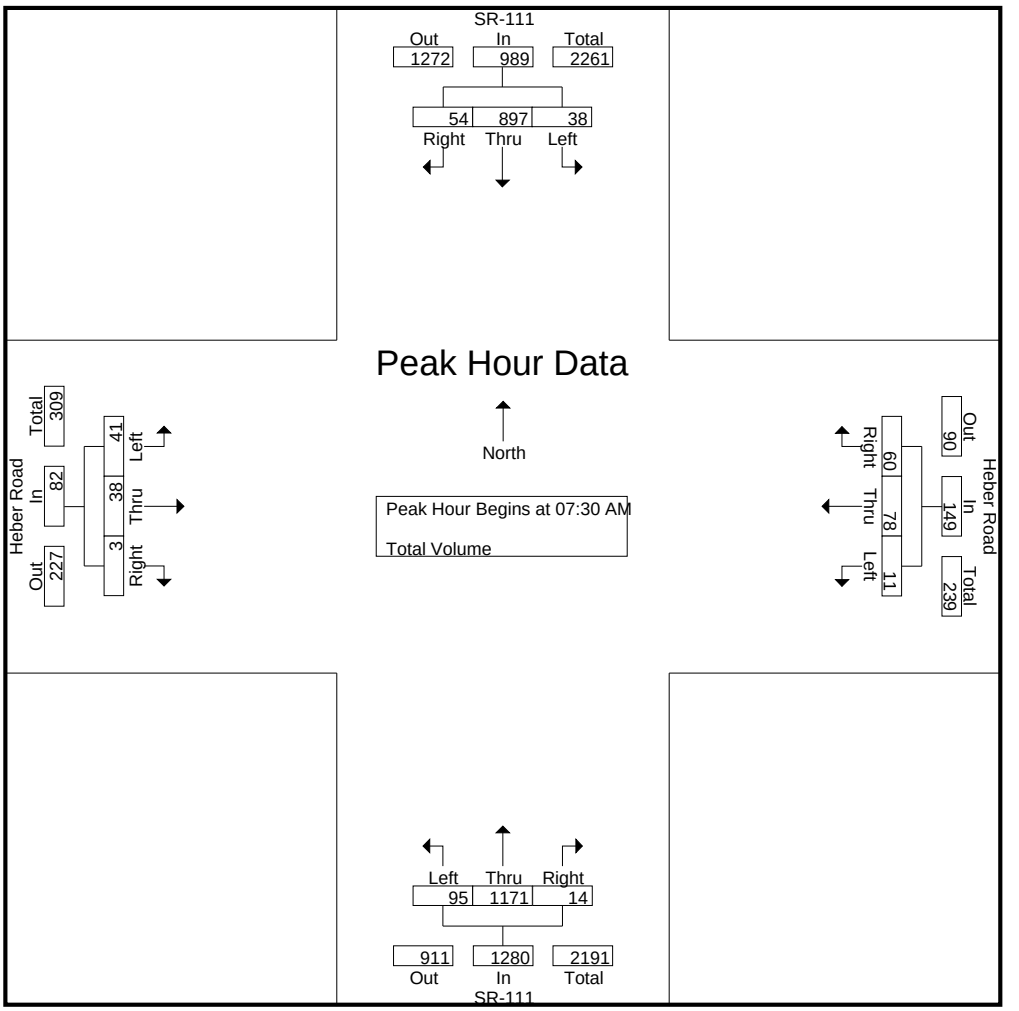
	SR-111 Southbound				Heber Road Westbound				SR-111 Northbound				Heber Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	7	124	5	136	2	12	10	24	15	274	2	291	6	7	0	13	464
07:15 AM	4	126	6	136	5	18	17	40	21	286	2	309	9	16	0	25	510
07:30 AM	7	179	10	196	3	20	17	40	18	368	3	389	13	10	0	23	648
07:45 AM	18	288	20	326	3	28	16	47	29	291	4	324	10	10	1	21	718
Total	36	717	41	794	13	78	60	151	83	1219	11	1313	38	43	1	82	2340
08:00 AM	8	230	11	249	3	13	16	32	33	227	6	266	6	12	0	18	565
08:15 AM	5	200	13	218	2	17	11	30	15	285	1	301	12	6	2	20	569
08:30 AM	9	204	3	216	1	6	9	16	21	255	8	284	4	6	0	10	526
08:45 AM	6	211	5	222	5	14	12	31	18	234	0	252	11	8	0	19	524
Total	28	845	32	905	11	50	48	109	87	1001	15	1103	33	32	2	67	2184
Grand Total	64	1562	73	1699	24	128	108	260	170	2220	26	2416	71	75	3	149	4524
Apprch %	3.8	91.9	4.3		9.2	49.2	41.5		7	91.9	1.1		47.7	50.3	2		
Total %	1.4	34.5	1.6	37.6	0.5	2.8	2.4	5.7	3.8	49.1	0.6	53.4	1.6	1.7	0.1	3.3	

	SR-111 Southbound				Heber Road Westbound				SR-111 Northbound				Heber Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	7	179	10	196	**3**	20	**17**	40	18	**368**	3	**389**	**13**	10	0	**23**	648
07:45 AM	**18**	**288**	**20**	**326**	3	**28**	16	**47**	29	291	4	324	10	10	1	21	**718**
08:00 AM	8	230	11	249	3	13	16	32	**33**	227	**6**	266	6	**12**	0	18	565
08:15 AM	5	200	13	218	2	17	11	30	15	285	1	301	12	6	**2**	20	569
Total Volume	38	897	54	989	11	78	60	149	95	1171	14	1280	41	38	3	82	2500
% App. Total	3.8	90.7	5.5		7.4	52.3	40.3		7.4	91.5	1.1		50	46.3	3.7		
PHF	.528	.779	.675	.758	.917	.696	.882	.793	.720	.796	.583	.823	.788	.792	.375	.891	.870

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County of Imperial
N/S: SR-111
E/W: Heber Road
Weather: Clear

File Name : 28_CIM_SR111_Heber AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	**18**	**288**	**20**	**326**	**5**	18	**17**	40	15	274	2	291	9	**16**	0	**25**
+15 mins.	8	230	11	249	3	20	17	40	21	286	2	309	**13**	10	0	23
+30 mins.	5	200	13	218	3	**28**	16	**47**	18	**368**	3	**389**	10	10	**1**	21
+45 mins.	9	204	3	216	3	13	16	32	**29**	291	**4**	324	6	12	0	18
Total Volume	40	922	47	1009	14	79	66	159	83	1219	11	1313	38	48	1	87
% App. Total	4	91.4	4.7		8.8	49.7	41.5		6.3	92.8	0.8		43.7	55.2	1.1	
PHF	.556	.800	.588	.774	.700	.705	.971	.846	.716	.828	.688	.844	.731	.750	.250	.870

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County of Imperial
N/S: SR-111
E/W: Heber Road
Weather: Clear

File Name : 28_CIM_SR111_Heber PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

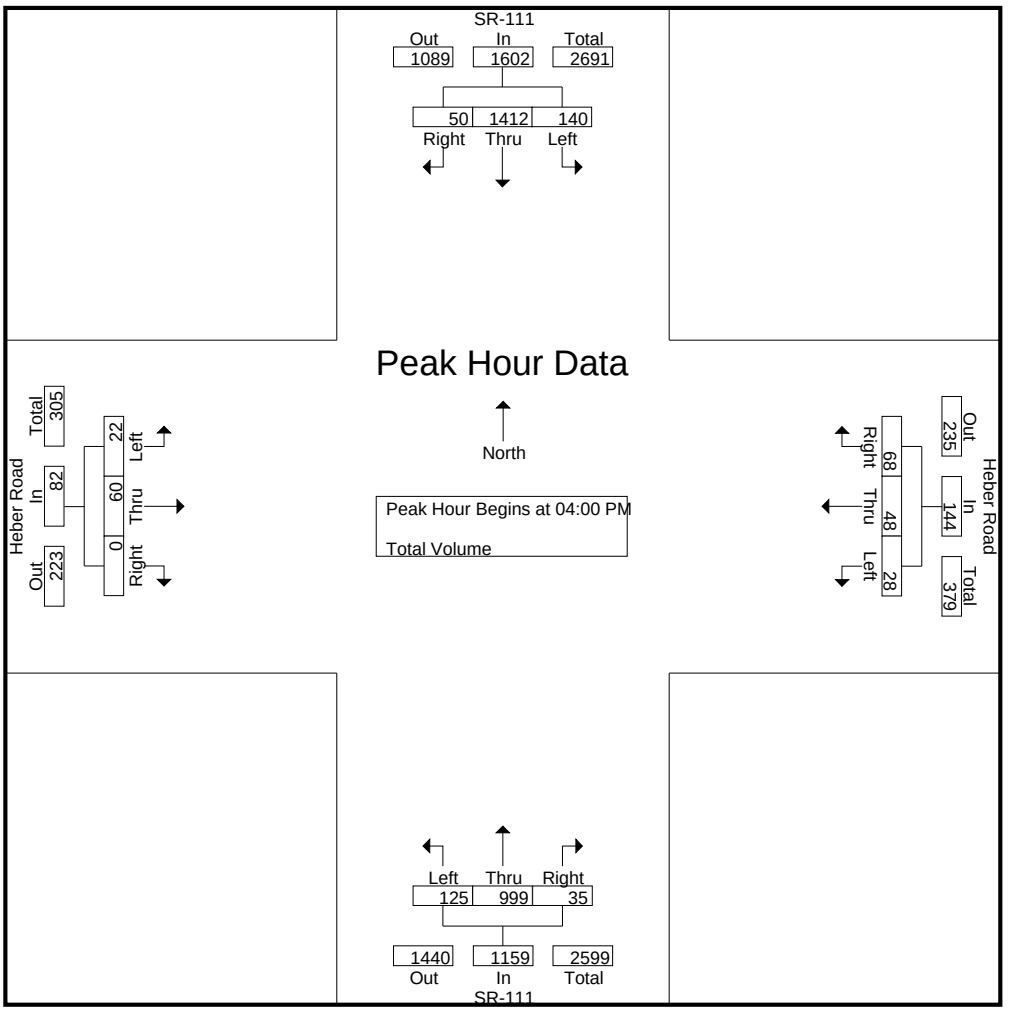
	SR-111 Southbound				Heber Road Westbound				SR-111 Northbound				Heber Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	53	352	26	431	2	13	16	31	40	263	9	312	8	14	0	22	796
04:15 PM	44	379	15	438	11	13	13	37	34	231	10	275	6	14	0	20	770
04:30 PM	21	337	3	361	11	12	20	43	25	272	9	306	5	12	0	17	727
04:45 PM	22	344	6	372	4	10	19	33	26	233	7	266	3	20	0	23	694
Total	140	1412	50	1602	28	48	68	144	125	999	35	1159	22	60	0	82	2987
05:00 PM	26	345	10	381	1	16	20	37	38	267	3	308	8	23	0	31	757
05:15 PM	22	376	13	411	4	15	20	39	27	263	6	296	5	26	2	33	779
05:30 PM	26	349	8	383	5	16	21	42	41	242	6	289	3	17	0	20	734
05:45 PM	23	337	10	370	14	11	10	35	40	219	3	262	3	10	3	16	683
Total	97	1407	41	1545	24	58	71	153	146	991	18	1155	19	76	5	100	2953
Grand Total	237	2819	91	3147	52	106	139	297	271	1990	53	2314	41	136	5	182	5940
Apprch %	7.5	89.6	2.9		17.5	35.7	46.8		11.7	86	2.3		22.5	74.7	2.7		
Total %	4	47.5	1.5	53	0.9	1.8	2.3	5	4.6	33.5	0.9	39	0.7	2.3	0.1	3.1	

	SR-111 Southbound				Heber Road Westbound				SR-111 Northbound				Heber Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**53**	352	**26**	431	2	**13**	16	31	**40**	263	9	**312**	**8**	14	0	22	**796**
04:15 PM	44	**379**	15	**438**	**11**	13	13	37	34	231	**10**	275	6	14	0	20	770
04:30 PM	21	337	3	361	11	12	**20**	**43**	25	**272**	9	306	5	12	0	17	727
04:45 PM	22	344	6	372	4	10	19	33	26	233	7	266	3	**20**	0	**23**	694
Total Volume	140	1412	50	1602	28	48	68	144	125	999	35	1159	22	60	0	82	2987
% App. Total	8.7	88.1	3.1		19.4	33.3	47.2		10.8	86.2	3		26.8	73.2	0		
PHF	.660	.931	.481	.914	.636	.923	.850	.837	.781	.918	.875	.929	.688	.750	.000	.891	.938

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County of Imperial
N/S: SR-111
E/W: Heber Road
Weather: Clear

File Name : 28_CIM_SR111_Heber PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				04:30 PM				04:45 PM			
+0 mins.	**53**	352	**26**	431	1	**16**	20	37	25	**272**	**9**	306	3	20	0	23
+15 mins.	44	**379**	15	**438**	4	15	20	39	26	233	7	266	**8**	23	0	31
+30 mins.	21	337	3	361	5	16	**21**	**42**	**38**	267	3	**308**	5	**26**	**2**	**33**
+45 mins.	22	344	6	372	**14**	11	10	35	27	263	6	296	3	17	0	20
Total Volume	140	1412	50	1602	24	58	71	153	116	1035	25	1176	19	86	2	107
% App. Total	8.7	88.1	3.1		15.7	37.9	46.4		9.9	88	2.1		17.8	80.4	1.9	
PHF	.660	.931	.481	.914	.429	.906	.845	.911	.763	.951	.694	.955	.594	.827	.250	.811

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County of Imperial
N/S: Cesar Chavez Boulevard
E/W: Birch Street (SR-98)
Weather: Clear

File Name : 29_CIM_CesarC_Birch AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

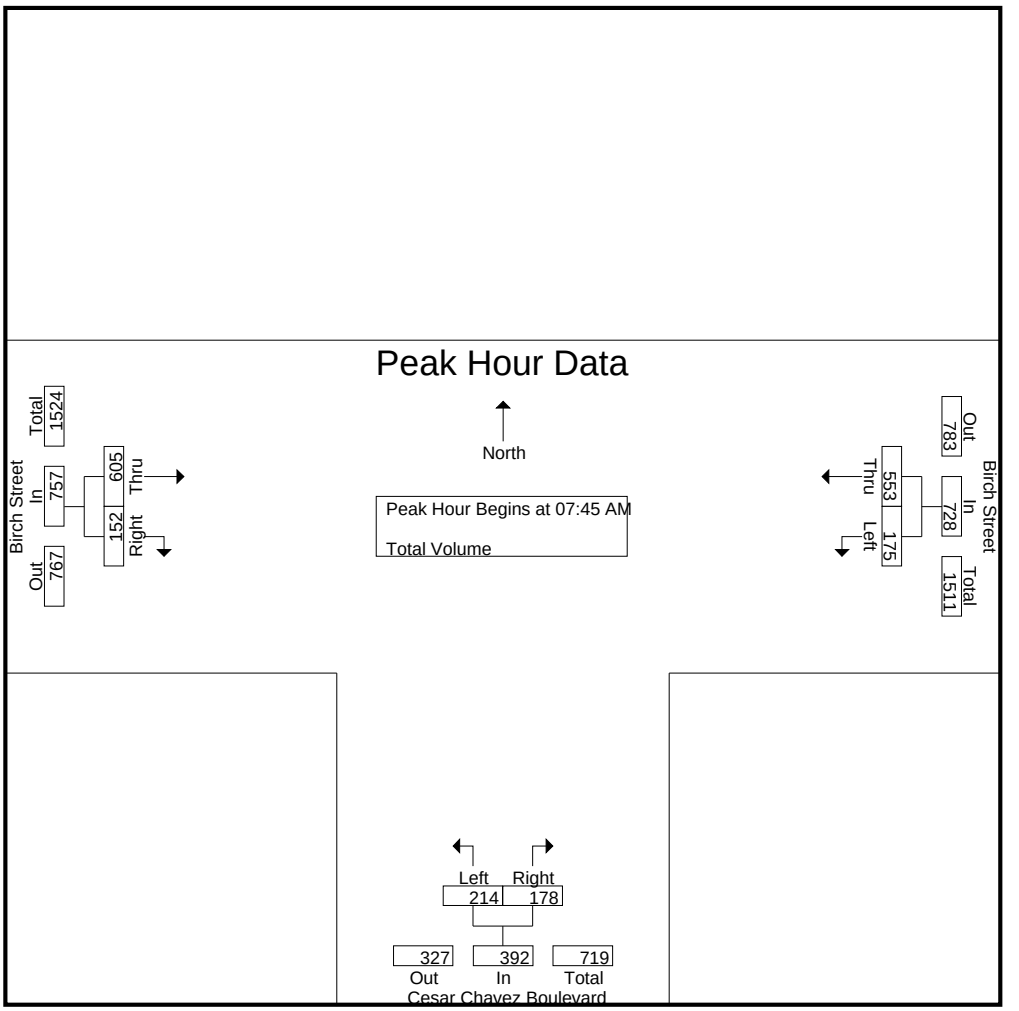
	Birch Street Westbound			Cesar Chavez Boulevard Northbound			Birch Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	22	56	78	52	29	81	50	19	69	228
07:15 AM	24	58	82	63	33	96	61	22	83	261
07:30 AM	35	95	130	63	40	103	102	42	144	377
07:45 AM	50	162	212	37	39	76	190	44	234	522
Total	131	371	502	215	141	356	403	127	530	1388
08:00 AM	39	140	179	71	41	112	197	38	235	526
08:15 AM	35	135	170	57	53	110	133	38	171	451
08:30 AM	51	116	167	49	45	94	85	32	117	378
08:45 AM	36	70	106	62	51	113	89	36	125	344
Total	161	461	622	239	190	429	504	144	648	1699
Grand Total	292	832	1124	454	331	785	907	271	1178	3087
Apprch %	26	74		57.8	42.2		77	23		
Total %	9.5	27	36.4	14.7	10.7	25.4	29.4	8.8	38.2	

	Birch Street Westbound			Cesar Chavez Boulevard Northbound			Birch Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	50	**162**	**212**	37	39	76	190	**44**	234	522
08:00 AM	39	140	179	**71**	41	**112**	**197**	38	**235**	**526**
08:15 AM	35	135	170	57	**53**	110	133	38	171	451
08:30 AM	**51**	116	167	49	45	94	85	32	117	378
Total Volume	175	553	728	214	178	392	605	152	757	1877
% App. Total	24	76		54.6	45.4		79.9	20.1		
PHF	.858	.853	.858	.754	.840	.875	.768	.864	.805	.892

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County of Imperial
N/S: Cesar Chavez Boulevard
E/W: Birch Street (SR-98)
Weather: Clear

File Name : 29_CIM_CesarC_Birch AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			08:00 AM			07:30 AM		
+0 mins.	50	**162**	**212**	**71**	41	112	102	42	144
+15 mins.	39	140	179	57	**53**	110	190	**44**	234
+30 mins.	35	135	170	49	45	94	**197**	38	**235**
+45 mins.	**51**	116	167	62	51	**113**	133	38	171
Total Volume	175	553	728	239	190	429	622	162	784
% App. Total	24	76		55.7	44.3		79.3	20.7	
PHF	.858	.853	.858	.842	.896	.949	.789	.920	.834

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County of Imperial
N/S: Cesar Chavez Boulevard
E/W: Birch Street (SR-98)
Weather: Clear

File Name : 29_CIM_CesarC_Birch PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

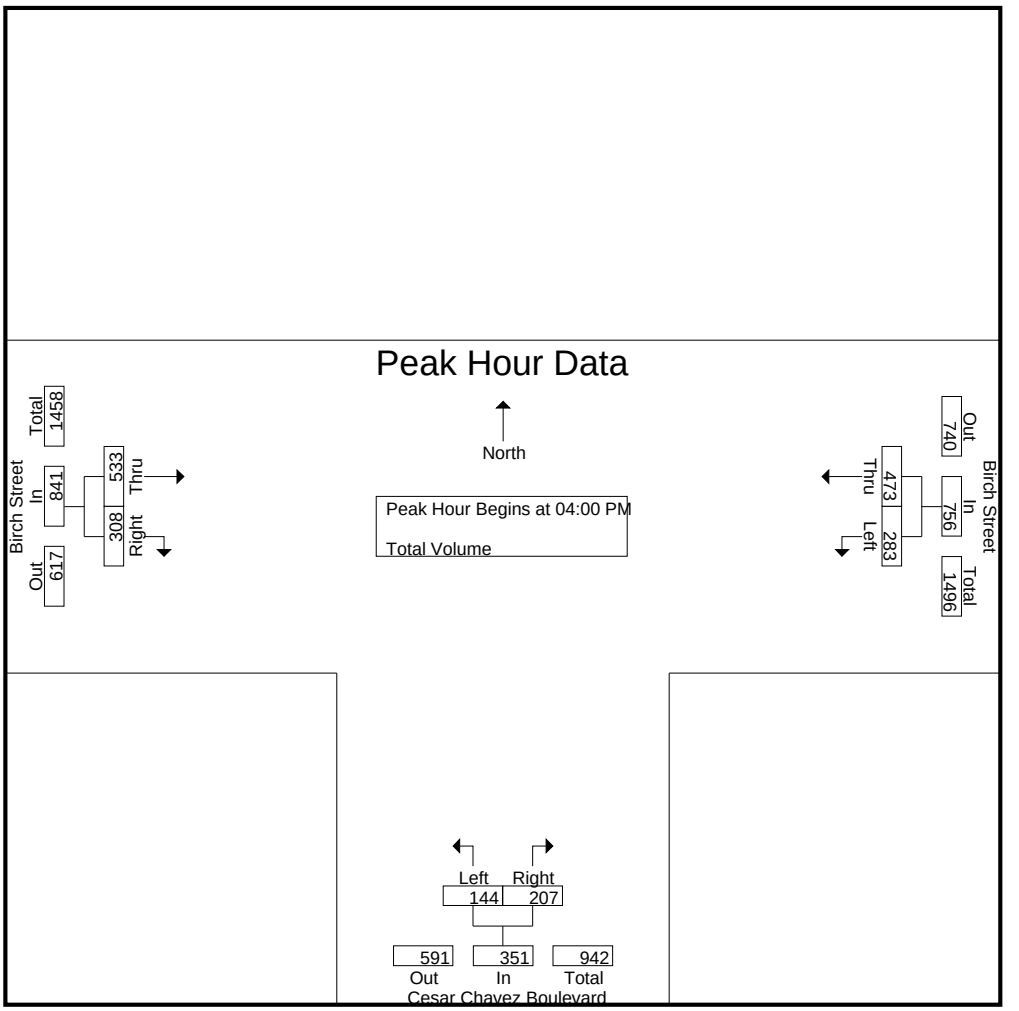
	Birch Street Westbound			Cesar Chavez Boulevard Northbound			Birch Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	73	126	199	48	46	94	146	76	222	515
04:15 PM	65	115	180	36	51	87	121	79	200	467
04:30 PM	68	114	182	20	59	79	143	84	227	488
04:45 PM	77	118	195	40	51	91	123	69	192	478
Total	283	473	756	144	207	351	533	308	841	1948
05:00 PM	73	99	172	45	51	96	106	63	169	437
05:15 PM	71	112	183	28	58	86	116	75	191	460
05:30 PM	81	109	190	41	61	102	126	86	212	504
05:45 PM	80	94	174	29	58	87	122	69	191	452
Total	305	414	719	143	228	371	470	293	763	1853
Grand Total	588	887	1475	287	435	722	1003	601	1604	3801
Apprch %	39.9	60.1		39.8	60.2		62.5	37.5		
Total %	15.5	23.3	38.8	7.6	11.4	19	26.4	15.8	42.2	

	Birch Street Westbound			Cesar Chavez Boulevard Northbound			Birch Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	73	**126**	**199**	**48**	46	**94**	**146**	76	222	**515**
04:15 PM	65	115	180	36	51	87	121	79	200	467
04:30 PM	68	114	182	20	**59**	79	143	**84**	**227**	488
04:45 PM	**77**	118	195	40	51	91	123	69	192	478
Total Volume	283	473	756	144	207	351	533	308	841	1948
% App. Total	37.4	62.6		41	59		63.4	36.6		
PHF	.919	.938	.950	.750	.877	.934	.913	.917	.926	.946

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County of Imperial
N/S: Cesar Chavez Boulevard
E/W: Birch Street (SR-98)
Weather: Clear

File Name : 29_CIM_CesarC_Birch PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:45 PM			04:00 PM		
+0 mins.	73	**126**	**199**	40	51	91	**146**	76	222
+15 mins.	65	115	180	**45**	51	96	121	79	200
+30 mins.	68	114	182	28	58	86	143	**84**	**227**
+45 mins.	**77**	118	195	41	**61**	**102**	123	69	192
Total Volume	283	473	756	154	221	375	533	308	841
% App. Total	37.4	62.6		41.1	58.9		63.4	36.6	
PHF	.919	.938	.950	.856	.906	.919	.913	.917	.926

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County of Imperial
N/S: Imperial Boulevard
E/W: Birch Street (SR-98)
Weather: Clear

File Name : 30_CIM_Imp_Birch AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

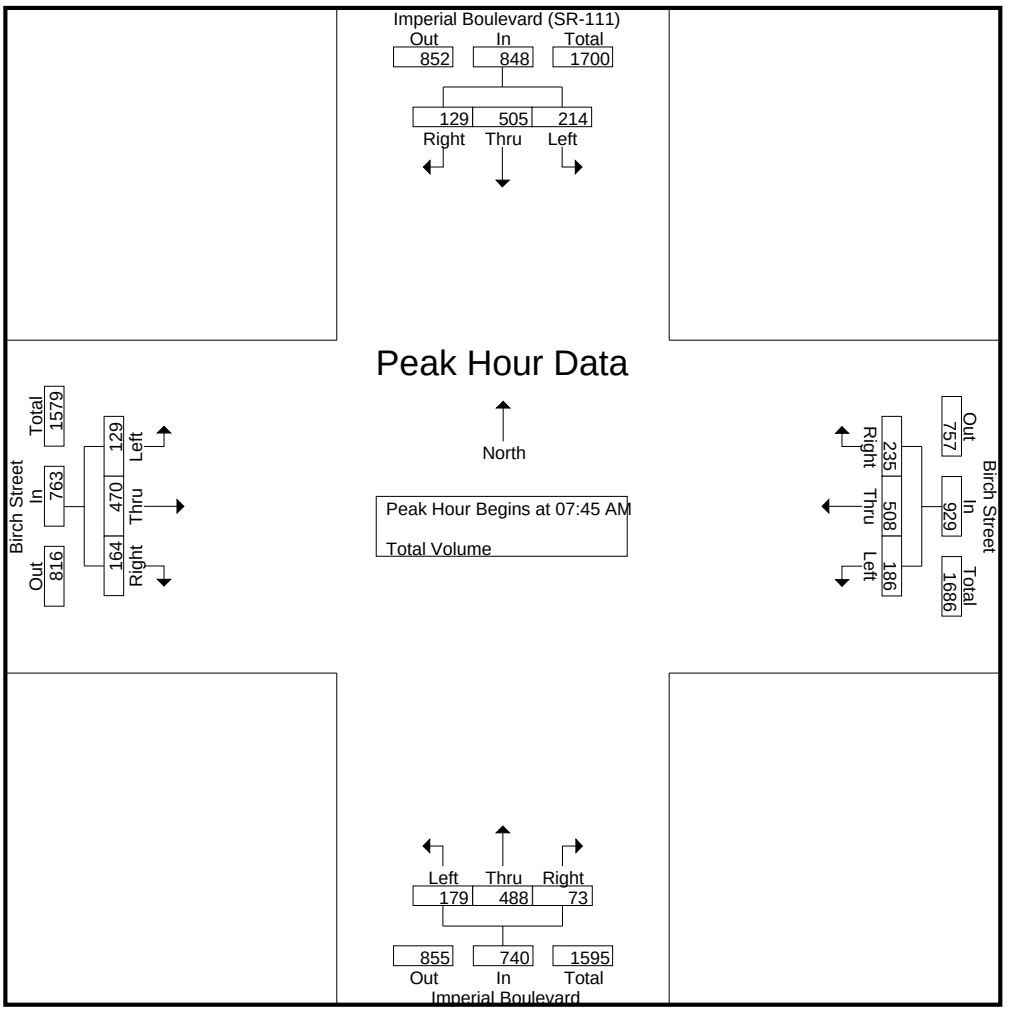
	Imperial Boulevard (SR-111) Southbound				Birch Street Westbound				Imperial Boulevard Northbound				Birch Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	26	47	20	93	12	63	54	129	13	117	17	147	24	41	9	74	443
07:15 AM	39	57	14	110	20	65	58	143	14	126	16	156	21	42	12	75	484
07:30 AM	58	84	20	162	12	95	99	206	27	106	20	153	29	86	18	133	654
07:45 AM	65	108	38	211	23	125	66	214	52	137	20	209	16	165	57	238	872
Total	188	296	92	576	67	348	277	692	106	486	73	665	90	334	96	520	2453
08:00 AM	64	151	25	240	61	149	58	268	48	117	12	177	35	133	64	232	917
08:15 AM	42	141	36	219	40	138	51	229	37	102	19	158	47	102	25	174	780
08:30 AM	43	105	30	178	62	96	60	218	42	132	22	196	31	70	18	119	711
08:45 AM	64	137	54	255	30	41	42	113	44	114	21	179	50	82	31	163	710
Total	213	534	145	892	193	424	211	828	171	465	74	710	163	387	138	688	3118
Grand Total	401	830	237	1468	260	772	488	1520	277	951	147	1375	253	721	234	1208	5571
Apprch %	27.3	56.5	16.1		17.1	50.8	32.1		20.1	69.2	10.7		20.9	59.7	19.4		
Total %	7.2	14.9	4.3	26.4	4.7	13.9	8.8	27.3	5	17.1	2.6	24.7	4.5	12.9	4.2	21.7	

	Imperial Boulevard (SR-111) Southbound				Birch Street Westbound				Imperial Boulevard Northbound				Birch Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**65**	108	**38**	211	23	125	**66**	214	**52**	**137**	20	**209**	16	**165**	57	**238**	872
08:00 AM	64	**151**	25	**240**	61	**149**	58	**268**	48	117	12	177	35	133	**64**	232	**917**
08:15 AM	42	141	36	219	40	138	51	229	37	102	19	158	**47**	102	25	174	780
08:30 AM	43	105	30	178	**62**	96	60	218	42	132	**22**	196	31	70	18	119	711
Total Volume	214	505	129	848	186	508	235	929	179	488	73	740	129	470	164	763	3280
% App. Total	25.2	59.6	15.2		20	54.7	25.3		24.2	65.9	9.9		16.9	61.6	21.5		
PHF	.823	.836	.849	.883	.750	.852	.890	.867	.861	.891	.830	.885	.686	.712	.641	.801	.894

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County of Imperial
N/S: Imperial Boulevard
E/W: Birch Street (SR-98)
Weather: Clear

File Name : 30_CIM_Imp_Birch AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				07:45 AM				07:30 AM			
+0 mins.	**64**	**151**	25	240	23	125	**66**	214	**52**	**137**	20	**209**	29	86	18	133
+15 mins.	42	141	36	219	61	**149**	58	**268**	48	117	12	177	16	**165**	57	**238**
+30 mins.	43	105	30	178	40	138	51	229	37	102	19	158	35	133	**64**	232
+45 mins.	64	137	**54**	**255**	**62**	96	60	218	42	132	**22**	196	**47**	102	25	174
Total Volume	213	534	145	892	186	508	235	929	179	488	73	740	127	486	164	777
% App. Total	23.9	59.9	16.3		20	54.7	25.3		24.2	65.9	9.9		16.3	62.5	21.1	
PHF	.832	.884	.671	.875	.750	.852	.890	.867	.861	.891	.830	.885	.676	.736	.641	.816

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County of Imperial
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File Name : 30_CIM_Imp_Birch PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

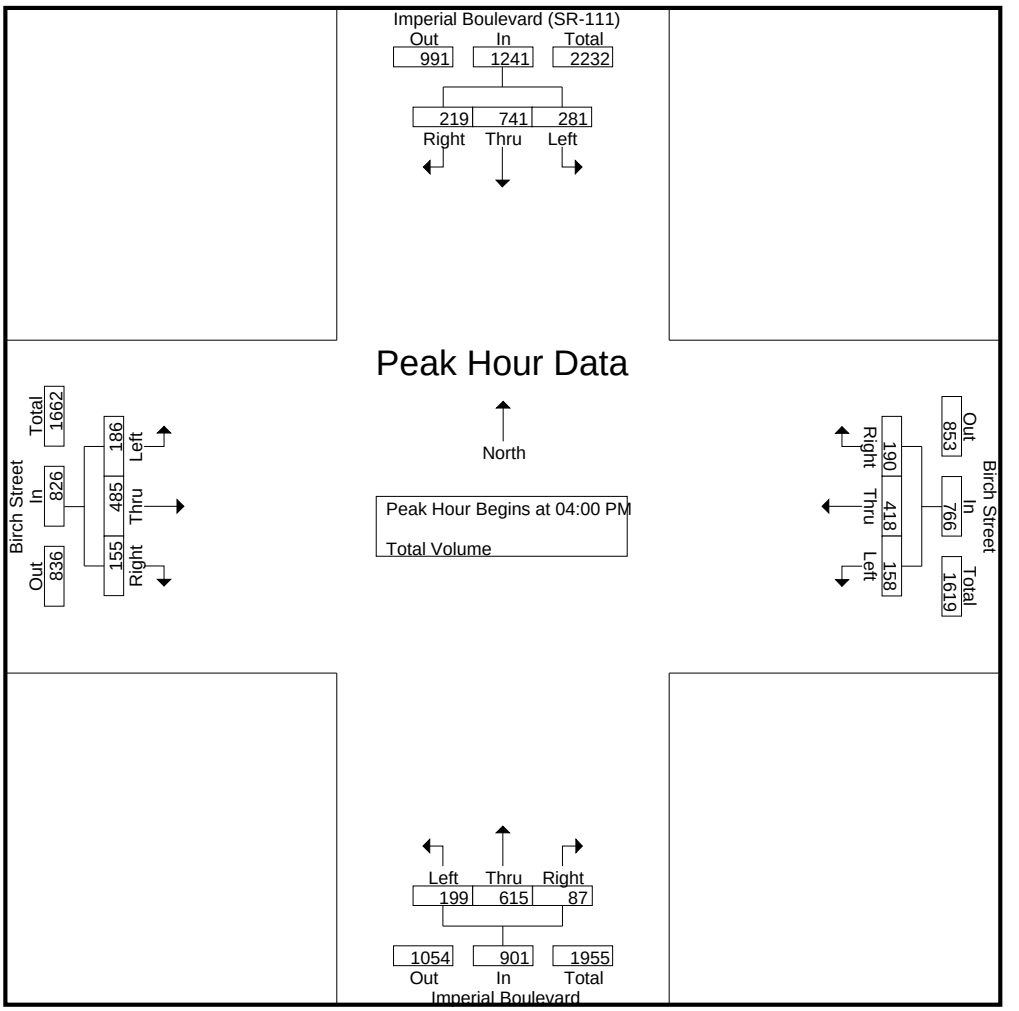
	Imperial Boulevard (SR-111) Southbound				Birch Street Westbound				Imperial Boulevard Northbound				Birch Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	88	195	59	342	44	96	46	186	60	163	20	243	53	136	47	236	1007
04:15 PM	62	185	64	311	51	119	50	220	39	171	27	237	44	111	31	186	954
04:30 PM	79	163	47	289	32	98	47	177	51	134	17	202	51	157	42	250	918
04:45 PM	52	198	49	299	31	105	47	183	49	147	23	219	38	81	35	154	855
Total	281	741	219	1241	158	418	190	766	199	615	87	901	186	485	155	826	3734
05:00 PM	64	162	43	269	26	89	64	179	47	142	19	208	54	163	23	240	896
05:15 PM	72	190	57	319	40	104	33	177	39	166	26	231	48	121	36	205	932
05:30 PM	63	143	51	257	59	92	48	199	44	148	22	214	51	128	31	210	880
05:45 PM	59	142	50	251	22	87	49	158	44	125	28	197	53	127	24	204	810
Total	258	637	201	1096	147	372	194	713	174	581	95	850	206	539	114	859	3518
Grand Total	539	1378	420	2337	305	790	384	1479	373	1196	182	1751	392	1024	269	1685	7252
Apprch %	23.1	59	18		20.6	53.4	26		21.3	68.3	10.4		23.3	60.8	16		
Total %	7.4	19	5.8	32.2	4.2	10.9	5.3	20.4	5.1	16.5	2.5	24.1	5.4	14.1	3.7	23.2	

	Imperial Boulevard (SR-111) Southbound				Birch Street Westbound				Imperial Boulevard Northbound				Birch Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**88**	195	59	**342**	44	96	46	186	**60**	163	20	**243**	**53**	136	**47**	236	**1007**
04:15 PM	62	185	**64**	311	**51**	**119**	**50**	**220**	39	**171**	**27**	237	44	111	31	186	954
04:30 PM	79	163	47	289	32	98	47	177	51	134	17	202	51	**157**	42	**250**	918
04:45 PM	52	**198**	49	299	31	105	47	183	49	147	23	219	38	81	35	154	855
Total Volume	281	741	219	1241	158	418	190	766	199	615	87	901	186	485	155	826	3734
% App. Total	22.6	59.7	17.6		20.6	54.6	24.8		22.1	68.3	9.7		22.5	58.7	18.8		
PHF	.798	.936	.855	.907	.775	.878	.950	.870	.829	.899	.806	.927	.877	.772	.824	.826	.927

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County of Imperial
N/S: Imperial Boulevard
E/W: Birch Street (SR-98)
Weather: Clear

File Name : 30_CIM_Imp_Birch PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				05:00 PM			
+0 mins.	**88**	195	59	**342**	44	96	46	186	**60**	163	20	**243**	**54**	**163**	23	**240**
+15 mins.	62	185	**64**	311	**51**	**119**	**50**	**220**	39	**171**	**27**	237	48	121	**36**	205
+30 mins.	79	163	47	289	32	98	47	177	51	134	17	202	51	128	31	210
+45 mins.	52	**198**	49	299	31	105	47	183	49	147	23	219	53	127	24	204
Total Volume	281	741	219	1241	158	418	190	766	199	615	87	901	206	539	114	859
% App. Total	22.6	59.7	17.6		20.6	54.6	24.8		22.1	68.3	9.7		24	62.7	13.3	
PHF	.798	.936	.855	.907	.775	.878	.950	.870	.829	.899	.806	.927	.954	.827	.792	.895

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County of Imperial
N/S: Cesar Chavez Boulevard
E/W: W 2nd Street
Weather: Clear

File Name : 31_CIM_CesarC_2nd St AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

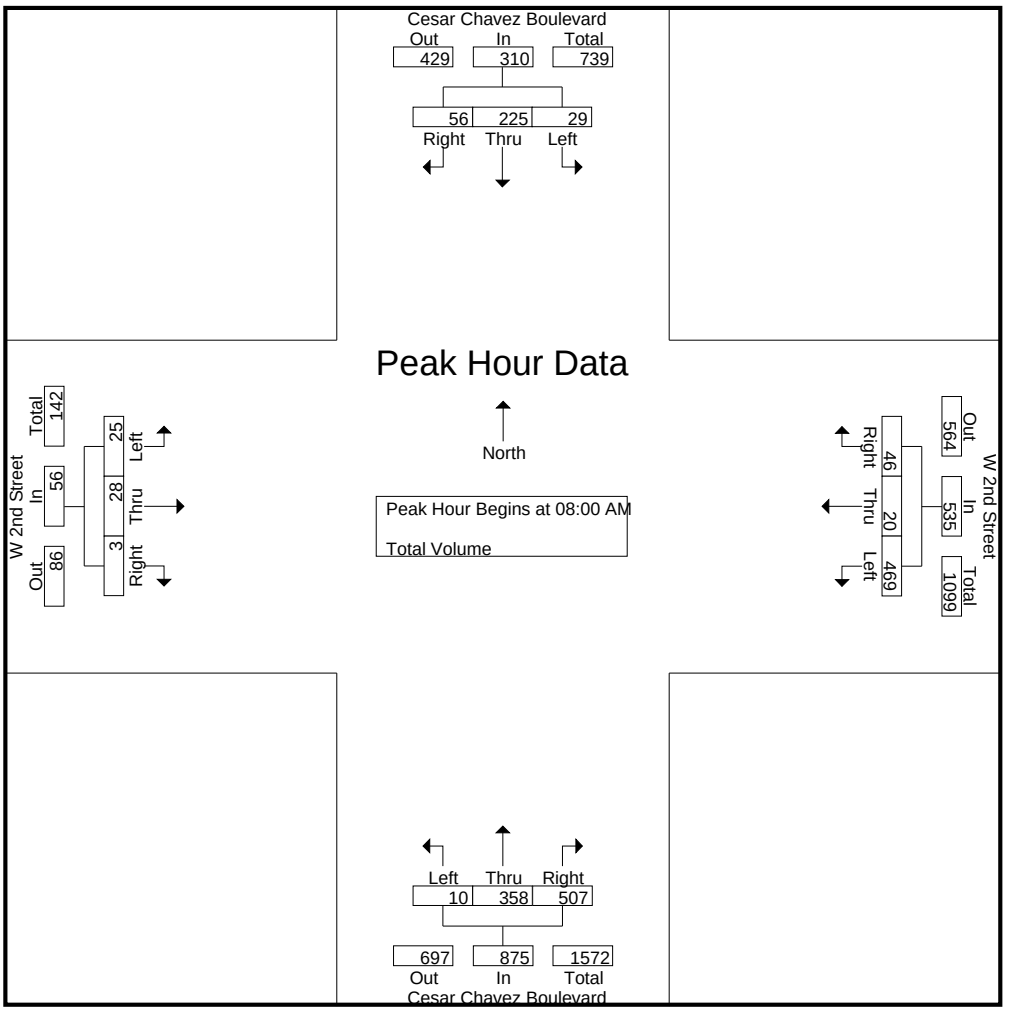
	Cesar Chavez Boulevard Southbound				W 2nd Street Westbound				Cesar Chavez Boulevard Northbound				W 2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	20	6	31	17	4	11	32	2	89	108	199	3	8	0	11	273
07:15 AM	8	37	8	53	55	2	19	76	4	102	128	234	5	6	1	12	375
07:30 AM	9	47	9	65	69	3	13	85	3	88	108	199	4	2	1	7	356
07:45 AM	14	47	16	77	110	5	20	135	1	79	117	197	2	0	0	2	411
Total	36	151	39	226	251	14	63	328	10	358	461	829	14	16	2	32	1415
08:00 AM	11	54	10	75	119	6	17	142	2	75	111	188	4	8	0	12	417
08:15 AM	6	49	11	66	130	4	16	150	3	86	107	196	3	1	0	4	416
08:30 AM	4	65	12	81	110	5	4	119	1	88	149	238	8	9	0	17	455
08:45 AM	8	57	23	88	110	5	9	124	4	109	140	253	10	10	3	23	488
Total	29	225	56	310	469	20	46	535	10	358	507	875	25	28	3	56	1776
Grand Total	65	376	95	536	720	34	109	863	20	716	968	1704	39	44	5	88	3191
Apprch %	12.1	70.1	17.7		83.4	3.9	12.6		1.2	42	56.8		44.3	50	5.7		
Total %	2	11.8	3	16.8	22.6	1.1	3.4	27	0.6	22.4	30.3	53.4	1.2	1.4	0.2	2.8	

	Cesar Chavez Boulevard Southbound				W 2nd Street Westbound				Cesar Chavez Boulevard Northbound				W 2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**11**	54	10	75	119	**6**	**17**	142	2	75	111	188	4	8	0	12	417
08:15 AM	6	49	11	66	**130**	4	16	**150**	3	86	107	196	3	1	0	4	416
08:30 AM	4	**65**	12	81	110	5	4	119	1	88	**149**	238	8	9	0	17	455
08:45 AM	8	57	**23**	**88**	110	5	9	124	**4**	**109**	140	**253**	**10**	**10**	**3**	**23**	**488**
Total Volume	29	225	56	310	469	20	46	535	10	358	507	875	25	28	3	56	1776
% App. Total	9.4	72.6	18.1		87.7	3.7	8.6		1.1	40.9	57.9		44.6	50	5.4		
PHF	.659	.865	.609	.881	.902	.833	.676	.892	.625	.821	.851	.865	.625	.700	.250	.609	.910

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County of Imperial
N/S: Cesar Chavez Boulevard
E/W: W 2nd Street
Weather: Clear

File Name : 31_CIM_CesarC_2nd St AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:45 AM				08:00 AM				08:00 AM			
+0 mins.	**11**	54	10	75	110	5	**20**	135	2	75	111	188	4	8	0	12
+15 mins.	6	49	11	66	119	**6**	17	142	3	86	107	196	3	1	0	4
+30 mins.	4	**65**	12	81	**130**	4	16	**150**	1	88	**149**	238	8	9	0	17
+45 mins.	8	57	**23**	**88**	110	5	4	119	**4**	**109**	140	**253**	**10**	**10**	**3**	**23**
Total Volume	29	225	56	310	469	20	57	546	10	358	507	875	25	28	3	56
% App. Total	9.4	72.6	18.1		85.9	3.7	10.4		1.1	40.9	57.9		44.6	50	5.4	
PHF	.659	.865	.609	.881	.902	.833	.713	.910	.625	.821	.851	.865	.625	.700	.250	.609

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County of Imperial
N/S: Cesar Chavez Boulevard
E/W: W 2nd Street
Weather: Clear

File Name : 31_CIM_CesarC_2nd St PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

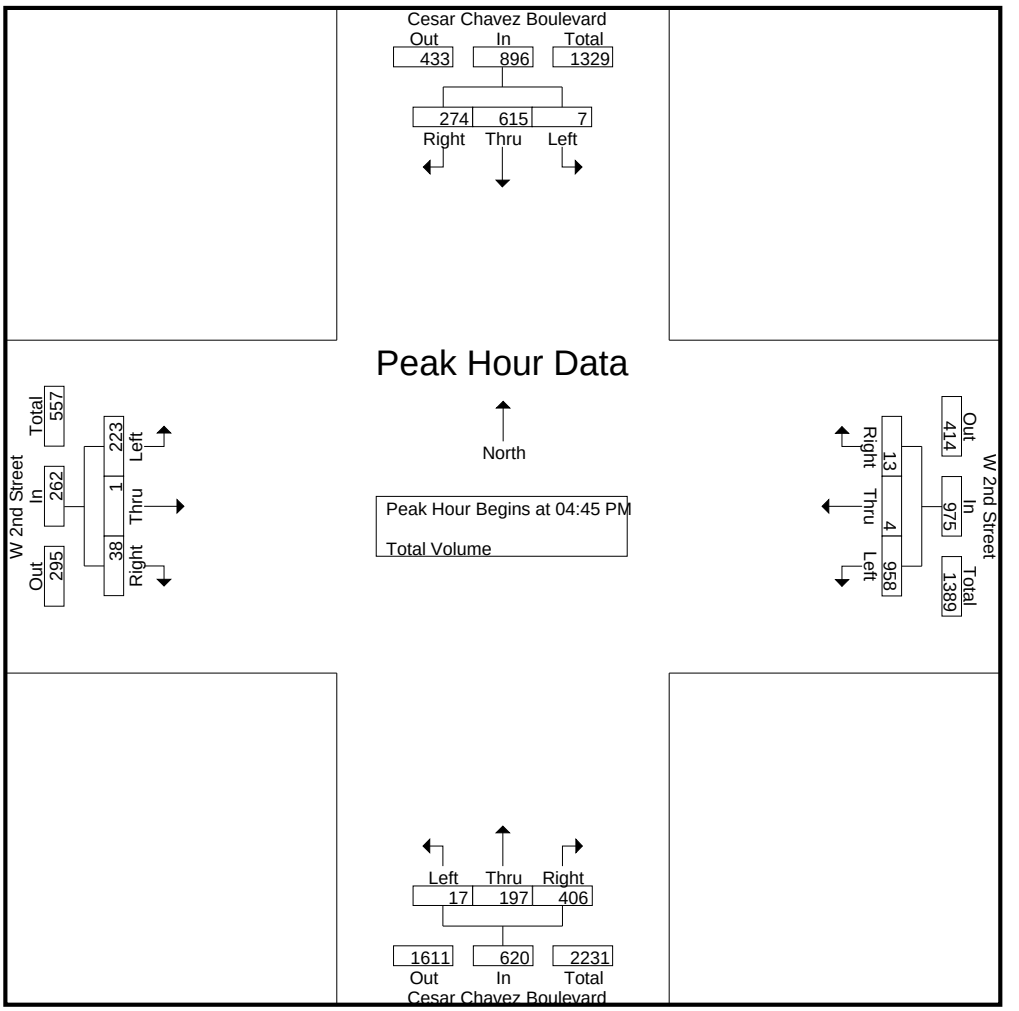
	Cesar Chavez Boulevard Southbound				W 2nd Street Westbound				Cesar Chavez Boulevard Northbound				W 2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	106	58	164	235	1	3	239	1	35	113	149	56	0	9	65	617
04:15 PM	1	95	63	159	228	1	1	230	7	45	115	167	45	0	17	62	618
04:30 PM	0	147	62	209	208	1	5	214	4	32	72	108	38	2	16	56	587
04:45 PM	2	168	70	240	253	0	4	257	4	47	82	133	58	1	8	67	697
Total	3	516	253	772	924	3	13	940	16	159	382	557	197	3	50	250	2519
05:00 PM	2	167	66	235	256	0	3	259	4	55	105	164	45	0	8	53	711
05:15 PM	1	139	58	198	260	1	4	265	3	56	102	161	57	0	14	71	695
05:30 PM	2	141	80	223	189	3	2	194	6	39	117	162	63	0	8	71	650
05:45 PM	0	96	55	151	293	0	3	296	7	30	80	117	64	2	7	73	637
Total	5	543	259	807	998	4	12	1014	20	180	404	604	229	2	37	268	2693
Grand Total	8	1059	512	1579	1922	7	25	1954	36	339	786	1161	426	5	87	518	5212
Apprch %	0.5	67.1	32.4		98.4	0.4	1.3		3.1	29.2	67.7		82.2	1	16.8		
Total %	0.2	20.3	9.8	30.3	36.9	0.1	0.5	37.5	0.7	6.5	15.1	22.3	8.2	0.1	1.7	9.9	

	Cesar Chavez Boulevard Southbound				W 2nd Street Westbound				Cesar Chavez Boulevard Northbound				W 2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**2**	**168**	70	**240**	253	0	**4**	257	4	47	82	133	58	**1**	8	67	697
05:00 PM	2	167	66	235	256	0	3	259	4	55	105	**164**	45	0	8	53	**711**
05:15 PM	1	139	58	198	**260**	1	4	**265**	3	**56**	102	161	57	0	**14**	**71**	695
05:30 PM	2	141	**80**	223	189	**3**	2	194	**6**	39	**117**	162	**63**	0	8	71	650
Total Volume	7	615	274	896	958	4	13	975	17	197	406	620	223	1	38	262	2753
% App. Total	0.8	68.6	30.6		98.3	0.4	1.3		2.7	31.8	65.5		85.1	0.4	14.5		
PHF	.875	.915	.856	.933	.921	.333	.813	.920	.708	.879	.868	.945	.885	.250	.679	.923	.968

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County of Imperial
N/S: Cesar Chavez Boulevard
E/W: W 2nd Street
Weather: Clear

File Name : 31_CIM_CesarC_2nd St PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				04:45 PM				05:00 PM			
+0 mins.	**2**	**168**	70	**240**	256	0	3	259	4	47	82	133	45	0	8	53
+15 mins.	2	167	66	235	260	1	**4**	265	4	55	105	**164**	57	0	**14**	71
+30 mins.	1	139	58	198	189	**3**	2	194	3	**56**	102	161	63	0	8	71
+45 mins.	2	141	**80**	223	**293**	0	3	**296**	**6**	39	**117**	162	**64**	**2**	7	**73**
Total Volume	7	615	274	896	998	4	12	1014	17	197	406	620	229	2	37	268
% App. Total	0.8	68.6	30.6		98.4	0.4	1.2		2.7	31.8	65.5		85.4	0.7	13.8	
PHF	.875	.915	.856	.933	.852	.333	.750	.856	.708	.879	.868	.945	.895	.250	.661	.918

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County of Imperial
N/S: Imperial Boulevard
E/W: 2nd Street
Weather: Clear

File Name : 32_CIM_Imp_2nd St AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

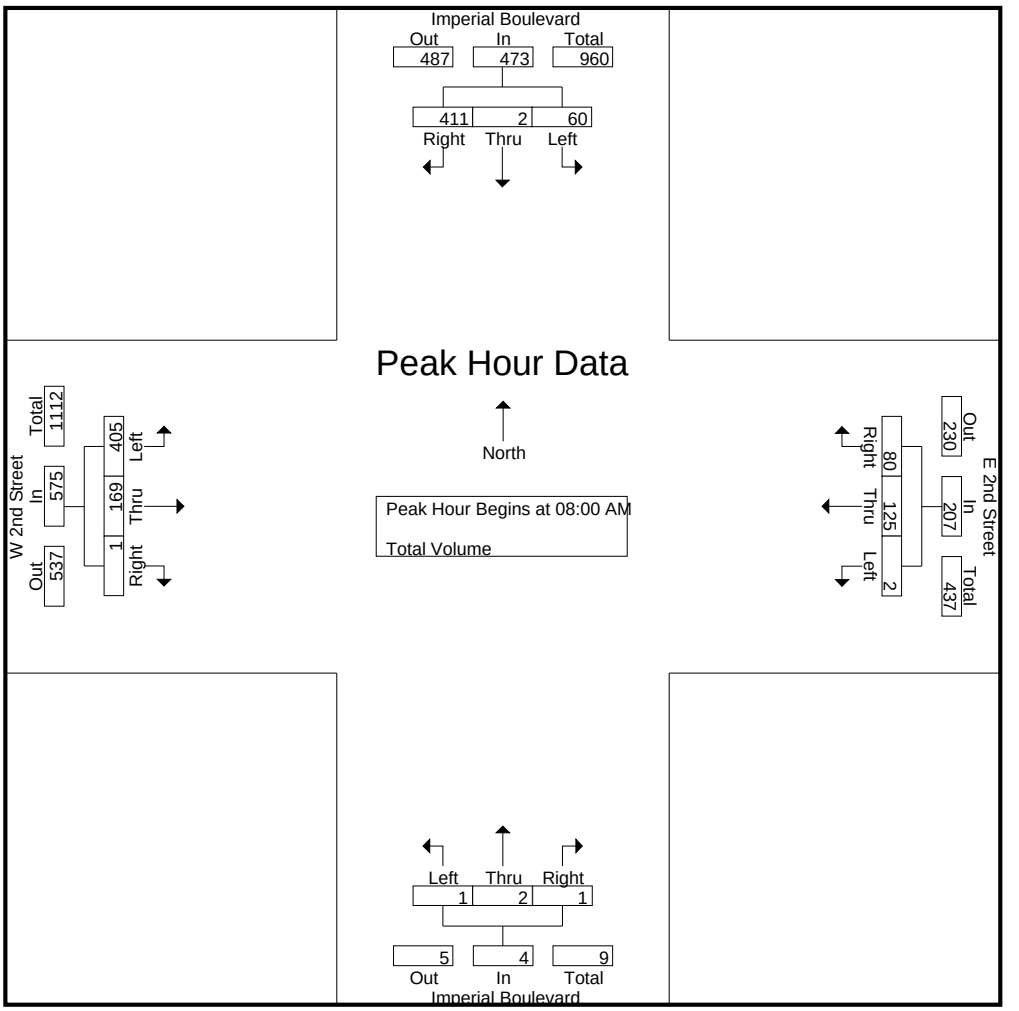
	Imperial Boulevard Southbound				E 2nd Street Westbound				Imperial Boulevard Northbound				W 2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	2	18	26	0	13	9	22	0	0	0	0	82	25	0	107	155
07:15 AM	10	1	47	58	0	21	15	36	0	0	0	0	116	57	0	173	267
07:30 AM	11	0	58	69	0	32	19	51	0	1	0	1	95	31	0	126	247
07:45 AM	13	4	88	105	1	36	14	51	0	2	0	2	116	46	1	163	321
Total	40	7	211	258	1	102	57	160	0	3	0	3	409	159	1	569	990
08:00 AM	14	1	105	120	1	37	15	53	0	1	0	1	73	37	0	110	284
08:15 AM	11	0	118	129	1	37	19	57	0	0	1	1	106	43	1	150	337
08:30 AM	16	1	98	115	0	23	27	50	1	0	0	1	107	38	0	145	311
08:45 AM	19	0	90	109	0	28	19	47	0	1	0	1	119	51	0	170	327
Total	60	2	411	473	2	125	80	207	1	2	1	4	405	169	1	575	1259
Grand Total	100	9	622	731	3	227	137	367	1	5	1	7	814	328	2	1144	2249
Apprch %	13.7	1.2	85.1		0.8	61.9	37.3		14.3	71.4	14.3		71.2	28.7	0.2		
Total %	4.4	0.4	27.7	32.5	0.1	10.1	6.1	16.3	0	0.2	0	0.3	36.2	14.6	0.1	50.9	

	Imperial Boulevard Southbound				E 2nd Street Westbound				Imperial Boulevard Northbound				W 2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	14	**1**	105	120	**1**	**37**	15	53	0	**1**	0	**1**	73	37	0	110	284
08:15 AM	11	0	**118**	**129**	1	37	19	**57**	0	0	**1**	1	106	43	**1**	150	**337**
08:30 AM	16	1	98	115	0	23	**27**	50	**1**	0	0	1	107	38	0	145	311
08:45 AM	**19**	0	90	109	0	28	19	47	0	1	0	1	**119**	**51**	0	**170**	327
Total Volume	60	2	411	473	2	125	80	207	1	2	1	4	405	169	1	575	1259
% App. Total	12.7	0.4	86.9		1	60.4	38.6		25	50	25		70.4	29.4	0.2		
PHF	.789	.500	.871	.917	.500	.845	.741	.908	.250	.500	.250	1.00	.851	.828	.250	.846	.934

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County of Imperial
N/S: Imperial Boulevard
E/W: 2nd Street
Weather: Clear

File Name : 32_CIM_Imp_2nd St AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				07:30 AM				07:30 AM				08:00 AM			
+0 mins.	14	**1**	105	120	0	32	**19**	51	0	1	0	1	73	37	0	110
+15 mins.	11	0	**118**	**129**	**1**	36	14	51	0	**2**	0	**2**	106	43	**1**	150
+30 mins.	16	1	98	115	1	**37**	15	53	0	1	0	1	107	38	0	145
+45 mins.	**19**	0	90	109	1	37	19	**57**	0	0	**1**	1	**119**	**51**	0	**170**
Total Volume	60	2	411	473	3	142	67	212	0	4	1	5	405	169	1	575
% App. Total	12.7	0.4	86.9		1.4	67	31.6		0	80	20		70.4	29.4	0.2	
PHF	.789	.500	.871	.917	.750	.959	.882	.930	.000	.500	.250	.625	.851	.828	.250	.846

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County of Imperial
N/S: Imperial Boulevard
E/W: 2nd Street
Weather: Clear

File Name : 32_CIM_Imp_2nd St PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

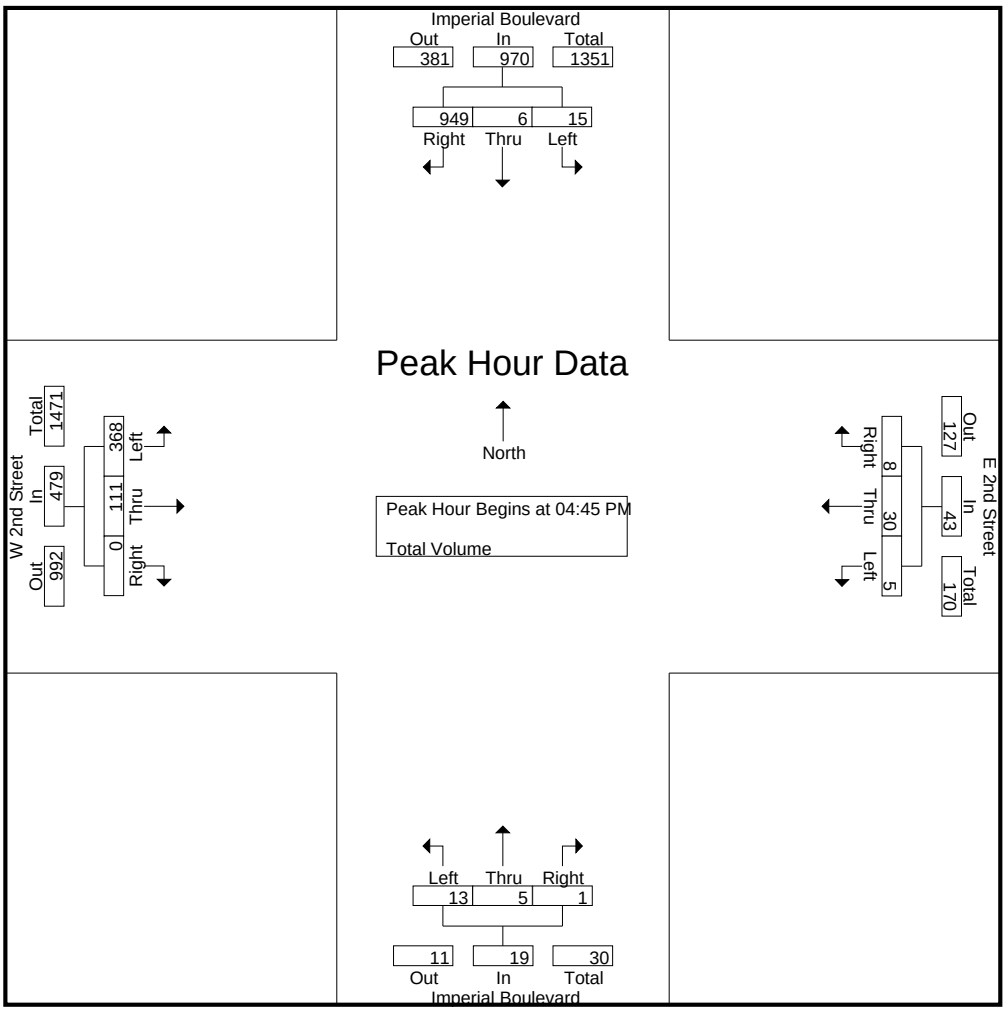
	Imperial Boulevard Southbound				E 2nd Street Westbound				Imperial Boulevard Northbound				W 2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	204	205	2	13	0	15	3	4	0	7	92	24	0	116	343
04:15 PM	2	0	242	244	3	6	4	13	2	2	4	8	106	27	0	133	398
04:30 PM	0	1	182	183	2	9	4	15	1	2	0	3	71	18	0	89	290
04:45 PM	1	0	241	242	0	6	2	8	4	1	0	5	97	22	0	119	374
Total	3	2	869	874	7	34	10	51	10	9	4	23	366	91	0	457	1405
05:00 PM	2	2	249	253	2	7	0	9	1	1	0	2	79	37	0	116	380
05:15 PM	4	2	266	272	2	12	2	16	6	2	1	9	95	21	0	116	413
05:30 PM	8	2	193	203	1	5	4	10	2	1	0	3	97	31	0	128	344
05:45 PM	4	0	265	269	0	3	3	6	0	1	1	2	64	13	0	77	354
Total	18	6	973	997	5	27	9	41	9	5	2	16	335	102	0	437	1491
Grand Total	21	8	1842	1871	12	61	19	92	19	14	6	39	701	193	0	894	2896
Apprch %	1.1	0.4	98.5		13	66.3	20.7		48.7	35.9	15.4		78.4	21.6	0		
Total %	0.7	0.3	63.6	64.6	0.4	2.1	0.7	3.2	0.7	0.5	0.2	1.3	24.2	6.7	0	30.9	

	Imperial Boulevard Southbound				E 2nd Street Westbound				Imperial Boulevard Northbound				W 2nd Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	0	241	242	0	6	2	8	4	1	0	5	**97**	22	0	119	374
05:00 PM	2	**2**	249	253	**2**	7	0	9	1	1	0	2	79	**37**	0	116	380
05:15 PM	4	2	**266**	**272**	2	**12**	2	**16**	**6**	**2**	**1**	**9**	95	21	0	116	**413**
05:30 PM	**8**	2	193	203	1	5	**4**	10	2	1	0	3	97	31	0	**128**	344
Total Volume	15	6	949	970	5	30	8	43	13	5	1	19	368	111	0	479	1511
% App. Total	1.5	0.6	97.8		11.6	69.8	18.6		68.4	26.3	5.3		76.8	23.2	0		
PHF	.469	.750	.892	.892	.625	.625	.500	.672	.542	.625	.250	.528	.948	.750	.000	.936	.915

Counts Unlimited, Inc.
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(951) 268-6268

County of Imperial
N/S: Imperial Boulevard
E/W: 2nd Street
Weather: Clear

File Name : 32_CIM_Imp_2nd St PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:00 PM				04:45 PM			
+0 mins.	2	**2**	249	253	2	**13**	0	**15**	3	**4**	0	7	**97**	22	0	119
+15 mins.	4	2	**266**	**272**	**3**	6	**4**	13	2	2	**4**	**8**	79	**37**	0	116
+30 mins.	**8**	2	193	203	2	9	4	15	1	2	0	3	95	21	0	116
+45 mins.	4	0	265	269	0	6	2	8	**4**	1	0	5	97	31	0	**128**
Total Volume	18	6	973	997	7	34	10	51	10	9	4	23	368	111	0	479
% App. Total	1.8	0.6	97.6		13.7	66.7	19.6		43.5	39.1	17.4		76.8	23.2	0	
PHF	.563	.750	.914	.916	.583	.654	.625	.850	.625	.563	.250	.719	.948	.750	.000	.936

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County of Imperial
N/S: Orchard Road/SR-7
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 33_CIM_SR7_8W AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

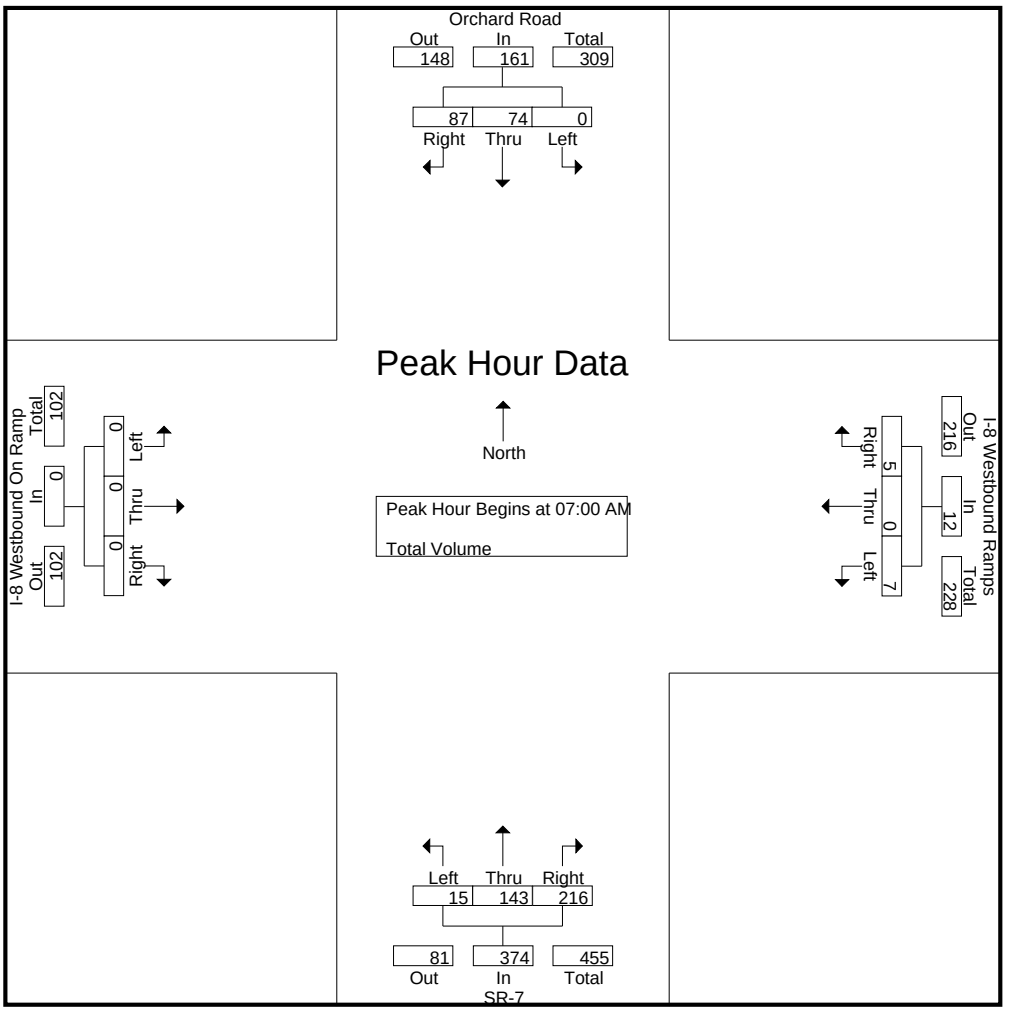
	Orchard Road Southbound				I-8 Westbound Ramps Westbound				SR-7 Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	16	12	28	2	0	0	2	3	25	55	83	0	0	0	0	113
07:15 AM	0	13	23	36	3	0	1	4	5	36	65	106	0	0	0	0	146
07:30 AM	0	21	29	50	1	0	4	5	5	43	46	94	0	0	0	0	149
07:45 AM	0	24	23	47	1	0	0	1	2	39	50	91	0	0	0	0	139
Total	0	74	87	161	7	0	5	12	15	143	216	374	0	0	0	0	547
08:00 AM	0	19	17	36	1	0	1	2	3	17	40	60	0	0	0	0	98
08:15 AM	0	20	10	30	4	0	2	6	2	21	44	67	0	0	0	0	103
08:30 AM	0	25	12	37	5	0	1	6	3	18	49	70	0	0	0	0	113
08:45 AM	0	20	9	29	2	0	1	3	6	27	57	90	0	0	0	0	122
Total	0	84	48	132	12	0	5	17	14	83	190	287	0	0	0	0	436
Grand Total	0	158	135	293	19	0	10	29	29	226	406	661	0	0	0	0	983
Apprch %	0	53.9	46.1		65.5	0	34.5		4.4	34.2	61.4		0	0	0		
Total %	0	16.1	13.7	29.8	1.9	0	1	3	3	23	41.3	67.2	0	0	0	0	

	Orchard Road Southbound				I-8 Westbound Ramps Westbound				SR-7 Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	16	12	28	2	0	0	2	3	25	55	83	0	0	0	0	113
07:15 AM	0	13	23	36	**3**	0	1	4	**5**	36	**65**	**106**	0	0	0	0	146
07:30 AM	0	21	**29**	**50**	1	0	**4**	**5**	5	**43**	46	94	0	0	0	0	**149**
07:45 AM	0	**24**	23	47	1	0	0	1	2	39	50	91	0	0	0	0	139
Total Volume	0	74	87	161	7	0	5	12	15	143	216	374	0	0	0	0	547
% App. Total	0	46	54		58.3	0	41.7		4	38.2	57.8		0	0	0		
PHF	.000	.771	.750	.805	.583	.000	.313	.600	.750	.831	.831	.882	.000	.000	.000	.000	.918

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Orchard Road/SR-7
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 33_CIM_SR7_8W AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				08:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	13	23	36	1	0	1	2	3	25	55	83	0	0	0	0
+15 mins.	0	21	**29**	**50**	4	0	**2**	**6**	**5**	36	**65**	**106**	0	0	0	0
+30 mins.	0	**24**	23	47	**5**	0	1	6	5	**43**	46	94	0	0	0	0
+45 mins.	0	19	17	36	2	0	1	3	2	39	50	91	0	0	0	0
Total Volume	0	77	92	169	12	0	5	17	15	143	216	374	0	0	0	0
% App. Total	0	45.6	54.4		70.6	0	29.4		4	38.2	57.8		0	0	0	
PHF	.000	.802	.793	.845	.600	.000	.625	.708	.750	.831	.831	.882	.000	.000	.000	.000

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County of Imperial
N/S: Orchard Road/SR-7
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 33_CIM_SR7_8W PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

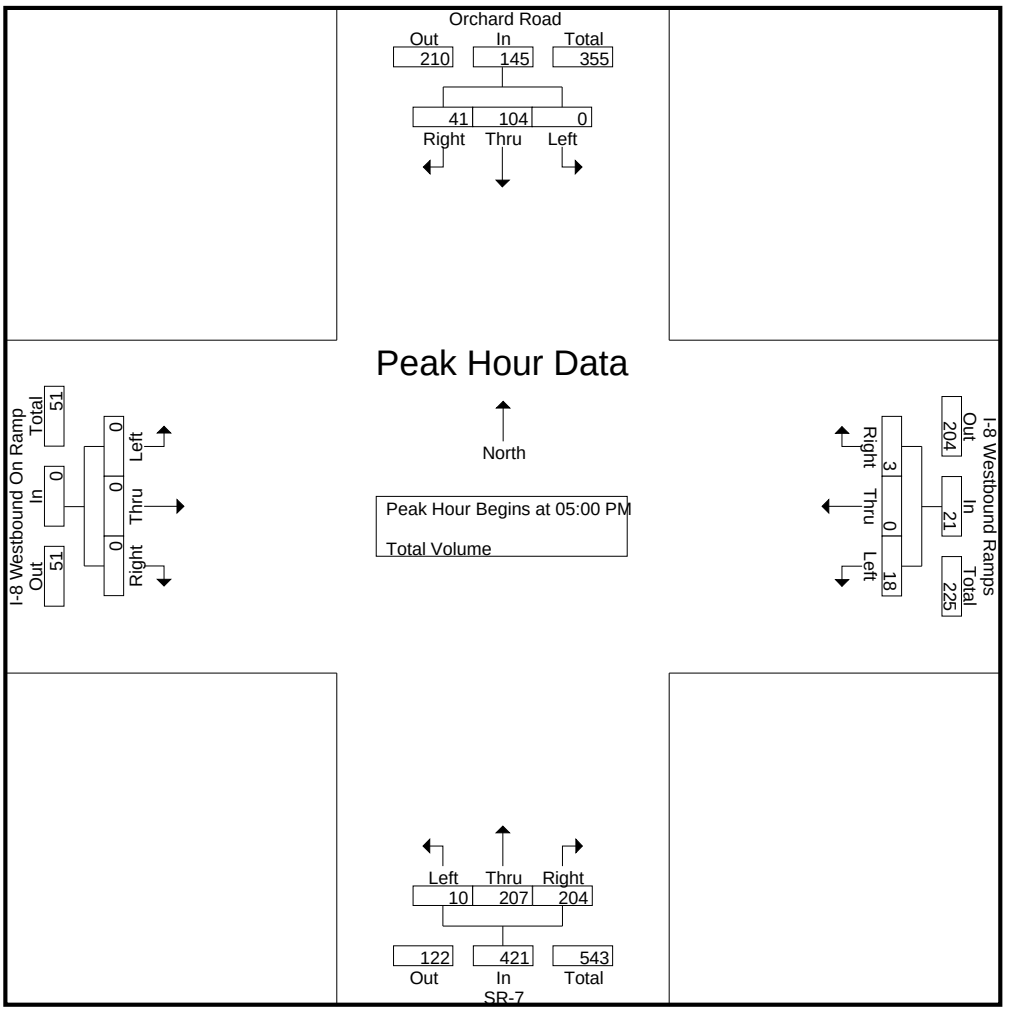
	Orchard Road Southbound				I-8 Westbound Ramps Westbound				SR-7 Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	27	7	34	8	0	2	10	2	42	50	94	0	0	0	0	138
04:15 PM	0	32	11	43	4	0	1	5	3	41	64	108	0	0	0	0	156
04:30 PM	0	25	13	38	3	0	2	5	4	37	62	103	0	0	0	0	146
04:45 PM	0	19	5	24	4	0	0	4	1	46	54	101	0	0	0	0	129
Total	0	103	36	139	19	0	5	24	10	166	230	406	0	0	0	0	569
05:00 PM	0	34	11	45	3	0	0	3	3	38	56	97	0	0	0	0	145
05:15 PM	0	20	8	28	2	0	1	3	5	66	41	112	0	0	0	0	143
05:30 PM	0	25	15	40	8	0	0	8	1	53	54	108	0	0	0	0	156
05:45 PM	0	25	7	32	5	0	2	7	1	50	53	104	0	0	0	0	143
Total	0	104	41	145	18	0	3	21	10	207	204	421	0	0	0	0	587
Grand Total	0	207	77	284	37	0	8	45	20	373	434	827	0	0	0	0	1156
Apprch %	0	72.9	27.1		82.2	0	17.8		2.4	45.1	52.5		0	0	0		
Total %	0	17.9	6.7	24.6	3.2	0	0.7	3.9	1.7	32.3	37.5	71.5	0	0	0	0	

	Orchard Road Southbound				I-8 Westbound Ramps Westbound				SR-7 Northbound				I-8 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**34**	11	**45**	3	0	0	3	3	38	**56**	97	0	0	0	0	145
05:15 PM	0	20	8	28	2	0	1	3	**5**	**66**	41	**112**	0	0	0	0	143
05:30 PM	0	25	**15**	40	**8**	0	0	**8**	1	53	54	108	0	0	0	0	**156**
05:45 PM	0	25	7	32	5	0	**2**	7	1	50	53	104	0	0	0	0	143
Total Volume	0	104	41	145	18	0	3	21	10	207	204	421	0	0	0	0	587
% App. Total	0	71.7	28.3		85.7	0	14.3		2.4	49.2	48.5		0	0	0		
PHF	.000	.765	.683	.806	.563	.000	.375	.656	.500	.784	.911	.940	.000	.000	.000	.000	.941

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: Orchard Road/SR-7
E/W: I-8 Westbound Ramps
Weather: Clear

File Name : 33_CIM_SR7_8W PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:00 PM				05:00 PM				04:00 PM			
+0 mins.	0	32	11	43	**8**	0	**2**	**10**	3	38	**56**	97	0	0	0	0
+15 mins.	0	25	**13**	38	4	0	1	5	**5**	**66**	41	**112**	0	0	0	0
+30 mins.	0	19	5	24	3	0	2	5	1	53	54	108	0	0	0	0
+45 mins.	0	**34**	11	**45**	4	0	0	4	1	50	53	104	0	0	0	0
Total Volume	0	110	40	150	19	0	5	24	10	207	204	421	0	0	0	0
% App. Total	0	73.3	26.7		79.2	0	20.8		2.4	49.2	48.5		0	0	0	
PHF	.000	.809	.769	.833	.594	.000	.625	.600	.500	.784	.911	.940	.000	.000	.000	.000

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County of Imperial
N/S: SR-7
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 34_CIM_SR7_8E AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

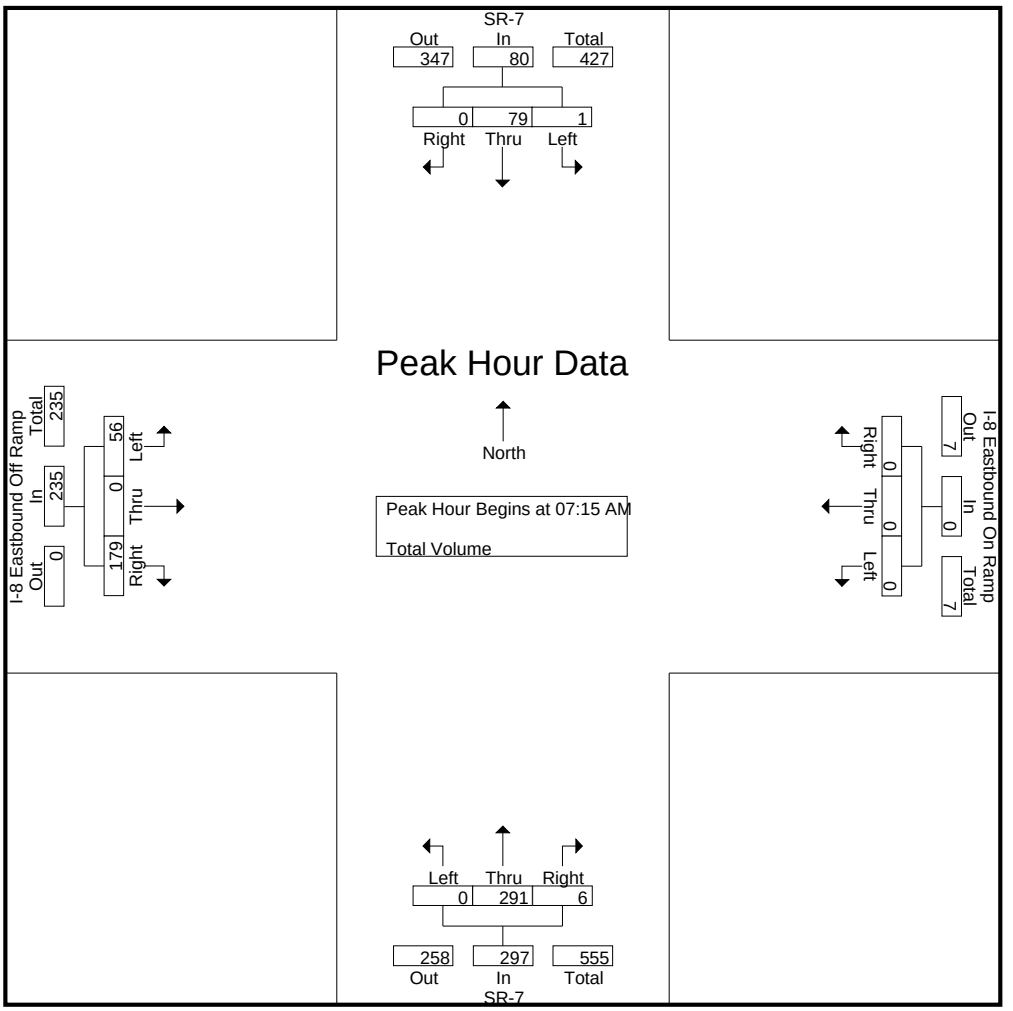
	SR-7 Southbound				I-8 Eastbound On Ramp Westbound				SR-7 Northbound				I-8 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	18	0	18	0	0	0	0	0	77	1	78	6	0	12	18	114
07:15 AM	0	16	0	16	0	0	0	0	0	94	3	97	12	0	30	42	155
07:30 AM	0	21	0	21	0	0	0	0	0	69	0	69	22	0	45	67	157
07:45 AM	0	25	0	25	0	0	0	0	0	76	2	78	14	0	60	74	177
Total	0	80	0	80	0	0	0	0	0	316	6	322	54	0	147	201	603
08:00 AM	1	17	0	18	0	0	0	0	0	52	1	53	8	0	44	52	123
08:15 AM	0	23	0	23	0	0	0	0	0	64	1	65	6	0	43	49	137
08:30 AM	0	29	0	29	0	0	0	0	0	61	0	61	8	0	40	48	138
08:45 AM	0	21	0	21	0	0	0	0	0	84	1	85	7	0	37	44	150
Total	1	90	0	91	0	0	0	0	0	261	3	264	29	0	164	193	548
Grand Total	1	170	0	171	0	0	0	0	0	577	9	586	83	0	311	394	1151
Apprch %	0.6	99.4	0		0	0	0		0	98.5	1.5		21.1	0	78.9		
Total %	0.1	14.8	0	14.9	0	0	0	0	0	50.1	0.8	50.9	7.2	0	27	34.2	

	SR-7 Southbound				I-8 Eastbound On Ramp Westbound				SR-7 Northbound				I-8 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	16	0	16	0	0	0	0	0	**94**	**3**	**97**	12	0	30	42	155
07:30 AM	0	21	0	21	0	0	0	0	0	69	0	69	**22**	0	45	67	157
07:45 AM	0	**25**	0	**25**	0	0	0	0	0	76	2	78	14	0	**60**	**74**	**177**
08:00 AM	**1**	17	0	18	0	0	0	0	0	52	1	53	8	0	44	52	123
Total Volume	1	79	0	80	0	0	0	0	0	291	6	297	56	0	179	235	612
% App. Total	1.2	98.8	0		0	0	0		0	98	2		23.8	0	76.2		
PHF	.250	.790	.000	.800	.000	.000	.000	.000	.000	.774	.500	.765	.636	.000	.746	.794	.864

Counts Unlimited, Inc.
PO Box 1178
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(951) 268-6268

County of Imperial
N/S: SR-7
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 34_CIM_SR7_8E AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:00 AM				07:00 AM				07:30 AM			
+0 mins.	0	25	0	25	0	0	0	0	0	77	1	78	**22**	0	45	67
+15 mins.	**1**	17	0	18	0	0	0	0	0	**94**	**3**	**97**	14	0	**60**	**74**
+30 mins.	0	23	0	23	0	0	0	0	0	69	0	69	8	0	44	52
+45 mins.	0	**29**	0	**29**	0	0	0	0	0	76	2	78	6	0	43	49
Total Volume	1	94	0	95	0	0	0	0	0	316	6	322	50	0	192	242
% App. Total	1.1	98.9	0		0	0	0		0	98.1	1.9		20.7	0	79.3	
PHF	.250	.810	.000	.819	.000	.000	.000	.000	.000	.840	.500	.830	.568	.000	.800	.818

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(951) 268-6268

County of Imperial
N/S: SR-7
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 34_CIM_SR7_8E PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

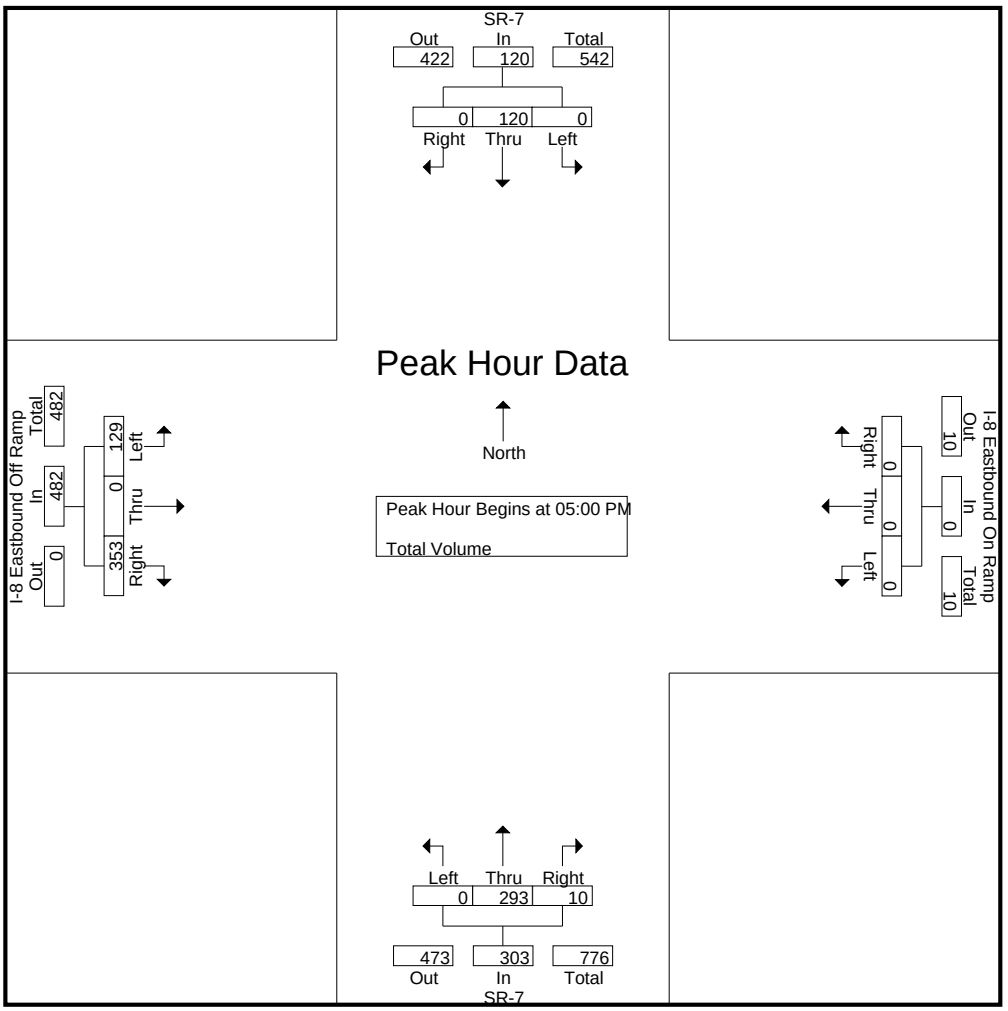
	SR-7 Southbound				I-8 Eastbound On Ramp Westbound				SR-7 Northbound				I-8 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	33	0	33	0	0	0	0	0	71	7	78	22	0	83	105	216
04:15 PM	0	35	0	35	0	0	0	0	0	92	1	93	17	0	67	84	212
04:30 PM	0	26	0	26	0	0	0	0	0	79	2	81	23	0	91	114	221
04:45 PM	0	21	0	21	0	0	0	0	0	80	0	80	20	0	78	98	199
Total	0	115	0	115	0	0	0	0	0	322	10	332	82	0	319	401	848
05:00 PM	0	35	0	35	0	0	0	0	0	77	0	77	22	0	81	103	215
05:15 PM	0	24	0	24	0	0	0	0	0	69	2	71	43	0	102	145	240
05:30 PM	0	32	0	32	0	0	0	0	0	72	4	76	34	0	92	126	234
05:45 PM	0	29	0	29	0	0	0	0	0	75	4	79	30	0	78	108	216
Total	0	120	0	120	0	0	0	0	0	293	10	303	129	0	353	482	905
Grand Total	0	235	0	235	0	0	0	0	0	615	20	635	211	0	672	883	1753
Apprch %	0	100	0		0	0	0		0	96.9	3.1		23.9	0	76.1		
Total %	0	13.4	0	13.4	0	0	0	0	0	35.1	1.1	36.2	12	0	38.3	50.4	

	SR-7 Southbound				I-8 Eastbound On Ramp Westbound				SR-7 Northbound				I-8 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	**35**	0	**35**	0	0	0	0	0	**77**	0	77	22	0	81	103	215
05:15 PM	0	24	0	24	0	0	0	0	0	69	2	71	**43**	0	**102**	**145**	**240**
05:30 PM	0	32	0	32	0	0	0	0	0	72	**4**	76	34	0	92	126	234
05:45 PM	0	29	0	29	0	0	0	0	0	75	4	**79**	30	0	78	108	216
Total Volume	0	120	0	120	0	0	0	0	0	293	10	303	129	0	353	482	905
% App. Total	0	100	0		0	0	0		0	96.7	3.3		26.8	0	73.2		
PHF	.000	.857	.000	.857	.000	.000	.000	.000	.000	.951	.625	.959	.750	.000	.865	.831	.943

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: SR-7
E/W: I-8 Eastbound Ramps
Weather: Clear

File Name : 34_CIM_SR7_8E PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:00 PM				05:00 PM			
+0 mins.	0	**35**	0	**35**	0	0	0	0	0	71	**7**	78	22	0	81	103
+15 mins.	0	24	0	24	0	0	0	0	0	**92**	1	**93**	**43**	0	**102**	**145**
+30 mins.	0	32	0	32	0	0	0	0	0	79	2	81	34	0	92	126
+45 mins.	0	29	0	29	0	0	0	0	0	80	0	80	30	0	78	108
Total Volume	0	120	0	120	0	0	0	0	0	322	10	332	129	0	353	482
% App. Total	0	100	0		0	0	0		0	97	3		26.8	0	73.2	
PHF	.000	.857	.000	.857	.000	.000	.000	.000	.000	.875	.357	.892	.750	.000	.865	.831

Counts Unlimited, Inc.
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County of Imperial
N/S: SR-7
E/W: SR-98
Weather: Clear

File Name : 35_CIM_SR7_98 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

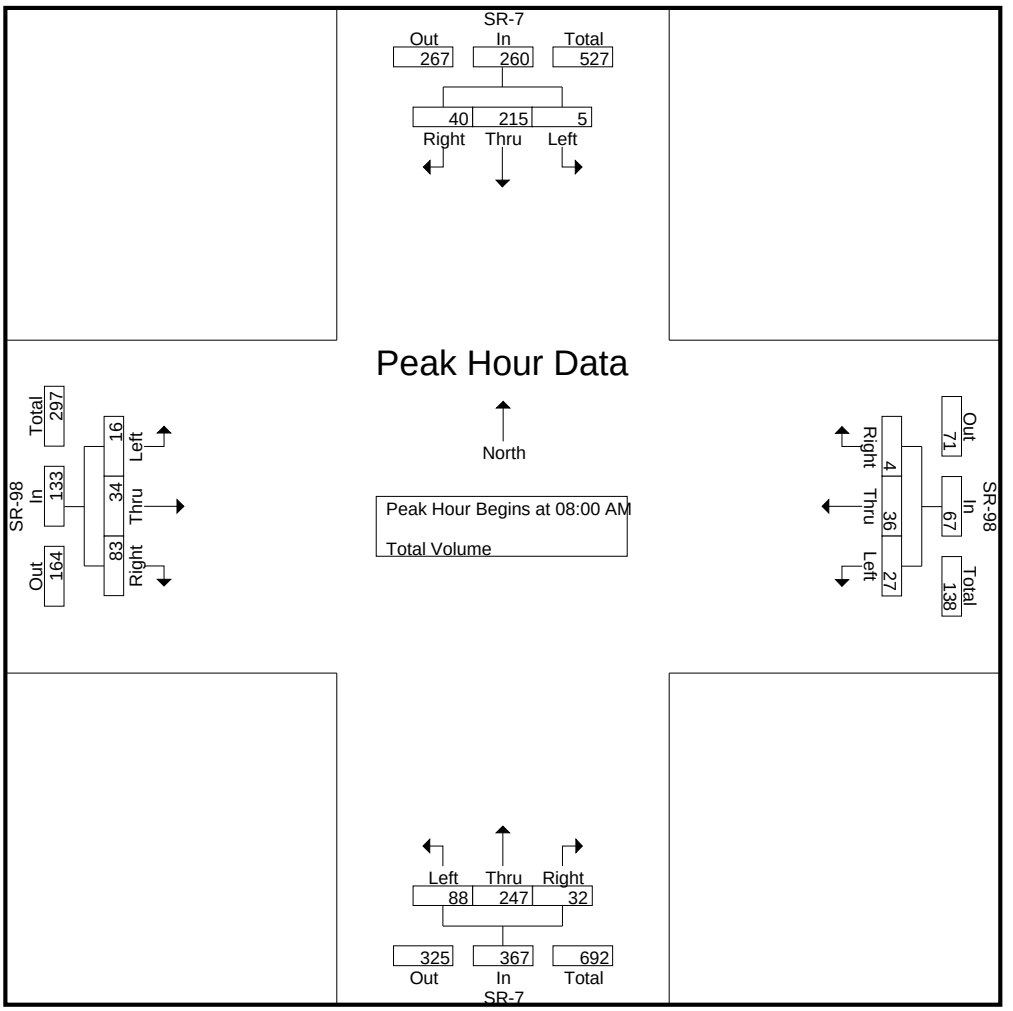
	SR-7 Southbound				SR-98 Westbound				SR-7 Northbound				SR-98 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	20	6	27	5	22	2	29	7	75	4	86	8	9	16	33	175
07:15 AM	3	27	7	37	7	13	0	20	11	80	6	97	4	3	16	23	177
07:30 AM	4	40	8	52	7	11	0	18	17	62	3	82	11	13	19	43	195
07:45 AM	3	57	17	77	13	12	0	25	14	50	4	68	9	11	34	54	224
Total	11	144	38	193	32	58	2	92	49	267	17	333	32	36	85	153	771
08:00 AM	0	55	9	64	5	5	3	13	6	58	5	69	1	12	16	29	175
08:15 AM	3	58	9	70	3	8	0	11	34	54	6	94	7	7	27	41	216
08:30 AM	1	50	15	66	10	12	1	23	20	62	9	91	5	5	19	29	209
08:45 AM	1	52	7	60	9	11	0	20	28	73	12	113	3	10	21	34	227
Total	5	215	40	260	27	36	4	67	88	247	32	367	16	34	83	133	827
Grand Total	16	359	78	453	59	94	6	159	137	514	49	700	48	70	168	286	1598
Apprch %	3.5	79.2	17.2		37.1	59.1	3.8		19.6	73.4	7		16.8	24.5	58.7		
Total %	1	22.5	4.9	28.3	3.7	5.9	0.4	9.9	8.6	32.2	3.1	43.8	3	4.4	10.5	17.9	

	SR-7 Southbound				SR-98 Westbound				SR-7 Northbound				SR-98 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	55	9	64	5	5	**3**	13	6	58	5	69	1	**12**	16	29	175
08:15 AM	**3**	**58**	9	**70**	3	8	0	11	**34**	54	6	94	**7**	7	**27**	**41**	216
08:30 AM	1	50	**15**	66	**10**	**12**	1	**23**	20	62	9	91	5	5	19	29	209
08:45 AM	1	52	7	60	9	11	0	20	28	**73**	**12**	**113**	3	10	21	34	**227**
Total Volume	5	215	40	260	27	36	4	67	88	247	32	367	16	34	83	133	827
% App. Total	1.9	82.7	15.4		40.3	53.7	6		24	67.3	8.7		12	25.6	62.4		
PHF	.417	.927	.667	.929	.675	.750	.333	.728	.647	.846	.667	.812	.571	.708	.769	.811	.911

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

County of Imperial
N/S: SR-7
E/W: SR-98
Weather: Clear

File Name : 35_CIM_SR7_98 AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:00 AM				08:00 AM				07:30 AM			
+0 mins.	**3**	57	**17**	**77**	5	**22**	**2**	**29**	6	58	5	69	**11**	**13**	19	43
+15 mins.	0	55	9	64	7	13	0	20	**34**	54	6	94	9	11	**34**	**54**
+30 mins.	3	**58**	9	70	7	11	0	18	20	62	9	91	1	12	16	29
+45 mins.	1	50	15	66	**13**	12	0	25	28	**73**	**12**	**113**	7	7	27	41
Total Volume	7	220	50	277	32	58	2	92	88	247	32	367	28	43	96	167
% App. Total	2.5	79.4	18.1		34.8	63	2.2		24	67.3	8.7		16.8	25.7	57.5	
PHF	.583	.948	.735	.899	.615	.659	.250	.793	.647	.846	.667	.812	.636	.827	.706	.773

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County of Imperial
N/S: SR-7
E/W: SR-98
Weather: Clear

File Name : 35_CIM_SR7_98 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

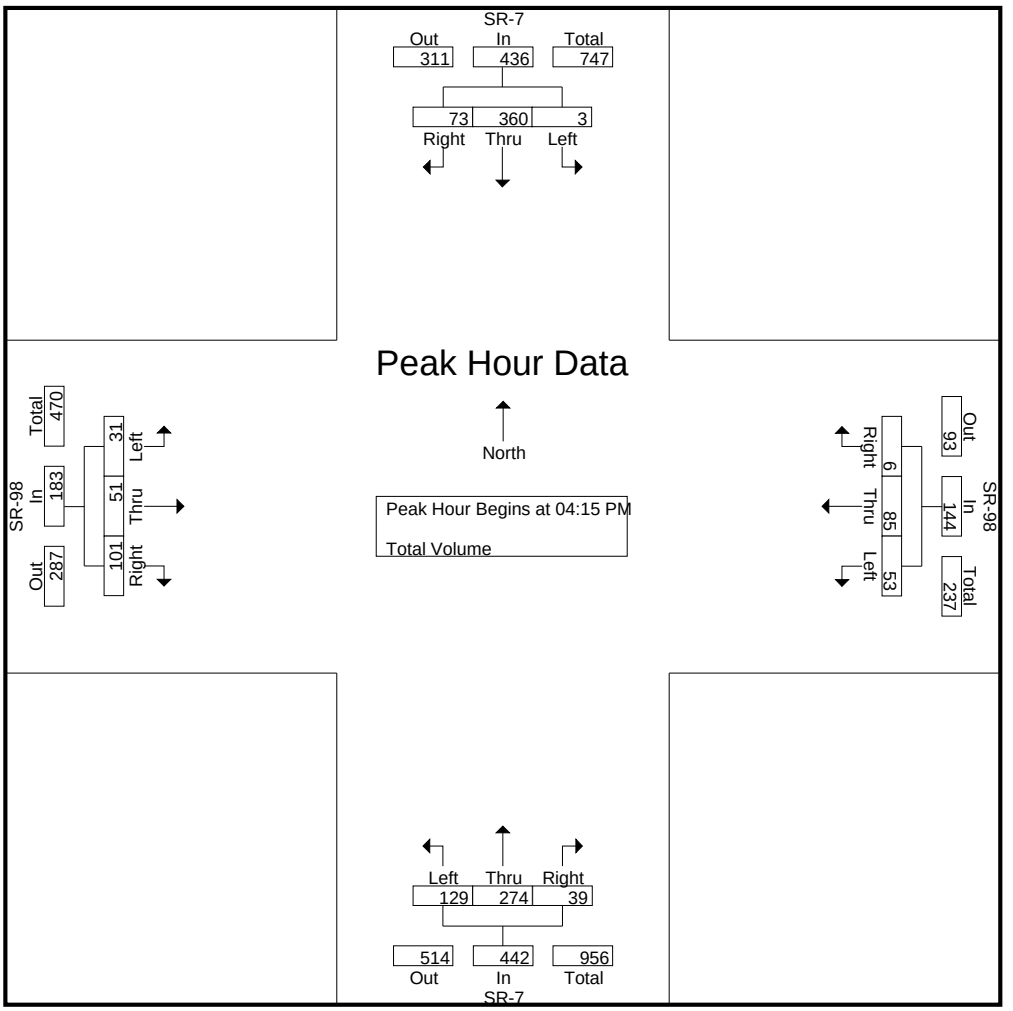
	SR-7 Southbound				SR-98 Westbound				SR-7 Northbound				SR-98 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	102	16	119	20	21	5	46	16	66	13	95	16	16	33	65	325
04:15 PM	1	89	18	108	15	15	0	30	22	70	5	97	10	25	19	54	289
04:30 PM	0	85	17	102	13	21	1	35	32	74	15	121	11	8	24	43	301
04:45 PM	2	96	18	116	12	26	1	39	26	54	8	88	4	9	29	42	285
Total	4	372	69	445	60	83	7	150	96	264	41	401	41	58	105	204	1200
05:00 PM	0	90	20	110	13	23	4	40	49	76	11	136	6	9	29	44	330
05:15 PM	1	98	15	114	14	15	0	29	32	57	8	97	9	12	25	46	286
05:30 PM	1	112	14	127	15	14	1	30	20	66	11	97	9	14	25	48	302
05:45 PM	1	79	25	105	14	21	0	35	15	66	8	89	12	11	14	37	266
Total	3	379	74	456	56	73	5	134	116	265	38	419	36	46	93	175	1184
Grand Total	7	751	143	901	116	156	12	284	212	529	79	820	77	104	198	379	2384
Apprch %	0.8	83.4	15.9		40.8	54.9	4.2		25.9	64.5	9.6		20.3	27.4	52.2		
Total %	0.3	31.5	6	37.8	4.9	6.5	0.5	11.9	8.9	22.2	3.3	34.4	3.2	4.4	8.3	15.9	

	SR-7 Southbound				SR-98 Westbound				SR-7 Northbound				SR-98 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	89	18	108	**15**	15	0	30	22	70	5	97	10	**25**	19	**54**	289
04:30 PM	0	85	17	102	13	21	1	35	32	74	**15**	121	**11**	8	24	43	301
04:45 PM	**2**	**96**	18	**116**	12	**26**	1	39	26	54	8	88	4	9	**29**	42	285
05:00 PM	0	90	**20**	110	13	23	**4**	**40**	**49**	**76**	11	**136**	6	9	29	44	**330**
Total Volume	3	360	73	436	53	85	6	144	129	274	39	442	31	51	101	183	1205
% App. Total	0.7	82.6	16.7		36.8	59	4.2		29.2	62	8.8		16.9	27.9	55.2		
PHF	.375	.938	.913	.940	.883	.817	.375	.900	.658	.901	.650	.813	.705	.510	.871	.847	.913

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County of Imperial
N/S: SR-7
E/W: SR-98
Weather: Clear

File Name : 35_CIM_SR7_98 PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:00 PM				04:15 PM				04:00 PM			
+0 mins.	**2**	96	18	116	**20**	21	**5**	**46**	22	70	5	97	**16**	16	**33**	**65**
+15 mins.	0	90	**20**	110	15	15	0	30	32	74	**15**	121	10	**25**	19	54
+30 mins.	1	98	15	114	13	21	1	35	26	54	8	88	11	8	24	43
+45 mins.	1	**112**	14	**127**	12	**26**	1	39	**49**	**76**	11	**136**	4	9	29	42
Total Volume	4	396	67	467	60	83	7	150	129	274	39	442	41	58	105	204
% App. Total	0.9	84.8	14.3		40	55.3	4.7		29.2	62	8.8		20.1	28.4	51.5	
PHF	.500	.884	.838	.919	.750	.798	.350	.815	.658	.901	.650	.813	.641	.580	.795	.785

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County of Imperial
N/S: SR-7
E/W: Maggio Road
Weather: Clear

File Name : 36_CIM_SR7_Mag AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 1

Groups Printed- Total Volume

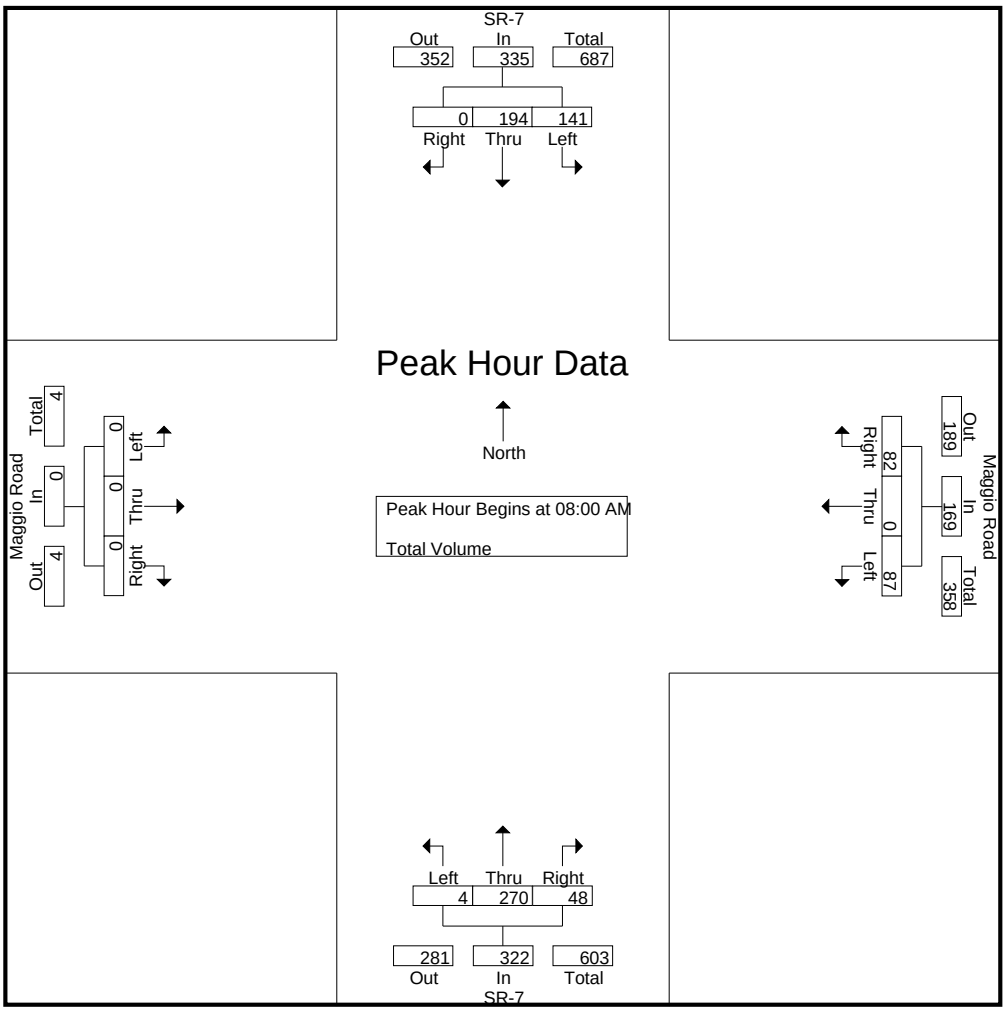
	SR-7 Southbound				Maggio Road Westbound				SR-7 Northbound				Maggio Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	19	28	0	47	4	0	16	20	1	72	13	86	0	0	0	0	153
07:15 AM	22	28	0	50	4	0	15	19	1	74	15	90	0	0	0	0	159
07:30 AM	31	28	0	59	9	0	16	25	0	73	14	87	0	0	0	0	171
07:45 AM	60	51	0	111	9	0	17	26	1	45	18	64	0	0	0	0	201
Total	132	135	0	267	26	0	64	90	3	264	60	327	0	0	0	0	684
08:00 AM	31	40	0	71	15	0	15	30	1	47	9	57	0	0	0	0	158
08:15 AM	49	49	0	98	31	0	17	48	1	70	12	83	0	0	0	0	229
08:30 AM	29	47	0	76	16	0	22	38	0	68	13	81	0	0	0	0	195
08:45 AM	32	58	0	90	25	0	28	53	2	85	14	101	0	0	0	0	244
Total	141	194	0	335	87	0	82	169	4	270	48	322	0	0	0	0	826
Grand Total	273	329	0	602	113	0	146	259	7	534	108	649	0	0	0	0	1510
Apprch %	45.3	54.7	0		43.6	0	56.4		1.1	82.3	16.6		0	0	0		
Total %	18.1	21.8	0	39.9	7.5	0	9.7	17.2	0.5	35.4	7.2	43	0	0	0	0	

	SR-7 Southbound				Maggio Road Westbound				SR-7 Northbound				Maggio Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	31	40	0	71	15	0	15	30	1	47	9	57	0	0	0	0	158
08:15 AM	**49**	49	0	**98**	**31**	0	17	48	1	70	12	83	0	0	0	0	229
08:30 AM	29	47	0	76	16	0	22	38	0	68	13	81	0	0	0	0	195
08:45 AM	32	**58**	0	90	25	0	**28**	**53**	**2**	**85**	**14**	**101**	0	0	0	0	**244**
Total Volume	141	194	0	335	87	0	82	169	4	270	48	322	0	0	0	0	826
% App. Total	42.1	57.9	0		51.5	0	48.5		1.2	83.9	14.9		0	0	0		
PHF	.719	.836	.000	.855	.702	.000	.732	.797	.500	.794	.857	.797	.000	.000	.000	.000	.846

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County of Imperial
N/S: SR-7
E/W: Maggio Road
Weather: Clear

File Name : 36_CIM_SR7_Mag AM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				08:00 AM				07:00 AM				07:00 AM			
+0 mins.	**60**	**51**	0	**111**	15	0	15	30	**1**	72	13	86	0	0	0	0
+15 mins.	31	40	0	71	**31**	0	17	48	1	**74**	15	**90**	0	0	0	0
+30 mins.	49	49	0	98	16	0	22	38	0	73	14	87	0	0	0	0
+45 mins.	29	47	0	76	25	0	**28**	**53**	1	45	**18**	64	0	0	0	0
Total Volume	169	187	0	356	87	0	82	169	3	264	60	327	0	0	0	0
% App. Total	47.5	52.5	0		51.5	0	48.5		0.9	80.7	18.3		0	0	0	
PHF	.704	.917	.000	.802	.702	.000	.732	.797	.750	.892	.833	.908	.000	.000	.000	.000

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County of Imperial
N/S: SR-7
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File Name : 36_CIM_SR7_Mag PM
Site Code : 12525114
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Page No : 1

Groups Printed- Total Volume

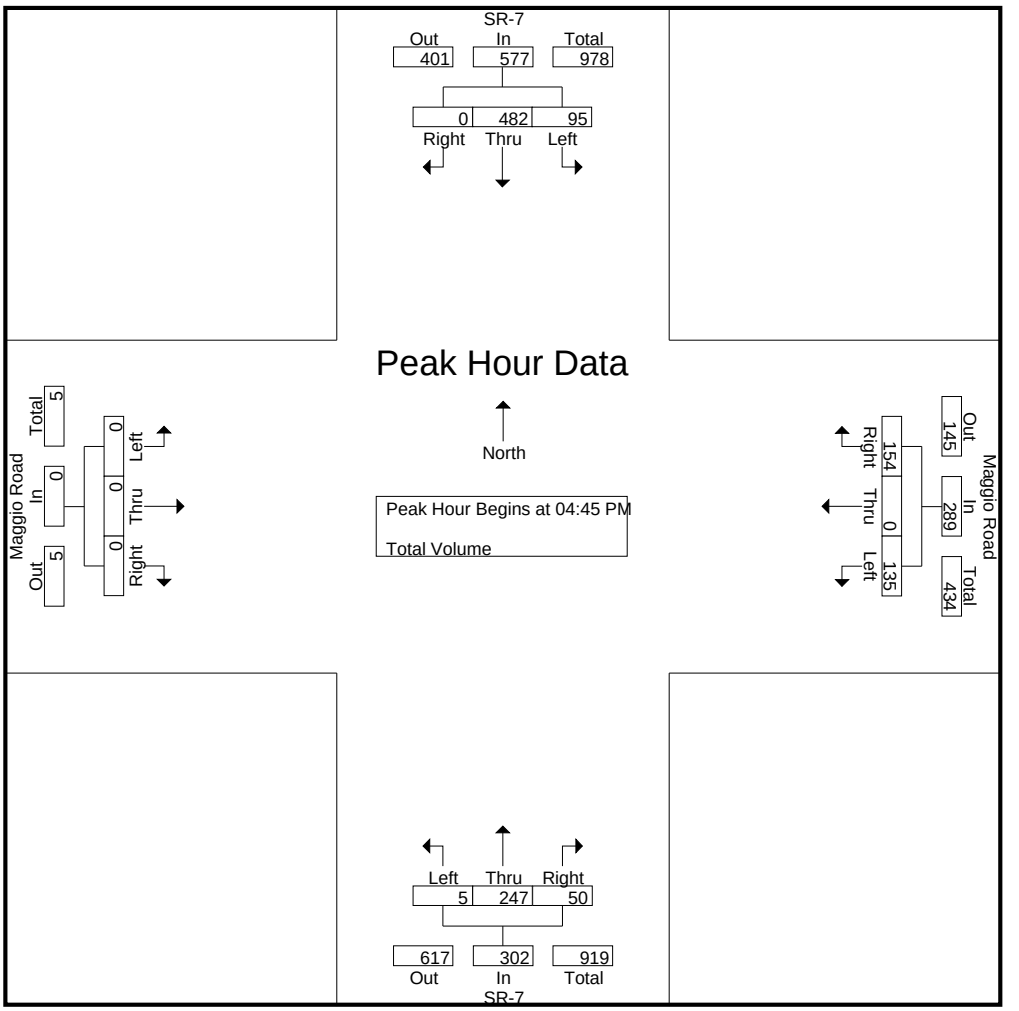
	SR-7 Southbound				Maggio Road Westbound				SR-7 Northbound				Maggio Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	40	129	0	169	29	0	34	63	2	63	13	78	0	0	0	0	310
04:15 PM	18	110	0	128	31	0	23	54	1	79	10	90	0	0	0	0	272
04:30 PM	29	84	0	113	19	0	38	57	3	75	16	94	0	0	0	0	264
04:45 PM	19	131	0	150	26	0	25	51	1	53	11	65	0	0	0	0	266
Total	106	454	0	560	105	0	120	225	7	270	50	327	0	0	0	0	1112
05:00 PM	29	96	0	125	27	0	56	83	0	71	13	84	0	0	0	0	292
05:15 PM	27	132	0	159	42	0	35	77	2	60	11	73	0	0	0	0	309
05:30 PM	20	123	0	143	40	0	38	78	2	63	15	80	0	0	0	0	301
05:45 PM	27	100	0	127	33	0	25	58	3	59	14	76	0	0	0	0	261
Total	103	451	0	554	142	0	154	296	7	253	53	313	0	0	0	0	1163
Grand Total	209	905	0	1114	247	0	274	521	14	523	103	640	0	0	0	0	2275
Apprch %	18.8	81.2	0		47.4	0	52.6		2.2	81.7	16.1		0	0	0		
Total %	9.2	39.8	0	49	10.9	0	12	22.9	0.6	23	4.5	28.1	0	0	0	0	

	SR-7 Southbound				Maggio Road Westbound				SR-7 Northbound				Maggio Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	19	131	0	150	26	0	25	51	1	53	11	65	0	0	0	0	266
05:00 PM	**29**	96	0	125	27	0	**56**	**83**	0	**71**	13	**84**	0	0	0	0	292
05:15 PM	27	**132**	0	**159**	**42**	0	35	77	**2**	60	11	73	0	0	0	0	**309**
05:30 PM	20	123	0	143	40	0	38	78	2	63	**15**	80	0	0	0	0	301
Total Volume	95	482	0	577	135	0	154	289	5	247	50	302	0	0	0	0	1168
% App. Total	16.5	83.5	0		46.7	0	53.3		1.7	81.8	16.6		0	0	0		
PHF	.819	.913	.000	.907	.804	.000	.688	.870	.625	.870	.833	.899	.000	.000	.000	.000	.945

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County of Imperial
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File Name : 36_CIM_SR7_Mag PM
Site Code : 12525114
Start Date : 2/6/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				05:00 PM				04:15 PM				04:00 PM			
+0 mins.	19	131	0	150	27	0	**56**	**83**	1	**79**	10	90	0	0	0	0
+15 mins.	**29**	96	0	125	**42**	0	35	77	**3**	75	**16**	**94**	0	0	0	0
+30 mins.	27	**132**	0	**159**	40	0	38	78	1	53	11	65	0	0	0	0
+45 mins.	20	123	0	143	33	0	25	58	0	71	13	84	0	0	0	0
Total Volume	95	482	0	577	142	0	154	296	5	278	50	333	0	0	0	0
% App. Total	16.5	83.5	0		48	0	52		1.5	83.5	15		0	0	0	
PHF	.819	.913	.000	.907	.845	.000	.688	.892	.417	.880	.781	.886	.000	.000	.000	.000

ADT VOLUME COUNTS

Counts Unlimited, Inc.

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Phone: (951) 268-6268
email: counts@countsunlimited.com

County of Imperial
State Route 111
N/ Gillespie Road
24 Hour Directional Classification Count

CIM001
Site Code: 125-25114

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	3	2	0	0	0	0	0	0	0	0	0	0	5
01:00	0	1	0	0	0	0	0	0	1	0	1	0	0	3
02:00	0	0	1	0	0	0	0	0	0	0	1	0	0	2
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	9	0	0	4	0	0	1	2	0	2	0	0	18
05:00	0	10	5	**1**	2	1	0	1	2	0	1	0	0	23
06:00	0	**19**	5	0	6	0	0	1	3	0	**3**	0	0	37
07:00	0	14	10	1	6	1	0	**3**	1	0	2	0	0	38
08:00	0	9	8	0	3	0	0	2	5	0	2	0	0	29
09:00	0	16	**18**	1	2	0	0	0	**8**	0	2	**1**	0	48
10:00	0	18	11	0	**11**	1	0	1	5	0	2	0	0	**49**
11:00	**1**	15	12	0	6	**3**	0	0	5	0	0	0	0	42
12 PM	0	26	15	**1**	8	**2**	0	1	**7**	0	**2**	0	0	62
13:00	2	26	13	0	8	0	0	**3**	6	0	1	0	0	59
14:00	**5**	36	15	1	**9**	1	0	0	4	0	0	**2**	0	73
15:00	0	**37**	**27**	1	8	0	0	1	6	0	1	0	0	**81**
16:00	0	31	14	1	6	0	0	2	4	0	1	1	0	60
17:00	0	25	10	1	7	1	0	1	2	0	1	0	0	48
18:00	0	13	3	1	2	0	0	1	2	0	0	1	0	23
19:00	0	11	6	0	1	0	0	3	0	0	0	0	0	21
20:00	0	9	0	0	1	0	0	0	2	0	0	0	0	12
21:00	0	6	3	0	1	0	0	2	0	0	0	1	0	13
22:00	0	10	1	1	0	1	0	0	0	0	1	0	0	14
23:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
Total	8	354	181	10	91	11	0	23	65	0	23	6	0	772
Percent	1.0%	45.9%	23.4%	1.3%	11.8%	1.4%	0.0%	3.0%	8.4%	0.0%	3.0%	0.8%	0.0%	
AM Peak	11:00	06:00	09:00	05:00	10:00	11:00		07:00	09:00		06:00	09:00		10:00
Vol.	1	19	18	1	11	3		3	8		3	1		49
PM Peak	14:00	15:00	15:00	12:00	14:00	12:00		13:00	12:00		12:00	14:00		15:00
Vol.	5	37	27	1	9	2		3	7		2	2		81
Grand Total	8	354	181	10	91	11	0	23	65	0	23	6	0	772
Percent	1.0%	45.9%	23.4%	1.3%	11.8%	1.4%	0.0%	3.0%	8.4%	0.0%	3.0%	0.8%	0.0%	

Counts Unlimited, Inc.

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County of Imperial
State Route 111
N/ Gillespie Road
24 Hour Directional Classification Count

CIM001
Site Code: 125-25114

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	2	0	0	0	0	0	0	1	0	0	**2**	0	5
01:00	0	1	1	0	0	0	0	0	3	0	0	0	0	5
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	1	0	1	0	0	0	1	0	0	0	0	3
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	11	4	1	2	0	0	1	1	0	**2**	0	0	22
06:00	0	14	10	2	8	0	0	1	5	0	0	0	0	40
07:00	0	**24**	11	**3**	9	0	0	1	**11**	0	2	0	0	61
08:00	0	18	13	0	**20**	0	0	3	2	0	0	0	0	56
09:00	0	19	12	0	14	**1**	0	0	4	0	0	0	0	50
10:00	0	19	**14**	0	17	1	0	**4**	6	**1**	2	0	0	**64**
11:00	**1**	18	6	2	13	0	0	3	6	0	2	0	0	51
12 PM	**3**	15	11	2	12	**2**	0	3	4	0	**2**	0	0	54
13:00	0	22	5	2	5	0	0	3	4	0	2	**1**	0	44
14:00	0	13	10	1	**22**	1	0	**4**	**11**	0	2	0	**1**	65
15:00	1	**31**	**13**	1	8	1	0	3	7	0	2	0	0	**67**
16:00	0	19	12	0	5	0	0	1	4	0	1	1	0	43
17:00	0	20	5	**3**	4	1	0	3	1	0	0	1	0	38
18:00	0	18	0	1	7	0	0	0	0	0	1	0	0	27
19:00	0	8	2	0	1	0	0	1	0	0	0	0	0	12
20:00	0	5	1	0	5	0	0	0	1	0	1	0	0	13
21:00	0	7	1	0	2	0	0	0	0	0	1	0	0	11
22:00	0	11	1	0	4	0	0	1	1	0	0	0	0	18
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Total	5	299	133	18	159	7	0	32	73	1	20	5	1	753
Percent	0.7%	39.7%	17.7%	2.4%	21.1%	0.9%	0.0%	4.2%	9.7%	0.1%	2.7%	0.7%	0.1%	
AM Peak	11:00	07:00	10:00	07:00	08:00	09:00		10:00	07:00	10:00	05:00	00:00		10:00
Vol.	1	24	14	3	20	1		4	11	1	2	2		64
PM Peak	12:00	15:00	15:00	17:00	14:00	12:00		14:00	14:00		12:00	13:00	14:00	15:00
Vol.	3	31	13	3	22	2		4	11		2	1	1	67
Grand Total	5	299	133	18	159	7	0	32	73	1	20	5	1	753
Percent	0.7%	39.7%	17.7%	2.4%	21.1%	0.9%	0.0%	4.2%	9.7%	0.1%	2.7%	0.7%	0.1%	

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County of Imperial
State Route 111
N/ Gillespie Road
24 Hour Directional Classification Count

CIM001
Site Code: 125-25114

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	5	2	0	0	0	0	0	1	0	0	**2**	0	10
01:00	0	2	1	0	0	0	0	0	4	0	1	0	0	8
02:00	0	1	1	0	0	0	0	0	0	0	1	0	0	3
03:00	0	4	1	0	1	0	0	0	1	0	0	0	0	7
04:00	0	9	0	0	4	0	0	1	2	0	2	0	0	18
05:00	0	21	9	2	4	1	0	2	3	0	3	0	0	45
06:00	0	33	15	2	14	0	0	2	8	0	3	0	0	77
07:00	0	**38**	21	**4**	15	1	0	4	**12**	0	**4**	0	0	99
08:00	0	27	21	0	23	0	0	**5**	7	0	2	0	0	85
09:00	0	35	**30**	1	16	1	0	0	12	0	2	1	0	98
10:00	0	37	25	0	**28**	2	0	5	11	**1**	4	0	0	**113**
11:00	**2**	33	18	2	19	**3**	0	3	11	0	2	0	0	93
12 PM	3	41	26	3	20	**4**	0	4	11	0	**4**	0	0	116
13:00	2	48	18	2	13	0	0	**6**	10	0	3	1	0	103
14:00	**5**	49	25	2	**31**	2	0	4	**15**	0	2	**2**	**1**	138
15:00	1	**68**	**40**	2	16	1	0	4	13	0	3	0	0	**148**
16:00	0	50	26	1	11	0	0	3	8	0	2	2	0	103
17:00	0	45	15	**4**	11	2	0	4	3	0	1	1	0	86
18:00	0	31	3	2	9	0	0	1	2	0	1	1	0	50
19:00	0	19	8	0	2	0	0	4	0	0	0	0	0	33
20:00	0	14	1	0	6	0	0	0	3	0	1	0	0	25
21:00	0	13	4	0	3	0	0	2	0	0	1	1	0	24
22:00	0	21	2	1	4	1	0	1	1	0	1	0	0	32
23:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
Total	13	653	314	28	250	18	0	55	138	1	43	11	1	1525
Percent	0.9%	42.8%	20.6%	1.8%	16.4%	1.2%	0.0%	3.6%	9.0%	0.1%	2.8%	0.7%	0.1%	
AM Peak	11:00	07:00	09:00	07:00	10:00	11:00		08:00	07:00	10:00	07:00	00:00		10:00
Vol.	2	38	30	4	28	3		5	12	1	4	2		113
PM Peak	14:00	15:00	15:00	17:00	14:00	12:00		13:00	14:00		12:00	14:00	14:00	15:00
Vol.	5	68	40	4	31	4		6	15		4	2	1	148
Grand Total	13	653	314	28	250	18	0	55	138	1	43	11	1	1525
Percent	0.9%	42.8%	20.6%	1.8%	16.4%	1.2%	0.0%	3.6%	9.0%	0.1%	2.8%	0.7%	0.1%	

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County of Imperial
State Route 111
N/ Beach Road
24 Hour Directional Classification Count

CIM002
Site Code: 125-25114

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	2	3	0	0	0	0	0	0	0	0	0	0	5
01:00	0	0	1	**1**	0	0	0	0	0	0	0	**1**	0	3
02:00	0	0	1	0	0	0	0	0	0	0	1	0	0	2
03:00	0	4	0	0	0	0	0	**1**	0	0	0	0	0	5
04:00	0	7	1	0	3	0	0	1	3	0	2	0	0	17
05:00	0	10	7	1	3	**1**	0	0	3	0	1	0	0	26
06:00	0	14	5	0	6	1	0	0	6	0	**3**	0	0	35
07:00	0	9	3	1	13	0	0	1	4	0	2	0	0	33
08:00	0	6	6	0	7	0	0	1	6	0	2	0	0	28
09:00	0	**15**	**10**	1	12	0	0	0	**8**	0	3	1	0	**50**
10:00	0	14	10	1	**16**	1	0	1	5	0	1	0	0	49
11:00	**1**	13	7	1	12	1	0	1	6	0	0	0	0	42
12 PM	0	24	12	**2**	18	**1**	0	1	**7**	0	**2**	0	0	67
13:00	2	19	**19**	0	13	0	0	2	6	0	1	0	0	62
14:00	**5**	**33**	10	0	23	0	0	**3**	4	0	0	**2**	0	**80**
15:00	0	29	13	1	**25**	0	0	1	7	0	1	0	0	77
16:00	0	31	11	2	12	0	0	3	5	0	1	1	0	66
17:00	0	14	12	1	14	1	0	0	2	0	1	0	0	45
18:00	0	11	2	1	3	0	0	0	3	0	1	0	0	21
19:00	0	10	3	0	7	0	0	1	2	0	0	0	0	23
20:00	0	10	0	0	1	0	0	0	2	0	0	0	0	13
21:00	0	4	3	1	2	0	0	0	1	0	0	1	0	12
22:00	0	8	2	1	1	1	0	0	0	0	1	0	0	14
23:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8
Total	8	293	142	15	192	7	0	17	80	0	23	6	0	783
Percent	1.0%	37.4%	18.1%	1.9%	24.5%	0.9%	0.0%	2.2%	10.2%	0.0%	2.9%	0.8%	0.0%	
AM Peak	11:00	09:00	09:00	01:00	10:00	05:00		03:00	09:00		06:00	01:00		09:00
Vol.	1	15	10	1	16	1		1	8		3	1		50
PM Peak	14:00	14:00	13:00	12:00	15:00	12:00		14:00	12:00		12:00	14:00		14:00
Vol.	5	33	19	2	25	1		3	7		2	2		80
Grand Total	8	293	142	15	192	7	0	17	80	0	23	6	0	783
Percent	1.0%	37.4%	18.1%	1.9%	24.5%	0.9%	0.0%	2.2%	10.2%	0.0%	2.9%	0.8%	0.0%	

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County of Imperial
State Route 111
N/ Beach Road
24 Hour Directional Classification Count

CIM002
Site Code: 125-25114

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	2	0	0	0	0	0	1	0	0	1	**1**	0	5
01:00	0	1	1	0	0	0	0	0	3	0	0	0	0	5
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	9	4	1	3	0	0	1	1	0	**2**	0	0	21
06:00	0	15	6	2	8	0	0	**3**	3	0	0	0	0	37
07:00	0	**24**	8	**3**	9	0	0	3	**7**	0	2	0	0	56
08:00	0	19	8	0	**22**	0	0	3	2	0	0	0	0	54
09:00	0	18	11	0	19	**1**	0	1	3	0	0	0	0	53
10:00	0	18	**18**	0	16	1	0	3	7	**1**	2	0	0	**66**
11:00	**1**	20	4	2	15	0	0	3	6	0	2	0	0	53
12 PM	**3**	17	11	2	13	**2**	0	2	5	0	**2**	0	0	57
13:00	0	23	5	2	9	0	0	1	6	0	2	**1**	0	49
14:00	0	9	10	2	**21**	1	0	3	**12**	0	2	0	**1**	61
15:00	1	**30**	**14**	1	9	2	0	**5**	4	0	2	0	0	**68**
16:00	0	20	11	1	8	0	0	1	3	0	1	0	0	45
17:00	0	20	5	**3**	5	1	0	3	1	0	0	1	0	39
18:00	0	17	1	1	7	0	0	0	0	0	1	0	0	27
19:00	0	9	1	0	1	0	0	1	0	0	0	0	0	12
20:00	0	4	2	0	5	0	0	0	1	0	1	0	0	13
21:00	0	7	2	0	1	0	0	0	0	0	1	0	0	11
22:00	0	10	2	0	4	0	0	2	0	0	0	0	0	18
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Total	5	295	126	20	176	8	0	36	64	1	21	3	1	756
Percent	0.7%	39.0%	16.7%	2.6%	23.3%	1.1%	0.0%	4.8%	8.5%	0.1%	2.8%	0.4%	0.1%	
AM Peak	11:00	07:00	10:00	07:00	08:00	09:00		06:00	07:00	10:00	05:00	00:00		10:00
Vol.	1	24	18	3	22	1		3	7	1	2	1		66
PM Peak	12:00	15:00	15:00	17:00	14:00	12:00		15:00	14:00		12:00	13:00	14:00	15:00
Vol.	3	30	14	3	21	2		5	12		2	1	1	68
Grand Total	5	295	126	20	176	8	0	36	64	1	21	3	1	756
Percent	0.7%	39.0%	16.7%	2.6%	23.3%	1.1%	0.0%	4.8%	8.5%	0.1%	2.8%	0.4%	0.1%	

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County of Imperial
State Route 111
N/ Beach Road
24 Hour Directional Classification Count

CIM002
Site Code: 125-25114

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	4	3	0	0	0	0	1	0	0	1	**1**	0	10
01:00	0	1	2	1	0	0	0	0	3	0	0	1	0	8
02:00	0	0	2	0	0	0	0	0	0	0	1	0	0	3
03:00	0	4	1	0	1	0	0	1	0	0	0	0	0	7
04:00	0	7	1	0	3	0	0	1	3	0	2	0	0	17
05:00	0	19	11	2	6	1	0	1	4	0	3	0	0	47
06:00	0	29	11	2	14	1	0	3	9	0	3	0	0	72
07:00	0	**33**	11	**4**	22	0	0	**4**	11	0	**4**	0	0	89
08:00	0	25	14	0	29	0	0	4	8	0	2	0	0	82
09:00	0	33	21	1	31	1	0	1	11	0	3	1	0	103
10:00	0	32	**28**	1	**32**	**2**	0	4	**12**	**1**	3	0	0	**115**
11:00	**2**	33	11	3	27	1	0	4	12	0	2	0	0	95
12 PM	3	41	23	**4**	31	**3**	0	3	12	0	**4**	0	0	124
13:00	2	42	24	2	22	0	0	3	12	0	3	1	0	111
14:00	**5**	42	20	2	**44**	1	0	**6**	**16**	0	2	**2**	**1**	141
15:00	1	**59**	**27**	2	34	2	0	6	11	0	3	0	0	**145**
16:00	0	51	22	3	20	0	0	4	8	0	2	1	0	111
17:00	0	34	17	4	19	2	0	3	3	0	1	1	0	84
18:00	0	28	3	2	10	0	0	0	3	0	2	0	0	48
19:00	0	19	4	0	8	0	0	2	2	0	0	0	0	35
20:00	0	14	2	0	6	0	0	0	3	0	1	0	0	26
21:00	0	11	5	1	3	0	0	0	1	0	1	1	0	23
22:00	0	18	4	1	5	1	0	2	0	0	1	0	0	32
23:00	0	9	1	0	1	0	0	0	0	0	0	0	0	11
Total	13	588	268	35	368	15	0	53	144	1	44	9	1	1539
Percent	0.8%	38.2%	17.4%	2.3%	23.9%	1.0%	0.0%	3.4%	9.4%	0.1%	2.9%	0.6%	0.1%	
AM Peak	11:00	07:00	10:00	07:00	10:00	10:00		07:00	10:00	10:00	07:00	00:00		10:00
Vol.	2	33	28	4	32	2		4	12	1	4	1		115
PM Peak	14:00	15:00	15:00	12:00	14:00	12:00		14:00	14:00		12:00	14:00	14:00	15:00
Vol.	5	59	27	4	44	3		6	16		4	2	1	145
Grand Total	13	588	268	35	368	15	0	53	144	1	44	9	1	1539
Percent	0.8%	38.2%	17.4%	2.3%	23.9%	1.0%	0.0%	3.4%	9.4%	0.1%	2.9%	0.6%	0.1%	

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County of Imperial
State Route 111
B/ English Road - Beal Road
24 Hour Directional Classification Count

CIM003
Site Code: 125-25114

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	1	3	0	1	0	0	0	0	0	0	0	0	5
01:00	0	0	1	1	0	0	0	0	0	0	0	**1**	0	3
02:00	0	0	1	1	2	0	0	0	0	0	0	0	0	4
03:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
04:00	0	6	2	1	3	0	0	1	2	0	2	0	0	17
05:00	0	10	8	**2**	9	1	0	2	3	0	1	0	0	36
06:00	0	11	13	0	17	1	0	1	4	0	**3**	0	0	50
07:00	0	3	9	2	14	0	0	1	4	0	1	0	0	34
08:00	0	6	7	1	9	0	0	**3**	6	0	0	0	0	32
09:00	0	**17**	9	0	16	0	0	0	**10**	0	3	1	0	**56**
10:00	0	10	**14**	0	**23**	1	0	1	4	0	1	0	0	54
11:00	**1**	12	11	2	19	**2**	0	2	5	0	0	0	0	54
12 PM	0	22	13	2	21	0	0	2	**6**	0	**2**	0	0	68
13:00	2	15	**20**	0	23	**1**	0	**4**	5	0	1	0	0	71
14:00	**4**	29	16	0	22	0	0	3	5	0	0	**2**	0	81
15:00	0	**32**	13	**3**	**31**	0	0	2	6	0	0	0	0	**87**
16:00	0	30	12	1	16	0	0	2	6	0	1	1	0	69
17:00	0	11	18	1	14	0	0	0	2	0	1	0	0	47
18:00	0	6	6	1	6	0	0	1	3	0	1	0	0	24
19:00	0	11	5	0	9	0	0	1	2	0	0	0	0	28
20:00	0	9	4	0	2	0	0	0	2	0	0	0	0	17
21:00	0	4	3	2	3	0	0	0	1	0	0	1	0	14
22:00	0	6	5	0	2	1	0	0	0	0	1	0	0	15
23:00	0	5	2	0	1	0	0	0	0	0	0	0	0	8
Total	7	258	196	20	263	7	0	26	76	0	18	6	0	877
Percent	0.8%	29.4%	22.3%	2.3%	30.0%	0.8%	0.0%	3.0%	8.7%	0.0%	2.1%	0.7%	0.0%	
AM Peak	11:00	09:00	10:00	05:00	10:00	11:00		08:00	09:00		06:00	01:00		09:00
Vol.	1	17	14	2	23	2		3	10		3	1		56
PM Peak	14:00	15:00	13:00	15:00	15:00	13:00		13:00	12:00		12:00	14:00		15:00
Vol.	4	32	20	3	31	1		4	6		2	2		87
Grand Total	7	258	196	20	263	7	0	26	76	0	18	6	0	877
Percent	0.8%	29.4%	22.3%	2.3%	30.0%	0.8%	0.0%	3.0%	8.7%	0.0%	2.1%	0.7%	0.0%	

Counts Unlimited, Inc.

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County of Imperial
State Route 111
B/ English Road - Beal Road
24 Hour Directional Classification Count

CIM003
Site Code: 125-25114

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	2	0	0	0	0	0	0	1	0	**2**	0	0	5
01:00	0	1	1	0	0	0	0	0	2	0	0	0	0	4
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	1	0	1	0	0	1	0	0	0	0	0	3
04:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
05:00	0	9	3	1	3	0	0	1	1	0	2	0	0	20
06:00	0	15	6	1	12	0	0	1	5	0	0	0	0	40
07:00	0	**27**	10	**3**	10	0	0	3	**8**	0	2	0	0	63
08:00	0	17	10	0	18	0	0	**4**	3	0	0	0	0	52
09:00	**1**	15	11	0	22	**1**	0	0	4	0	0	0	0	54
10:00	0	20	**16**	0	**32**	1	0	3	7	0	2	0	0	**81**
11:00	1	21	8	2	17	1	0	3	6	**1**	2	0	0	62
12 PM	**3**	16	10	2	13	**1**	0	**3**	5	0	**2**	0	0	55
13:00	0	21	8	2	14	1	0	1	5	0	2	**1**	0	55
14:00	0	14	13	2	**27**	1	0	3	**12**	0	2	0	**1**	**75**
15:00	1	**29**	**15**	1	16	1	0	3	6	0	2	0	0	74
16:00	0	19	15	0	12	0	0	1	4	0	1	1	0	53
17:00	0	18	8	**3**	8	1	0	3	1	0	0	1	0	43
18:00	0	15	3	1	7	0	0	0	0	0	1	0	0	27
19:00	0	10	5	0	5	0	0	1	0	0	0	0	0	21
20:00	0	5	1	0	6	0	0	0	1	0	0	0	0	13
21:00	0	9	2	0	3	0	0	0	0	0	2	0	0	16
22:00	0	9	2	0	5	0	0	2	0	0	0	0	0	18
23:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Total	6	297	149	18	232	8	0	33	71	1	22	3	1	841
Percent	0.7%	35.3%	17.7%	2.1%	27.6%	1.0%	0.0%	3.9%	8.4%	0.1%	2.6%	0.4%	0.1%	
AM Peak	09:00	07:00	10:00	07:00	10:00	09:00		08:00	07:00	11:00	00:00			10:00
Vol.	1	27	16	3	32	1		4	8	1	2			81
PM Peak	12:00	15:00	15:00	17:00	14:00	12:00		12:00	14:00		12:00	13:00	14:00	14:00
Vol.	3	29	15	3	27	1		3	12		2	1	1	75
Grand Total	6	297	149	18	232	8	0	33	71	1	22	3	1	841
Percent	0.7%	35.3%	17.7%	2.1%	27.6%	1.0%	0.0%	3.9%	8.4%	0.1%	2.6%	0.4%	0.1%	

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County of Imperial
State Route 111
B/ English Road - Beal Road
24 Hour Directional Classification Count

CIM003
Site Code: 125-25114

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	3	3	0	1	0	0	0	1	0	2	0	0	10
01:00	0	1	2	1	0	0	0	0	2	0	0	**1**	0	7
02:00	0	0	2	1	2	0	0	0	0	0	0	0	0	5
03:00	0	2	2	0	1	0	0	1	0	0	0	0	0	6
04:00	0	7	2	1	4	0	0	1	2	0	2	0	0	19
05:00	0	19	11	3	12	1	0	3	4	0	**3**	0	0	56
06:00	0	26	19	1	29	1	0	2	9	0	3	0	0	90
07:00	0	30	19	**5**	24	0	0	4	12	0	3	0	0	97
08:00	0	23	17	1	27	0	0	**7**	9	0	0	0	0	84
09:00	1	32	20	0	38	1	0	0	**14**	0	3	1	0	110
10:00	0	30	**30**	0	**55**	2	0	4	11	0	3	0	0	**135**
11:00	**2**	**33**	19	4	36	**3**	0	5	11	**1**	2	0	0	116
12 PM	3	38	23	**4**	34	1	0	5	11	0	**4**	0	0	123
13:00	2	36	28	2	37	**2**	0	5	10	0	3	1	0	126
14:00	**4**	43	**29**	2	**49**	1	0	**6**	**17**	0	2	**2**	**1**	156
15:00	1	**61**	28	4	47	1	0	5	12	0	2	0	0	**161**
16:00	0	49	27	1	28	0	0	3	10	0	2	2	0	122
17:00	0	29	26	4	22	1	0	3	3	0	1	1	0	90
18:00	0	21	9	2	13	0	0	1	3	0	2	0	0	51
19:00	0	21	10	0	14	0	0	2	2	0	0	0	0	49
20:00	0	14	5	0	8	0	0	0	3	0	0	0	0	30
21:00	0	13	5	2	6	0	0	0	1	0	2	1	0	30
22:00	0	15	7	0	7	1	0	2	0	0	1	0	0	33
23:00	0	9	2	0	1	0	0	0	0	0	0	0	0	12
Total	13	555	345	38	495	15	0	59	147	1	40	9	1	1718
Percent	0.8%	32.3%	20.1%	2.2%	28.8%	0.9%	0.0%	3.4%	8.6%	0.1%	2.3%	0.5%	0.1%	
AM Peak	11:00	11:00	10:00	07:00	10:00	11:00		08:00	09:00	11:00	05:00	01:00		10:00
Vol.	2	33	30	5	55	3		7	14	1	3	1		135
PM Peak	14:00	15:00	14:00	12:00	14:00	13:00		14:00	14:00		12:00	14:00	14:00	15:00
Vol.	4	61	29	4	49	2		6	17		4	2	1	161
Grand Total	13	555	345	38	495	15	0	59	147	1	40	9	1	1718
Percent	0.8%	32.3%	20.1%	2.2%	28.8%	0.9%	0.0%	3.4%	8.6%	0.1%	2.3%	0.5%	0.1%	

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County of Imperial
State Route 111
B/ Hazard Road - McDonald Road
24 Hour Directional Classification Count

CIM004
Site Code: 125-25114

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	5	3	0	2	0	0	0	0	0	0	0	0	10
01:00	0	2	1	1	1	0	0	0	0	0	1	0	0	6
02:00	0	0	2	0	0	0	0	0	0	0	1	0	0	3
03:00	0	8	1	0	1	0	0	0	0	0	0	0	0	10
04:00	0	5	0	0	3	0	0	**4**	0	0	2	0	0	14
05:00	0	20	12	**2**	10	1	0	2	5	0	2	0	0	54
06:00	0	24	20	2	**25**	1	0	3	3	0	2	0	0	80
07:00	0	32	16	2	18	**2**	0	3	2	0	2	0	0	77
08:00	0	29	22	0	17	1	0	2	8	0	1	0	0	80
09:00	0	24	**24**	1	17	1	0	2	**10**	0	**4**	**1**	0	84
10:00	0	**36**	23	2	18	2	0	2	4	0	0	0	0	**87**
11:00	**1**	32	16	0	17	0	0	3	6	0	0	0	0	75
12 PM	0	43	27	3	26	0	0	4	4	0	**2**	0	0	109
13:00	2	48	**32**	1	**28**	0	0	4	**7**	0	2	0	0	124
14:00	**6**	61	25	2	23	0	0	3	5	0	0	**1**	0	126
15:00	0	61	31	**4**	24	0	0	**5**	3	0	1	0	0	**129**
16:00	0	**63**	22	0	9	0	0	2	5	0	2	0	0	103
17:00	0	46	17	3	7	0	0	3	1	0	1	0	0	78
18:00	0	38	10	2	6	0	0	1	1	0	1	1	0	60
19:00	0	25	10	0	3	0	0	2	0	0	0	0	0	40
20:00	0	32	2	2	2	0	0	0	2	0	0	0	0	40
21:00	0	17	2	2	1	0	0	1	0	0	0	1	0	24
22:00	0	13	5	0	1	**1**	0	0	0	0	1	0	0	21
23:00	0	13	6	0	0	0	0	0	0	0	0	0	0	19
Total	9	677	329	29	259	9	0	46	66	0	25	4	0	1453
Percent	0.6%	46.6%	22.6%	2.0%	17.8%	0.6%	0.0%	3.2%	4.5%	0.0%	1.7%	0.3%	0.0%	
AM Peak	11:00	10:00	09:00	05:00	06:00	07:00		04:00	09:00		09:00	09:00		10:00
Vol.	1	36	24	2	25	2		4	10		4	1		87
PM Peak	14:00	16:00	13:00	15:00	13:00	22:00		15:00	13:00		12:00	14:00		15:00
Vol.	6	63	32	4	28	1		5	7		2	1		129
Grand Total	9	677	329	29	259	9	0	46	66	0	25	4	0	1453
Percent	0.6%	46.6%	22.6%	2.0%	17.8%	0.6%	0.0%	3.2%	4.5%	0.0%	1.7%	0.3%	0.0%	

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County of Imperial
State Route 111
B/ Hazard Road - McDonald Road
24 Hour Directional Classification Count

CIM004
Site Code: 125-25114

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	2	2	0	2	0	0	0	1	0	0	**2**	0	9
01:00	0	1	3	0	0	0	0	0	3	0	0	0	0	7
02:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
03:00	0	4	0	0	3	0	0	0	1	0	0	0	0	8
04:00	0	5	9	0	5	0	0	0	0	0	0	0	0	19
05:00	0	9	13	**4**	7	0	0	1	1	0	1	0	0	36
06:00	0	42	20	3	18	0	0	2	4	0	0	0	0	89
07:00	0	**45**	29	4	18	0	0	2	**7**	0	2	0	0	107
08:00	0	38	20	3	24	0	0	3	4	0	1	0	0	93
09:00	0	27	23	0	33	1	0	**4**	3	0	0	0	0	91
10:00	0	25	**37**	1	**40**	**3**	0	4	7	0	1	0	0	**118**
11:00	**2**	42	22	3	25	1	0	4	5	**1**	**3**	0	0	108
12 PM	**2**	**34**	**32**	3	27	1	0	5	2	0	**2**	0	0	108
13:00	1	31	26	3	26	2	0	4	5	0	2	**1**	0	101
14:00	0	23	23	**4**	**38**	0	0	**6**	**8**	0	2	0	**1**	105
15:00	1	33	32	3	37	**3**	0	5	7	0	2	1	0	**124**
16:00	0	31	30	1	17	0	0	1	4	0	1	1	0	86
17:00	0	28	26	3	12	1	0	2	1	0	1	0	0	74
18:00	0	18	16	3	6	0	0	0	0	0	1	0	0	44
19:00	0	15	8	1	6	0	0	0	0	0	0	0	0	30
20:00	0	9	5	1	7	0	0	0	1	0	0	0	0	23
21:00	0	12	9	0	1	0	0	0	0	0	2	0	0	24
22:00	0	4	3	1	3	0	0	2	0	0	0	0	0	13
23:00	0	4	1	0	3	0	0	0	0	0	0	0	0	8
Total	6	482	391	41	358	12	0	45	64	1	21	5	1	1427
Percent	0.4%	33.8%	27.4%	2.9%	25.1%	0.8%	0.0%	3.2%	4.5%	0.1%	1.5%	0.4%	0.1%	
AM Peak	11:00	07:00	10:00	05:00	10:00	10:00		09:00	07:00	11:00	11:00	00:00		10:00
Vol.	2	45	37	4	40	3		4	7	1	3	2		118
PM Peak	12:00	12:00	12:00	14:00	14:00	15:00		14:00	14:00		12:00	13:00	14:00	15:00
Vol.	2	34	32	4	38	3		6	8		2	1	1	124
Grand Total	6	482	391	41	358	12	0	45	64	1	21	5	1	1427
Percent	0.4%	33.8%	27.4%	2.9%	25.1%	0.8%	0.0%	3.2%	4.5%	0.1%	1.5%	0.4%	0.1%	

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County of Imperial
State Route 111
B/ Hazard Road - McDonald Road
24 Hour Directional Classification Count

CIM004
Site Code: 125-25114

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	7	5	0	4	0	0	0	1	0	0	**2**	0	19
01:00	0	3	4	1	1	0	0	0	3	0	1	0	0	13
02:00	0	0	4	0	0	0	0	0	0	0	1	0	0	5
03:00	0	12	1	0	4	0	0	0	1	0	0	0	0	18
04:00	0	10	9	0	8	0	0	4	0	0	2	0	0	33
05:00	0	29	25	**6**	17	1	0	3	6	0	3	0	0	90
06:00	0	66	40	5	43	1	0	5	7	0	2	0	0	169
07:00	0	**77**	45	6	36	2	0	5	9	0	**4**	0	0	184
08:00	0	67	42	3	41	1	0	5	12	0	2	0	0	173
09:00	0	51	47	1	50	2	0	6	**13**	0	4	1	0	175
10:00	0	61	**60**	3	**58**	**5**	0	6	11	0	1	0	0	**205**
11:00	**3**	74	38	3	42	1	0	**7**	11	**1**	3	0	0	183
12 PM	2	77	59	6	53	1	0	9	6	0	**4**	0	0	217
13:00	3	79	58	4	54	2	0	8	12	0	4	**1**	0	225
14:00	**6**	84	48	6	**61**	0	0	9	**13**	0	2	1	**1**	231
15:00	1	**94**	**63**	**7**	61	**3**	0	**10**	10	0	3	1	0	**253**
16:00	0	94	52	1	26	0	0	3	9	0	3	1	0	189
17:00	0	74	43	6	19	1	0	5	2	0	2	0	0	152
18:00	0	56	26	5	12	0	0	1	1	0	2	1	0	104
19:00	0	40	18	1	9	0	0	2	0	0	0	0	0	70
20:00	0	41	7	3	9	0	0	0	3	0	0	0	0	63
21:00	0	29	11	2	2	0	0	1	0	0	2	1	0	48
22:00	0	17	8	1	4	1	0	2	0	0	1	0	0	34
23:00	0	17	7	0	3	0	0	0	0	0	0	0	0	27
Total	15	1159	720	70	617	21	0	91	130	1	46	9	1	2880
Percent	0.5%	40.2%	25.0%	2.4%	21.4%	0.7%	0.0%	3.2%	4.5%	0.0%	1.6%	0.3%	0.0%	
AM Peak	11:00	07:00	10:00	05:00	10:00	10:00		11:00	09:00	11:00	07:00	00:00		10:00
Vol.	3	77	60	6	58	5		7	13	1	4	2		205
PM Peak	14:00	15:00	15:00	15:00	14:00	15:00		15:00	14:00		12:00	13:00	14:00	15:00
Vol.	6	94	63	7	61	3		10	13		4	1	1	253
Grand Total	15	1159	720	70	617	21	0	91	130	1	46	9	1	2880
Percent	0.5%	40.2%	25.0%	2.4%	21.4%	0.7%	0.0%	3.2%	4.5%	0.0%	1.6%	0.3%	0.0%	

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County of Imperial
State Route 111
B/ Montgomery Road - Lindsey Road
24 Hour Directional Classification Count

CIM005
Site Code: 125-25114

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	5	3	0	0	0	0	0	0	0	0	0	0	8
01:00	0	3	1	1	0	0	0	0	0	0	1	0	0	6
02:00	0	1	3	0	0	0	0	0	0	0	1	0	0	5
03:00	0	9	1	0	0	0	0	0	0	0	1	0	0	11
04:00	0	13	1	1	3	0	0	0	3	0	1	0	0	22
05:00	**1**	**52**	21	**3**	11	1	0	1	4	0	**3**	0	0	**97**
06:00	0	32	**26**	2	**23**	1	0	**2**	5	0	1	0	0	92
07:00	0	45	22	3	17	**3**	0	1	3	0	2	0	0	96
08:00	0	32	23	2	23	0	0	1	**10**	0	3	0	0	94
09:00	0	26	24	1	16	0	0	1	7	0	2	**1**	0	78
10:00	1	29	22	2	21	0	0	1	1	0	0	0	0	77
11:00	1	29	15	2	17	3	0	1	0	0	0	0	0	68
12 PM	0	40	19	**6**	28	**1**	0	0	0	0	0	0	0	94
13:00	**6**	33	**25**	3	**31**	0	0	1	2	0	0	0	0	**101**
14:00	2	**51**	15	3	28	0	0	1	0	0	0	0	0	100
15:00	0	33	18	5	21	0	0	**3**	0	0	0	0	0	80
16:00	0	48	16	1	10	0	0	2	**5**	0	0	**1**	0	83
17:00	0	50	11	3	6	0	0	0	4	0	0	0	0	74
18:00	0	40	10	2	4	0	0	1	1	0	**1**	1	0	60
19:00	0	27	8	0	6	0	0	0	2	0	0	0	0	43
20:00	0	32	4	2	0	0	0	0	2	0	0	0	0	40
21:00	0	16	3	2	1	0	0	0	1	0	0	1	0	24
22:00	0	10	3	0	2	1	0	0	0	0	1	0	0	17
23:00	0	13	4	0	1	0	0	0	0	0	0	0	0	18
Total	11	669	298	44	269	10	0	16	50	0	17	4	0	1388
Percent	0.8%	48.2%	21.5%	3.2%	19.4%	0.7%	0.0%	1.2%	3.6%	0.0%	1.2%	0.3%	0.0%	
AM Peak	05:00	05:00	06:00	05:00	06:00	07:00		06:00	08:00		05:00	09:00		05:00
Vol.	1	52	26	3	23	3		2	10		3	1		97
PM Peak	13:00	14:00	13:00	12:00	13:00	12:00		15:00	16:00		18:00	16:00		13:00
Vol.	6	51	25	6	31	1		3	5		1	1		101
Grand Total	11	669	298	44	269	10	0	16	50	0	17	4	0	1388
Percent	0.8%	48.2%	21.5%	3.2%	19.4%	0.7%	0.0%	1.2%	3.6%	0.0%	1.2%	0.3%	0.0%	

Counts Unlimited, Inc.

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County of Imperial
State Route 111
B/ Montgomery Road - Lindsey Road
24 Hour Directional Classification Count

CIM005
Site Code: 125-25114

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	2	1	0	2	0	0	0	0	0	0	**2**	0	7
01:00	0	1	4	0	0	0	0	2	1	0	0	0	0	8
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	4	2	0	6	0	0	0	0	0	0	0	0	12
04:00	0	2	6	0	5	0	0	0	0	0	0	0	0	13
05:00	0	5	12	3	2	0	0	0	1	0	1	0	0	24
06:00	0	22	18	2	15	0	0	2	1	0	0	0	0	60
07:00	0	37	21	4	12	0	0	**8**	1	0	0	0	0	83
08:00	0	23	25	**5**	**26**	0	0	3	**2**	0	**2**	0	0	86
09:00	0	39	15	0	19	0	0	1	0	0	0	0	0	74
10:00	0	42	**35**	1	21	0	0	0	0	0	0	0	0	**99**
11:00	**1**	**44**	28	1	13	0	0	0	0	0	0	0	0	87
12 PM	**1**	48	22	2	19	0	0	0	0	0	0	0	0	92
13:00	1	37	20	1	13	0	0	0	0	0	0	0	0	72
14:00	0	43	27	2	18	0	0	0	0	0	0	0	0	90
15:00	1	54	**33**	1	**22**	0	0	0	0	0	0	0	0	**111**
16:00	0	**71**	15	0	9	0	0	1	0	0	0	0	0	96
17:00	0	47	15	**3**	10	0	0	**2**	0	0	**1**	0	0	78
18:00	0	27	16	2	6	0	0	0	0	0	1	0	0	52
19:00	0	17	9	0	3	0	0	0	0	0	1	0	0	30
20:00	0	11	4	1	7	0	0	0	**1**	0	0	0	0	24
21:00	1	16	2	0	2	0	0	1	0	0	1	0	0	23
22:00	0	8	4	1	6	0	0	2	0	0	0	0	0	21
23:00	0	4	1	0	3	0	0	0	0	0	0	0	0	8
Total	5	604	336	29	239	0	0	22	7	0	7	2	0	1251
Percent	0.4%	48.3%	26.9%	2.3%	19.1%	0.0%	0.0%	1.8%	0.6%	0.0%	0.6%	0.2%	0.0%	
AM Peak	11:00	11:00	10:00	08:00	08:00			07:00	08:00		08:00	00:00		10:00
Vol.	1	44	35	5	26			8	2		2	2		99
PM Peak	12:00	16:00	15:00	17:00	15:00			17:00	20:00		17:00			15:00
Vol.	1	71	33	3	22			2	1		1			111
Grand Total	5	604	336	29	239	0	0	22	7	0	7	2	0	1251
Percent	0.4%	48.3%	26.9%	2.3%	19.1%	0.0%	0.0%	1.8%	0.6%	0.0%	0.6%	0.2%	0.0%	

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County of Imperial
State Route 111
B/ Montgomery Road - Lindsey Road
24 Hour Directional Classification Count

CIM005
Site Code: 125-25114

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	7	4	0	2	0	0	0	0	0	0	**2**	0	15
01:00	0	4	5	1	0	0	0	2	1	0	1	0	0	14
02:00	0	1	4	0	0	0	0	0	0	0	1	0	0	6
03:00	0	13	3	0	6	0	0	0	0	0	1	0	0	23
04:00	0	15	7	1	8	0	0	0	3	0	1	0	0	35
05:00	1	57	33	6	13	1	0	1	5	0	4	0	0	121
06:00	0	54	44	4	38	1	0	4	6	0	1	0	0	152
07:00	0	**82**	43	**7**	29	**3**	0	**9**	4	0	2	0	0	179
08:00	0	55	48	7	**49**	0	0	4	**12**	0	**5**	0	0	**180**
09:00	0	65	39	1	35	0	0	2	7	0	2	1	0	152
10:00	1	71	**57**	3	42	0	0	1	1	0	0	0	0	176
11:00	**2**	73	43	3	30	3	0	1	0	0	0	0	0	155
12 PM	1	88	41	**8**	**47**	**1**	0	0	0	0	0	0	0	186
13:00	**7**	70	45	4	44	0	0	1	2	0	0	0	0	173
14:00	2	94	42	5	46	0	0	1	0	0	0	0	0	190
15:00	1	87	**51**	6	43	0	0	**3**	0	0	0	0	0	**191**
16:00	0	**119**	31	1	19	0	0	3	**5**	0	0	**1**	0	179
17:00	0	97	26	6	16	0	0	2	4	0	1	0	0	152
18:00	0	67	26	4	10	0	0	1	1	0	**2**	1	0	112
19:00	0	44	17	0	9	0	0	0	2	0	1	0	0	73
20:00	0	43	8	3	7	0	0	0	3	0	0	0	0	64
21:00	1	32	5	2	3	0	0	1	1	0	1	1	0	47
22:00	0	18	7	1	8	1	0	2	0	0	1	0	0	38
23:00	0	17	5	0	4	0	0	0	0	0	0	0	0	26
Total	16	1273	634	73	508	10	0	38	57	0	24	6	0	2639
Percent	0.6%	48.2%	24.0%	2.8%	19.2%	0.4%	0.0%	1.4%	2.2%	0.0%	0.9%	0.2%	0.0%	
AM Peak	11:00	07:00	10:00	07:00	08:00	07:00		07:00	08:00		08:00	00:00		08:00
Vol.	2	82	57	7	49	3		9	12		5	2		180
PM Peak	13:00	16:00	15:00	12:00	12:00	12:00		15:00	16:00		18:00	16:00		15:00
Vol.	7	119	51	8	47	1		3	5		2	1		191
Grand Total	16	1273	634	73	508	10	0	38	57	0	24	6	0	2639
Percent	0.6%	48.2%	24.0%	2.8%	19.2%	0.4%	0.0%	1.4%	2.2%	0.0%	0.9%	0.2%	0.0%	

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County of Imperial
State Route 115
B/ Southeast Avenue - Blair Road
24 Hour Directional Classification Count

CIM006
Site Code: 125-25114

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	3	0	0	0	**2**	0	0	0	0	0	0	0	5
03:00	0	16	4	0	2	0	0	0	1	0	0	0	0	23
04:00	0	19	2	0	4	0	0	0	0	0	0	0	0	25
05:00	0	133	**43**	0	**37**	2	0	1	2	0	0	0	0	218
06:00	0	87	35	1	20	1	0	2	2	0	1	0	0	149
07:00	0	**143**	36	**3**	30	1	0	2	**6**	0	1	1	0	**223**
08:00	0	43	16	1	7	2	0	0	1	0	**3**	0	0	73
09:00	0	14	10	1	14	1	0	1	0	0	2	0	0	43
10:00	0	15	10	0	17	1	0	**6**	2	0	1	**2**	0	54
11:00	0	16	6	1	10	2	0	1	1	0	2	0	0	39
12 PM	**2**	19	8	**1**	7	**1**	0	1	1	0	1	0	0	41
13:00	2	**73**	**17**	1	**23**	1	0	3	5	0	**3**	0	0	**128**
14:00	0	13	7	0	11	0	0	**4**	**7**	0	0	0	0	42
15:00	0	19	9	0	8	1	0	4	4	0	1	0	0	46
16:00	0	7	8	0	4	0	0	1	1	0	1	**2**	0	24
17:00	0	9	4	1	2	0	0	0	1	0	1	0	0	18
18:00	0	7	3	0	3	0	0	0	1	0	0	0	0	14
19:00	0	8	5	0	2	0	0	0	1	0	0	0	0	16
20:00	0	5	1	0	0	0	0	2	0	0	0	0	0	8
21:00	0	34	4	0	4	0	0	0	0	0	0	0	0	42
22:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total	4	688	228	10	206	15	0	28	36	0	17	5	0	1237
Percent	0.3%	55.6%	18.4%	0.8%	16.7%	1.2%	0.0%	2.3%	2.9%	0.0%	1.4%	0.4%	0.0%	
AM Peak		07:00	05:00	07:00	05:00	02:00		10:00	07:00		08:00	10:00		07:00
Vol.		143	43	3	37	2		6	6		3	2		223
PM Peak	12:00	13:00	13:00	12:00	13:00	12:00		14:00	14:00		13:00	16:00		13:00
Vol.	2	73	17	1	23	1		4	7		3	2		128
Grand Total	4	688	228	10	206	15	0	28	36	0	17	5	0	1237
Percent	0.3%	55.6%	18.4%	0.8%	16.7%	1.2%	0.0%	2.3%	2.9%	0.0%	1.4%	0.4%	0.0%	

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County of Imperial
State Route 115
B/ Southeast Avenue - Blair Road
24 Hour Directional Classification Count

CIM006
Site Code: 125-25114

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	0	1	0	1	0	0	0	0	0	0	0	0	2
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
04:00	0	5	3	1	2	0	0	0	0	0	0	0	0	11
05:00	0	**8**	16	1	12	**1**	0	0	0	0	0	0	0	38
06:00	0	4	**25**	1	18	0	0	3	2	0	0	0	0	**53**
07:00	0	4	15	2	17	1	0	1	2	0	1	0	0	43
08:00	0	1	9	**3**	17	1	0	2	**4**	0	1	0	0	38
09:00	0	3	10	1	13	1	0	0	2	0	**2**	**1**	0	33
10:00	0	3	17	1	15	0	0	1	1	0	0	0	0	38
11:00	0	4	18	1	**21**	1	0	**4**	1	0	2	0	0	52
12 PM	0	7	25	2	13	1	0	1	0	0	0	0	0	49
13:00	0	20	65	0	28	**2**	0	**7**	5	**1**	**1**	0	0	129
14:00	**1**	**43**	90	**3**	**47**	1	0	4	8	0	1	0	0	198
15:00	0	43	**130**	3	43	0	0	2	**9**	0	1	**1**	0	**232**
16:00	0	16	82	3	23	0	0	1	2	0	1	0	0	128
17:00	0	5	20	1	10	0	0	0	1	0	0	0	0	37
18:00	0	5	15	2	4	0	0	0	0	0	0	0	0	26
19:00	0	4	8	0	5	0	0	1	0	0	0	0	0	18
20:00	0	5	16	0	4	0	0	0	0	0	1	0	0	26
21:00	0	11	55	0	13	0	0	0	0	0	0	0	0	79
22:00	1	9	17	0	6	0	0	0	0	0	0	0	0	33
23:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
Total	2	201	637	27	314	9	0	27	37	1	11	2	0	1268
Percent	0.2%	15.9%	50.2%	2.1%	24.8%	0.7%	0.0%	2.1%	2.9%	0.1%	0.9%	0.2%	0.0%	
AM Peak		05:00	06:00	08:00	11:00	05:00		11:00	08:00		09:00	09:00		06:00
Vol.		8	25	3	21	1		4	4		2	1		53
PM Peak	14:00	14:00	15:00	14:00	14:00	13:00		13:00	15:00	13:00	13:00	15:00		15:00
Vol.	1	43	130	3	47	2		7	9	1	1	1		232
Grand Total	2	201	637	27	314	9	0	27	37	1	11	2	0	1268
Percent	0.2%	15.9%	50.2%	2.1%	24.8%	0.7%	0.0%	2.1%	2.9%	0.1%	0.9%	0.2%	0.0%	

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County of Imperial
State Route 115
B/ Southeast Avenue - Blair Road
24 Hour Directional Classification Count

CIM006
Site Code: 125-25114

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	1	1	0	1	0	0	0	0	0	0	0	0	3
01:00	0	0	0	1	0	0	0	0	0	0	0	0	0	1
02:00	0	3	0	0	1	2	0	0	0	0	0	0	0	6
03:00	0	16	4	1	2	0	0	0	1	0	0	0	0	24
04:00	0	24	5	1	6	0	0	0	0	0	0	0	0	36
05:00	0	141	59	1	**49**	**3**	0	1	2	0	0	0	0	256
06:00	0	91	**60**	2	38	1	0	5	4	0	1	0	0	202
07:00	0	**147**	51	**5**	47	2	0	3	**8**	0	2	1	0	**266**
08:00	0	44	25	4	24	3	0	2	5	0	**4**	0	0	111
09:00	0	17	20	2	27	2	0	1	2	0	4	1	0	76
10:00	0	18	27	1	32	1	0	**7**	3	0	1	**2**	0	92
11:00	0	20	24	2	31	3	0	5	2	0	4	0	0	91
12 PM	**2**	26	33	**3**	20	2	0	2	1	0	1	0	0	90
13:00	2	**93**	82	1	51	**3**	0	**10**	10	**1**	**4**	0	0	257
14:00	1	56	97	3	**58**	1	0	8	**15**	0	1	0	0	240
15:00	0	62	**139**	3	51	1	0	6	13	0	2	1	0	**278**
16:00	0	23	90	3	27	0	0	2	3	0	2	**2**	0	152
17:00	0	14	24	2	12	0	0	0	2	0	1	0	0	55
18:00	0	12	18	2	7	0	0	0	1	0	0	0	0	40
19:00	0	12	13	0	7	0	0	1	1	0	0	0	0	34
20:00	0	10	17	0	4	0	0	2	0	0	1	0	0	34
21:00	0	45	59	0	17	0	0	0	0	0	0	0	0	121
22:00	1	11	17	0	7	0	0	0	0	0	0	0	0	36
23:00	0	3	0	0	1	0	0	0	0	0	0	0	0	4
Total	6	889	865	37	520	24	0	55	73	1	28	7	0	2505
Percent	0.2%	35.5%	34.5%	1.5%	20.8%	1.0%	0.0%	2.2%	2.9%	0.0%	1.1%	0.3%	0.0%	
AM Peak		07:00	06:00	07:00	05:00	05:00		10:00	07:00		08:00	10:00		07:00
Vol.		147	60	5	49	3		7	8		4	2		266
PM Peak	12:00	13:00	15:00	12:00	14:00	13:00		13:00	14:00	13:00	13:00	16:00		15:00
Vol.	2	93	139	3	58	3		10	15	1	4	2		278
Grand Total	6	889	865	37	520	24	0	55	73	1	28	7	0	2505
Percent	0.2%	35.5%	34.5%	1.5%	20.8%	1.0%	0.0%	2.2%	2.9%	0.0%	1.1%	0.3%	0.0%	

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County of Imperial
State Route 111
B/ Yocum Road - Ruegger Road
24 Hour Directional Classification Count

CIM007
Site Code: 125-25114

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/12/25	0	10	4	0	0	0	0	0	0	0	0	0	0	14
01:00	0	7	2	0	0	0	0	0	1	0	0	0	0	10
02:00	0	12	4	0	0	1	0	0	0	0	2	0	0	19
03:00	0	26	6	0	0	0	0	0	0	0	2	0	0	34
04:00	0	37	19	0	5	0	0	0	0	0	**6**	0	0	67
05:00	1	**191**	**69**	2	11	2	0	1	9	0	5	0	0	**291**
06:00	0	128	45	1	**29**	2	0	**3**	3	0	5	0	0	216
07:00	1	176	41	2	24	**6**	0	2	9	0	4	0	0	265
08:00	**2**	120	37	**3**	12	3	0	3	9	0	4	0	0	193
09:00	0	69	32	2	19	1	0	1	**17**	0	4	0	0	145
10:00	0	94	28	1	10	2	0	2	8	0	2	0	0	147
11:00	2	97	36	1	9	1	0	0	10	0	3	0	0	159
12 PM	1	107	33	**4**	8	**3**	0	3	**7**	0	1	**1**	0	168
13:00	**4**	181	**54**	2	**15**	3	0	**4**	6	0	**3**	0	0	**272**
14:00	1	133	31	3	12	0	0	1	3	0	1	0	0	185
15:00	0	157	45	1	6	1	0	0	2	0	1	0	0	213
16:00	1	**189**	36	0	9	0	0	2	3	0	0	0	0	240
17:00	1	169	34	1	7	0	0	1	3	0	0	0	0	216
18:00	1	137	32	0	4	0	0	1	1	0	0	0	0	176
19:00	0	100	18	0	5	0	0	1	0	0	0	0	0	124
20:00	0	94	10	0	2	0	0	1	1	0	0	0	0	108
21:00	1	97	15	0	1	0	0	0	1	0	0	0	0	115
22:00	0	42	6	0	0	0	0	0	0	0	0	0	0	48
23:00	0	25	3	0	3	0	0	0	0	0	0	0	0	31
Total	16	2398	640	23	191	25	0	26	93	0	43	1	0	3456
Percent	0.5%	69.4%	18.5%	0.7%	5.5%	0.7%	0.0%	0.8%	2.7%	0.0%	1.2%	0.0%	0.0%	
AM Peak	08:00	05:00	05:00	08:00	06:00	07:00		06:00	09:00		04:00			05:00
Vol.	2	191	69	3	29	6		3	17		6			291
PM Peak	13:00	16:00	13:00	12:00	13:00	12:00		13:00	12:00		13:00	12:00		13:00
Vol.	4	189	54	4	15	3		4	7		3	1		272

Counts Unlimited, Inc.
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County of Imperial
State Route 111
B/ Yocum Road - Ruegger Road
24 Hour Directional Classification Count

CIM007
Site Code: 125-25114

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/12/25	0	7	3	0	1	0	0	0	0	0	0	0	0	11
01:00	0	8	1	0	0	0	0	0	1	0	0	0	0	10
02:00	0	10	2	0	1	0	0	0	1	0	0	0	0	14
03:00	0	17	1	0	0	0	0	0	1	0	0	0	0	19
04:00	1	36	11	0	2	0	0	0	4	0	6	0	0	60
05:00	**2**	58	17	2	3	1	0	0	6	0	0	0	0	89
06:00	1	117	27	1	7	**2**	**1**	0	6	0	**8**	0	0	170
07:00	0	**157**	27	1	10	2	1	1	7	0	2	0	0	208
08:00	0	147	**52**	2	12	2	0	3	14	0	2	0	0	**234**
09:00	2	144	35	**4**	15	0	0	4	8	0	5	0	0	217
10:00	0	120	38	3	**22**	1	0	6	**17**	0	5	**1**	0	213
11:00	0	110	50	3	15	2	0	**8**	17	0	4	1	0	210
12 PM	0	109	43	2	16	2	0	4	15	0	2	0	0	193
13:00	1	167	59	**3**	24	**5**	0	**7**	**25**	0	**3**	**1**	0	295
14:00	0	**267**	**80**	1	23	0	0	7	7	0	1	0	0	**386**
15:00	**2**	249	70	2	**30**	4	0	7	9	0	3	1	0	377
16:00	1	249	49	2	12	0	0	2	5	0	0	0	0	320
17:00	0	133	28	1	9	0	0	1	2	0	0	0	0	174
18:00	0	122	25	1	5	1	0	1	0	0	0	0	0	155
19:00	0	68	17	0	5	0	0	0	0	0	0	0	0	90
20:00	0	55	15	0	0	0	0	1	2	0	1	0	0	74
21:00	0	96	12	1	2	0	0	0	1	0	0	0	0	112
22:00	0	52	12	0	3	0	0	0	0	0	0	0	0	67
23:00	0	10	1	0	2	0	0	0	0	0	0	0	0	13
Total	10	2508	675	29	219	22	2	52	148	0	42	4	0	3711
Percent	0.3%	67.6%	18.2%	0.8%	5.9%	0.6%	0.1%	1.4%	4.0%	0.0%	1.1%	0.1%	0.0%	
AM Peak	05:00	07:00	08:00	09:00	10:00	06:00	06:00	11:00	10:00		06:00	10:00		08:00
Vol.	2	157	52	4	22	2	1	8	17		8	1		234
PM Peak	15:00	14:00	14:00	13:00	15:00	13:00		13:00	13:00		13:00	13:00		14:00
Vol.	2	267	80	3	30	5		7	25		3	1		386

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County of Imperial
State Route 111
B/ Yocum Road - Ruegger Road
24 Hour Directional Classification Count

CIM007
Site Code: 125-25114

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/12/25	0	17	7	0	1	0	0	0	0	0	0	0	0	25
01:00	0	15	3	0	0	0	0	0	2	0	0	0	0	20
02:00	0	22	6	0	1	1	0	0	1	0	2	0	0	33
03:00	0	43	7	0	0	0	0	0	1	0	2	0	0	53
04:00	1	73	30	0	7	0	0	0	4	0	12	0	0	127
05:00	**3**	249	86	4	14	3	0	1	15	0	5	0	0	380
06:00	1	245	72	2	**36**	4	**1**	3	9	0	**13**	0	0	386
07:00	1	**333**	68	3	34	**8**	1	3	16	0	6	0	0	**473**
08:00	2	267	**89**	5	24	5	0	6	23	0	6	0	0	427
09:00	2	213	67	**6**	34	1	0	5	25	0	9	0	0	362
10:00	0	214	66	4	32	3	0	**8**	25	0	7	**1**	0	360
11:00	2	207	86	4	24	3	0	8	**27**	0	7	1	0	369
12 PM	1	216	76	**6**	24	5	0	7	22	0	3	**1**	0	361
13:00	**5**	348	113	5	**39**	**8**	0	**11**	**31**	0	**6**	1	0	567
14:00	1	400	111	4	35	0	0	8	10	0	2	0	0	571
15:00	2	406	**115**	3	36	5	0	7	11	0	4	1	0	**590**
16:00	2	**438**	85	2	21	0	0	4	8	0	0	0	0	560
17:00	1	302	62	2	16	0	0	2	5	0	0	0	0	390
18:00	1	259	57	1	9	1	0	2	1	0	0	0	0	331
19:00	0	168	35	0	10	0	0	1	0	0	0	0	0	214
20:00	0	149	25	0	2	0	0	2	3	0	1	0	0	182
21:00	1	193	27	1	3	0	0	0	2	0	0	0	0	227
22:00	0	94	18	0	3	0	0	0	0	0	0	0	0	115
23:00	0	35	4	0	5	0	0	0	0	0	0	0	0	44
Total	26	4906	1315	52	410	47	2	78	241	0	85	5	0	7167
Percent	0.4%	68.5%	18.3%	0.7%	5.7%	0.7%	0.0%	1.1%	3.4%	0.0%	1.2%	0.1%	0.0%	
AM Peak	05:00	07:00	08:00	09:00	06:00	07:00	06:00	10:00	11:00		06:00	10:00		07:00
Vol.	3	333	89	6	36	8	1	8	27		13	1		473
PM Peak	13:00	16:00	15:00	12:00	13:00	13:00		13:00	13:00		13:00	12:00		15:00
Vol.	5	438	115	6	39	8		11	31		6	1		590

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County of Imperial
State Route 111
S/ Andre Road
24 Hour Directional Classification Count

CIM008
Site Code: 125-25114

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	9	5	0	1	0	0	0	5	0	0	0	0	20
01:00	0	12	2	0	3	0	0	0	0	0	0	0	0	17
02:00	0	15	5	0	2	1	0	0	4	0	1	0	0	28
03:00	0	26	5	0	2	0	0	0	2	0	**5**	0	0	40
04:00	0	37	13	1	8	0	0	2	1	0	2	0	0	64
05:00	**1**	**169**	51	2	31	1	0	1	4	0	5	0	0	**265**
06:00	0	95	**58**	3	**35**	**4**	0	**3**	4	0	2	0	0	204
07:00	0	156	55	2	30	1	0	3	2	0	0	**1**	0	250
08:00	0	72	40	**4**	26	1	0	1	**8**	0	2	0	0	154
09:00	0	57	36	3	20	2	0	0	5	0	1	1	0	125
10:00	1	61	26	2	16	0	0	2	7	0	1	0	0	116
11:00	0	75	27	1	24	1	0	3	5	0	2	0	0	138
12 PM	2	95	**50**	2	**28**	0	0	1	5	0	**3**	**1**	0	187
13:00	**3**	127	36	**3**	20	**1**	0	2	1	0	0	0	0	193
14:00	0	97	40	3	20	0	0	**6**	**6**	0	3	0	0	175
15:00	2	115	37	3	26	1	0	2	3	0	0	0	0	189
16:00	1	**140**	40	0	14	0	**1**	3	0	0	1	0	0	**200**
17:00	0	127	33	1	15	0	0	1	1	0	0	0	0	178
18:00	0	97	25	1	8	0	0	0	0	0	0	0	0	131
19:00	0	77	19	0	10	0	0	0	0	0	0	0	0	106
20:00	0	80	14	0	3	0	0	0	0	0	0	0	0	97
21:00	0	77	14	2	12	0	0	0	1	0	0	0	0	106
22:00	0	38	6	1	5	0	0	0	0	0	0	0	0	50
23:00	0	20	8	1	1	0	0	0	2	0	0	0	0	32
Total	10	1874	645	35	360	13	1	30	66	0	28	3	0	3065
Percent	0.3%	61.1%	21.0%	1.1%	11.7%	0.4%	0.0%	1.0%	2.2%	0.0%	0.9%	0.1%	0.0%	
AM Peak	05:00	05:00	06:00	08:00	06:00	06:00		06:00	08:00		03:00	07:00		05:00
Vol.	1	169	58	4	35	4		3	8		5	1		265
PM Peak	13:00	16:00	12:00	13:00	12:00	13:00	16:00	14:00	14:00		12:00	12:00		16:00
Vol.	3	140	50	3	28	1	1	6	6		3	1		200
Grand Total	10	1874	645	35	360	13	1	30	66	0	28	3	0	3065
Percent	0.3%	61.1%	21.0%	1.1%	11.7%	0.4%	0.0%	1.0%	2.2%	0.0%	0.9%	0.1%	0.0%	

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County of Imperial
State Route 111
S/ Andre Road
24 Hour Directional Classification Count

CIM008
Site Code: 125-25114

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	5	3	0	0	0	0	0	1	0	0	0	0	9
01:00	0	4	2	0	3	0	0	2	0	0	0	0	0	11
02:00	0	6	2	0	7	0	0	0	0	0	0	0	0	15
03:00	0	11	2	0	8	0	0	0	0	0	0	0	0	21
04:00	**1**	22	15	0	4	0	0	0	0	0	**3**	0	0	45
05:00	0	41	13	1	9	0	0	0	0	0	0	0	0	64
06:00	1	88	36	1	21	0	0	0	1	0	1	0	0	149
07:00	0	**129**	35	2	23	0	0	6	2	0	2	0	0	199
08:00	0	102	**52**	**6**	**40**	0	0	6	1	0	2	0	0	**209**
09:00	1	92	35	5	30	1	0	**7**	1	0	1	**1**	0	174
10:00	0	92	37	0	38	0	0	3	**4**	0	0	0	0	174
11:00	1	72	36	6	40	**3**	0	6	4	0	3	1	0	172
12 PM	0	98	48	2	39	0	0	2	1	0	1	0	0	191
13:00	0	99	48	3	31	1	0	**6**	**6**	0	3	0	0	197
14:00	1	**219**	59	**5**	61	**3**	0	3	5	0	**4**	0	0	360
15:00	1	218	**79**	3	**70**	2	0	4	1	0	2	0	0	**380**
16:00	0	210	58	1	46	2	0	1	4	0	0	0	0	322
17:00	0	138	36	1	22	0	0	2	0	0	0	0	0	199
18:00	0	103	38	1	21	0	0	1	0	0	0	0	0	164
19:00	0	39	10	0	8	0	0	1	1	0	0	0	0	59
20:00	0	32	7	1	11	0	0	0	0	0	0	0	0	51
21:00	1	52	11	0	8	0	0	1	0	0	0	0	0	73
22:00	**2**	60	5	0	16	0	0	1	0	0	0	0	0	84
23:00	0	12	1	0	2	0	0	0	0	0	0	0	0	15
Total	9	1944	668	38	558	12	0	52	32	0	22	2	0	3337
Percent	0.3%	58.3%	20.0%	1.1%	16.7%	0.4%	0.0%	1.6%	1.0%	0.0%	0.7%	0.1%	0.0%	
AM Peak	04:00	07:00	08:00	08:00	08:00	11:00		09:00	10:00		04:00	09:00		08:00
Vol.	1	129	52	6	40	3		7	4		3	1		209
PM Peak	22:00	14:00	15:00	14:00	15:00	14:00		13:00	13:00		14:00			15:00
Vol.	2	219	79	5	70	3		6	6		4			380
Grand Total	9	1944	668	38	558	12	0	52	32	0	22	2	0	3337
Percent	0.3%	58.3%	20.0%	1.1%	16.7%	0.4%	0.0%	1.6%	1.0%	0.0%	0.7%	0.1%	0.0%	

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County of Imperial
State Route 111
S/ Andre Road
24 Hour Directional Classification Count

CIM008
Site Code: 125-25114

Northbound, Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	14	8	0	1	0	0	0	6	0	0	0	0	29
01:00	0	16	4	0	6	0	0	2	0	0	0	0	0	28
02:00	0	21	7	0	9	1	0	0	4	0	1	0	0	43
03:00	0	37	7	0	10	0	0	0	2	0	**5**	0	0	61
04:00	**1**	59	28	1	12	0	0	2	1	0	5	0	0	109
05:00	1	210	64	3	40	1	0	1	4	0	5	0	0	329
06:00	1	183	**94**	4	56	**4**	0	3	5	0	3	0	0	353
07:00	0	**285**	90	4	53	1	0	**9**	4	0	2	1	0	**449**
08:00	0	174	92	**10**	**66**	1	0	7	9	0	4	0	0	363
09:00	1	149	71	8	50	3	0	7	6	0	2	**2**	0	299
10:00	1	153	63	2	54	0	0	5	**11**	0	1	0	0	290
11:00	1	147	63	7	64	4	0	9	9	0	5	1	0	310
12 PM	2	193	98	4	67	0	0	3	6	0	4	**1**	0	378
13:00	**3**	226	84	6	51	2	0	8	7	0	3	0	0	390
14:00	1	316	99	**8**	81	**3**	0	**9**	**11**	0	**7**	0	0	535
15:00	3	333	**116**	6	**96**	3	0	6	4	0	2	0	0	**569**
16:00	1	**350**	98	1	60	2	**1**	4	4	0	1	0	0	522
17:00	0	265	69	2	37	0	0	3	1	0	0	0	0	377
18:00	0	200	63	2	29	0	0	1	0	0	0	0	0	295
19:00	0	116	29	0	18	0	0	1	1	0	0	0	0	165
20:00	0	112	21	1	14	0	0	0	0	0	0	0	0	148
21:00	1	129	25	2	20	0	0	1	1	0	0	0	0	179
22:00	2	98	11	1	21	0	0	1	0	0	0	0	0	134
23:00	0	32	9	1	3	0	0	0	2	0	0	0	0	47
Total	19	3818	1313	73	918	25	1	82	98	0	50	5	0	6402
Percent	0.3%	59.6%	20.5%	1.1%	14.3%	0.4%	0.0%	1.3%	1.5%	0.0%	0.8%	0.1%	0.0%	
AM Peak	04:00	07:00	06:00	08:00	08:00	06:00		07:00	10:00		03:00	09:00		07:00
Vol.	1	285	94	10	66	4		9	11		5	2		449
PM Peak	13:00	16:00	15:00	14:00	15:00	14:00	16:00	14:00	14:00		14:00	12:00		15:00
Vol.	3	350	116	8	96	3	1	9	11		7	1		569
Grand Total	19	3818	1313	73	918	25	1	82	98	0	50	5	0	6402
Percent	0.3%	59.6%	20.5%	1.1%	14.3%	0.4%	0.0%	1.3%	1.5%	0.0%	0.8%	0.1%	0.0%	

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County of Imperial
State Route 78
W/ Martin Road
24 Hour Directional Classification Count

CIM009
Site Code: 125-25114

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	42	5	0	2	0	0	2	83	**1**	0	0	0	135
01:00	0	25	1	0	2	0	0	2	56	0	0	0	0	86
02:00	0	19	1	0	0	0	0	1	55	0	0	0	0	76
03:00	0	19	5	0	1	1	0	0	48	0	1	**1**	0	76
04:00	0	20	13	0	3	0	0	4	43	0	5	0	0	88
05:00	0	47	31	0	5	1	0	2	56	0	12	0	0	154
06:00	0	68	48	0	6	0	0	**8**	69	0	12	1	0	212
07:00	0	141	72	0	4	**4**	0	6	69	1	3	1	0	301
08:00	0	165	**87**	0	**24**	1	0	1	86	0	10	0	0	374
09:00	0	**174**	68	0	12	1	0	2	75	1	**16**	0	0	349
10:00	**1**	168	64	2	18	2	0	2	101	0	5	0	0	363
11:00	0	157	77	**7**	10	2	0	4	**115**	0	11	1	0	**384**
12 PM	1	170	78	0	11	0	0	2	121	0	7	**3**	0	393
13:00	0	164	**119**	3	11	1	0	5	140	0	9	0	0	452
14:00	0	210	99	4	**20**	**8**	0	4	**149**	0	7	1	0	**502**
15:00	**8**	226	106	0	9	2	0	4	132	0	**12**	1	0	500
16:00	0	**239**	77	**5**	10	2	**2**	**8**	133	0	8	1	0	485
17:00	0	202	61	0	7	1	0	8	115	**2**	4	1	0	401
18:00	0	178	26	0	4	1	0	4	90	0	7	1	0	311
19:00	0	159	3	0	6	0	0	5	67	0	5	2	0	247
20:00	0	161	13	0	7	0	0	4	73	0	2	0	0	260
21:00	0	128	9	0	11	0	0	1	51	0	1	0	0	201
22:00	0	110	5	0	5	0	0	5	64	0	0	0	0	189
23:00	0	78	1	0	4	1	0	0	67	0	2	1	0	154
Total	10	3070	1069	21	192	28	2	84	2058	5	139	15	0	6693
Percent	0.1%	45.9%	16.0%	0.3%	2.9%	0.4%	0.0%	1.3%	30.7%	0.1%	2.1%	0.2%	0.0%	
AM Peak	10:00	09:00	08:00	11:00	08:00	07:00		06:00	11:00	00:00	09:00	03:00		11:00
Vol.	1	174	87	7	24	4		8	115	1	16	1		384
PM Peak	15:00	16:00	13:00	16:00	14:00	14:00	16:00	16:00	14:00	17:00	15:00	12:00		14:00
Vol.	8	239	119	5	20	8	2	8	149	2	12	3		502
Grand Total	10	3070	1069	21	192	28	2	84	2058	5	139	15	0	6693
Percent	0.1%	45.9%	16.0%	0.3%	2.9%	0.4%	0.0%	1.3%	30.7%	0.1%	2.1%	0.2%	0.0%	

Counts Unlimited, Inc.

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County of Imperial
State Route 78
W/ Martin Road
24 Hour Directional Classification Count

CIM009
Site Code: 125-25114

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	31	2	0	1	0	0	0	71	0	2	**4**	0	111
01:00	0	19	4	0	3	0	0	0	59	0	5	0	0	90
02:00	0	41	7	0	2	0	0	2	55	0	6	0	0	113
03:00	0	36	13	0	2	0	0	3	52	0	9	2	0	117
04:00	0	72	34	0	5	1	0	1	47	**1**	4	0	0	165
05:00	0	151	57	4	3	5	0	3	48	0	9	0	0	280
06:00	0	**164**	61	**9**	0	6	0	6	43	1	4	1	0	295
07:00	0	121	**81**	0	9	**12**	0	3	50	0	6	1	0	283
08:00	**1**	115	67	0	4	4	0	4	73	0	8	0	0	276
09:00	0	135	80	2	**16**	3	0	7	77	0	**13**	0	0	**333**
10:00	1	108	74	2	6	3	0	7	**87**	0	10	0	0	298
11:00	0	143	77	1	11	0	0	**8**	76	0	3	0	0	319
12 PM	0	144	**73**	**1**	7	2	0	6	68	0	2	0	0	303
13:00	0	190	55	1	**10**	**4**	0	7	86	0	4	0	0	357
14:00	**1**	194	55	0	6	1	0	6	88	0	5	4	0	**360**
15:00	0	**201**	41	0	7	0	**1**	6	68	0	1	1	0	326
16:00	0	182	55	1	8	0	0	6	75	1	2	**6**	0	336
17:00	0	145	40	1	4	0	0	**8**	**116**	0	0	0	0	314
18:00	0	132	9	0	1	0	0	2	102	3	0	0	0	249
19:00	0	102	14	0	1	0	0	0	112	**4**	4	6	0	243
20:00	0	101	9	0	2	0	0	0	103	2	**8**	3	0	228
21:00	0	77	7	0	0	0	0	5	87	0	6	0	0	182
22:00	0	52	15	0	1	0	0	1	71	0	5	0	0	145
23:00	0	22	2	0	0	0	0	2	58	0	1	0	0	85
Total	3	2678	932	22	109	41	1	93	1772	12	117	28	0	5808
Percent	0.1%	46.1%	16.0%	0.4%	1.9%	0.7%	0.0%	1.6%	30.5%	0.2%	2.0%	0.5%	0.0%	
AM Peak	08:00	06:00	07:00	06:00	09:00	07:00		11:00	10:00	04:00	09:00	00:00		09:00
Vol.	1	164	81	9	16	12		8	87	1	13	4		333
PM Peak	14:00	15:00	12:00	12:00	13:00	13:00	15:00	17:00	17:00	19:00	20:00	16:00		14:00
Vol.	1	201	73	1	10	4	1	8	116	4	8	6		360
Grand Total	3	2678	932	22	109	41	1	93	1772	12	117	28	0	5808
Percent	0.1%	46.1%	16.0%	0.4%	1.9%	0.7%	0.0%	1.6%	30.5%	0.2%	2.0%	0.5%	0.0%	

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County of Imperial
State Route 78
W/ Martin Road
24 Hour Directional Classification Count

CIM009
Site Code: 125-25114

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
02/06/25	0	73	7	0	3	0	0	2	154	**1**	2	**4**	0	246
01:00	0	44	5	0	5	0	0	2	115	0	5	0	0	176
02:00	0	60	8	0	2	0	0	3	110	0	6	0	0	189
03:00	0	55	18	0	3	1	0	3	100	0	10	3	0	193
04:00	0	92	47	0	8	1	0	5	90	1	9	0	0	253
05:00	0	198	88	4	8	6	0	5	104	0	21	0	0	434
06:00	0	232	109	**9**	6	6	0	**14**	112	1	16	2	0	507
07:00	0	262	153	0	13	**16**	0	9	119	1	9	2	0	584
08:00	1	280	**154**	0	**28**	5	0	5	159	0	18	0	0	650
09:00	0	**309**	148	2	28	4	0	9	152	1	**29**	0	0	682
10:00	**2**	276	138	4	24	5	0	9	188	0	15	0	0	661
11:00	0	300	154	8	21	2	0	12	**191**	0	14	1	0	**703**
12 PM	1	314	151	1	18	2	0	8	189	0	9	3	0	696
13:00	0	354	**174**	4	21	5	0	12	226	0	**13**	0	0	809
14:00	1	404	154	4	**26**	**9**	0	10	**237**	0	12	5	0	**862**
15:00	**8**	**427**	147	0	16	2	1	10	200	0	13	2	0	826
16:00	0	421	132	**6**	18	2	**2**	14	208	1	10	7	0	821
17:00	0	347	101	1	11	1	0	**16**	231	2	4	1	0	715
18:00	0	310	35	0	5	1	0	6	192	3	7	1	0	560
19:00	0	261	17	0	7	0	0	5	179	**4**	9	**8**	0	490
20:00	0	262	22	0	9	0	0	4	176	2	10	3	0	488
21:00	0	205	16	0	11	0	0	6	138	0	7	0	0	383
22:00	0	162	20	0	6	0	0	6	135	0	5	0	0	334
23:00	0	100	3	0	4	1	0	2	125	0	3	1	0	239
Total	13	5748	2001	43	301	69	3	177	3830	17	256	43	0	12501
Percent	0.1%	46.0%	16.0%	0.3%	2.4%	0.6%	0.0%	1.4%	30.6%	0.1%	2.0%	0.3%	0.0%	
AM Peak	10:00	09:00	08:00	06:00	08:00	07:00		06:00	11:00	00:00	09:00	00:00		11:00
Vol.	2	309	154	9	28	16		14	191	1	29	4		703
PM Peak	15:00	15:00	13:00	16:00	14:00	14:00	16:00	17:00	14:00	19:00	13:00	19:00		14:00
Vol.	8	427	174	6	26	9	2	16	237	4	13	8		862
Grand Total	13	5748	2001	43	301	69	3	177	3830	17	256	43	0	12501
Percent	0.1%	46.0%	16.0%	0.3%	2.4%	0.6%	0.0%	1.4%	30.6%	0.1%	2.0%	0.3%	0.0%	

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County of Imperial
Brandt Road
B/ Swink Road - Hovley Road
24 Hour Directional Classification Count

CIM006
Site Code: 125-221001B

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	5	1	0	0	0	0	0	0	0	0	0	0	6
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	3	0	0	0	0	0	0	1	0	0	0	0	4
06:00	0	5	6	0	1	0	0	0	0	0	0	0	0	12
07:00	0	2	8	0	1	0	0	0	**2**	0	0	0	0	13
08:00	0	**7**	11	0	0	0	0	0	1	0	0	0	0	19
09:00	0	3	10	**3**	1	0	0	0	0	0	0	0	0	17
10:00	0	5	8	3	0	0	0	0	0	0	0	0	0	16
11:00	0	4	**13**	0	**3**	0	0	**1**	1	0	0	0	0	**22**
12 PM	0	3	17	0	0	**8**	**1**	0	1	0	0	0	0	30
13:00	0	16	11	0	0	1	0	0	0	0	0	0	0	28
14:00	0	**40**	**25**	0	0	0	0	0	0	0	0	0	0	**65**
15:00	0	11	12	0	**5**	0	0	0	**2**	0	0	0	0	30
16:00	0	16	6	0	1	0	0	0	0	0	0	0	0	23
17:00	0	11	2	0	0	0	0	0	0	0	0	0	0	13
18:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
19:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
20:00	0	2	0	0	0	0	0	0	1	0	0	0	0	3
21:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Total	0	164	132	6	12	9	1	1	9	0	0	0	0	334
Percent	0.0%	49.1%	39.5%	1.8%	3.6%	2.7%	0.3%	0.3%	2.7%	0.0%	0.0%	0.0%	0.0%	
AM Peak		08:00	11:00	09:00	11:00			11:00	07:00					11:00
Vol.		7	13	3	3			1	2					22
PM Peak		14:00	14:00		15:00	12:00	12:00		15:00					14:00
Vol.		40	25		5	8	1		2					65
Grand Total	0	164	132	6	12	9	1	1	9	0	0	0	0	334
Percent	0.0%	49.1%	39.5%	1.8%	3.6%	2.7%	0.3%	0.3%	2.7%	0.0%	0.0%	0.0%	0.0%	

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County of Imperial
Brandt Road
B/ Swink Road - Hovley Road
24 Hour Directional Classification Count

CIM006
Site Code: 125-221001B

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
04:00	0	33	0	0	0	0	0	0	0	0	0	0	0	33
05:00	0	**66**	18	0	1	0	0	0	**3**	0	0	0	0	**88**
06:00	0	14	14	0	2	0	0	0	0	**1**	0	0	0	31
07:00	0	24	**19**	0	0	**2**	0	**1**	0	0	0	0	0	46
08:00	0	9	18	0	**3**	1	0	0	1	0	0	0	0	32
09:00	0	4	10	0	1	0	0	1	2	0	0	0	0	18
10:00	0	4	11	0	2	0	0	0	2	0	0	0	0	19
11:00	0	3	7	0	2	1	0	0	0	0	0	0	0	13
12 PM	0	4	11	0	**2**	0	0	0	0	0	0	0	0	17
13:00	0	4	**16**	0	0	**1**	0	**1**	0	0	0	0	0	**22**
14:00	0	5	12	0	0	0	0	0	0	0	0	0	0	17
15:00	0	4	9	0	0	0	0	0	**2**	0	0	0	0	15
16:00	0	**13**	9	0	0	0	0	0	0	0	0	0	0	22
17:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
18:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
19:00	**1**	1	1	0	0	0	0	0	1	0	0	0	0	4
20:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
21:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
22:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Total	1	230	158	0	13	5	0	3	11	1	0	0	0	422
Percent	0.2%	54.5%	37.4%	0.0%	3.1%	1.2%	0.0%	0.7%	2.6%	0.2%	0.0%	0.0%	0.0%	
AM Peak		05:00	07:00		08:00	07:00		07:00	05:00	06:00				05:00
Vol.		66	19		3	2		1	3	1				88
PM Peak	19:00	16:00	13:00		12:00	13:00		13:00	15:00					13:00
Vol.	1	13	16		2	1		1	2					22
Grand Total	1	230	158	0	13	5	0	3	11	1	0	0	0	422
Percent	0.2%	54.5%	37.4%	0.0%	3.1%	1.2%	0.0%	0.7%	2.6%	0.2%	0.0%	0.0%	0.0%	

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County of Imperial
Brandt Road
B/ Swink Road - Hovley Road
24 Hour Directional Classification Count
Northbound, Southbound

CIM006
Site Code: 125-221001B

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	6	1	0	0	0	0	0	0	0	0	0	0	7
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
04:00	0	35	0	0	0	0	0	0	0	0	0	0	0	35
05:00	0	**69**	18	0	1	0	0	0	**4**	0	0	0	0	**92**
06:00	0	19	20	0	3	0	0	0	0	**1**	0	0	0	43
07:00	0	26	27	0	1	**2**	0	**1**	2	0	0	0	0	59
08:00	0	16	**29**	0	3	1	0	0	2	0	0	0	0	51
09:00	0	7	20	**3**	2	0	0	1	2	0	0	0	0	35
10:00	0	9	19	3	2	0	0	0	2	0	0	0	0	35
11:00	0	7	20	0	**5**	1	0	1	1	0	0	0	0	35
12 PM	0	7	28	0	2	**8**	**1**	0	1	0	0	0	0	47
13:00	0	20	27	0	0	2	0	**1**	0	0	0	0	0	50
14:00	0	**45**	**37**	0	0	0	0	0	0	0	0	0	0	**82**
15:00	0	15	21	0	**5**	0	0	0	**4**	0	0	0	0	45
16:00	0	29	15	0	1	0	0	0	0	0	0	0	0	45
17:00	0	20	3	0	0	0	0	0	0	0	0	0	0	23
18:00	0	16	1	0	0	0	0	0	0	0	0	0	0	17
19:00	**1**	5	3	0	0	0	0	0	1	0	0	0	0	10
20:00	0	5	0	0	0	0	0	0	1	0	0	0	0	6
21:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
22:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
23:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
Total	1	394	290	6	25	14	1	4	20	1	0	0	0	756
Percent	0.1%	52.1%	38.4%	0.8%	3.3%	1.9%	0.1%	0.5%	2.6%	0.1%	0.0%	0.0%	0.0%	
AM Peak		05:00	08:00	09:00	11:00	07:00		07:00	05:00	06:00				05:00
Vol.		69	29	3	5	2		1	4	1				92
PM Peak	19:00	14:00	14:00		15:00	12:00	12:00	13:00	15:00					14:00
Vol.	1	45	37		5	8	1	1	4					82
Grand Total	1	394	290	6	25	14	1	4	20	1	0	0	0	756
Percent	0.1%	52.1%	38.4%	0.8%	3.3%	1.9%	0.1%	0.5%	2.6%	0.1%	0.0%	0.0%	0.0%	

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County of Imperial
Brandt Road
N/ Vail Road
24 Hour Directional Classification Count

CIM005
Site Code: 125-221001B

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	25	0	0	0	0	0	0	0	0	0	0	0	25
05:00	0	**40**	9	0	0	**1**	0	0	**1**	0	0	0	0	**51**
06:00	0	7	**15**	0	0	0	0	0	0	**1**	0	0	0	23
07:00	0	18	9	0	0	0	0	0	0	0	0	0	0	27
08:00	0	8	12	0	**2**	1	0	0	1	0	0	0	0	24
09:00	0	5	10	0	0	0	0	**1**	1	0	0	0	0	17
10:00	0	1	10	0	1	0	0	1	1	0	0	0	0	14
11:00	0	2	6	0	0	1	0	0	0	0	0	0	0	9
12 PM	0	2	2	0	0	0	0	0	0	0	0	0	0	4
13:00	0	4	**12**	0	**1**	**1**	0	0	0	0	0	0	0	**18**
14:00	0	3	7	0	1	0	0	0	0	0	0	0	0	11
15:00	0	1	10	0	0	0	0	0	0	0	0	0	0	11
16:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
17:00	0	**8**	0	0	0	0	0	0	0	0	0	0	0	8
18:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
19:00	0	4	0	0	0	0	0	0	**1**	0	0	0	0	5
20:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
21:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
Total	0	160	106	0	5	4	0	2	5	1	0	0	0	283
Percent	0.0%	56.5%	37.5%	0.0%	1.8%	1.4%	0.0%	0.7%	1.8%	0.4%	0.0%	0.0%	0.0%	
AM Peak		05:00	06:00		08:00	05:00		09:00	05:00	06:00				05:00
Vol.		40	15		2	1		1	1	1				51
PM Peak		17:00	13:00		13:00	13:00			19:00					13:00
Vol.		8	12		1	1			1					18
Grand Total	0	160	106	0	5	4	0	2	5	1	0	0	0	283
Percent	0.0%	56.5%	37.5%	0.0%	1.8%	1.4%	0.0%	0.7%	1.8%	0.4%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

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County of Imperial
Brandt Road
N/ Vail Road
24 Hour Directional Classification Count

CIM005
Site Code: 125-221001B

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	4	0	0	0	0	0	0	0	0	**1**	0	0	5
06:00	0	**6**	7	0	0	0	0	0	0	0	0	0	0	13
07:00	0	1	4	0	**1**	0	0	0	0	0	1	0	0	7
08:00	0	5	**10**	0	0	0	0	0	**1**	0	0	0	0	**16**
09:00	0	2	7	0	0	0	0	0	0	0	0	0	0	9
10:00	0	2	5	0	0	0	0	1	0	0	0	0	0	8
11:00	0	3	7	0	1	0	0	**2**	1	0	0	0	0	14
12 PM	0	4	11	0	0	0	**1**	0	1	0	0	0	0	17
13:00	0	16	8	0	0	**1**	0	0	0	0	0	0	0	25
14:00	0	**19**	**12**	0	**1**	0	0	0	0	0	0	0	0	**32**
15:00	0	10	11	0	1	0	0	0	**2**	0	0	0	0	24
16:00	0	13	10	0	0	0	0	0	0	0	0	0	0	23
17:00	0	5	5	0	0	0	0	0	0	0	0	0	0	10
18:00	0	2	8	0	0	0	0	0	0	0	0	0	0	10
19:00	0	2	1	0	1	0	0	0	0	0	0	0	0	4
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	108	106	0	5	1	1	3	5	0	2	0	0	231
Percent	0.0%	46.8%	45.9%	0.0%	2.2%	0.4%	0.4%	1.3%	2.2%	0.0%	0.9%	0.0%	0.0%	
AM Peak		06:00	08:00		07:00			11:00	08:00		05:00			08:00
Vol.		6	10		1			2	1		1			16
PM Peak		14:00	14:00		14:00	13:00	12:00		15:00					14:00
Vol.		19	12		1	1	1		2					32
Grand Total	0	108	106	0	5	1	1	3	5	0	2	0	0	231
Percent	0.0%	46.8%	45.9%	0.0%	2.2%	0.4%	0.4%	1.3%	2.2%	0.0%	0.9%	0.0%	0.0%	

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County of Imperial
Brandt Road
N/ Vail Road
24 Hour Directional Classification Count
Northbound, Southbound

CIM005
Site Code: 125-221001B

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	27	0	0	0	0	0	0	0	0	0	0	0	27
05:00	0	**44**	9	0	0	**1**	0	0	1	0	**1**	0	0	**56**
06:00	0	13	**22**	0	0	0	0	0	0	**1**	0	0	0	36
07:00	0	19	13	0	1	0	0	0	0	0	1	0	0	34
08:00	0	13	22	0	**2**	1	0	0	**2**	0	0	0	0	40
09:00	0	7	17	0	0	0	0	1	1	0	0	0	0	26
10:00	0	3	15	0	1	0	0	**2**	1	0	0	0	0	22
11:00	0	5	13	0	1	1	0	2	1	0	0	0	0	23
12 PM	0	6	13	0	0	0	**1**	0	1	0	0	0	0	21
13:00	0	20	20	0	1	**2**	0	0	0	0	0	0	0	**43**
14:00	0	**22**	19	0	**2**	0	0	0	0	0	0	0	0	43
15:00	0	11	**21**	0	1	0	0	0	**2**	0	0	0	0	35
16:00	0	19	12	0	0	0	0	0	0	0	0	0	0	31
17:00	0	13	5	0	0	0	0	0	0	0	0	0	0	18
18:00	0	7	8	0	0	0	0	0	0	0	0	0	0	15
19:00	0	6	1	0	1	0	0	0	1	0	0	0	0	9
20:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
21:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
Total	0	268	212	0	10	5	1	5	10	1	2	0	0	514
Percent	0.0%	52.1%	41.2%	0.0%	1.9%	1.0%	0.2%	1.0%	1.9%	0.2%	0.4%	0.0%	0.0%	
AM Peak		05:00	06:00		08:00	05:00		10:00	08:00	06:00	05:00			05:00
Vol.		44	22		2	1		2	2	1	1			56
PM Peak		14:00	15:00		14:00	13:00	12:00		15:00					13:00
Vol.		22	21		2	2	1		2					43
Grand Total	0	268	212	0	10	5	1	5	10	1	2	0	0	514
Percent	0.0%	52.1%	41.2%	0.0%	1.9%	1.0%	0.2%	1.0%	1.9%	0.2%	0.4%	0.0%	0.0%	

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County of Imperial
English Road
N/ Highway 111
24 Hour Directional Classification Count

CIM007
Site Code: 125-221001B

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/17/22	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	**1**	0	0	0	0	0	0	0	0	2
03:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	**11**	2	0	0	0	0	0	0	0	0	0	0	13
06:00	0	4	10	0	0	0	0	0	0	0	0	0	0	14
07:00	0	4	5	0	1	**4**	0	0	**1**	0	0	0	0	**15**
08:00	0	3	**12**	0	0	0	0	0	0	0	0	0	0	15
09:00	0	2	9	0	0	0	0	0	0	0	0	0	0	11
10:00	0	6	8	0	0	0	0	0	0	0	0	0	0	14
11:00	0	2	3	0	0	0	0	0	0	0	0	0	0	5
12 PM	0	**9**	4	0	0	0	0	0	**1**	0	0	0	0	**14**
13:00	0	3	2	0	0	**1**	0	0	1	0	0	0	0	7
14:00	0	2	2	0	0	0	0	0	1	0	0	0	0	5
15:00	0	2	**5**	0	**1**	0	0	0	0	0	0	0	0	8
16:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
17:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
18:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
19:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
20:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	67	63	0	4	5	0	0	4	0	0	0	0	143
Percent	0.0%	46.9%	44.1%	0.0%	2.8%	3.5%	0.0%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	
AM Peak		05:00	08:00		02:00	07:00			07:00					07:00
Vol.		11	12		1	4			1					15
PM Peak		12:00	15:00		15:00	13:00			12:00					12:00
Vol.		9	5		1	1			1					14
Grand Total	0	67	63	0	4	5	0	0	4	0	0	0	0	143
Percent	0.0%	46.9%	44.1%	0.0%	2.8%	3.5%	0.0%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	

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County of Imperial
English Road
N/ Highway 111
24 Hour Directional Classification Count

CIM007
Site Code: 125-221001B

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/17/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
04:00	0	1	1	0	0	0	0	0	**2**	0	0	0	0	4
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	2	0	0	0	0	0	0	1	0	0	0	0	3
08:00	0	**7**	5	0	0	0	0	0	1	0	0	0	0	**13**
09:00	0	4	3	0	**1**	0	0	**1**	0	0	0	0	0	9
10:00	0	4	6	0	0	**1**	0	0	0	0	0	0	0	11
11:00	0	1	**7**	0	1	0	0	0	0	**1**	0	0	0	10
12 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	4
13:00	0	2	6	**1**	**1**	0	0	**1**	0	0	0	0	0	11
14:00	0	3	4	0	0	**3**	0	0	0	0	0	0	0	10
15:00	0	7	8	0	1	0	0	0	0	0	0	0	0	16
16:00	0	**8**	**9**	0	0	0	0	0	0	0	0	0	0	**17**
17:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
18:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
19:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	53	53	1	4	4	0	2	5	1	0	0	0	123
Percent	0.0%	43.1%	43.1%	0.8%	3.3%	3.3%	0.0%	1.6%	4.1%	0.8%	0.0%	0.0%	0.0%	
AM Peak		08:00	11:00		09:00	10:00		09:00	04:00	11:00				08:00
Vol.		7	7		1	1		1	2	1				13
PM Peak		16:00	16:00	13:00	13:00	14:00		13:00						16:00
Vol.		8	9	1	1	3		1						17
Grand Total	0	53	53	1	4	4	0	2	5	1	0	0	0	123
Percent	0.0%	43.1%	43.1%	0.8%	3.3%	3.3%	0.0%	1.6%	4.1%	0.8%	0.0%	0.0%	0.0%	

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County of Imperial
English Road
N/ Highway 111
24 Hour Directional Classification Count
Northbound, Southbound

CIM007
Site Code: 125-221001B

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/17/22	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	1	0	**1**	0	0	0	0	0	0	0	0	3
03:00	0	2	1	0	0	0	0	0	1	0	0	0	0	4
04:00	0	3	1	0	0	0	0	0	**2**	0	0	0	0	6
05:00	0	**13**	2	0	0	0	0	0	0	0	0	0	0	15
06:00	0	4	10	0	0	0	0	0	0	0	0	0	0	14
07:00	0	6	5	0	1	**4**	0	0	2	0	0	0	0	18
08:00	0	10	**17**	0	0	0	0	0	1	0	0	0	0	**28**
09:00	0	6	12	0	1	0	0	**1**	0	0	0	0	0	20
10:00	0	10	14	0	0	1	0	0	0	0	0	0	0	25
11:00	0	3	10	0	1	0	0	0	0	**1**	0	0	0	15
12 PM	0	12	5	0	0	0	0	0	**1**	0	0	0	0	18
13:00	0	5	8	**1**	1	1	0	**1**	1	0	0	0	0	18
14:00	0	5	6	0	0	**3**	0	0	1	0	0	0	0	15
15:00	0	9	**13**	0	**2**	0	0	0	0	0	0	0	0	**24**
16:00	0	**14**	9	0	0	0	0	0	0	0	0	0	0	23
17:00	0	5	2	0	1	0	0	0	0	0	0	0	0	8
18:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
19:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
20:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	120	116	1	8	9	0	2	9	1	0	0	0	266
Percent	0.0%	45.1%	43.6%	0.4%	3.0%	3.4%	0.0%	0.8%	3.4%	0.4%	0.0%	0.0%	0.0%	
AM Peak		05:00	08:00		02:00	07:00		09:00	04:00	11:00				08:00
Vol.		13	17		1	4		1	2	1				28
PM Peak		16:00	15:00	13:00	15:00	14:00		13:00	12:00					15:00
Vol.		14	13	1	2	3		1	1					24
Grand Total	0	120	116	1	8	9	0	2	9	1	0	0	0	266
Percent	0.0%	45.1%	43.6%	0.4%	3.0%	3.4%	0.0%	0.8%	3.4%	0.4%	0.0%	0.0%	0.0%	

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County of Imperial
Gentry Road
B/ West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count

CIM007
Site Code: 125-221001

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	2	0	1	0	0	0	1	0	0	0	0	4
01:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
02:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
03:00	0	0	0	0	5	0	0	2	1	0	0	0	0	8
04:00	0	10	5	1	11	0	0	0	0	0	0	0	0	27
05:00	0	**25**	**16**	**6**	**31**	0	0	1	1	0	0	0	0	**80**
06:00	0	17	16	1	8	0	0	2	1	0	0	0	0	45
07:00	0	20	9	1	15	0	0	**5**	1	0	0	0	0	51
08:00	0	6	5	2	6	0	0	1	**3**	0	0	0	0	23
09:00	0	3	6	0	19	**1**	0	1	0	0	**1**	0	0	31
10:00	0	4	3	0	12	0	0	0	2	0	0	0	0	21
11:00	0	3	3	0	8	1	**1**	0	1	0	0	0	0	17
12 PM	0	6	**11**	0	**8**	0	0	0	**1**	0	0	0	0	**26**
13:00	0	3	2	0	5	0	0	0	0	0	0	0	0	10
14:00	0	2	5	0	3	0	0	**1**	0	0	0	0	0	11
15:00	0	3	3	0	8	0	0	0	0	0	0	0	0	14
16:00	0	**11**	3	0	6	0	0	1	0	0	0	0	0	21
17:00	0	10	2	0	4	0	0	0	1	0	0	0	0	17
18:00	0	2	5	0	2	0	0	0	0	0	0	0	0	9
19:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
20:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
21:00	0	0	0	0	1	0	0	0	1	0	0	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	0	0	1	0	0	0	1	0	0	0	0	3
Total	0	136	100	11	155	2	1	14	15	0	1	0	0	435
Percent	0.0%	31.3%	23.0%	2.5%	35.6%	0.5%	0.2%	3.2%	3.4%	0.0%	0.2%	0.0%	0.0%	
AM Peak		05:00	05:00	05:00	05:00	09:00	11:00	07:00	08:00		09:00			05:00
Vol.		25	16	6	31	1	1	5	3		1			80
PM Peak		16:00	12:00		12:00			14:00	12:00					12:00
Vol.		11	11		8			1	1					26
Grand Total	0	136	100	11	155	2	1	14	15	0	1	0	0	435
Percent	0.0%	31.3%	23.0%	2.5%	35.6%	0.5%	0.2%	3.2%	3.4%	0.0%	0.2%	0.0%	0.0%	

Counts Unlimited, Inc.

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County of Imperial
Gentry Road
B/ West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count

CIM007
Site Code: 125-221001

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	**13**	7	0	2	0	0	0	0	0	0	0	0	22
05:00	0	9	3	0	1	0	0	0	0	0	0	0	0	13
06:00	0	1	4	0	5	0	0	0	0	0	0	0	0	10
07:00	**1**	5	5	1	6	1	0	1	0	0	0	0	0	20
08:00	0	7	8	**3**	7	0	0	0	1	0	0	0	0	**26**
09:00	0	2	5	0	**10**	**3**	0	**3**	1	0	0	0	0	24
10:00	0	5	**9**	0	5	0	0	0	**2**	0	0	0	0	21
11:00	1	6	8	0	5	1	0	1	2	0	**1**	0	0	25
12 PM	1	6	10	0	9	**1**	**1**	1	0	0	0	0	0	29
13:00	0	11	6	**1**	2	0	0	0	0	0	0	0	0	20
14:00	1	22	15	0	5	1	0	**3**	0	0	0	0	0	47
15:00	**2**	11	16	0	6	1	0	1	0	0	0	0	0	37
16:00	0	**48**	**18**	0	**10**	0	0	0	0	0	0	0	0	**76**
17:00	0	13	9	0	5	0	0	1	0	0	**1**	0	0	29
18:00	0	4	4	0	2	0	0	0	0	0	1	0	0	11
19:00	0	2	1	0	2	0	0	0	0	0	0	0	0	5
20:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
21:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
22:00	0	3	2	0	3	0	0	0	0	0	0	0	0	8
23:00	1	0	1	0	0	1	0	0	**1**	0	0	0	0	4
Total	7	176	133	5	86	9	1	11	7	0	3	0	0	438
Percent	1.6%	40.2%	30.4%	1.1%	19.6%	2.1%	0.2%	2.5%	1.6%	0.0%	0.7%	0.0%	0.0%	
AM Peak	07:00	04:00	10:00	08:00	09:00	09:00		09:00	10:00		11:00			08:00
Vol.	1	13	9	3	10	3		3	2		1			26
PM Peak	15:00	16:00	16:00	13:00	16:00	12:00	12:00	14:00	23:00		17:00			16:00
Vol.	2	48	18	1	10	1	1	3	1		1			76
Grand Total	7	176	133	5	86	9	1	11	7	0	3	0	0	438
Percent	1.6%	40.2%	30.4%	1.1%	19.6%	2.1%	0.2%	2.5%	1.6%	0.0%	0.7%	0.0%	0.0%	

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County of Imperial
Gentry Road
B/ West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count
Northbound, Southbound

CIM007
Site Code: 125-221001

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	2	0	1	0	0	0	1	0	0	0	0	4
01:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
02:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
03:00	0	1	0	0	5	0	0	2	1	0	0	0	0	9
04:00	0	23	12	1	13	0	0	0	0	0	0	0	0	49
05:00	0	**34**	19	**6**	**32**	0	0	1	1	0	0	0	0	**93**
06:00	0	18	**20**	1	13	0	0	2	1	0	0	0	0	55
07:00	**1**	25	14	2	21	1	0	**6**	1	0	0	0	0	71
08:00	0	13	13	5	13	0	0	1	**4**	0	0	0	0	49
09:00	0	5	11	0	29	**4**	0	4	1	0	**1**	0	0	55
10:00	0	9	12	0	17	0	0	0	4	0	0	0	0	42
11:00	1	9	11	0	13	2	**1**	1	3	0	1	0	0	42
12 PM	1	12	**21**	0	**17**	**1**	**1**	1	1	0	0	0	0	55
13:00	0	14	8	**1**	7	0	0	0	0	0	0	0	0	30
14:00	1	24	20	0	8	1	0	**4**	0	0	0	0	0	58
15:00	**2**	14	19	0	14	1	0	1	0	0	0	0	0	51
16:00	0	**59**	21	0	16	0	0	1	0	0	0	0	0	**97**
17:00	0	23	11	0	9	0	0	1	1	0	**1**	0	0	46
18:00	0	6	9	0	4	0	0	0	0	0	1	0	0	20
19:00	0	4	2	0	2	0	0	0	0	0	0	0	0	8
20:00	0	3	2	0	1	0	0	0	0	0	0	0	0	6
21:00	0	2	0	0	2	0	0	0	1	0	0	0	0	5
22:00	0	3	2	0	3	0	0	0	0	0	0	0	0	8
23:00	1	1	1	0	1	1	0	0	**2**	0	0	0	0	7
Total	7	312	233	16	241	11	2	25	22	0	4	0	0	873
Percent	0.8%	35.7%	26.7%	1.8%	27.6%	1.3%	0.2%	2.9%	2.5%	0.0%	0.5%	0.0%	0.0%	
AM Peak	07:00	05:00	06:00	05:00	05:00	09:00	11:00	07:00	08:00		09:00			05:00
Vol.	1	34	20	6	32	4	1	6	4		1			93
PM Peak	15:00	16:00	12:00	13:00	12:00	12:00	12:00	14:00	23:00		17:00			16:00
Vol.	2	59	21	1	17	1	1	4	2		1			97
Grand Total	7	312	233	16	241	11	2	25	22	0	4	0	0	873
Percent	0.8%	35.7%	26.7%	1.8%	27.6%	1.3%	0.2%	2.9%	2.5%	0.0%	0.5%	0.0%	0.0%	

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County of Imperial
Kalin Road
B/ West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count

CIM006
Site Code: 125-221001

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
05:00	0	**9**	**14**	0	**11**	0	0	0	0	0	0	0	0	**34**
06:00	0	5	4	0	1	0	0	**1**	0	0	0	0	0	11
07:00	0	4	2	0	3	0	0	0	0	0	0	0	0	9
08:00	0	6	2	0	5	0	0	0	0	0	0	0	0	13
09:00	0	2	1	0	4	**1**	0	0	0	0	0	0	0	8
10:00	0	0	1	**1**	2	0	0	0	0	0	0	0	0	4
11:00	0	1	1	1	1	0	0	0	0	0	0	0	0	4
12 PM	0	0	0	0	0	0	0	0	0	0	**1**	0	0	1
13:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
14:00	0	0	**1**	0	**4**	0	0	0	0	0	0	0	0	**5**
15:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
16:00	0	**1**	1	0	0	0	0	0	0	0	0	0	0	2
17:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
18:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
19:00	0	1	0	**1**	0	0	0	0	0	0	0	0	0	2
20:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	34	33	3	36	1	0	1	0	0	1	0	0	109
Percent	0.0%	31.2%	30.3%	2.8%	33.0%	0.9%	0.0%	0.9%	0.0%	0.0%	0.9%	0.0%	0.0%	
AM Peak		05:00	05:00	10:00	05:00	09:00		06:00						05:00
Vol.		9	14	1	11	1		1						34
PM Peak		16:00	14:00	19:00	14:00						12:00			14:00
Vol.		1	1	1	4						1			5
Grand Total	0	34	33	3	36	1	0	1	0	0	1	0	0	109
Percent	0.0%	31.2%	30.3%	2.8%	33.0%	0.9%	0.0%	0.9%	0.0%	0.0%	0.9%	0.0%	0.0%	

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County of Imperial
Kalin Road
B/ West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count

CIM006
Site Code: 125-221001

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
05:00	0	**3**	0	0	1	0	0	0	0	0	0	0	0	4
06:00	0	0	1	0	1	0	0	0	0	0	0	0	0	2
07:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
08:00	0	2	0	0	3	0	0	**1**	0	0	0	0	0	6
09:00	0	0	1	0	0	**1**	0	0	0	0	0	0	0	2
10:00	0	2	**3**	0	2	0	0	0	0	0	0	0	0	**7**
11:00	0	0	2	0	**4**	0	0	0	0	0	0	0	0	6
12 PM	0	1	0	0	**3**	0	0	0	0	0	0	0	0	4
13:00	0	0	0	0	3	0	0	**1**	0	0	0	**1**	0	5
14:00	0	11	**7**	0	3	0	0	1	0	0	0	0	0	**22**
15:00	0	2	5	0	0	0	0	0	0	0	0	0	0	7
16:00	**1**	**12**	3	0	3	0	0	1	0	0	0	0	0	20
17:00	0	3	0	0	2	0	0	0	0	0	0	0	0	5
18:00	0	1	1	0	1	0	0	0	0	0	0	0	0	3
19:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
20:00	0	0	2	**1**	0	0	0	0	0	0	0	0	0	3
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	40	25	1	27	1	0	4	0	0	0	1	0	100
Percent	1.0%	40.0%	25.0%	1.0%	27.0%	1.0%	0.0%	4.0%	0.0%	0.0%	0.0%	1.0%	0.0%	
AM Peak		05:00	10:00		11:00	09:00		08:00						10:00
Vol.		3	3		4	1		1						7
PM Peak	16:00	16:00	14:00	20:00	12:00			13:00				13:00		14:00
Vol.	1	12	7	1	3			1				1		22
Grand Total	1	40	25	1	27	1	0	4	0	0	0	1	0	100
Percent	1.0%	40.0%	25.0%	1.0%	27.0%	1.0%	0.0%	4.0%	0.0%	0.0%	0.0%	1.0%	0.0%	

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County of Imperial
Kalin Road
B/ West Sinclair Road - West Eddins Road
24 Hour Directional Classification Count
Northbound, Southbound

CIM006
Site Code: 125-221001

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	5	0	0	1	0	0	0	0	0	0	0	0	6
05:00	0	**12**	**14**	0	**12**	0	0	0	0	0	0	0	0	**38**
06:00	0	5	5	0	2	0	0	**1**	0	0	0	0	0	13
07:00	0	5	2	0	3	0	0	0	0	0	0	0	0	10
08:00	0	8	2	0	8	0	0	1	0	0	0	0	0	19
09:00	0	2	2	0	4	**2**	0	0	0	0	0	0	0	10
10:00	0	2	4	**1**	4	0	0	0	0	0	0	0	0	11
11:00	0	1	3	1	5	0	0	0	0	0	0	0	0	10
12 PM	0	1	0	0	3	0	0	0	0	0	**1**	0	0	5
13:00	0	0	0	0	5	0	0	**1**	0	0	0	**1**	0	7
14:00	0	11	**8**	0	**7**	0	0	1	0	0	0	0	0	**27**
15:00	0	2	6	0	1	0	0	0	0	0	0	0	0	9
16:00	**1**	**13**	4	0	3	0	0	1	0	0	0	0	0	22
17:00	0	3	0	0	4	0	0	0	0	0	0	0	0	7
18:00	0	1	2	0	1	0	0	0	0	0	0	0	0	4
19:00	0	3	0	**1**	0	0	0	0	0	0	0	0	0	4
20:00	0	0	3	1	0	0	0	0	0	0	0	0	0	4
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	74	58	4	63	2	0	5	0	0	1	1	0	209
Percent	0.5%	35.4%	27.8%	1.9%	30.1%	1.0%	0.0%	2.4%	0.0%	0.0%	0.5%	0.5%	0.0%	
AM Peak		05:00	05:00	10:00	05:00	09:00		06:00						05:00
Vol.		12	14	1	12	2		1						38
PM Peak	16:00	16:00	14:00	19:00	14:00			13:00			12:00	13:00		14:00
Vol.	1	13	8	1	7			1			1	1		27
Grand Total	1	74	58	4	63	2	0	5	0	0	1	1	0	209
Percent	0.5%	35.4%	27.8%	1.9%	30.1%	1.0%	0.0%	2.4%	0.0%	0.0%	0.5%	0.5%	0.0%	

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County of Imperial
Lack Road
B/ New River - Bannister Road
24 Hour Directional Classification Count

CIM009
Site Code: 125-221001

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:00	0	2	4	0	0	0	0	0	0	0	0	0	0	6
05:00	0	**11**	**6**	0	2	**1**	0	0	0	0	0	0	0	**20**
06:00	0	2	2	0	6	0	0	0	0	0	0	0	0	10
07:00	0	0	4	**1**	3	0	0	**3**	0	0	0	0	0	11
08:00	0	1	2	0	**8**	0	0	0	0	**1**	0	0	0	12
09:00	0	0	3	0	4	0	0	1	0	0	0	0	0	8
10:00	0	1	2	0	2	0	0	3	**1**	0	0	0	0	9
11:00	0	1	2	0	4	0	0	2	0	0	0	0	0	9
12 PM	0	0	0	0	**4**	0	0	1	0	0	0	0	0	5
13:00	0	**2**	**2**	0	4	0	0	**3**	0	0	0	0	0	**11**
14:00	0	0	0	0	4	**1**	0	0	0	0	**1**	0	0	6
15:00	0	1	0	0	2	0	0	0	0	0	0	0	0	3
16:00	0	0	0	0	2	0	0	0	0	0	0	0	0	2
17:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
18:00	0	1	2	0	1	0	0	0	0	0	0	0	0	4
19:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	26	29	1	50	2	0	13	1	1	1	0	0	124
Percent	0.0%	21.0%	23.4%	0.8%	40.3%	1.6%	0.0%	10.5%	0.8%	0.8%	0.8%	0.0%	0.0%	
AM Peak		05:00	05:00	07:00	08:00	05:00		07:00	10:00	08:00				05:00
Vol.		11	6	1	8	1		3	1	1				20
PM Peak		13:00	13:00		12:00	14:00		13:00			14:00			13:00
Vol.		2	2		4	1		3			1			11
Grand Total	0	26	29	1	50	2	0	13	1	1	1	0	0	124
Percent	0.0%	21.0%	23.4%	0.8%	40.3%	1.6%	0.0%	10.5%	0.8%	0.8%	0.8%	0.0%	0.0%	

Counts Unlimited, Inc.

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County of Imperial
Lack Road
B/ New River - Bannister Road
24 Hour Directional Classification Count

CIM009
Site Code: 125-221001

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
06:00	0	**1**	2	0	2	0	0	**1**	0	0	0	0	0	6
07:00	0	1	1	0	2	0	0	1	0	0	0	**1**	0	6
08:00	0	1	3	0	**3**	0	0	1	0	0	0	0	0	8
09:00	0	1	**4**	0	3	0	0	0	0	0	0	0	0	8
10:00	0	0	4	0	1	0	0	0	0	0	0	0	0	5
11:00	0	1	4	**1**	2	0	0	1	0	0	0	1	0	**10**
12 PM	0	3	5	0	1	0	0	0	0	0	0	0	0	9
13:00	0	6	4	0	1	0	0	0	0	0	0	0	0	11
14:00	0	**12**	5	0	1	**1**	0	0	0	0	0	0	0	**19**
15:00	0	3	3	0	**2**	0	0	0	0	0	0	0	0	8
16:00	0	1	**7**	0	2	0	0	0	**1**	0	0	0	0	11
17:00	0	3	2	0	2	0	0	0	0	0	0	0	0	7
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	1	0	0	1	0	0	**1**	0	0	0	0	0	3
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
Total	0	37	46	1	24	1	0	5	1	0	0	2	0	117
Percent	0.0%	31.6%	39.3%	0.9%	20.5%	0.9%	0.0%	4.3%	0.9%	0.0%	0.0%	1.7%	0.0%	
AM Peak		06:00	09:00	11:00	08:00			06:00				07:00		11:00
Vol.		1	4	1	3			1				1		10
PM Peak		14:00	16:00		15:00	14:00		19:00	16:00					14:00
Vol.		12	7		2	1		1	1					19
Grand Total	0	37	46	1	24	1	0	5	1	0	0	2	0	117
Percent	0.0%	31.6%	39.3%	0.9%	20.5%	0.9%	0.0%	4.3%	0.9%	0.0%	0.0%	1.7%	0.0%	

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County of Imperial
Lack Road
B/ New River - Bannister Road
24 Hour Directional Classification Count
Northbound, Southbound

CIM009
Site Code: 125-221001

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:00	0	2	5	0	0	0	0	0	0	0	0	0	0	7
05:00	0	**11**	6	0	3	**1**	0	0	0	0	0	0	0	**21**
06:00	0	3	4	0	8	0	0	1	0	0	0	0	0	16
07:00	0	1	5	**1**	5	0	0	**4**	0	0	0	**1**	0	17
08:00	0	2	5	0	**11**	0	0	1	0	**1**	0	0	0	20
09:00	0	1	**7**	0	7	0	0	1	0	0	0	0	0	16
10:00	0	1	6	0	3	0	0	3	**1**	0	0	0	0	14
11:00	0	2	6	1	6	0	0	3	0	0	0	1	0	19
12 PM	0	3	5	0	**5**	0	0	1	0	0	0	0	0	14
13:00	0	8	6	0	5	0	0	**3**	0	0	0	0	0	22
14:00	0	**12**	5	0	5	**2**	0	0	0	0	**1**	0	0	**25**
15:00	0	4	3	0	4	0	0	0	0	0	0	0	0	11
16:00	0	1	**7**	0	4	0	0	0	**1**	0	0	0	0	13
17:00	0	4	2	0	3	0	0	0	0	0	0	0	0	9
18:00	0	1	2	0	1	0	0	0	0	0	0	0	0	4
19:00	0	3	0	0	2	0	0	1	0	0	0	0	0	6
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	1	0	1	0	0	0	0	0	0	0	0	3
Total	0	63	75	2	74	3	0	18	2	1	1	2	0	241
Percent	0.0%	26.1%	31.1%	0.8%	30.7%	1.2%	0.0%	7.5%	0.8%	0.4%	0.4%	0.8%	0.0%	
AM Peak		05:00	09:00	07:00	08:00	05:00		07:00	10:00	08:00		07:00		05:00
Vol.		11	7	1	11	1		4	1	1		1		21
PM Peak		14:00	16:00		12:00	14:00		13:00	16:00		14:00			14:00
Vol.		12	7		5	2		3	1		1			25
Grand Total	0	63	75	2	74	3	0	18	2	1	1	2	0	241
Percent	0.0%	26.1%	31.1%	0.8%	30.7%	1.2%	0.0%	7.5%	0.8%	0.4%	0.4%	0.8%	0.0%	

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County of Imperial
West Eddins Road
B/ Brandt Road - Highway 111
24 Hour Directional Classification Count

CIM005
Site Code: 125-221001

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	2	4	0	0	0	0	0	0	0	0	0	0	6
01:00	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:00	0	5	1	0	3	0	0	0	0	0	3	0	0	12
05:00	0	9	1	0	6	0	0	0	0	0	7	0	0	23
06:00	0	5	6	1	5	0	0	2	0	0	6	**2**	0	27
07:00	0	**16**	**12**	1	9	0	0	0	**2**	0	8	0	0	**48**
08:00	**1**	11	6	**3**	**16**	0	0	1	1	0	5	1	0	45
09:00	0	7	5	1	8	**1**	0	3	2	0	**10**	1	0	38
10:00	0	7	9	0	12	0	0	**5**	0	0	8	0	0	41
11:00	0	7	3	0	8	0	0	0	1	0	6	1	0	26
12 PM	0	9	3	1	13	0	0	0	**1**	0	**2**	0	0	29
13:00	0	21	9	2	10	**1**	0	**1**	0	0	2	0	0	46
14:00	0	**23**	**16**	2	14	0	0	1	0	0	1	0	0	**57**
15:00	0	13	9	0	**21**	0	0	0	0	0	0	0	0	43
16:00	0	16	6	1	11	0	0	1	0	0	0	0	0	35
17:00	0	8	4	0	7	0	0	0	0	0	0	0	0	19
18:00	0	6	4	**3**	3	0	0	0	1	0	0	0	0	17
19:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8
20:00	0	1	1	1	3	0	0	0	0	0	0	0	0	6
21:00	0	2	2	1	2	0	0	0	0	0	0	0	0	7
22:00	0	2	0	0	3	0	0	0	0	0	0	0	0	5
23:00	0	4	0	0	2	0	0	0	0	0	0	0	0	6
Total	1	181	103	17	158	2	0	14	9	0	58	5	0	548
Percent	0.2%	33.0%	18.8%	3.1%	28.8%	0.4%	0.0%	2.6%	1.6%	0.0%	10.6%	0.9%	0.0%	
AM Peak	08:00	07:00	07:00	08:00	08:00	09:00		10:00	07:00		09:00	06:00		07:00
Vol.	1	16	12	3	16	1		5	2		10	2		48
PM Peak		14:00	14:00	18:00	15:00	13:00		13:00	12:00		12:00			14:00
Vol.		23	16	3	21	1		1	1		2			57
Grand Total	1	181	103	17	158	2	0	14	9	0	58	5	0	548
Percent	0.2%	33.0%	18.8%	3.1%	28.8%	0.4%	0.0%	2.6%	1.6%	0.0%	10.6%	0.9%	0.0%	

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County of Imperial
West Eddins Road
B/ Brandt Road - Highway 111
24 Hour Directional Classification Count

CIM005
Site Code: 125-221001

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	2	1	0	0	0	0	0	0	0	0	0	0	3
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
03:00	0	4	4	0	0	0	0	1	0	0	1	0	0	10
04:00	0	13	7	0	1	0	0	0	0	0	5	0	0	26
05:00	0	**33**	**25**	**4**	13	0	0	1	1	0	5	0	0	**82**
06:00	0	13	13	1	4	0	0	2	0	0	**8**	1	0	42
07:00	0	6	5	1	9	0	0	0	0	0	8	**2**	0	31
08:00	0	13	11	1	2	0	0	0	**2**	0	7	0	0	36
09:00	0	5	9	0	**14**	0	0	**3**	2	0	8	1	0	42
10:00	0	5	10	1	6	0	0	2	0	0	7	2	0	33
11:00	0	6	13	0	7	0	0	0	0	0	7	1	0	34
12 PM	0	12	9	**1**	**8**	**1**	0	**1**	**1**	0	**2**	**1**	0	**36**
13:00	0	7	9	1	3	1	0	1	0	0	1	1	0	24
14:00	**1**	8	**14**	1	2	0	0	1	0	0	0	0	0	27
15:00	0	15	12	0	5	0	0	1	0	0	1	0	0	34
16:00	0	**19**	5	0	2	0	0	0	1	0	0	0	0	27
17:00	0	7	5	1	5	0	0	0	0	0	0	0	0	18
18:00	0	5	6	1	2	0	0	0	0	0	0	0	0	14
19:00	1	7	1	1	2	0	0	1	0	0	0	0	0	13
20:00	0	1	1	0	1	0	0	0	0	0	0	0	0	3
21:00	0	1	0	0	2	0	0	0	1	0	0	0	0	4
22:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
23:00	0	2	0	0	1	0	0	0	0	0	0	0	0	3
Total	2	188	163	14	89	2	0	14	8	0	60	9	0	549
Percent	0.4%	34.2%	29.7%	2.6%	16.2%	0.4%	0.0%	2.6%	1.5%	0.0%	10.9%	1.6%	0.0%	
AM Peak		05:00	05:00	05:00	09:00			09:00	08:00		06:00	07:00		05:00
Vol.		33	25	4	14			3	2		8	2		82
PM Peak	14:00	16:00	14:00	12:00	12:00	12:00		12:00	12:00		12:00	12:00		12:00
Vol.	1	19	14	1	8	1		1	1		2	1		36
Grand Total	2	188	163	14	89	2	0	14	8	0	60	9	0	549
Percent	0.4%	34.2%	29.7%	2.6%	16.2%	0.4%	0.0%	2.6%	1.5%	0.0%	10.9%	1.6%	0.0%	

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County of Imperial
West Eddins Road
B/ Brandt Road - Highway 111
24 Hour Directional Classification Count

CIM005
Site Code: 125-221001

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	4	5	0	0	0	0	0	0	0	0	0	0	9
01:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
02:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
03:00	0	4	4	0	1	0	0	1	0	0	1	0	0	11
04:00	0	18	8	0	4	0	0	0	0	0	8	0	0	38
05:00	0	**42**	**26**	**4**	19	0	0	1	1	0	12	0	0	**105**
06:00	0	18	19	2	9	0	0	4	0	0	14	**3**	0	69
07:00	0	22	17	2	18	0	0	0	2	0	16	2	0	79
08:00	**1**	24	17	4	18	0	0	1	3	0	12	1	0	81
09:00	0	12	14	1	**22**	**1**	0	6	**4**	0	**18**	2	0	80
10:00	0	12	19	1	18	0	0	**7**	0	0	15	2	0	74
11:00	0	13	16	0	15	0	0	0	1	0	13	2	0	60
12 PM	0	21	12	2	21	1	0	1	**2**	0	**4**	**1**	0	65
13:00	0	28	18	3	13	**2**	0	**2**	0	0	3	1	0	70
14:00	**1**	31	**30**	3	16	0	0	2	0	0	1	0	0	**84**
15:00	0	28	21	0	**26**	0	0	1	0	0	1	0	0	77
16:00	0	**35**	11	1	13	0	0	1	1	0	0	0	0	62
17:00	0	15	9	1	12	0	0	0	0	0	0	0	0	37
18:00	0	11	10	**4**	5	0	0	0	1	0	0	0	0	31
19:00	1	13	2	1	3	0	0	1	0	0	0	0	0	21
20:00	0	2	2	1	4	0	0	0	0	0	0	0	0	9
21:00	0	3	2	1	4	0	0	0	1	0	0	0	0	11
22:00	0	4	2	0	3	0	0	0	0	0	0	0	0	9
23:00	0	6	0	0	3	0	0	0	0	0	0	0	0	9
Total	3	369	266	31	247	4	0	28	17	0	118	14	0	1097
Percent	0.3%	33.6%	24.2%	2.8%	22.5%	0.4%	0.0%	2.6%	1.5%	0.0%	10.8%	1.3%	0.0%	
AM Peak	08:00	05:00	05:00	05:00	09:00	09:00		10:00	09:00		09:00	06:00		05:00
Vol.	1	42	26	4	22	1		7	4		18	3		105
PM Peak	14:00	16:00	14:00	18:00	15:00	13:00		13:00	12:00		12:00	12:00		14:00
Vol.	1	35	30	4	26	2		2	2		4	1		84
Grand Total	3	369	266	31	247	4	0	28	17	0	118	14	0	1097
Percent	0.3%	33.6%	24.2%	2.8%	22.5%	0.4%	0.0%	2.6%	1.5%	0.0%	10.8%	1.3%	0.0%	

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County of Imperial
West Sinclair Road
B/ Brandt Road - Highway 111
24 Hour Directional Classification Count

CIM004
Site Code: 125-221001

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	1	0	2	0	0	0	0	0	0	0	0	3
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	2	0	2	0	0	0	0	0	0	0	0	4
05:00	0	6	3	0	0	0	0	**1**	0	0	0	0	0	10
06:00	0	2	6	1	2	0	0	1	3	0	0	0	0	15
07:00	0	**8**	4	**5**	5	0	0	0	2	0	2	0	0	**26**
08:00	0	2	2	0	8	0	0	1	2	0	2	0	0	17
09:00	0	2	4	0	**10**	**1**	0	1	**4**	0	0	0	0	22
10:00	0	1	**8**	0	7	0	0	0	3	0	**3**	0	0	22
11:00	0	2	4	1	6	1	0	0	4	**1**	1	0	0	20
12 PM	0	3	2	0	4	0	0	0	**2**	0	**1**	0	0	12
13:00	0	2	3	0	7	0	0	0	0	0	0	0	0	12
14:00	**1**	5	**4**	0	**12**	0	0	0	0	0	0	0	0	**22**
15:00	0	2	3	0	3	0	0	0	0	0	0	0	0	8
16:00	0	**10**	4	0	5	0	0	0	0	0	0	0	0	19
17:00	0	3	3	0	3	0	0	0	1	0	0	0	0	10
18:00	0	3	0	0	0	0	0	0	1	0	0	0	0	4
19:00	0	2	0	0	2	0	0	0	0	0	0	0	0	4
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	55	55	7	78	2	0	4	22	1	9	0	0	234
Percent	0.4%	23.5%	23.5%	3.0%	33.3%	0.9%	0.0%	1.7%	9.4%	0.4%	3.8%	0.0%	0.0%	
AM Peak		07:00	10:00	07:00	09:00	09:00		05:00	09:00	11:00	10:00			07:00
Vol.		8	8	5	10	1		1	4	1	3			26
PM Peak	14:00	16:00	14:00		14:00				12:00		12:00			14:00
Vol.	1	10	4		12				2		1			22
Grand Total	1	55	55	7	78	2	0	4	22	1	9	0	0	234
Percent	0.4%	23.5%	23.5%	3.0%	33.3%	0.9%	0.0%	1.7%	9.4%	0.4%	3.8%	0.0%	0.0%	

Counts Unlimited, Inc.

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County of Imperial
West Sinclair Road
B/ Brandt Road - Highway 111
24 Hour Directional Classification Count

CIM004
Site Code: 125-221001

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	2	0	1	0	0	0	0	0	0	0	0	3
04:00	0	3	3	0	5	0	0	0	0	0	1	0	0	12
05:00	0	4	5	1	7	0	0	0	2	0	0	0	0	19
06:00	**1**	**5**	0	0	4	0	0	1	2	0	1	0	0	14
07:00	0	2	2	0	1	0	0	0	**6**	0	0	0	0	11
08:00	0	3	3	**2**	5	**1**	0	**2**	2	0	2	0	0	**20**
09:00	0	0	4	0	3	0	0	0	2	0	2	0	0	11
10:00	0	3	5	0	**8**	0	0	0	3	0	0	0	0	19
11:00	0	1	**7**	0	6	0	0	0	1	0	**4**	0	0	19
12 PM	0	**3**	3	0	**11**	0	0	**1**	1	0	**1**	0	0	**20**
13:00	0	1	0	0	4	0	0	1	1	0	0	**1**	0	8
14:00	0	2	**4**	0	3	0	0	1	**2**	0	0	0	0	12
15:00	0	2	3	0	4	0	0	0	0	0	0	0	0	9
16:00	0	1	3	**1**	2	0	0	0	0	0	0	0	0	7
17:00	**1**	1	3	0	2	**1**	0	0	0	0	0	0	0	8
18:00	0	1	0	0	0	0	0	0	0	0	1	0	0	2
19:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	32	48	4	68	2	0	6	22	0	12	1	0	197
Percent	1.0%	16.2%	24.4%	2.0%	34.5%	1.0%	0.0%	3.0%	11.2%	0.0%	6.1%	0.5%	0.0%	
AM Peak	06:00	06:00	11:00	08:00	10:00	08:00		08:00	07:00		11:00			08:00
Vol.	1	5	7	2	8	1		2	6		4			20
PM Peak	17:00	12:00	14:00	16:00	12:00	17:00		12:00	14:00		12:00	13:00		12:00
Vol.	1	3	4	1	11	1		1	2		1	1		20
Grand Total	2	32	48	4	68	2	0	6	22	0	12	1	0	197
Percent	1.0%	16.2%	24.4%	2.0%	34.5%	1.0%	0.0%	3.0%	11.2%	0.0%	6.1%	0.5%	0.0%	

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24 Hour Directional Classification Count

CIM004
Site Code: 125-221001

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/09/22	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	2	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	1	0	2	0	0	0	0	0	0	0	0	3
03:00	0	0	2	0	1	0	0	0	0	0	0	0	0	3
04:00	0	3	5	0	7	0	0	0	0	0	1	0	0	16
05:00	0	**10**	8	1	7	0	0	1	2	0	0	0	0	29
06:00	**1**	7	6	1	6	0	0	2	5	0	1	0	0	29
07:00	0	10	6	**5**	6	0	0	0	**8**	0	2	0	0	37
08:00	0	5	5	2	13	**1**	0	**3**	4	0	4	0	0	37
09:00	0	2	8	0	13	1	0	1	6	0	2	0	0	33
10:00	0	4	**13**	0	**15**	0	0	0	6	0	3	0	0	**41**
11:00	0	3	11	1	12	1	0	0	5	**1**	**5**	0	0	39
12 PM	0	6	5	0	**15**	0	0	**1**	**3**	0	**2**	0	0	32
13:00	0	3	3	0	11	0	0	1	1	0	0	**1**	0	20
14:00	**1**	7	**8**	0	15	0	0	1	2	0	0	0	0	**34**
15:00	0	4	6	0	7	0	0	0	0	0	0	0	0	17
16:00	0	**11**	7	**1**	7	0	0	0	0	0	0	0	0	26
17:00	1	4	6	0	5	**1**	0	0	1	0	0	0	0	18
18:00	0	4	0	0	0	0	0	0	1	0	1	0	0	6
19:00	0	2	0	0	3	0	0	0	0	0	0	0	0	5
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	87	103	11	146	4	0	10	44	1	21	1	0	431
Percent	0.7%	20.2%	23.9%	2.6%	33.9%	0.9%	0.0%	2.3%	10.2%	0.2%	4.9%	0.2%	0.0%	
AM Peak	06:00	05:00	10:00	07:00	10:00	08:00		08:00	07:00	11:00	11:00			10:00
Vol.	1	10	13	5	15	1		3	8	1	5			41
PM Peak	14:00	16:00	14:00	16:00	12:00	17:00		12:00	12:00		12:00	13:00		14:00
Vol.	1	11	8	1	15	1		1	3		2	1		34
Grand Total	3	87	103	11	146	4	0	10	44	1	21	1	0	431
Percent	0.7%	20.2%	23.9%	2.6%	33.9%	0.9%	0.0%	2.3%	10.2%	0.2%	4.9%	0.2%	0.0%	

APPENDIX C-3

INTERSECTION LOS ANALYSIS WORKSHEETS

EXISTING CONDITIONS



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	73	63	128	190	74	71
Future Volume (veh/h)	73	63	128	190	74	71
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	84	0	147	218	85	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	137		191	992	547	
Arrive On Green	0.08	0.00	0.11	0.57	0.31	0.00
Sat Flow, veh/h	1668	1485	1668	1737	1737	1485
Grp Volume(v), veh/h	84	0	147	218	85	0
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1737	1737	1485
Q Serve(g_s), s	1.5	0.0	2.7	2.0	1.1	0.0
Cycle Q Clear(g_c), s	1.5	0.0	2.7	2.0	1.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	137		191	992	547	
V/C Ratio(X)	0.61		0.77	0.22	0.16	
Avail Cap(c_a), veh/h	263		342	2407	1805	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.1	0.0	13.7	3.3	7.8	0.0
Incr Delay (d2), s/veh	4.3	0.0	6.4	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(50%),veh/ln	0.6	0.0	1.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.4	0.0	20.1	3.4	8.0	0.0
LnGrp LOS	B		C	A	A	
Approach Vol, veh/h	84			365	85	
Approach Delay, s/veh	18.4			10.1	8.0	
Approach LOS	B			B	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		24.6		7.1	8.1	16.5
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		44.0		5.0	6.5	33.0
Max Q Clear Time (g_c+I1), s		4.0		3.5	4.7	3.1
Green Ext Time (p_c), s		1.1		0.0	0.1	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	11.1
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	118	4	64	119	177	6	465	75	79	389	32
Future Volume (veh/h)	28	118	4	64	119	177	6	465	75	79	389	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	30	128	4	70	129	192	7	505	82	86	423	35
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	55	234	247	109	200	266	16	577	280	112	754	366
Arrive On Green	0.16	0.16	0.16	0.17	0.17	0.17	0.01	0.18	0.18	0.06	0.24	0.24
Sat Flow, veh/h	343	1465	1547	631	1163	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	158	0	4	199	0	192	7	505	82	86	423	35
Grp Sat Flow(s),veh/h/ln	1809	0	1547	1794	0	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	4.7	0.0	0.1	6.0	0.0	6.8	0.2	8.9	2.7	2.8	6.8	1.0
Cycle Q Clear(g_c), s	4.7	0.0	0.1	6.0	0.0	6.8	0.2	8.9	2.7	2.8	6.8	1.0
Prop In Lane	0.19		1.00	0.35		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	0	247	309	0	266	16	577	280	112	754	366
V/C Ratio(X)	0.55	0.00	0.02	0.64	0.00	0.72	0.44	0.88	0.29	0.77	0.56	0.10
Avail Cap(c_a), veh/h	312	0	267	309	0	267	150	577	280	150	754	366
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	0.0	20.5	22.4	0.0	22.7	28.6	23.1	20.5	26.7	19.5	17.3
Incr Delay (d2), s/veh	1.7	0.0	0.0	4.5	0.0	9.1	17.7	14.0	0.6	15.1	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(50%),veh/ln	1.8	0.0	0.0	2.5	0.0	2.8	0.2	3.9	0.8	1.5	2.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.1	0.0	20.6	26.9	0.0	31.8	46.3	37.2	21.1	41.8	20.4	17.4
LnGrp LOS	C		C	C		C	D	D	C	D	C	B
Approach Vol, veh/h		162			391			594			544	
Approach Delay, s/veh		24.0			29.3			35.1			23.6	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.2	17.5		15.8	5.0	20.7		16.5				
Change Period (Y+Rc), s	4.5	7.0		6.5	4.5	7.0		6.5				
Max Green Setting (Gmax), s	5.6	10.5		10.0	5.0	10.5		10.0				
Max Q Clear Time (g_c+I1), s	4.8	10.9		6.7	2.2	8.8		8.8				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	0.4		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	29.0
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	1	25	70	2
Future Vol, veh/h	0	2	1	25	70	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	385	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	10	10	10	18	18	10
Mvmt Flow	0	2	1	31	86	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	121	88	89	0	-	0
Stage 1	88	-	-	-	-	-
Stage 2	33	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	856	949	1458	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	969	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	855	949	1458	-	-	-
Mov Cap-2 Maneuver	816	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	969	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.8	0.29	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1458	-	949	-	-
HCM Lane V/C Ratio	0.001	-	0.003	-	-
HCM Ctrl Dly (s/v)	7.5	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	63	0	0	32	3	0	0	0	5	0	1
Future Vol, veh/h	4	63	0	0	32	3	0	0	0	5	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	10	18	10	10	18	10	10	2	10	10	2	10
Mvmt Flow	5	77	0	0	39	4	0	0	0	6	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	43	0	0	77	0	0	126	129	77	127	127	41
Stage 1	-	-	-	-	-	-	87	87	-	41	41	-
Stage 2	-	-	-	-	-	-	39	43	-	87	87	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.52	6.3	7.2	6.52	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.018	3.39	3.59	4.018	3.39
Pot Cap-1 Maneuver	1516	-	-	1473	-	-	830	761	962	828	763	1008
Stage 1	-	-	-	-	-	-	902	823	-	954	861	-
Stage 2	-	-	-	-	-	-	956	859	-	902	823	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1516	-	-	1473	-	-	826	759	962	825	761	1008
Mov Cap-2 Maneuver	-	-	-	-	-	-	826	759	-	825	761	-
Stage 1	-	-	-	-	-	-	899	820	-	954	861	-
Stage 2	-	-	-	-	-	-	955	859	-	899	820	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.44	0	0	9.27
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	-	107	-	-	1473	-	-	851
HCM Lane V/C Ratio	-	0.003	-	-	-	-	-	0.009
HCM Ctrl Dly (s/v)	0	7.4	0	-	0	-	-	9.3
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	-	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	2	40	2	4	75
Future Vol, veh/h	6	2	40	2	4	75
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	10	10	18	10	10	18
Mvmt Flow	8	3	51	3	5	95

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	158	53	0	0	54	0
Stage 1	53	-	-	-	-	-
Stage 2	105	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	815	992	-	-	1501	-
Stage 1	950	-	-	-	-	-
Stage 2	900	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	811	991	-	-	1500	-
Mov Cap-2 Maneuver	789	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.39	0	0.38
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	831	1500	-
HCM Lane V/C Ratio	-	-	0.012	0.003	-
HCM Ctrl Dly (s/v)	-	-	9.4	7.4	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	7	4	2	1	0	5	78	1	14	99	7
Future Vol, veh/h	8	7	4	2	1	0	5	78	1	14	99	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	240	-	-	290	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	19	19	19	19	19	19	10	10	10	10	10	10
Mvmt Flow	10	9	5	2	1	0	6	95	1	17	121	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	267	268	125	267	271	96	129	0	0	96	0	0
Stage 1	159	159	-	108	108	-	-	-	-	-	-	-
Stage 2	108	109	-	159	163	-	-	-	-	-	-	-
Critical Hdwy	7.29	6.69	6.39	7.29	6.69	6.39	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.29	5.69	-	6.29	5.69	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.29	5.69	-	6.29	5.69	-	-	-	-	-	-	-
Follow-up Hdwy	3.671	4.171	3.471	3.671	4.171	3.471	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	652	610	882	652	608	916	1408	-	-	1448	-	-
Stage 1	804	735	-	858	774	-	-	-	-	-	-	-
Stage 2	858	774	-	804	732	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	641	601	882	629	598	916	1408	-	-	1448	-	-
Mov Cap-2 Maneuver	641	601	-	629	598	-	-	-	-	-	-	-
Stage 1	795	726	-	854	771	-	-	-	-	-	-	-
Stage 2	853	770	-	781	723	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.63	10.86	0.45	0.88
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1408	-	-	662	618	1448	-	-
HCM Lane V/C Ratio	0.004	-	-	0.035	0.006	0.012	-	-
HCM Ctrl Dly (s/v)	7.6	-	-	10.6	10.9	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	108	41	57	117	24	57	87	117	26	79	32
Future Vol, veh/h	46	108	41	57	117	24	57	87	117	26	79	32
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
Heavy Vehicles, %	8	8	8	8	8	8	7	7	7	5	5	5
Mvmt Flow	58	137	52	72	148	30	72	110	148	33	100	41
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	11.2	11.4	11.6	10.6
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	57%	0%	46%	0%	49%	0%	40%	0%
Vol Thru, %	43%	27%	54%	57%	51%	71%	60%	55%
Vol Right, %	0%	73%	0%	43%	0%	29%	0%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	101	161	100	95	116	83	66	72
LT Vol	57	0	46	0	57	0	26	0
Through Vol	44	44	54	54	59	59	40	40
RT Vol	0	117	0	41	0	24	0	32
Lane Flow Rate	127	203	127	120	146	104	83	91
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.237	0.333	0.238	0.208	0.275	0.183	0.157	0.159
Departure Headway (Hd)	6.701	5.896	6.771	6.23	6.775	6.318	6.829	6.309
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	534	607	529	574	529	566	523	567
Service Time	4.457	3.651	4.532	3.991	4.536	4.079	4.594	4.073
HCM Lane V/C Ratio	0.238	0.334	0.24	0.209	0.276	0.184	0.159	0.16
HCM Control Delay, s/veh	11.5	11.6	11.7	10.6	12.1	10.5	10.9	10.3
HCM Lane LOS	B	B	B	B	B	B	B	B
HCM 95th-tile Q	0.9	1.5	0.9	0.8	1.1	0.7	0.6	0.6

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	0	20	1	0	3	19	254	2	0	359	6
Future Vol, veh/h	7	0	20	1	0	3	19	254	2	0	359	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	400	-	400	395	-	510
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	82	82	82	82	82	82	82	82	82	82	82	82
Heavy Vehicles, %	10	10	10	10	10	10	10	35	10	10	35	10
Mvmt Flow	9	0	24	1	0	4	23	310	2	0	438	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	639	796	219	575	794	155	438	0	0	312	0	0
Stage 1	438	438	-	356	356	-	-	-	-	-	-	-
Stage 2	201	359	-	219	438	-	-	-	-	-	-	-
Critical Hdwy	7.7	6.7	7.1	7.7	6.7	7.1	4.3	-	-	4.3	-	-
Critical Hdwy Stg 1	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.6	4.1	3.4	3.6	4.1	3.4	2.3	-	-	2.3	-	-
Pot Cap-1 Maneuver	345	303	761	384	304	839	1064	-	-	1189	-	-
Stage 1	547	558	-	613	608	-	-	-	-	-	-	-
Stage 2	759	606	-	741	558	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	336	297	761	364	298	839	1064	-	-	1189	-	-
Mov Cap-2 Maneuver	488	457	-	518	448	-	-	-	-	-	-	-
Stage 1	547	558	-	599	595	-	-	-	-	-	-	-
Stage 2	739	593	-	717	558	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.7	9.99	0.58	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1064	-	-	665	726	1189	-	-
HCM Lane V/C Ratio	0.022	-	-	0.05	0.007	-	-	-
HCM Ctrl Dly (s/v)	8.5	-	-	10.7	10	0	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0	0	-	-

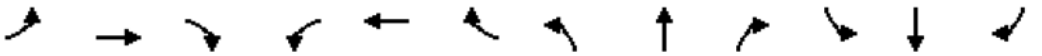
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	351	4	2	259	18	9	3	1	11	2	5
Future Vol, veh/h	2	351	4	2	259	18	9	3	1	11	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	11	35	11	11	35	11	11	11	11	11	11	11
Mvmt Flow	2	366	4	2	270	19	9	3	1	11	2	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	289	0	0	370	0	0	510	663	183	463	648	135
Stage 1	-	-	-	-	-	-	370	370	-	274	274	-
Stage 2	-	-	-	-	-	-	140	293	-	189	374	-
Critical Hdwy	4.32	-	-	4.32	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.31	-	-	2.31	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	1208	-	-	1123	-	-	427	363	801	462	370	861
Stage 1	-	-	-	-	-	-	598	597	-	684	660	-
Stage 2	-	-	-	-	-	-	823	647	-	770	594	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1208	-	-	1123	-	-	421	361	801	457	368	861
Mov Cap-2 Maneuver	-	-	-	-	-	-	546	505	-	597	508	-
Stage 1	-	-	-	-	-	-	597	596	-	683	659	-
Stage 2	-	-	-	-	-	-	814	646	-	763	593	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.04	0.06	11.7	10.75
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	535	801	1208	-	-	1123	-	-	581	861
HCM Lane V/C Ratio	0.023	0.001	0.002	-	-	0.002	-	-	0.023	0.006
HCM Ctrl Dly (s/v)	11.9	9.5	8	-	-	8.2	-	-	11.3	9.2
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.1	0	0	-	-	0	-	-	0.1	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	335	40	9	239	32	48	53	12	47	57	16
Future Volume (veh/h)	17	335	40	9	239	32	48	53	12	47	57	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	18	356	43	10	254	34	51	56	13	50	61	17
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	87	679	81	51	621	82	191	339	79	189	323	90
Arrive On Green	0.05	0.29	0.29	0.03	0.27	0.27	0.11	0.25	0.25	0.11	0.25	0.25
Sat Flow, veh/h	1668	2358	283	1668	2327	308	1668	1371	318	1668	1314	366
Grp Volume(v), veh/h	18	197	202	10	142	146	51	0	69	50	0	78
Grp Sat Flow(s),veh/h/ln	1668	1312	1328	1668	1312	1323	1668	0	1690	1668	0	1681
Q Serve(g_s), s	0.6	7.5	7.7	0.4	5.3	5.5	1.7	0.0	1.9	1.6	0.0	2.2
Cycle Q Clear(g_c), s	0.6	7.5	7.7	0.4	5.3	5.5	1.7	0.0	1.9	1.6	0.0	2.2
Prop In Lane	1.00		0.21	1.00		0.23	1.00		0.19	1.00		0.22
Lane Grp Cap(c), veh/h	87	378	383	51	350	353	191	0	418	189	0	414
V/C Ratio(X)	0.21	0.52	0.53	0.20	0.41	0.41	0.27	0.00	0.16	0.26	0.00	0.19
Avail Cap(c_a), veh/h	343	743	752	343	743	749	343	0	911	343	0	906
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	27.2	17.9	17.9	28.3	18.0	18.1	24.2	0.0	17.7	24.3	0.0	17.8
Incr Delay (d2), s/veh	1.2	1.1	1.1	1.8	0.8	0.8	0.7	0.0	0.2	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(50%),veh/ln	0.3	2.1	2.2	0.2	1.5	1.6	0.7	0.0	0.7	0.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.4	19.0	19.0	30.1	18.8	18.9	25.0	0.0	17.9	25.0	0.0	18.1
LnGrp LOS	C	B	B	C	B	B	C		B	C		B
Approach Vol, veh/h		417			298			120			128	
Approach Delay, s/veh		19.4			19.2			20.9			20.8	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	22.4	11.6	19.4	7.8	21.1	11.5	19.5
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.3	33.9	12.3	32.3	12.3	33.9	12.3	32.3
Max Q Clear Time (g_c+I1), s	2.4	9.7	3.7	4.2	2.6	7.5	3.6	3.9
Green Ext Time (p_c), s	0.0	2.4	0.0	0.4	0.0	1.7	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	19.7
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	2	2	240	4	100	2	334	138	1
Future Volume (veh/h)	1	0	0	2	2	240	4	100	2	334	138	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1381	1752	1381	1381	1752
Adj Flow Rate, veh/h	1	0	0	2	2	0	4	108	2	359	148	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, %	10	10	10	10	10	10	10	35	10	35	35	10
Cap, veh/h	5	14	0	9	19		18	559	316	539	1085	613
Arrive On Green	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.21	0.21	0.21	0.41	0.41
Sat Flow, veh/h	1668	1752	0	1668	1752	1485	1668	2624	1485	2552	2624	1485
Grp Volume(v), veh/h	1	0	0	2	2	0	4	108	2	359	148	1
Grp Sat Flow(s),veh/h/ln	1668	1752	0	1668	1752	1485	1668	1312	1485	1276	1312	1485
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.1	0.0	0.1	1.6	0.0	6.1	1.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.1	0.1	0.0	0.1	1.6	0.0	6.1	1.6	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	14	0	9	19		18	559	316	539	1085	613
V/C Ratio(X)	0.22	0.00	0.00	0.22	0.11		0.22	0.19	0.01	0.67	0.14	0.00
Avail Cap(c_a), veh/h	355	470	0	355	470		355	615	348	669	1085	613
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	0.0	0.0	23.2	23.0	0.0	23.0	15.2	14.6	17.0	8.6	8.1
Incr Delay (d2), s/veh	22.1	0.0	0.0	11.5	2.4	0.0	6.0	0.2	0.0	1.8	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(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	1.4	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.4	0.0	0.0	34.8	25.4	0.0	29.0	15.3	14.6	18.8	8.6	8.1
LnGrp LOS	D			C	C		C	B	B	B	A	A
Approach Vol, veh/h		1			4			114			508	
Approach Delay, s/veh		45.4			30.1			15.8			15.8	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	16.6	6.0	8.8	6.2	26.0	5.8	8.9
Change Period (Y+Rc), s	5.7	* 6.6	5.7	8.4	5.7	6.6	5.7	8.4
Max Green Setting (Gmax), s	12.3	* 11	10.0	12.6	10.0	11.0	10.0	12.6
Max Q Clear Time (g_c+I1), s	8.1	3.6	2.1	0.0	2.1	3.6	2.0	2.1
Green Ext Time (p_c), s	0.5	0.2	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	16.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

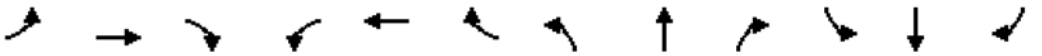
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	338	0	18	232	14	1	27	27	7	12	1
Future Vol, veh/h	0	338	0	18	232	14	1	27	27	7	12	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	570	-	570	650	-	650	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	0	367	0	20	252	15	1	29	29	8	13	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	267	0	0	367	0	0	539	674	184	490	659	126
Stage 1	-	-	-	-	-	-	367	367	-	291	291	-
Stage 2	-	-	-	-	-	-	172	307	-	198	367	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	1237	-	-	1132	-	-	408	359	803	444	366	876
Stage 1	-	-	-	-	-	-	603	601	-	670	651	-
Stage 2	-	-	-	-	-	-	791	640	-	762	601	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1237	-	-	1132	-	-	390	353	803	396	360	876
Mov Cap-2 Maneuver	-	-	-	-	-	-	537	500	-	548	497	-
Stage 1	-	-	-	-	-	-	603	601	-	659	639	-
Stage 2	-	-	-	-	-	-	760	629	-	698	601	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.56	11.18	12.13
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	501	803	1237	-	-	1132	-	-	515	876
HCM Lane V/C Ratio	0.061	0.037	-	-	-	0.017	-	-	0.04	0.001
HCM Ctrl Dly (s/v)	12.6	9.7	0	-	-	8.2	-	-	12.3	9.1
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0.1	-	-	0.1	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	1	29	1	14	10	27	186	4	5	188	17
Future Volume (veh/h)	58	1	29	1	14	10	27	186	4	5	188	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	65	1	33	1	16	11	30	209	4	6	211	19
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	139	268	227	4	127	107	91	1068	905	27	1765	158
Arrive On Green	0.08	0.15	0.15	0.00	0.07	0.07	0.11	1.00	1.00	0.02	0.55	0.55
Sat Flow, veh/h	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	3195	285
Grp Volume(v), veh/h	65	1	33	1	16	11	30	209	4	6	113	117
Grp Sat Flow(s),veh/h/ln	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	1721	1760
Q Serve(g_s), s	3.2	0.0	1.7	0.1	0.7	0.6	1.5	0.0	0.0	0.3	2.8	2.9
Cycle Q Clear(g_c), s	3.2	0.0	1.7	0.1	0.7	0.6	1.5	0.0	0.0	0.3	2.8	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	139	268	227	4	127	107	91	1068	905	27	951	972
V/C Ratio(X)	0.47	0.00	0.15	0.23	0.13	0.10	0.33	0.20	0.00	0.22	0.12	0.12
Avail Cap(c_a), veh/h	274	300	254	197	219	186	236	1068	905	217	951	972
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	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	32.7	33.4	44.8	39.3	39.2	38.8	0.0	0.0	43.8	9.6	9.7
Incr Delay (d2), s/veh	2.5	0.0	0.3	26.1	0.4	0.4	2.1	0.4	0.0	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(50%),veh/ln	1.4	0.0	0.6	0.1	0.3	0.2	0.6	0.1	0.0	0.2	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.0	32.7	33.7	70.9	39.7	39.6	40.8	0.4	0.0	47.9	9.9	9.9
LnGrp LOS	D	C	C	E	D	D	D	A	A	D	A	A
Approach Vol, veh/h		99			28			243			236	
Approach Delay, s/veh		39.1			40.8			5.4			10.9	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	60.6	4.9	18.4	9.4	57.2	11.9	11.4
Change Period (Y+Rc), s	4.7	7.5	4.7	5.1	4.7	7.5	4.7	5.1
Max Green Setting (Gmax), s	11.3	31.5	10.3	14.9	12.3	30.5	14.3	10.9
Max Q Clear Time (g_c+I1), s	2.3	2.0	2.1	3.7	3.5	4.9	5.2	2.7
Green Ext Time (p_c), s	0.0	1.0	0.0	0.0	0.0	1.0	0.1	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	14.7
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	5	26	12	1	1	24	201	21	2	134	81
Future Volume (veh/h)	10	5	26	12	1	1	24	201	21	2	134	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	11	6	29	13	1	1	27	223	23	2	149	90
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	69	38	93	45	3	43	153	1039	880	153	1039	880
Arrive On Green	0.06	0.06	0.06	0.03	0.03	0.03	0.09	0.57	0.57	0.18	1.00	1.00
Sat Flow, veh/h	1135	619	1535	1607	124	1535	1725	1811	1535	1725	1811	1535
Grp Volume(v), veh/h	17	0	29	14	0	1	27	223	23	2	149	90
Grp Sat Flow(s),veh/h/ln	1754	0	1535	1731	0	1535	1725	1811	1535	1725	1811	1535
Q Serve(g_s), s	0.8	0.0	1.6	0.7	0.0	0.1	1.3	5.4	0.6	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	1.6	0.7	0.0	0.1	1.3	5.4	0.6	0.1	0.0	0.0
Prop In Lane	0.65		1.00	0.93		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	107	0	93	48	0	43	153	1039	880	153	1039	880
V/C Ratio(X)	0.16	0.00	0.31	0.29	0.00	0.02	0.18	0.21	0.03	0.01	0.14	0.10
Avail Cap(c_a), veh/h	212	0	186	248	0	220	236	1039	880	197	1039	880
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	0.0	40.5	42.9	0.0	42.6	37.9	9.3	8.3	33.7	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	1.9	3.3	0.0	0.2	0.5	0.5	0.1	0.0	0.3	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(50%),veh/ln	0.4	0.0	0.6	0.3	0.0	0.0	0.5	1.8	0.2	0.0	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.8	0.0	42.3	46.2	0.0	42.8	38.5	9.8	8.4	33.8	0.3	0.2
LnGrp LOS	D		D	D		D	D	A	A	C	A	A
Approach Vol, veh/h		46			15			273			241	
Approach Delay, s/veh		41.8			45.9			12.5			0.5	
Approach LOS		D			D			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.7	59.1		10.6	12.7	59.1		7.6
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1
Max Green Setting (Gmax), s	10.3	33.5		10.9	12.3	31.5		12.9
Max Q Clear Time (g_c+I1), s	2.1	7.4		3.6	3.3	2.0		2.7
Green Ext Time (p_c), s	0.0	1.1		0.0	0.0	1.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.7
HCM 7th LOS	B

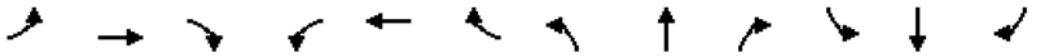
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	104	13	0	128	8	3	1	1	1	6	44
Future Vol, veh/h	20	104	13	0	128	8	3	1	1	1	6	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	650	620	-	600	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	25	128	16	0	158	10	4	1	1	1	7	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	168	0	0	144	0	0	260	346	64	272	352	79
Stage 1	-	-	-	-	-	-	178	178	-	158	158	-
Stage 2	-	-	-	-	-	-	83	168	-	114	194	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	1351	-	-	1379	-	-	651	558	961	638	554	940
Stage 1	-	-	-	-	-	-	784	732	-	806	747	-
Stage 2	-	-	-	-	-	-	893	739	-	856	720	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1351	-	-	1379	-	-	594	548	961	624	543	940
Mov Cap-2 Maneuver	-	-	-	-	-	-	686	627	-	716	630	-
Stage 1	-	-	-	-	-	-	769	718	-	806	747	-
Stage 2	-	-	-	-	-	-	833	739	-	837	706	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.21	0	10.08	9.29
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	670	961	581	-	-	1379	-	-	641	940
HCM Lane V/C Ratio	0.007	0.001	0.018	-	-	-	-	-	0.013	0.058
HCM Ctrl Dly (s/v)	10.4	8.7	7.7	0.1	-	0	-	-	10.7	9.1
HCM Lane LOS	B	A	A	A	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0	0.1	-	-	0	-	-	0	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	256	72	187	242	43	78	179	242	49	195	17
Future Volume (veh/h)	24	256	72	187	242	43	78	179	242	49	195	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	27	291	82	212	275	49	89	203	275	56	222	19
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	84	469	130	260	813	143	180	406	575	141	304	26
Arrive On Green	0.05	0.17	0.17	0.15	0.28	0.28	0.10	0.22	0.22	0.08	0.18	0.18
Sat Flow, veh/h	1739	2684	743	1739	2949	518	1739	1826	1547	1739	1658	142
Grp Volume(v), veh/h	27	186	187	212	160	164	89	203	275	56	0	241
Grp Sat Flow(s),veh/h/ln	1739	1735	1692	1739	1735	1733	1739	1826	1547	1739	0	1800
Q Serve(g_s), s	0.9	5.9	6.1	7.0	4.4	4.5	2.9	5.8	8.1	1.8	0.0	7.5
Cycle Q Clear(g_c), s	0.9	5.9	6.1	7.0	4.4	4.5	2.9	5.8	8.1	1.8	0.0	7.5
Prop In Lane	1.00		0.44	1.00		0.30	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	84	303	296	260	478	478	180	406	575	141	0	330
V/C Ratio(X)	0.32	0.61	0.63	0.82	0.33	0.34	0.49	0.50	0.48	0.40	0.00	0.73
Avail Cap(c_a), veh/h	233	1033	1008	330	1150	1148	248	1011	1088	233	0	1003
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	0.00	1.00
Uniform Delay (d), s/veh	27.4	22.7	22.8	24.6	17.2	17.3	25.2	20.3	14.3	26.0	0.0	23.0
Incr Delay (d2), s/veh	2.2	2.0	2.2	11.9	0.4	0.4	2.1	1.0	0.6	1.8	0.0	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(50%),veh/ln	0.4	2.4	2.4	3.6	1.7	1.7	1.2	2.3	2.5	0.8	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.6	24.7	25.0	36.4	17.6	17.7	27.3	21.2	14.9	27.8	0.0	26.1
LnGrp LOS	C	C	C	D	B	B	C	C	B	C		C
Approach Vol, veh/h		400			536			567			297	
Approach Delay, s/veh		25.2			25.1			19.1			26.4	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	16.8	11.9	17.3	7.6	22.8	9.5	19.6
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	11.3	35.5	8.5	* 33	8.0	* 40	8.0	33.0
Max Q Clear Time (g_c+I1), s	9.0	8.1	4.9	9.5	2.9	6.5	3.8	10.1
Green Ext Time (p_c), s	0.1	2.3	0.1	1.4	0.0	2.0	0.0	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	23.5
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	53	76	103	22	94	39	76	299	38	73	324	21
Future Volume (veh/h)	53	76	103	22	94	39	76	299	38	73	324	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	54	78	105	22	96	40	78	305	39	74	331	21
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, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	178	368	488	93	279	236	384	477	232	212	503	245
Arrive On Green	0.11	0.21	0.21	0.06	0.16	0.16	0.12	0.16	0.16	0.13	0.17	0.17
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	3047	1485
Grp Volume(v), veh/h	54	78	105	22	96	40	78	305	39	74	331	21
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1523	1485
Q Serve(g_s), s	1.9	2.3	3.2	0.8	3.1	1.5	1.4	5.9	1.4	2.5	6.4	0.8
Cycle Q Clear(g_c), s	1.9	2.3	3.2	0.8	3.1	1.5	1.4	5.9	1.4	2.5	6.4	0.8
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	178	368	488	93	279	236	384	477	232	212	503	245
V/C Ratio(X)	0.30	0.21	0.22	0.24	0.34	0.17	0.20	0.64	0.17	0.35	0.66	0.09
Avail Cap(c_a), veh/h	301	1426	1385	301	1426	1209	532	1712	834	381	1907	929
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	25.8	20.4	15.2	28.3	23.4	22.8	24.9	24.8	22.9	25.0	24.5	22.1
Incr Delay (d2), s/veh	0.9	0.3	0.2	1.3	0.7	0.3	0.3	1.4	0.3	1.0	1.5	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(50%),veh/ln	0.7	0.9	0.9	0.3	1.2	0.5	0.5	1.9	0.5	0.9	2.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.8	20.7	15.4	29.6	24.2	23.1	25.2	26.2	23.2	26.0	26.0	22.3
LnGrp LOS	C	C	B	C	C	C	C	C	C	C	C	C
Approach Vol, veh/h		237			158			422			426	
Approach Delay, s/veh		19.7			24.6			25.7			25.8	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	18.2	9.2	21.6	13.1	18.7	12.4	18.4
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	14.3	35.2	11.3	51.0	10.3	39.2	11.3	51.0
Max Q Clear Time (g_c+I1), s	4.5	7.9	2.8	5.2	3.4	8.4	3.9	5.1
Green Ext Time (p_c), s	0.1	1.8	0.0	0.7	0.1	2.0	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	24.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	136	225	53	147	97	112	540	48	77	820	42
Future Volume (veh/h)	85	136	225	53	147	97	112	540	48	77	820	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	99	158	262	62	171	113	130	628	56	90	953	49
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	144	230	322	79	217	253	112	1031	92	114	1062	55
Arrive On Green	0.21	0.21	0.21	0.16	0.16	0.16	0.06	0.32	0.32	0.07	0.32	0.32
Sat Flow, veh/h	690	1101	1547	479	1322	1547	1739	3222	287	1739	3357	173
Grp Volume(v), veh/h	257	0	262	233	0	113	130	338	346	90	492	510
Grp Sat Flow(s),veh/h/ln	1791	0	1547	1802	0	1547	1739	1735	1774	1739	1735	1795
Q Serve(g_s), s	13.0	0.0	15.8	12.2	0.0	6.5	6.3	16.1	16.2	5.0	26.6	26.6
Cycle Q Clear(g_c), s	13.0	0.0	15.8	12.2	0.0	6.5	6.3	16.1	16.2	5.0	26.6	26.6
Prop In Lane	0.39		1.00	0.27		1.00	1.00		0.16	1.00		0.10
Lane Grp Cap(c), veh/h	373	0	322	295	0	253	112	555	568	114	549	568
V/C Ratio(X)	0.69	0.00	0.81	0.79	0.00	0.45	1.17	0.61	0.61	0.79	0.90	0.90
Avail Cap(c_a), veh/h	784	0	678	789	0	678	112	562	575	149	590	610
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.9	0.0	37.0	39.4	0.0	37.0	46.0	28.2	28.2	45.2	32.1	32.1
Incr Delay (d2), s/veh	2.3	0.0	4.9	4.7	0.0	1.2	136.4	1.9	1.8	19.0	15.9	15.4
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(50%),veh/ln	5.9	0.0	6.4	5.8	0.0	2.5	6.8	6.6	6.7	2.7	12.8	13.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.2	0.0	42.0	44.1	0.0	38.3	182.4	30.1	30.1	64.2	47.9	47.5
LnGrp LOS	D		D	D		D	F	C	C	E	D	D
Approach Vol, veh/h		519			346			814			1092	
Approach Delay, s/veh		40.1			42.2			54.4			49.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.6	38.6		26.2	12.0	38.3		21.8
Change Period (Y+Rc), s	5.2	7.2		5.7	5.7	7.2		5.7
Max Green Setting (Gmax), s	8.4	31.8		43.0	6.3	33.4		43.0
Max Q Clear Time (g_c+I1), s	17.0	18.2		17.8	8.3	28.6		14.2
Green Ext Time (p_c), s	0.0	3.2		2.6	0.0	2.4		1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	48.1
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	65	90	10	73	11	89	622	13	12	598	28
Future Volume (veh/h)	15	65	90	10	73	11	89	622	13	12	598	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	17	72	100	11	81	12	99	691	0	13	664	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	78	112	139	81	237	33	272	1303		65	912	
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.41	0.00	0.04	0.29	0.00
Sat Flow, veh/h	72	667	831	80	1415	195	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	189	0	0	104	0	0	99	691	0	13	664	0
Grp Sat Flow(s),veh/h/ln	1571	0	0	1690	0	0	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	1.9	0.0	0.0	0.0	0.0	0.0	3.1	9.8	0.0	0.4	11.2	0.0
Cycle Q Clear(g_c), s	6.7	0.0	0.0	3.2	0.0	0.0	3.1	9.8	0.0	0.4	11.2	0.0
Prop In Lane	0.09		0.53	0.11		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	329	0	0	350	0	0	272	1303		65	912	
V/C Ratio(X)	0.57	0.00	0.00	0.30	0.00	0.00	0.36	0.53		0.20	0.73	
Avail Cap(c_a), veh/h	579	0	0	613	0	0	374	1897		346	1844	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.3	0.0	0.0	21.9	0.0	0.0	22.1	13.1	0.0	27.6	19.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	0.5	0.0	0.0	0.8	0.3	0.0	1.5	1.1	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(50%),veh/ln	2.5	0.0	0.0	1.2	0.0	0.0	1.1	2.6	0.0	0.2	3.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.9	0.0	0.0	22.3	0.0	0.0	22.9	13.4	0.0	29.1	20.1	0.0
LnGrp LOS	C			C			C	B		C	C	
Approach Vol, veh/h		189			104			790			677	
Approach Delay, s/veh		24.9			22.3			14.6			20.3	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	32.8		18.4	15.3	25.5		18.4				
Change Period (Y+Rc), s	5.7	8.4		8.5	5.7	8.4		8.5				
Max Green Setting (Gmax), s	12.3	35.6		19.5	13.3	34.6		19.5				
Max Q Clear Time (g_c+I1), s	2.4	11.8		8.7	5.1	13.2		5.2				
Green Ext Time (p_c), s	0.0	4.2		0.7	0.1	3.9		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.4
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	282	50	160	311	146	65	423	104	145	777	351
Future Volume (veh/h)	226	282	50	160	311	146	65	423	104	145	777	351
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	279	348	62	198	384	180	80	522	128	179	959	433
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	289	720	127	227	482	223	101	1053	470	184	1219	544
Arrive On Green	0.17	0.24	0.24	0.13	0.21	0.21	0.06	0.30	0.30	0.11	0.35	0.35
Sat Flow, veh/h	1739	2947	520	1739	2304	1065	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	279	203	207	198	288	276	80	522	128	179	959	433
Grp Sat Flow(s),veh/h/ln	1739	1735	1732	1739	1735	1634	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	18.5	11.7	11.9	13.0	18.3	18.7	5.3	14.3	7.3	11.9	28.8	29.3
Cycle Q Clear(g_c), s	18.5	11.7	11.9	13.0	18.3	18.7	5.3	14.3	7.3	11.9	28.8	29.3
Prop In Lane	1.00		0.30	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	424	423	227	363	342	101	1053	470	184	1219	544
V/C Ratio(X)	0.97	0.48	0.49	0.87	0.79	0.81	0.79	0.50	0.27	0.97	0.79	0.80
Avail Cap(c_a), veh/h	289	634	633	296	641	604	106	1053	470	184	1219	544
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	48.2	37.6	37.7	49.6	43.6	43.8	54.1	33.2	30.8	51.8	33.8	34.0
Incr Delay (d2), s/veh	43.8	0.8	0.9	19.4	4.0	4.6	31.6	1.7	1.4	58.4	5.2	11.5
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(50%),veh/ln	11.5	5.1	5.1	6.9	8.2	8.0	3.2	6.3	2.9	8.2	12.8	12.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	92.0	38.5	38.6	69.0	47.6	48.4	85.7	34.9	32.2	110.2	39.0	45.5
LnGrp LOS	F	D	D	E	D	D	F	C	C	F	D	D
Approach Vol, veh/h		689			762			730			1571	
Approach Delay, s/veh		60.2			53.4			40.0			48.9	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	42.5	20.9	34.9	12.4	48.1	25.0	30.8
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	12.3	35.3	19.8	42.5	7.1	40.5	19.3	43.0
Max Q Clear Time (g_c+I1), s	13.9	16.3	15.0	13.9	7.3	31.3	20.5	20.7
Green Ext Time (p_c), s	0.0	3.8	0.2	2.6	0.0	5.4	0.0	3.6

Intersection Summary	
HCM 7th Control Delay, s/veh	50.2
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	1	210	5	2	2	315	666	2	1	650	46
Future Volume (veh/h)	63	1	210	5	2	2	315	666	2	1	650	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	72	1	239	6	2	2	358	757	2	1	739	52
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	294	4	531	28	9	9	580	1604	4	5	1011	475
Arrive On Green	0.18	0.18	0.18	0.03	0.03	0.03	0.18	0.50	0.50	0.00	0.32	0.32
Sat Flow, veh/h	1647	23	1485	986	329	329	3237	3233	9	1668	3159	1485
Grp Volume(v), veh/h	73	0	239	10	0	0	358	370	389	1	739	52
Grp Sat Flow(s),veh/h/ln	1669	0	1485	1643	0	0	1618	1580	1661	1668	1580	1485
Q Serve(g_s), s	2.3	0.0	7.5	0.4	0.0	0.0	6.3	9.4	9.4	0.0	12.7	1.5
Cycle Q Clear(g_c), s	2.3	0.0	7.5	0.4	0.0	0.0	6.3	9.4	9.4	0.0	12.7	1.5
Prop In Lane	0.99		1.00	0.60		0.20	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	298	0	531	46	0	0	580	784	824	5	1011	475
V/C Ratio(X)	0.24	0.00	0.45	0.22	0.00	0.00	0.62	0.47	0.47	0.20	0.73	0.11
Avail Cap(c_a), veh/h	1363	0	1478	295	0	0	713	1161	1221	300	2192	1030
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	0.0	15.0	29.1	0.0	0.0	23.2	10.1	10.1	30.5	18.5	14.7
Incr Delay (d2), s/veh	0.4	0.0	0.6	2.3	0.0	0.0	1.1	0.4	0.4	18.1	1.0	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(50%),veh/ln	0.8	0.0	2.2	0.2	0.0	0.0	2.1	2.3	2.4	0.0	3.8	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.0	0.0	15.6	31.4	0.0	0.0	24.3	10.6	10.6	48.5	19.5	14.8
LnGrp LOS	C		B	C			C	B	B	D	B	B
Approach Vol, veh/h		312			10			1117			792	
Approach Delay, s/veh		17.1			31.4			15.0			19.2	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	34.9		15.4	15.5	24.1		6.2
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	1.0	45.0		50.0	13.5	42.5		11.0
Max Q Clear Time (g_c+I1), s	2.0	11.4		9.5	8.3	14.7		2.4
Green Ext Time (p_c), s	0.0	4.3		1.2	0.6	4.9		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	16.9
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	251	112	127	269	325	54	591	89	260	690	48
Future Volume (veh/h)	50	251	112	127	269	325	54	591	89	260	690	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	60	302	135	153	324	0	65	712	107	313	831	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	82	423	185	187	836		85	885	133	438	1341	
Arrive On Green	0.05	0.18	0.18	0.11	0.24	0.00	0.05	0.29	0.29	0.13	0.39	0.00
Sat Flow, veh/h	1739	2349	1026	1739	3469	1547	1739	3025	454	3374	3469	1547
Grp Volume(v), veh/h	60	221	216	153	324	0	65	408	411	313	831	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1641	1739	1735	1547	1739	1735	1744	1687	1735	1547
Q Serve(g_s), s	2.6	9.2	9.6	6.6	6.0	0.0	2.8	16.8	16.8	6.8	14.9	0.0
Cycle Q Clear(g_c), s	2.6	9.2	9.6	6.6	6.0	0.0	2.8	16.8	16.8	6.8	14.9	0.0
Prop In Lane	1.00		0.63	1.00		1.00	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	82	312	296	187	836		85	507	510	438	1341	
V/C Ratio(X)	0.73	0.71	0.73	0.82	0.39		0.77	0.80	0.81	0.71	0.62	
Avail Cap(c_a), veh/h	140	676	640	188	1465		147	663	666	438	1528	
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.2	29.6	29.8	33.6	24.5	0.0	36.2	25.2	25.2	32.1	19.0	0.0
Incr Delay (d2), s/veh	12.0	3.0	3.5	23.6	0.3	0.0	13.3	5.5	5.5	5.4	0.6	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(50%),veh/ln	1.3	3.8	3.8	3.9	2.3	0.0	1.5	7.2	7.2	3.0	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.2	32.6	33.2	57.2	24.7	0.0	49.5	30.6	30.7	37.6	19.7	0.0
LnGrp LOS	D	C	C	E	C		D	C	C	D	B	
Approach Vol, veh/h		497			477			884			1144	
Approach Delay, s/veh		34.8			35.1			32.0			24.6	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	35.8	8.3	24.3	15.7	28.6	13.0	19.7
Change Period (Y+Rc), s	4.7	6.1	4.7	* 5.8	5.7	6.1	4.7	5.8
Max Green Setting (Gmax), s	6.5	33.9	6.2	* 33	10.0	29.4	8.3	30.0
Max Q Clear Time (g_c+I1), s	4.8	16.9	4.6	8.0	8.8	18.8	8.6	11.6
Green Ext Time (p_c), s	0.0	5.3	0.0	1.9	0.1	3.7	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	30.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	146	64	76	279	105	128	804	85	92	662	83
Future Volume (veh/h)	42	146	64	76	279	105	128	804	85	92	662	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	48	166	73	86	317	119	145	914	97	105	752	94
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	163	344	145	204	417	154	174	1084	509	164	1066	501
Arrive On Green	0.10	0.15	0.15	0.12	0.18	0.18	0.10	0.34	0.34	0.10	0.34	0.34
Sat Flow, veh/h	1668	2281	962	1668	2381	877	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	48	119	120	86	220	216	145	914	97	105	752	94
Grp Sat Flow(s),veh/h/ln	1668	1664	1579	1668	1664	1594	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	2.6	6.3	6.7	4.6	12.0	12.4	8.2	25.6	4.4	5.8	19.8	4.3
Cycle Q Clear(g_c), s	2.6	6.3	6.7	4.6	12.0	12.4	8.2	25.6	4.4	5.8	19.8	4.3
Prop In Lane	1.00		0.61	1.00		0.55	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	251	238	204	291	279	174	1084	509	164	1066	501
V/C Ratio(X)	0.29	0.47	0.50	0.42	0.75	0.77	0.84	0.84	0.19	0.64	0.71	0.19
Avail Cap(c_a), veh/h	227	992	941	227	992	950	180	1411	663	175	1401	658
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	40.0	37.1	37.3	38.8	37.5	37.6	42.0	29.0	22.1	41.5	27.5	22.4
Incr Delay (d2), s/veh	1.0	1.4	1.6	1.4	3.9	4.6	26.9	3.8	0.2	7.1	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(50%),veh/ln	1.0	2.5	2.5	1.8	4.9	4.8	4.4	9.2	1.4	2.6	6.9	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.0	38.5	38.9	40.2	41.4	42.2	69.0	32.8	22.2	48.5	28.6	22.6
LnGrp LOS	D	D	D	D	D	D	E	C	C	D	C	C
Approach Vol, veh/h		287			522			1156			951	
Approach Delay, s/veh		39.1			41.6			36.5			30.2	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	41.2	17.4	21.9	15.6	40.6	15.1	24.2
Change Period (Y+Rc), s	5.7	8.4	5.7	7.5	5.7	8.4	5.7	7.5
Max Green Setting (Gmax), s	10.0	42.7	13.0	57.0	10.3	42.4	13.0	57.0
Max Q Clear Time (g_c+I1), s	17.8	27.6	6.6	8.7	10.2	21.8	4.6	14.4
Green Ext Time (p_c), s	0.0	5.2	0.1	1.2	0.0	4.8	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	35.6
HCM 7th LOS	D

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	44	1	123	12	81	0	0	137	60
Future Vol, veh/h	0	0	0	44	1	123	12	81	0	0	137	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	56	1	158	15	104	0	0	176	77

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	310	387	104	253	0	-	-	-	0
Stage 1	135	135	-	-	-	-	-	-	-
Stage 2	176	253	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	662	532	924	1257	-	0	0	-	-
Stage 1	868	766	-	-	-	0	0	-	-
Stage 2	831	680	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	653	0	924	1257	-	-	-	-	-
Mov Cap-2 Maneuver	653	0	-	-	-	-	-	-	-
Stage 1	856	0	-	-	-	-	-	-	-
Stage 2	831	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.06	1.02	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	232	-	653	924	-	-
HCM Lane V/C Ratio	0.012	-	0.088	0.171	-	-
HCM Ctrl Dly (s/v)	7.9	0	11	9.7	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.6	-	-

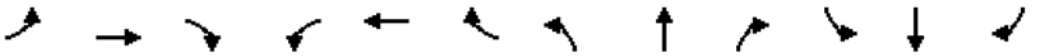
Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	1	4	0	0	0	0	49	23	84	97	0
Future Vol, veh/h	50	1	4	0	0	0	0	49	23	84	97	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	70	70	70	70	70	70	70	70	70	70	70	70
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	71	1	6	0	0	0	0	70	33	120	139	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	449	481	139	-	0	0	103	0	0
Stage 1	379	379	-	-	-	-	-	-	-
Stage 2	70	103	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	-	-	-	4.22	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	-	-	-	2.308	-	-
Pot Cap-1 Maneuver	550	470	884	0	-	-	1429	-	0
Stage 1	671	598	-	0	-	-	-	-	0
Stage 2	928	791	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	500	0	884	-	-	-	1429	-	-
Mov Cap-2 Maneuver	500	0	-	-	-	-	-	-	-
Stage 1	671	0	-	-	-	-	-	-	-
Stage 2	844	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.11	0	3.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	500	884	835	-
HCM Lane V/C Ratio	-	-	0.146	0.006	0.084	-
HCM Ctrl Dly (s/v)	-	-	13.4	9.1	7.8	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	19	0	786	28	244	0	0	656	81
Future Volume (veh/h)	0	0	0	19	0	786	28	244	0	0	656	81
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				26	0	1062	38	330	0	0	886	109
Peak Hour Factor				0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				707	0	1108	83	1549	0	0	1145	511
Arrive On Green				0.41	0.00	0.41	0.05	0.45	0.00	0.00	0.33	0.33
Sat Flow, veh/h				1739	0	2723	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				26	0	1062	38	330	0	0	886	109
Grp Sat Flow(s),veh/h/ln				1739	0	1362	1739	1735	0	0	1735	1547
Q Serve(g_s), s				0.8	0.0	34.1	1.9	5.2	0.0	0.0	20.7	4.6
Cycle Q Clear(g_c), s				0.8	0.0	34.1	1.9	5.2	0.0	0.0	20.7	4.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				707	0	1108	83	1549	0	0	1145	511
V/C Ratio(X)				0.04	0.00	0.96	0.46	0.21	0.00	0.00	0.77	0.21
Avail Cap(c_a), veh/h				715	0	1120	135	1549	0	0	1145	511
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	1.00	0.99	0.99	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.1	0.0	26.0	41.7	15.2	0.0	0.0	27.1	21.7
Incr Delay (d2), s/veh				0.0	0.0	17.7	3.9	0.3	0.0	0.0	5.1	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
%ile BackOfQ(50%),veh/ln				0.3	0.0	12.1	0.9	2.0	0.0	0.0	8.9	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				16.1	0.0	43.7	45.6	15.5	0.0	0.0	32.3	22.7
LnGrp LOS				B		D	D	B			C	C
Approach Vol, veh/h					1088			368			995	
Approach Delay, s/veh					43.0			18.6			31.2	
Approach LOS					D			B			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.3			10.5	35.8		43.7				
Change Period (Y+Rc), s		6.1			6.2	6.1		7.1				
Max Green Setting (Gmax), s		39.8			7.0	26.6		37.0				
Max Q Clear Time (g_c+I1), s		7.2			3.9	22.7		36.1				
Green Ext Time (p_c), s		2.2			0.0	2.2		0.5				

Intersection Summary												
HCM 7th Control Delay, s/veh			34.6									
HCM 7th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	2	16	0	0	0	0	211	30	0	202	481
Future Volume (veh/h)	68	2	16	0	0	0	0	211	30	0	202	481
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826				0	1826	1826	0	1826	1826
Adj Flow Rate, veh/h	58	50	21				0	281	40	0	269	641
Peak Hour Factor	0.75	0.75	0.75				0.75	0.75	0.75	0.75	0.75	0.75
Percent Heavy Veh, %	5	5	5				0	5	5	0	5	5
Cap, veh/h	185	130	54				0	2386	336	0	2711	2417
Arrive On Green	0.11	0.11	0.11				0.00	0.78	0.78	0.00	0.78	0.78
Sat Flow, veh/h	1739	1221	513				0	3144	430	0	3561	2723
Grp Volume(v), veh/h	58	0	71				0	158	163	0	269	641
Grp Sat Flow(s),veh/h/ln	1739	0	1734				0	1735	1749	0	1735	1362
Q Serve(g_s), s	2.5	0.0	3.1				0.0	1.8	1.8	0.0	1.5	2.8
Cycle Q Clear(g_c), s	2.5	0.0	3.1				0.0	1.8	1.8	0.0	1.5	2.8
Prop In Lane	1.00		0.30				0.00		0.25	0.00		1.00
Lane Grp Cap(c), veh/h	185	0	184				0	1355	1366	0	2711	2417
V/C Ratio(X)	0.31	0.00	0.39				0.00	0.12	0.12	0.00	0.10	0.27
Avail Cap(c_a), veh/h	728	0	726				0	1355	1366	0	2711	2417
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	1.00				0.00	1.00	1.00	0.00	0.85	0.85
Uniform Delay (d), s/veh	33.1	0.0	33.3				0.0	2.1	2.1	0.0	2.1	0.7
Incr Delay (d2), s/veh	1.0	0.0	1.3				0.0	0.2	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
%ile BackOfQ(50%),veh/ln	1.0	0.0	1.2				0.0	0.4	0.4	0.0	0.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.0	0.0	34.7				0.0	2.3	2.3	0.0	2.1	0.7
LnGrp LOS	C		C					A	A		A	A
Approach Vol, veh/h		129						321			910	
Approach Delay, s/veh		34.4						2.3			1.1	
Approach LOS		C						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.0	13.0	67.0
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	37.5	33.5	37.5
Max Q Clear Time (g_c+I1), s	3.8	5.1	4.8
Green Ext Time (p_c), s	1.9	0.4	4.9

Intersection Summary	
HCM 7th Control Delay, s/veh	4.5
HCM 7th 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												
Traffic Volume (veh/h)	41	38	3	11	78	60	95	1171	14	38	897	54
Future Volume (veh/h)	41	38	3	11	78	60	95	1171	14	38	897	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	47	44	3	13	90	69	109	1346	16	44	1031	62
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	55	37	503	38	220	503	149	1495	18	115	1350	81
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.08	0.42	0.42	0.07	0.40	0.40
Sat Flow, veh/h	23	115	1560	7	683	1560	1753	3540	42	1753	3352	202
Grp Volume(v), veh/h	91	0	3	103	0	69	109	665	697	44	538	555
Grp Sat Flow(s),veh/h/ln	138	0	1560	690	0	1560	1753	1749	1833	1753	1749	1804
Q Serve(g_s), s	1.1	0.0	0.1	1.1	0.0	3.6	6.9	40.3	40.3	2.7	30.2	30.2
Cycle Q Clear(g_c), s	36.6	0.0	0.1	36.6	0.0	3.6	6.9	40.3	40.3	2.7	30.2	30.2
Prop In Lane	0.52		1.00	0.13		1.00	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	93	0	503	258	0	503	149	738	774	115	704	727
V/C Ratio(X)	0.98	0.00	0.01	0.40	0.00	0.14	0.73	0.90	0.90	0.38	0.76	0.76
Avail Cap(c_a), veh/h	149	0	564	327	0	564	177	738	774	156	704	727
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.9	0.0	26.2	30.1	0.0	27.3	50.8	30.6	30.6	50.9	29.3	29.3
Incr Delay (d2), s/veh	54.0	0.0	0.0	1.0	0.0	0.1	11.9	16.2	15.6	2.1	7.7	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(50%),veh/ln	8.9	0.0	0.1	2.0	0.0	1.3	3.4	18.6	19.4	1.2	13.1	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	98.9	0.0	26.2	31.1	0.0	27.4	62.7	46.8	46.2	53.0	37.0	36.8
LnGrp LOS	F		C	C		C	E	D	D	D	D	D
Approach Vol, veh/h		94			172			1471			1137	
Approach Delay, s/veh		96.6			29.6			47.7			37.5	
Approach LOS		F			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.2	56.4		45.2	15.4	54.2		45.2				
Change Period (Y+Rc), s	5.7	8.4		7.5	5.7	8.4		7.5				
Max Green Setting (Gmax), s	10.1	47.2		41.1	11.5	45.8		41.1				
Max Q Clear Time (g_c+I1), s	14.7	42.3		38.6	8.9	32.2		38.6				
Green Ext Time (p_c), s	0.0	3.1		0.1	0.1	5.2		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	44.2
HCM 7th LOS	D



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	605	152	175	553	214	178
Future Volume (veh/h)	605	152	175	553	214	178
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	680	171	197	621	240	200
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1172	858	338	1860	377	591
Arrive On Green	0.33	0.33	0.10	0.53	0.21	0.21
Sat Flow, veh/h	3618	1572	3428	3618	1767	2768
Grp Volume(v), veh/h	680	171	197	621	240	200
Grp Sat Flow(s),veh/h/ln	1763	1572	1714	1763	1767	1384
Q Serve(g_s), s	7.5	2.6	2.6	4.7	5.8	2.9
Cycle Q Clear(g_c), s	7.5	2.6	2.6	4.7	5.8	2.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1172	858	338	1860	377	591
V/C Ratio(X)	0.58	0.20	0.58	0.33	0.64	0.34
Avail Cap(c_a), veh/h	3396	1850	404	4098	1460	2287
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	12.9	5.4	20.1	6.3	16.7	15.6
Incr Delay (d2), s/veh	0.5	0.1	1.6	0.1	1.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.6	1.0	1.3	2.2	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.3	5.5	21.7	6.4	18.5	15.9
LnGrp LOS	B	A	C	A	B	B
Approach Vol, veh/h	851			818	440	
Approach Delay, s/veh	11.8			10.1	17.3	
Approach LOS	B			B	B	

Timer - Assigned Phs	3	4		6	8
Phs Duration (G+Y+Rc), s	9.1	21.9		15.7	31.0
Change Period (Y+Rc), s	4.5	* 6.4		5.7	6.4
Max Green Setting (Gmax), s	5.5	* 45		38.6	54.3
Max Q Clear Time (g_c+I1), s	4.6	9.5		7.8	6.7
Green Ext Time (p_c), s	0.1	6.1		1.5	5.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.3
HCM 7th LOS	B

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	129	470	164	186	508	235	179	488	73	214	505	129
Future Volume (veh/h)	129	470	164	186	508	235	179	488	73	214	505	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	145	528	184	209	571	264	201	548	82	240	567	145
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	236	901	535	293	930	418	290	772	115	293	888	396
Arrive On Green	0.07	0.26	0.26	0.09	0.27	0.27	0.08	0.25	0.25	0.09	0.25	0.25
Sat Flow, veh/h	3428	3526	1572	3428	3418	1538	3428	3077	459	3428	3526	1572
Grp Volume(v), veh/h	145	528	184	209	564	271	201	313	317	240	567	145
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1689	1579	1714	1763	1773	1714	1763	1572
Q Serve(g_s), s	2.8	8.9	5.9	4.0	9.9	10.2	3.9	11.0	11.1	4.7	9.7	5.2
Cycle Q Clear(g_c), s	2.8	8.9	5.9	4.0	9.9	10.2	3.9	11.0	11.1	4.7	9.7	5.2
Prop In Lane	1.00		1.00	1.00		0.97	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	236	901	535	293	919	429	290	442	445	293	888	396
V/C Ratio(X)	0.61	0.59	0.34	0.71	0.61	0.63	0.69	0.71	0.71	0.82	0.64	0.37
Avail Cap(c_a), veh/h	253	1896	979	293	1891	884	293	1039	1045	293	2078	927
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	30.7	22.1	16.7	30.2	21.6	21.7	30.2	23.2	23.2	30.5	22.6	20.9
Incr Delay (d2), s/veh	3.9	0.6	0.4	7.9	0.7	1.5	6.8	2.1	2.1	16.6	0.8	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(50%),veh/ln	1.2	3.5	2.0	1.9	3.8	3.7	1.8	4.5	4.5	2.5	3.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.7	22.7	17.1	38.2	22.3	23.2	37.0	25.3	25.3	47.1	23.4	21.5
LnGrp LOS	C	C	B	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		857			1044			831			952	
Approach Delay, s/veh		23.5			25.7			28.1			29.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	22.6	11.0	23.2	10.9	22.7	9.9	24.4
Change Period (Y+Rc), s	5.2	5.6	5.2	5.9	5.2	5.6	5.2	* 5.9
Max Green Setting (Gmax), s	5.8	40.0	5.8	36.5	5.8	40.0	5.0	* 38
Max Q Clear Time (g_c+I1), s	6.7	13.1	6.0	10.9	5.9	11.7	4.8	12.2
Green Ext Time (p_c), s	0.0	4.0	0.0	4.4	0.0	4.5	0.0	6.2

Intersection Summary	
HCM 7th Control Delay, s/veh	26.6
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	25	28	3	469	20	46	10	358	507	29	225	56
Future Volume (veh/h)	25	28	3	469	20	46	10	358	507	29	225	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	27	31	3	515	22	51	11	393	557	32	247	62
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	251	236	23	537	287	243	43	954	426	319	1504	894
Arrive On Green	0.14	0.14	0.14	0.15	0.15	0.15	0.02	0.27	0.27	0.18	0.43	0.43
Sat Flow, veh/h	1767	1665	161	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	27	0	34	515	22	51	11	393	557	32	247	62
Grp Sat Flow(s),veh/h/ln	1767	0	1827	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	1.0	0.0	1.3	12.0	0.8	2.2	0.5	7.1	21.0	1.2	3.4	1.4
Cycle Q Clear(g_c), s	1.0	0.0	1.3	12.0	0.8	2.2	0.5	7.1	21.0	1.2	3.4	1.4
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	0	259	537	287	243	43	954	426	319	1504	894
V/C Ratio(X)	0.11	0.00	0.13	0.96	0.08	0.21	0.25	0.41	1.31	0.10	0.16	0.07
Avail Cap(c_a), veh/h	251	0	904	537	942	798	205	954	426	319	1504	894
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	29.1	28.2	28.1	28.7	37.2	23.2	28.3	26.5	13.7	7.5
Incr Delay (d2), s/veh	0.2	0.0	0.2	28.6	0.1	0.4	3.0	0.3	155.0	0.1	0.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.5	7.8	0.3	0.8	0.2	2.8	25.7	0.5	1.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.2	0.0	29.3	56.8	28.2	29.1	40.2	23.5	183.3	26.7	13.8	7.6
LnGrp LOS	C		C	E	C	C	D	C	F	C	B	A
Approach Vol, veh/h		61			588			961			341	
Approach Delay, s/veh		29.3			53.3			116.3			13.9	
Approach LOS		C			D			F			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	16.0	6.5	38.1	16.0	17.0	18.6	26.0
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	12.0	38.4	9.0	26.0	11.0	39.4	14.0	21.0
Max Q Clear Time (g_c+I1), s	14.0	3.3	2.5	5.4	3.0	4.2	3.2	23.0
Green Ext Time (p_c), s	0.0	0.1	0.0	1.6	0.0	0.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	76.7
HCM 7th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	405	169	1	2	125	80	1	2	1	60	2	411
Future Volume (veh/h)	405	169	1	2	125	80	1	2	1	60	2	411
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	309	358	1	2	134	86	1	2	1	65	0	443
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	476	498	1	5	313	188	3	355	164	123	0	691
Arrive On Green	0.27	0.27	0.27	0.15	0.15	0.15	0.00	0.15	0.15	0.07	0.00	0.22
Sat Flow, veh/h	1767	1849	5	32	2151	1293	1767	2344	1080	1767	0	3145
Grp Volume(v), veh/h	309	0	359	114	0	108	1	1	2	65	0	443
Grp Sat Flow(s),veh/h/ln	1767	0	1855	1854	0	1623	1767	1763	1661	1767	0	1572
Q Serve(g_s), s	8.2	0.0	9.3	3.0	0.0	3.2	0.0	0.0	0.0	1.9	0.0	6.8
Cycle Q Clear(g_c), s	8.2	0.0	9.3	3.0	0.0	3.2	0.0	0.0	0.0	1.9	0.0	6.8
Prop In Lane	1.00		0.00	0.02		0.80	1.00		0.65	1.00		1.00
Lane Grp Cap(c), veh/h	476	0	499	270	0	236	3	267	252	123	0	691
V/C Ratio(X)	0.65	0.00	0.72	0.42	0.00	0.46	0.30	0.01	0.01	0.53	0.00	0.64
Avail Cap(c_a), veh/h	1034	0	1086	1018	0	891	201	922	868	278	0	1781
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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.1	0.0	17.5	20.5	0.0	20.6	26.3	19.0	19.0	23.7	0.0	18.7
Incr Delay (d2), s/veh	1.5	0.0	2.0	1.0	0.0	1.4	43.5	0.0	0.0	3.5	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(50%),veh/ln	3.0	0.0	3.7	1.2	0.0	1.2	0.1	0.0	0.0	0.8	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.6	0.0	19.4	21.6	0.0	22.0	69.8	19.0	19.0	27.2	0.0	19.7
LnGrp LOS	B		B	C		C	E	B	B	C		B
Approach Vol, veh/h		668			222			4			508	
Approach Delay, s/veh		19.0			21.8			31.7			20.7	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	12.7		19.3	4.8	16.3		12.4				
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7				
Max Green Setting (Gmax), s	8.3	27.6		30.9	6.0	29.9		29.0				
Max Q Clear Time (g_c+I1), s	3.9	2.0		11.3	2.0	8.8		5.2				
Green Ext Time (p_c), s	0.0	0.0		3.0	0.0	1.7		1.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	20.1
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	7	0	5	15	143	216	0	74	87
Future Vol, veh/h	0	0	0	7	0	5	15	143	216	0	74	87
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	330
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	8	0	5	16	155	235	0	80	95

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	268	363	155	175	0	-	-	-	0
Stage 1	188	188	-	-	-	-	-	-	-
Stage 2	80	175	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	700	549	865	1343	-	0	0	-	-
Stage 1	821	726	-	-	-	0	0	-	-
Stage 2	918	736	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	691	0	865	1343	-	-	-	-	-
Mov Cap-2 Maneuver	691	0	-	-	-	-	-	-	-
Stage 1	810	0	-	-	-	-	-	-	-
Stage 2	918	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.86	0.73	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	171	-	754	-	-
HCM Lane V/C Ratio	0.012	-	0.017	-	-
HCM Ctrl Dly (s/v)	7.7	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

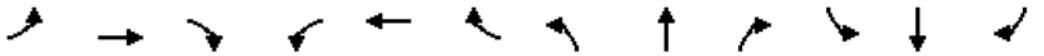
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	0	179	0	0	0	0	291	6	1	79	0
Future Vol, veh/h	56	0	179	0	0	0	0	291	6	1	79	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	470	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	65	0	208	0	0	0	0	338	7	1	92	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	263	440	-	-	0	0	345	0	0
Stage 1	94	94	-	-	-	-	-	-	-
Stage 2	169	345	-	-	-	-	-	-	-
Critical Hdwy	6.78	6.68	-	-	-	-	4.28	-	-
Critical Hdwy Stg 1	5.58	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.98	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.614	4.114	-	-	-	-	2.314	-	-
Pot Cap-1 Maneuver	690	492	0	0	-	-	1151	-	0
Stage 1	902	796	0	0	-	-	-	-	0
Stage 2	818	614	0	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	690	0	-	-	-	-	1151	-	-
Mov Cap-2 Maneuver	690	0	-	-	-	-	-	-	-
Stage 1	902	0	-	-	-	-	-	-	-
Stage 2	817	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.76	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	690	1151	-
HCM Lane V/C Ratio	-	-	0.094	0.001	-
HCM Ctrl Dly (s/v)	-	-	10.8	8.1	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	34	83	27	36	4	88	247	32	5	215	40
Future Volume (veh/h)	16	34	83	27	36	4	88	247	32	5	215	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1455	1752	1752	1752	1455	952	1752	1752	952	1604
Adj Flow Rate, veh/h	18	37	91	30	40	4	97	271	35	5	236	44
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, %	10	10	30	10	10	10	30	64	10	10	64	20
Cap, veh/h	86	272	622	130	319	270	352	773	558	22	325	315
Arrive On Green	0.05	0.16	0.16	0.08	0.18	0.18	0.13	0.30	0.30	0.01	0.18	0.18
Sat Flow, veh/h	1668	1752	2171	1668	1752	1485	2689	2598	1485	1668	1808	1359
Grp Volume(v), veh/h	18	37	91	30	40	4	97	271	35	5	236	44
Grp Sat Flow(s),veh/h/ln	1668	1752	1085	1668	1752	1485	1345	866	1485	1668	904	1359
Q Serve(g_s), s	0.6	1.1	1.9	1.0	1.2	0.1	2.0	5.1	0.9	0.2	7.6	1.6
Cycle Q Clear(g_c), s	0.6	1.1	1.9	1.0	1.2	0.1	2.0	5.1	0.9	0.2	7.6	1.6
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	86	272	622	130	319	270	352	773	558	22	325	315
V/C Ratio(X)	0.21	0.14	0.15	0.23	0.13	0.01	0.28	0.35	0.06	0.23	0.73	0.14
Avail Cap(c_a), veh/h	331	1573	2234	358	1601	1357	534	1787	1137	278	1186	961
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	28.1	22.6	16.5	26.8	21.2	20.8	24.2	17.0	12.4	30.2	23.9	18.9
Incr Delay (d2), s/veh	1.2	0.2	0.1	0.9	0.2	0.0	0.4	0.3	0.0	5.0	3.1	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(50%),veh/ln	0.3	0.4	0.4	0.4	0.4	0.0	0.6	0.8	0.2	0.1	1.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.3	22.8	16.6	27.7	21.4	20.8	24.7	17.3	12.4	35.2	27.0	19.1
LnGrp LOS	C	C	B	C	C	C	C	B	B	D	C	B
Approach Vol, veh/h		146			74			403			285	
Approach Delay, s/veh		19.7			23.9			18.7			25.9	
Approach LOS		B			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	18.0	13.8	19.5	8.9	19.7	6.5	26.8
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	13.3	55.6	12.3	40.6	12.3	56.6	10.3	42.6
Max Q Clear Time (g_c+I1), s	3.0	3.9	4.0	9.6	2.6	3.2	2.2	7.1
Green Ext Time (p_c), s	0.0	0.5	0.1	1.5	0.0	0.2	0.0	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	21.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	87	0	82	4	270	48	141	194	0
Future Volume (veh/h)	0	0	0	87	0	82	4	270	48	141	194	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				952	0	952	1870	952	952	952	952	0
Adj Flow Rate, veh/h				102	0	96	5	318	56	166	228	0
Peak Hour Factor				0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %				64	0	64	2	64	64	64	64	0
Cap, veh/h				152	0	135	24	407	71	195	1210	0
Arrive On Green				0.17	0.00	0.17	0.01	0.26	0.26	0.21	0.47	0.00
Sat Flow, veh/h				906	0	806	1781	1539	268	906	2683	0
Grp Volume(v), veh/h				102	0	96	5	185	189	166	228	0
Grp Sat Flow(s),veh/h/ln				906	0	806	1781	904	903	906	866	0
Q Serve(g_s), s				6.0	0.0	6.4	0.2	10.8	11.1	10.1	2.9	0.0
Cycle Q Clear(g_c), s				6.0	0.0	6.4	0.2	10.8	11.1	10.1	2.9	0.0
Prop In Lane				1.00		1.00	1.00		0.30	1.00		0.00
Lane Grp Cap(c), veh/h				152	0	135	24	239	239	195	1210	0
V/C Ratio(X)				0.67	0.00	0.71	0.21	0.78	0.79	0.85	0.19	0.00
Avail Cap(c_a), veh/h				809	0	719	312	636	635	295	2218	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				22.3	0.0	22.5	27.9	19.5	19.6	21.6	8.9	0.0
Incr Delay (d2), s/veh				5.1	0.0	6.7	4.3	5.3	5.8	13.9	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(50%),veh/ln				1.4	0.0	1.4	0.1	2.1	2.2	2.5	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				27.4	0.0	29.2	32.2	24.8	25.4	35.4	9.0	0.0
LnGrp LOS				C		C	C	C	C	D	A	
Approach Vol, veh/h					198			379			394	
Approach Delay, s/veh					28.3			25.2			20.1	
Approach LOS					C			C			C	

Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	8.0	23.5			6.5	35.0		15.7				
Change Period (Y+Rc), s	5.7	8.4			5.7	8.4		6.1				
Max Green Setting (Gmax), s	18.6	40.2			10.0	48.8		51.0				
Max Q Clear Time (g_c+I1), s	12.1	13.1			2.2	4.9		8.4				
Green Ext Time (p_c), s	0.2	2.0			0.0	1.5		0.7				

Intersection Summary		
HCM 7th Control Delay, s/veh		23.8
HCM 7th LOS		C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	99	92	55	135	235	135
Future Volume (veh/h)	99	92	55	135	235	135
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	109	0	60	148	258	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	165		109	939	569	
Arrive On Green	0.10	0.00	0.07	0.54	0.33	0.00
Sat Flow, veh/h	1668	1485	1668	1737	1737	1485
Grp Volume(v), veh/h	109	0	60	148	258	0
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1737	1737	1485
Q Serve(g_s), s	1.9	0.0	1.1	1.3	3.6	0.0
Cycle Q Clear(g_c), s	1.9	0.0	1.1	1.3	3.6	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	165		109	939	569	
V/C Ratio(X)	0.66		0.55	0.16	0.45	
Avail Cap(c_a), veh/h	1012		738	3445	2420	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.3	0.0	13.8	3.5	8.1	0.0
Incr Delay (d2), s/veh	4.5	0.0	4.3	0.1	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.4	0.0	0.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	17.7	0.0	18.1	3.6	8.7	0.0
LnGrp LOS	B		B	A	A	
Approach Vol, veh/h	109			208	258	
Approach Delay, s/veh	17.7			7.8	8.7	
Approach LOS	B			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		23.0		7.5	6.5	16.5
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		60.5		18.5	13.5	42.5
Max Q Clear Time (g_c+I1), s		3.3		3.9	3.1	5.6
Green Ext Time (p_c), s		0.7		0.2	0.1	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	10.1
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	169	7	105	135	110	3	374	69	113	526	30
Future Volume (veh/h)	27	169	7	105	135	110	3	374	69	113	526	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	31	192	8	119	153	125	3	425	78	128	598	34
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	38	232	230	142	183	282	131	658	319	161	713	346
Arrive On Green	0.15	0.15	0.15	0.18	0.18	0.18	0.08	0.21	0.21	0.09	0.22	0.22
Sat Flow, veh/h	252	1561	1547	782	1005	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	223	0	8	272	0	125	3	425	78	128	598	34
Grp Sat Flow(s),veh/h/ln	1813	0	1547	1787	0	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	7.9	0.0	0.3	9.7	0.0	4.8	0.1	8.1	2.8	4.8	11.9	1.2
Cycle Q Clear(g_c), s	7.9	0.0	0.3	9.7	0.0	4.8	0.1	8.1	2.8	4.8	11.9	1.2
Prop In Lane	0.14		1.00	0.44		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	270	0	230	325	0	282	131	658	319	161	713	346
V/C Ratio(X)	0.83	0.00	0.03	0.84	0.00	0.44	0.02	0.65	0.24	0.79	0.84	0.10
Avail Cap(c_a), veh/h	287	0	245	364	0	315	131	674	327	197	794	385
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	0.0	24.1	26.1	0.0	24.1	28.4	24.1	22.0	29.4	24.6	20.4
Incr Delay (d2), s/veh	16.9	0.0	0.1	14.3	0.0	1.1	0.1	2.1	0.4	16.4	7.3	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(50%),veh/ln	4.3	0.0	0.1	4.9	0.0	1.6	0.0	2.8	0.9	2.5	4.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.3	0.0	24.2	40.4	0.0	25.2	28.4	26.1	22.4	45.8	31.9	20.5
LnGrp LOS	D		C	D		C	C	C	C	D	C	C
Approach Vol, veh/h		231			397			506			760	
Approach Delay, s/veh		43.6			35.6			25.6			33.7	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.6	20.7		16.4	9.5	21.8		18.6				
Change Period (Y+Rc), s	4.5	7.0		6.5	4.5	7.0		6.5				
Max Green Setting (Gmax), s	7.5	14.0		10.5	5.0	16.5		13.5				
Max Q Clear Time (g_c+I1), s	6.8	10.1		9.9	2.1	13.9		11.7				
Green Ext Time (p_c), s	0.0	1.0		0.1	0.0	0.9		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	33.1
HCM 7th LOS	C

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	0	64	46	0
Future Vol, veh/h	0	4	0	64	46	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	385	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	10	10	10	18	18	10
Mvmt Flow	0	5	0	74	53	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	128	53	53	0	-	0
Stage 1	53	-	-	-	-	-
Stage 2	74	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	848	992	1502	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	929	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	848	992	1502	-	-	-
Mov Cap-2 Maneuver	815	-	-	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	929	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	8.65	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1502	-	992	-	-
HCM Lane V/C Ratio	-	-	0.005	-	-
HCM Ctrl Dly (s/v)	0	-	8.6	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	46	1	0	66	4	0	0	1	6	0	2
Future Vol, veh/h	1	46	1	0	66	4	0	0	1	6	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	10	18	10	10	18	10	10	2	10	10	2	10
Mvmt Flow	1	52	1	0	75	5	0	0	1	7	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	80	0	0	53	0	0	130	135	53	132	133	77
Stage 1	-	-	-	-	-	-	55	55	-	77	77	-
Stage 2	-	-	-	-	-	-	75	80	-	55	56	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.52	6.3	7.2	6.52	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.018	3.39	3.59	4.018	3.39
Pot Cap-1 Maneuver	1469	-	-	1502	-	-	824	756	992	822	758	962
Stage 1	-	-	-	-	-	-	937	849	-	912	831	-
Stage 2	-	-	-	-	-	-	915	829	-	938	848	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1469	-	-	1502	-	-	822	756	992	821	757	962
Mov Cap-2 Maneuver	-	-	-	-	-	-	822	756	-	821	757	-
Stage 1	-	-	-	-	-	-	937	848	-	912	831	-
Stage 2	-	-	-	-	-	-	912	829	-	936	848	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.16	0	8.63	9.27
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	992	37	-	-	1502	-	-	852
HCM Lane V/C Ratio	0.001	0.001	-	-	-	-	-	0.011
HCM Ctrl Dly (s/v)	8.6	7.5	0	-	0	-	-	9.3
HCM Lane LOS	A	A	A	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	14	82	5	8	66
Future Vol, veh/h	6	14	82	5	8	66
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	10	10	18	10	10	18
Mvmt Flow	6	15	88	5	9	71

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	180	92	0	0	95	0
Stage 1	92	-	-	-	-	-
Stage 2	88	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	791	944	-	-	1451	-
Stage 1	912	-	-	-	-	-
Stage 2	916	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	786	943	-	-	1449	-
Mov Cap-2 Maneuver	774	-	-	-	-	-
Stage 1	911	-	-	-	-	-
Stage 2	910	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.17	0	0.81
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	885	1449	-
HCM Lane V/C Ratio	-	-	0.024	0.006	-
HCM Ctrl Dly (s/v)	-	-	9.2	7.5	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	2	6	2	7	1	88	0	0	90	9
Future Vol, veh/h	6	0	2	6	2	7	1	88	0	0	90	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	240	-	-	290	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	19	19	19	19	19	19	10	10	10	10	10	10
Mvmt Flow	6	0	2	6	2	7	1	92	0	0	94	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	193	192	98	188	197	92	103	0	0	92	0	0
Stage 1	98	98	-	94	94	-	-	-	-	-	-	-
Stage 2	95	94	-	94	103	-	-	-	-	-	-	-
Critical Hdwy	7.29	6.69	6.39	7.29	6.69	6.39	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.29	5.69	-	6.29	5.69	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.29	5.69	-	6.29	5.69	-	-	-	-	-	-	-
Follow-up Hdwy	3.671	4.171	3.471	3.671	4.171	3.471	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	731	674	913	737	670	921	1440	-	-	1454	-	-
Stage 1	868	782	-	873	785	-	-	-	-	-	-	-
Stage 2	872	785	-	873	778	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	722	673	913	735	669	921	1440	-	-	1454	-	-
Mov Cap-2 Maneuver	722	673	-	735	669	-	-	-	-	-	-	-
Stage 1	868	782	-	872	785	-	-	-	-	-	-	-
Stage 2	862	785	-	871	778	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	9.78	9.59	0.08	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1440	-	-	762	800	1454	-	-
HCM Lane V/C Ratio	0.001	-	-	0.011	0.02	-	-	-
HCM Ctrl Dly (s/v)	7.5	-	-	9.8	9.6	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	88	45	107	76	32	57	72	43	19	100	40
Future Vol, veh/h	38	88	45	107	76	32	57	72	43	19	100	40
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
Heavy Vehicles, %	8	8	8	8	8	8	7	7	7	5	5	5
Mvmt Flow	42	97	49	118	84	35	63	79	47	21	110	44
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	9.8	10.8	10	9.7
HCM LOS	A	B	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	61%	0%	46%	0%	74%	0%	28%	0%
Vol Thru, %	39%	46%	54%	49%	26%	54%	72%	56%
Vol Right, %	0%	54%	0%	51%	0%	46%	0%	44%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	93	79	82	89	145	70	69	90
LT Vol	57	0	38	0	107	0	19	0
Through Vol	36	36	44	44	38	38	50	50
RT Vol	0	43	0	45	0	32	0	40
Lane Flow Rate	102	87	90	98	159	77	76	99
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.182	0.138	0.157	0.155	0.281	0.121	0.131	0.159
Departure Headway (Hd)	6.419	5.723	6.283	5.69	6.34	5.644	6.243	5.788
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	559	627	571	631	567	636	575	620
Service Time	4.152	3.456	4.012	3.42	4.068	3.371	3.976	3.521
HCM Lane V/C Ratio	0.182	0.139	0.158	0.155	0.28	0.121	0.132	0.16
HCM Control Delay, s/veh	10.6	9.4	10.2	9.5	11.5	9.2	9.9	9.6
HCM Lane LOS	B	A	B	A	B	A	A	A
HCM 95th-tile Q	0.7	0.5	0.6	0.5	1.1	0.4	0.4	0.6

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	1	24	0	1	2	16	341	0	3	434	13
Future Vol, veh/h	7	1	24	0	1	2	16	341	0	3	434	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	400	-	400	395	-	510
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	35	10	10	35	10
Mvmt Flow	8	1	26	0	1	2	17	371	0	3	472	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	699	884	236	648	884	185	472	0	0	371	0	0
Stage 1	478	478	-	405	405	-	-	-	-	-	-	-
Stage 2	221	405	-	243	478	-	-	-	-	-	-	-
Critical Hdwy	7.7	6.7	7.1	7.7	6.7	7.1	4.3	-	-	4.3	-	-
Critical Hdwy Stg 1	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.6	4.1	3.4	3.6	4.1	3.4	2.3	-	-	2.3	-	-
Pot Cap-1 Maneuver	312	269	742	340	269	801	1032	-	-	1129	-	-
Stage 1	517	534	-	572	577	-	-	-	-	-	-	-
Stage 2	739	577	-	717	534	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	304	264	742	320	264	801	1032	-	-	1129	-	-
Mov Cap-2 Maneuver	460	430	-	483	424	-	-	-	-	-	-	-
Stage 1	515	532	-	562	567	-	-	-	-	-	-	-
Stage 2	723	567	-	688	532	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.94	10.86	0.38	0.05
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1032	-	-	641	618	1129	-	-
HCM Lane V/C Ratio	0.017	-	-	0.054	0.005	0.003	-	-
HCM Ctrl Dly (s/v)	8.5	-	-	10.9	10.9	8.2	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0	0	-	-

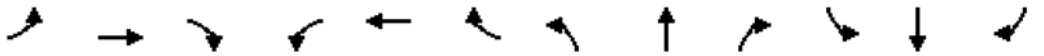
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	470	5	0	331	8	2	0	0	10	4	5
Future Vol, veh/h	1	470	5	0	331	8	2	0	0	10	4	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	11	35	11	11	35	11	11	11	11	11	11	11
Mvmt Flow	1	540	6	0	380	9	2	0	0	11	5	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	390	0	0	546	0	0	735	932	270	653	929	190
Stage 1	-	-	-	-	-	-	543	543	-	380	380	-
Stage 2	-	-	-	-	-	-	193	390	-	272	548	-
Critical Hdwy	4.32	-	-	4.32	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.31	-	-	2.31	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	1104	-	-	959	-	-	291	250	701	335	251	792
Stage 1	-	-	-	-	-	-	470	496	-	590	590	-
Stage 2	-	-	-	-	-	-	766	584	-	685	493	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1104	-	-	959	-	-	286	250	701	335	251	792
Mov Cap-2 Maneuver	-	-	-	-	-	-	428	415	-	503	415	-
Stage 1	-	-	-	-	-	-	469	496	-	590	590	-
Stage 2	-	-	-	-	-	-	754	584	-	685	493	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.02	0	13.46	12
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	428	-	1104	-	-	959	-	-	474	792
HCM Lane V/C Ratio	0.005	-	0.001	-	-	-	-	-	0.034	0.007
HCM Ctrl Dly (s/v)	13.5	0	8.3	-	-	0	-	-	12.9	9.6
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	0	-	-	0	-	-	0.1	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	434	34	16	301	21	51	34	14	46	50	18
Future Volume (veh/h)	13	434	34	16	301	21	51	34	14	46	50	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	14	462	36	17	320	22	54	36	15	49	53	19
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	69	663	51	82	689	47	198	292	122	186	298	107
Arrive On Green	0.04	0.27	0.27	0.05	0.28	0.28	0.12	0.25	0.25	0.11	0.24	0.24
Sat Flow, veh/h	1668	2466	192	1668	2491	170	1668	1170	487	1668	1226	440
Grp Volume(v), veh/h	14	245	253	17	168	174	54	0	51	49	0	72
Grp Sat Flow(s),veh/h/ln	1668	1312	1345	1668	1312	1349	1668	0	1657	1668	0	1666
Q Serve(g_s), s	0.5	10.1	10.1	0.6	6.4	6.4	1.8	0.0	1.4	1.6	0.0	2.0
Cycle Q Clear(g_c), s	0.5	10.1	10.1	0.6	6.4	6.4	1.8	0.0	1.4	1.6	0.0	2.0
Prop In Lane	1.00		0.14	1.00		0.13	1.00		0.29	1.00		0.26
Lane Grp Cap(c), veh/h	69	353	361	82	363	373	198	0	414	186	0	404
V/C Ratio(X)	0.20	0.70	0.70	0.21	0.46	0.47	0.27	0.00	0.12	0.26	0.00	0.18
Avail Cap(c_a), veh/h	343	742	761	343	742	763	343	0	893	343	0	898
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	27.7	19.7	19.7	27.4	18.0	18.0	24.0	0.0	17.4	24.4	0.0	18.0
Incr Delay (d2), s/veh	1.4	2.5	2.5	1.2	0.9	0.9	0.7	0.0	0.1	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(50%),veh/ln	0.2	3.0	3.1	0.2	1.8	1.9	0.7	0.0	0.5	0.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.2	22.2	22.2	28.6	18.9	18.9	24.8	0.0	17.5	25.1	0.0	18.2
LnGrp LOS	C	C	C	C	B	B	C		B	C		B
Approach Vol, veh/h		512			359			105			121	
Approach Delay, s/veh		22.4			19.4			21.3			21.0	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	21.2	11.8	19.2	7.2	21.7	11.4	19.7
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.3	33.9	12.3	32.3	12.3	33.9	12.3	32.3
Max Q Clear Time (g_c+I1), s	2.6	12.1	3.8	4.0	2.5	8.4	3.6	3.4
Green Ext Time (p_c), s	0.0	3.0	0.1	0.4	0.0	2.0	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	21.1
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	1	2	1	260	2	147	4	356	170	0
Future Volume (veh/h)	0	2	1	2	1	260	2	147	4	356	170	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1381	1752	1381	1381	1752
Adj Flow Rate, veh/h	0	2	1	2	1	0	2	155	4	375	179	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	10	35	10	35	35	10
Cap, veh/h	4	12	6	9	241		9	557	315	538	1096	620
Arrive On Green	0.00	0.01	0.01	0.01	0.14	0.00	0.01	0.21	0.21	0.21	0.42	0.00
Sat Flow, veh/h	1668	1102	551	1668	1752	1485	1668	2624	1485	2552	2624	1485
Grp Volume(v), veh/h	0	0	3	2	1	0	2	155	4	375	179	0
Grp Sat Flow(s),veh/h/ln	1668	0	1653	1668	1752	1485	1668	1312	1485	1276	1312	1485
Q Serve(g_s), s	0.0	0.0	0.1	0.1	0.0	0.0	0.1	2.3	0.1	6.4	2.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	0.1	0.0	0.0	0.1	2.3	0.1	6.4	2.0	0.0
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	4	0	18	9	241		9	557	315	538	1096	620
V/C Ratio(X)	0.00	0.00	0.17	0.22	0.00		0.22	0.28	0.01	0.70	0.16	0.00
Avail Cap(c_a), veh/h	354	0	372	354	394		354	613	347	775	1096	620
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	23.1	23.3	17.5	0.0	23.3	15.5	14.6	17.2	8.6	0.0
Incr Delay (d2), s/veh	0.0	0.0	4.3	11.5	0.0	0.0	11.5	0.3	0.0	1.6	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(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.5	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	27.4	34.8	17.5	0.0	34.8	15.8	14.7	18.8	8.6	0.0
LnGrp LOS			C	C	B		C	B	B	B	A	
Approach Vol, veh/h		3			3			161			554	
Approach Delay, s/veh		27.4			29.1			16.0			15.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	16.6	6.0	8.9	6.0	26.3	0.0	14.9
Change Period (Y+Rc), s	5.7	* 6.6	5.7	8.4	5.7	6.6	5.7	8.4
Max Green Setting (Gmax), s	14.3	* 11	10.0	10.6	10.0	13.0	10.0	10.6
Max Q Clear Time (g_c+I1), s	8.4	4.3	2.1	2.1	2.1	4.0	0.0	2.0
Green Ext Time (p_c), s	0.7	0.4	0.0	0.0	0.0	0.5	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	15.8
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

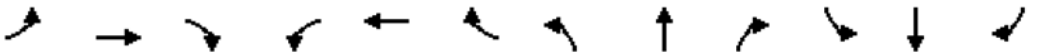
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	373	1	19	270	10	1	13	10	22	26	0
Future Vol, veh/h	1	373	1	19	270	10	1	13	10	22	26	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	570	-	570	650	-	650	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	1	389	1	20	281	10	1	14	10	23	27	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	292	0	0	390	0	0	584	722	194	524	713	141
Stage 1	-	-	-	-	-	-	391	391	-	321	321	-
Stage 2	-	-	-	-	-	-	194	331	-	203	392	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	1211	-	-	1110	-	-	378	336	790	419	340	857
Stage 1	-	-	-	-	-	-	584	586	-	643	631	-
Stage 2	-	-	-	-	-	-	767	624	-	757	585	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1211	-	-	1110	-	-	351	330	790	394	334	857
Mov Cap-2 Maneuver	-	-	-	-	-	-	510	483	-	545	478	-
Stage 1	-	-	-	-	-	-	583	586	-	632	619	-
Stage 2	-	-	-	-	-	-	720	613	-	729	585	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.02	0.53	11.39	12.89
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	484	790	1211	-	-	1110	-	-	506	-
HCM Lane V/C Ratio	0.03	0.013	0.001	-	-	0.018	-	-	0.099	-
HCM Ctrl Dly (s/v)	12.7	9.6	8	-	-	8.3	-	-	12.9	0
HCM Lane LOS	B	A	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.1	0	0	-	-	0.1	-	-	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	1	10	12	17	11	28	148	3	6	302	23
Future Volume (veh/h)	47	1	10	12	17	11	28	148	3	6	302	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	51	1	11	13	18	12	30	161	3	7	328	25
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	124	201	170	48	120	102	91	1085	920	31	1829	139
Arrive On Green	0.07	0.11	0.11	0.03	0.07	0.07	0.11	1.00	1.00	0.02	0.56	0.56
Sat Flow, veh/h	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	3242	246
Grp Volume(v), veh/h	51	1	11	13	18	12	30	161	3	7	173	180
Grp Sat Flow(s),veh/h/ln	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	1721	1767
Q Serve(g_s), s	2.5	0.0	0.6	0.7	0.8	0.7	1.5	0.0	0.0	0.4	4.4	4.4
Cycle Q Clear(g_c), s	2.5	0.0	0.6	0.7	0.8	0.7	1.5	0.0	0.0	0.4	4.4	4.4
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	124	201	170	48	120	102	91	1085	920	31	971	997
V/C Ratio(X)	0.41	0.00	0.06	0.27	0.15	0.12	0.33	0.15	0.00	0.23	0.18	0.18
Avail Cap(c_a), veh/h	236	380	322	217	360	305	217	1085	920	217	971	997
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	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	35.6	35.8	42.9	39.6	39.5	38.8	0.0	0.0	43.6	9.5	9.5
Incr Delay (d2), s/veh	2.2	0.0	0.2	3.0	0.6	0.5	2.1	0.3	0.0	3.7	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(50%),veh/ln	1.1	0.0	0.2	0.3	0.4	0.2	0.6	0.1	0.0	0.2	1.4	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.1	35.6	36.0	45.9	40.2	40.0	40.8	0.3	0.0	47.3	9.9	9.9
LnGrp LOS	D	D	D	D	D	D	D	A	A	D	A	A
Approach Vol, veh/h		63			43			194			360	
Approach Delay, s/veh		40.9			41.9			6.6			10.6	
Approach LOS		D			D			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	61.4	7.2	15.1	9.4	58.3	11.2	11.1
Change Period (Y+Rc), s	4.7	7.5	4.7	5.1	4.7	7.5	4.7	5.1
Max Green Setting (Gmax), s	11.3	26.5	11.3	18.9	11.3	26.5	12.3	17.9
Max Q Clear Time (g_c+I1), s	2.4	2.0	2.7	2.6	3.5	6.4	4.5	2.8
Green Ext Time (p_c), s	0.0	0.7	0.0	0.0	0.0	1.6	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	14.4
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	2	23	24	4	1	16	159	12	0	227	99
Future Volume (veh/h)	18	2	23	24	4	1	16	159	12	0	227	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	20	2	26	27	4	1	18	177	13	0	252	110
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	98	10	95	74	11	75	153	1254	1063	2	998	846
Arrive On Green	0.06	0.06	0.06	0.05	0.05	0.05	0.09	0.69	0.69	0.00	1.00	1.00
Sat Flow, veh/h	1575	157	1535	1512	224	1535	1725	1811	1535	1725	1811	1535
Grp Volume(v), veh/h	22	0	26	31	0	1	18	177	13	0	252	110
Grp Sat Flow(s),veh/h/ln	1732	0	1535	1736	0	1535	1725	1811	1535	1725	1811	1535
Q Serve(g_s), s	1.1	0.0	1.5	1.6	0.0	0.1	0.9	3.0	0.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	0.0	1.5	1.6	0.0	0.1	0.9	3.0	0.2	0.0	0.0	0.0
Prop In Lane	0.91		1.00	0.87		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	0	95	85	0	75	153	1254	1063	2	998	846
V/C Ratio(X)	0.20	0.00	0.27	0.36	0.00	0.01	0.12	0.14	0.01	0.00	0.25	0.13
Avail Cap(c_a), veh/h	210	0	186	249	0	220	197	1254	1063	153	998	846
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	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	0.0	40.3	41.4	0.0	40.7	37.7	4.7	4.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.5	2.6	0.0	0.1	0.3	0.2	0.0	0.0	0.6	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(50%),veh/ln	0.5	0.0	0.6	0.7	0.0	0.0	0.4	0.8	0.1	0.0	0.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.0	0.0	41.8	44.0	0.0	40.8	38.1	5.0	4.3	0.0	0.6	0.3
LnGrp LOS	D		D	D		D	D	A	A		A	A
Approach Vol, veh/h		48			32			208			362	
Approach Delay, s/veh		41.4			43.9			7.8			0.5	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	69.8		10.7	12.7	57.1		9.5				
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1				
Max Green Setting (Gmax), s	8.3	35.8		10.9	10.3	33.5		12.9				
Max Q Clear Time (g_c+I1), s	10.0	5.0		3.5	2.9	2.0		3.6				
Green Ext Time (p_c), s	0.0	0.9		0.0	0.0	1.6		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	8.0
HCM 7th LOS	A

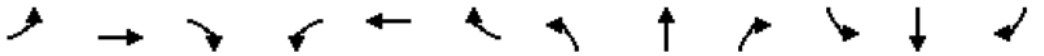
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	143	6	1	165	4	8	6	1	7	3	33
Future Vol, veh/h	24	143	6	1	165	4	8	6	1	7	3	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	650	620	-	600	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	26	157	7	1	181	4	9	7	1	8	3	36

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	186	0	0	164	0	0	304	398	79	318	400	91
Stage 1	-	-	-	-	-	-	210	210	-	184	184	-
Stage 2	-	-	-	-	-	-	95	188	-	135	216	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	1330	-	-	1356	-	-	605	521	941	591	519	924
Stage 1	-	-	-	-	-	-	750	708	-	778	728	-
Stage 2	-	-	-	-	-	-	879	724	-	832	703	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1330	-	-	1356	-	-	566	510	941	572	508	924
Mov Cap-2 Maneuver	-	-	-	-	-	-	662	601	-	681	607	-
Stage 1	-	-	-	-	-	-	735	693	-	777	727	-
Stage 2	-	-	-	-	-	-	840	724	-	806	689	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.18	0.05	10.68	9.41
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	635	941	517	-	-	1356	-	-	657	924
HCM Lane V/C Ratio	0.024	0.001	0.02	-	-	0.001	-	-	0.017	0.039
HCM Ctrl Dly (s/v)	10.8	8.8	7.8	0.1	-	7.7	-	-	10.6	9.1
HCM Lane LOS	B	A	A	A	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.1	0	0.1	-	-	0	-	-	0.1	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	297	96	202	269	43	116	203	206	37	143	23
Future Volume (veh/h)	34	297	96	202	269	43	116	203	206	37	143	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	37	319	103	217	289	46	125	218	222	40	154	25
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	107	502	159	265	855	135	204	393	569	113	224	36
Arrive On Green	0.06	0.19	0.19	0.15	0.28	0.28	0.12	0.22	0.22	0.07	0.15	0.15
Sat Flow, veh/h	1739	2591	822	1739	3003	472	1739	1826	1547	1739	1532	249
Grp Volume(v), veh/h	37	212	210	217	166	169	125	218	222	40	0	179
Grp Sat Flow(s),veh/h/ln	1739	1735	1678	1739	1735	1741	1739	1826	1547	1739	0	1781
Q Serve(g_s), s	1.2	6.7	6.9	7.2	4.5	4.6	4.1	6.3	6.3	1.3	0.0	5.7
Cycle Q Clear(g_c), s	1.2	6.7	6.9	7.2	4.5	4.6	4.1	6.3	6.3	1.3	0.0	5.7
Prop In Lane	1.00		0.49	1.00		0.27	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	107	336	325	265	494	496	204	393	569	113	0	260
V/C Ratio(X)	0.35	0.63	0.65	0.82	0.34	0.34	0.61	0.55	0.39	0.35	0.00	0.69
Avail Cap(c_a), veh/h	234	1036	1002	331	1153	1157	252	1014	1095	234	0	992
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	0.00	1.00
Uniform Delay (d), s/veh	26.7	22.0	22.1	24.4	16.8	16.8	24.9	20.8	13.9	26.6	0.0	24.1
Incr Delay (d2), s/veh	1.9	1.9	2.2	12.3	0.4	0.4	2.9	1.2	0.4	1.9	0.0	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(50%),veh/ln	0.5	2.7	2.7	3.7	1.7	1.7	1.7	2.5	1.9	0.6	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.7	23.9	24.2	36.7	17.2	17.3	27.9	22.0	14.3	28.5	0.0	27.3
LnGrp LOS	C	C	C	D	B	B	C	C	B	C		C
Approach Vol, veh/h		459			552			565			219	
Approach Delay, s/veh		24.4			24.9			20.3			27.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	17.9	12.7	15.1	8.4	23.3	8.6	19.2
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	11.3	35.5	8.6	* 33	8.0	* 40	8.0	33.0
Max Q Clear Time (g_c+I1), s	9.2	8.9	6.1	7.7	3.2	6.6	3.3	8.3
Green Ext Time (p_c), s	0.1	2.7	0.1	1.0	0.0	2.1	0.0	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	23.7
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	29	62	140	40	98	50	61	250	12	45	393	34
Future Volume (veh/h)	29	62	140	40	98	50	61	250	12	45	393	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	31	65	147	42	103	53	64	263	13	47	414	36
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	122	277	393	151	308	261	346	631	307	163	603	294
Arrive On Green	0.07	0.16	0.16	0.09	0.18	0.18	0.11	0.21	0.21	0.10	0.20	0.20
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	3047	1485
Grp Volume(v), veh/h	31	65	147	42	103	53	64	263	13	47	414	36
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1523	1485
Q Serve(g_s), s	1.1	2.0	5.1	1.5	3.3	1.9	1.1	4.7	0.4	1.7	8.0	1.3
Cycle Q Clear(g_c), s	1.1	2.0	5.1	1.5	3.3	1.9	1.1	4.7	0.4	1.7	8.0	1.3
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	122	277	393	151	308	261	346	631	307	163	603	294
V/C Ratio(X)	0.25	0.23	0.37	0.28	0.33	0.20	0.19	0.42	0.04	0.29	0.69	0.12
Avail Cap(c_a), veh/h	298	1414	1357	298	1414	1198	528	1842	898	298	1890	921
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	27.7	23.3	18.9	26.8	22.8	22.3	25.7	21.7	20.0	26.5	23.5	20.8
Incr Delay (d2), s/veh	1.1	0.4	0.6	1.0	0.6	0.4	0.3	0.4	0.1	1.0	1.4	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(50%),veh/ln	0.4	0.8	1.6	0.6	1.2	0.6	0.4	1.5	0.1	0.6	2.5	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.7	23.7	19.5	27.8	23.4	22.6	26.0	22.2	20.1	27.4	24.9	21.0
LnGrp LOS	C	C	B	C	C	C	C	C	C	C	C	C
Approach Vol, veh/h		243			198			340			497	
Approach Delay, s/veh		21.8			24.1			22.8			24.9	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	21.5	11.4	18.4	12.4	20.9	10.3	19.5
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	11.3	38.2	11.3	51.0	10.3	39.2	11.3	51.0
Max Q Clear Time (g_c+I1), s	3.7	6.7	3.5	7.1	3.1	10.0	3.1	5.3
Green Ext Time (p_c), s	0.0	1.5	0.0	0.8	0.1	2.5	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	23.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	92	165	63	128	65	127	821	23	42	646	49
Future Volume (veh/h)	56	92	165	63	128	65	127	821	23	42	646	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	61	100	179	68	139	71	138	892	25	46	702	53
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	102	168	234	88	180	231	158	1384	39	66	1122	85
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.09	0.40	0.40	0.04	0.34	0.34
Sat Flow, veh/h	679	1113	1547	590	1206	1547	1739	3447	97	1739	3269	247
Grp Volume(v), veh/h	161	0	179	207	0	71	138	449	468	46	372	383
Grp Sat Flow(s),veh/h/ln	1792	0	1547	1796	0	1547	1739	1735	1809	1739	1735	1781
Q Serve(g_s), s	7.7	0.0	10.2	10.1	0.0	3.7	7.2	19.1	19.1	2.4	16.4	16.4
Cycle Q Clear(g_c), s	7.7	0.0	10.2	10.1	0.0	3.7	7.2	19.1	19.1	2.4	16.4	16.4
Prop In Lane	0.38		1.00	0.33		1.00	1.00		0.05	1.00		0.14
Lane Grp Cap(c), veh/h	270	0	234	269	0	231	158	697	726	66	595	611
V/C Ratio(X)	0.60	0.00	0.77	0.77	0.00	0.31	0.87	0.64	0.64	0.70	0.63	0.63
Avail Cap(c_a), veh/h	842	0	727	844	0	727	158	697	726	95	595	611
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	0.0	37.3	37.4	0.0	34.7	41.1	22.1	22.1	43.5	25.1	25.1
Incr Delay (d2), s/veh	2.1	0.0	5.2	4.6	0.0	0.7	38.2	4.6	4.4	12.8	4.9	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(50%),veh/ln	3.5	0.0	4.2	4.8	0.0	1.5	4.6	7.9	8.2	1.2	7.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.3	0.0	42.5	42.0	0.0	35.4	79.3	26.6	26.5	56.3	30.0	29.9
LnGrp LOS	D		D	D		D	E	C	C	E	C	C
Approach Vol, veh/h		340			278			1055			801	
Approach Delay, s/veh		40.5			40.3			33.5			31.5	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	44.0		19.5	14.0	38.6		19.4				
Change Period (Y+Rc), s	5.2	7.2		5.7	5.7	7.2		5.7				
Max Green Setting (Gmax), s	5.6	35.2		43.0	8.3	31.4		43.0				
Max Q Clear Time (g_c+I1), s	4.4	21.1		12.2	9.2	18.4		12.1				
Green Ext Time (p_c), s	0.0	4.5		1.7	0.0	3.5		1.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	34.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	35	80	13	53	11	70	549	11	18	752	26
Future Volume (veh/h)	6	35	80	13	53	11	70	549	11	18	752	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	7	40	92	15	61	13	80	631	0	21	864	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	63	75	156	86	193	37	236	1391		97	1128	
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.14	0.44	0.00	0.06	0.36	0.00
Sat Flow, veh/h	32	493	1028	139	1270	241	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	139	0	0	89	0	0	80	631	0	21	864	0
Grp Sat Flow(s),veh/h/ln	1554	0	0	1651	0	0	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	2.8	9.0	0.0	0.8	15.7	0.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	3.0	0.0	0.0	2.8	9.0	0.0	0.8	15.7	0.0
Prop In Lane	0.05		0.66	0.17		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	295	0	0	316	0	0	236	1391		97	1128	
V/C Ratio(X)	0.47	0.00	0.00	0.28	0.00	0.00	0.34	0.45		0.22	0.77	
Avail Cap(c_a), veh/h	382	0	0	406	0	0	343	2032		317	1983	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	25.5	0.0	0.0	24.5	0.0	0.0	25.0	12.7	0.0	29.0	18.4	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.0	0.5	0.0	0.0	0.8	0.2	0.0	1.1	1.1	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(50%),veh/ln	2.0	0.0	0.0	1.2	0.0	0.0	1.0	2.4	0.0	0.3	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.7	0.0	0.0	25.0	0.0	0.0	25.9	12.9	0.0	30.1	19.5	0.0
LnGrp LOS	C			C			C	B		C	B	
Approach Vol, veh/h		139			89			711			885	
Approach Delay, s/veh		26.7			25.0			14.4			19.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	36.9		18.3	14.8	31.5		18.3				
Change Period (Y+Rc), s	5.7	8.4		8.5	5.7	8.4		8.5				
Max Green Setting (Gmax), s	12.3	41.6		13.5	13.3	40.6		13.5				
Max Q Clear Time (g_c+I1), s	2.8	11.0		7.3	4.8	17.7		5.0				
Green Ext Time (p_c), s	0.0	4.0		0.3	0.1	5.4		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.4
HCM 7th LOS	B

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	273	77	186	261	137	83	782	140	141	623	194
Future Volume (veh/h)	206	273	77	186	261	137	83	782	140	141	623	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	222	294	83	200	281	147	89	841	151	152	670	209
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	217	482	134	199	378	192	112	1240	553	164	1342	599
Arrive On Green	0.12	0.18	0.18	0.11	0.17	0.17	0.06	0.36	0.36	0.09	0.39	0.39
Sat Flow, veh/h	1739	2683	744	1739	2225	1132	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	222	188	189	200	217	211	89	841	151	152	670	209
Grp Sat Flow(s),veh/h/ln	1739	1735	1692	1739	1735	1622	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	12.3	9.9	10.2	11.3	11.7	12.2	5.0	20.3	6.9	8.6	14.5	9.5
Cycle Q Clear(g_c), s	12.3	9.9	10.2	11.3	11.7	12.2	5.0	20.3	6.9	8.6	14.5	9.5
Prop In Lane	1.00		0.44	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	217	312	304	199	294	275	112	1240	553	164	1342	599
V/C Ratio(X)	1.03	0.60	0.62	1.01	0.74	0.77	0.79	0.68	0.27	0.93	0.50	0.35
Avail Cap(c_a), veh/h	217	773	754	199	755	706	132	1240	553	164	1342	599
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	43.2	37.3	37.4	43.7	38.9	39.1	45.5	26.9	22.6	44.4	23.0	21.5
Incr Delay (d2), s/veh	67.8	1.9	2.1	65.2	3.6	4.4	23.8	3.0	1.2	49.7	1.3	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(50%),veh/ln	9.2	4.2	4.2	8.3	5.1	5.0	2.8	8.3	2.6	5.8	5.7	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	111.0	39.1	39.5	108.9	42.5	43.5	69.3	29.9	23.8	94.1	24.3	23.1
LnGrp LOS	F	D	D	F	D	D	E	C	C	F	C	C
Approach Vol, veh/h		599			628			1081			1031	
Approach Delay, s/veh		65.9			64.0			32.3			34.4	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	42.5	17.0	24.3	12.1	45.4	18.0	23.3
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	9.3	35.3	11.3	44.0	7.5	37.1	12.3	43.0
Max Q Clear Time (g_c+I1), s	10.6	22.3	13.3	12.2	7.0	16.5	14.3	14.2
Green Ext Time (p_c), s	0.0	4.8	0.0	2.2	0.0	4.8	0.0	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	44.9
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	2	267	3	3	1	222	573	2	1	787	59
Future Volume (veh/h)	49	2	267	3	3	1	222	573	2	1	787	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	54	2	297	3	3	1	247	637	2	1	874	66
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	334	12	540	14	14	5	507	1653	5	5	1132	532
Arrive On Green	0.21	0.21	0.21	0.02	0.02	0.02	0.16	0.51	0.51	0.00	0.36	0.36
Sat Flow, veh/h	1612	60	1485	717	717	239	3237	3231	10	1668	3159	1485
Grp Volume(v), veh/h	56	0	297	7	0	0	247	311	328	1	874	66
Grp Sat Flow(s),veh/h/ln	1671	0	1485	1673	0	0	1618	1580	1661	1668	1580	1485
Q Serve(g_s), s	1.9	0.0	11.1	0.3	0.0	0.0	4.9	8.4	8.4	0.0	17.1	2.1
Cycle Q Clear(g_c), s	1.9	0.0	11.1	0.3	0.0	0.0	4.9	8.4	8.4	0.0	17.1	2.1
Prop In Lane	0.96		1.00	0.43		0.14	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	346	0	540	33	0	0	507	808	850	5	1132	532
V/C Ratio(X)	0.16	0.00	0.55	0.21	0.00	0.00	0.49	0.39	0.39	0.20	0.77	0.12
Avail Cap(c_a), veh/h	1199	0	1297	264	0	0	581	1020	1073	263	1972	927
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.7	0.0	17.6	33.6	0.0	0.0	26.8	10.3	10.4	34.7	19.8	15.0
Incr Delay (d2), s/veh	0.2	0.0	0.9	3.0	0.0	0.0	0.7	0.3	0.3	18.1	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(50%),veh/ln	0.7	0.0	3.5	0.1	0.0	0.0	1.7	2.2	2.3	0.0	5.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.9	0.0	18.5	36.7	0.0	0.0	27.6	10.7	10.6	52.8	21.0	15.1
LnGrp LOS	C		B	D			C	B	B	D	C	B
Approach Vol, veh/h		353			7			886			941	
Approach Delay, s/veh		19.2			36.7			15.4			20.6	
Approach LOS		B			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	40.2		18.9	15.4	29.5		5.9				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	1.6	45.0		50.0	12.5	43.5		11.0				
Max Q Clear Time (g_c+I1), s	2.0	10.4		13.1	6.9	19.1		2.3				
Green Ext Time (p_c), s	0.0	3.5		1.3	0.4	5.9		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	196	89	93	202	445	89	849	67	379	857	59
Future Volume (veh/h)	67	196	89	93	202	445	89	849	67	379	857	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	69	202	92	96	208	0	92	875	69	391	884	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	91	317	139	122	530		118	1084	85	490	1473	
Arrive On Green	0.05	0.14	0.14	0.07	0.15	0.00	0.07	0.33	0.33	0.15	0.42	0.00
Sat Flow, veh/h	1739	2346	1029	1739	3469	1547	1739	3257	257	3374	3469	1547
Grp Volume(v), veh/h	69	147	147	96	208	0	92	466	478	391	884	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1641	1739	1735	1547	1739	1735	1780	1687	1735	1547
Q Serve(g_s), s	2.8	5.7	6.0	3.8	3.8	0.0	3.7	17.3	17.3	7.9	13.9	0.0
Cycle Q Clear(g_c), s	2.8	5.7	6.0	3.8	3.8	0.0	3.7	17.3	17.3	7.9	13.9	0.0
Prop In Lane	1.00		0.63	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	91	234	222	122	530		118	577	592	490	1473	
V/C Ratio(X)	0.75	0.63	0.66	0.79	0.39		0.78	0.81	0.81	0.80	0.60	
Avail Cap(c_a), veh/h	123	739	699	156	1561		210	722	740	580	1670	
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.9	28.8	28.9	32.2	26.9	0.0	32.3	21.4	21.4	29.1	15.7	0.0
Incr Delay (d2), s/veh	16.3	2.8	3.3	18.3	0.5	0.0	10.7	5.5	5.3	6.6	0.5	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(50%),veh/ln	1.5	2.4	2.4	2.1	1.5	0.0	1.8	7.2	7.4	3.5	4.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.2	31.5	32.3	50.5	27.4	0.0	43.0	26.9	26.8	35.7	16.1	0.0
LnGrp LOS	D	C	C	D	C		D	C	C	D	B	
Approach Vol, veh/h		363			304			1036			1275	
Approach Delay, s/veh		35.2			34.7			28.3			22.1	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	36.0	8.4	16.6	15.9	29.5	9.6	15.3
Change Period (Y+Rc), s	4.7	6.1	4.7	* 5.8	5.7	6.1	4.7	5.8
Max Green Setting (Gmax), s	8.5	33.9	5.0	* 32	12.1	29.3	6.3	30.0
Max Q Clear Time (g_c+I1), s	5.7	15.9	4.8	5.8	9.9	19.3	5.8	8.0
Green Ext Time (p_c), s	0.0	5.8	0.0	1.2	0.3	4.2	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	27.1
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	223	143	91	181	81	100	688	113	98	883	60
Future Volume (veh/h)	26	223	143	91	181	81	100	688	113	98	883	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	29	251	161	102	203	91	112	773	127	110	992	67
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	119	331	205	198	487	211	155	1129	531	154	1128	530
Arrive On Green	0.07	0.17	0.17	0.12	0.22	0.22	0.09	0.36	0.36	0.09	0.36	0.36
Sat Flow, veh/h	1668	1974	1222	1668	2262	978	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	29	210	202	102	147	147	112	773	127	110	992	67
Grp Sat Flow(s),veh/h/ln	1668	1664	1532	1668	1664	1576	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	1.7	12.5	13.1	5.9	7.9	8.3	6.8	21.5	6.2	6.6	30.5	3.1
Cycle Q Clear(g_c), s	1.7	12.5	13.1	5.9	7.9	8.3	6.8	21.5	6.2	6.6	30.5	3.1
Prop In Lane	1.00		0.80	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	279	257	198	358	339	155	1129	531	154	1128	530
V/C Ratio(X)	0.24	0.75	0.79	0.51	0.41	0.43	0.72	0.68	0.24	0.71	0.88	0.13
Avail Cap(c_a), veh/h	210	916	844	210	916	868	161	1270	597	179	1303	612
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	45.5	41.1	41.3	42.8	35.0	35.1	45.7	28.3	23.4	45.6	31.2	22.4
Incr Delay (d2), s/veh	1.1	4.1	5.3	2.1	0.8	0.9	14.3	1.3	0.2	10.6	6.5	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(50%),veh/ln	0.7	5.1	5.0	2.4	3.1	3.1	3.3	7.6	2.0	3.1	11.5	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.5	45.2	46.6	44.8	35.7	36.0	59.9	29.6	23.6	56.2	37.7	22.5
LnGrp LOS	D	D	D	D	D	D	E	C	C	E	D	C
Approach Vol, veh/h		441			396			1012			1169	
Approach Delay, s/veh		45.9			38.2			32.2			38.5	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	45.4	18.0	24.8	15.3	45.4	13.1	29.8
Change Period (Y+Rc), s	5.7	8.4	5.7	7.5	5.7	8.4	5.7	7.5
Max Green Setting (Gmax), s	10.1	41.6	13.0	57.0	10.0	42.7	13.0	57.0
Max Q Clear Time (g_c+I1), s	8.6	23.5	7.9	15.1	8.8	32.5	3.7	10.3
Green Ext Time (p_c), s	0.0	4.8	0.1	2.3	0.0	4.5	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	37.5
HCM 7th LOS	D

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	16	0	88	4	115	0	0	174	53
Future Vol, veh/h	0	0	0	16	0	88	4	115	0	0	174	53
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	17	0	96	4	125	0	0	189	58

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	323	380	125	247	0	-	-	-	0
Stage 1	134	134	-	-	-	-	-	-	-
Stage 2	189	247	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	651	537	899	1263	-	0	0	-	-
Stage 1	869	767	-	-	-	0	0	-	-
Stage 2	820	684	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	648	0	899	1263	-	-	-	-	-
Mov Cap-2 Maneuver	648	0	-	-	-	-	-	-	-
Stage 1	865	0	-	-	-	-	-	-	-
Stage 2	820	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.67	0.26	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	61	-	648	899	-	-
HCM Lane V/C Ratio	0.003	-	0.027	0.106	-	-
HCM Ctrl Dly (s/v)	7.9	0	10.7	9.5	-	-
HCM Lane LOS	A	A	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.4	-	-

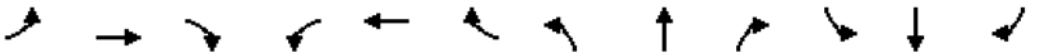
Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	94	0	4	0	0	0	0	25	16	140	55	0
Future Vol, veh/h	94	0	4	0	0	0	0	25	16	140	55	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	98	0	4	0	0	0	0	26	17	146	57	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	375	392	57	-	0	0	43	0	0
Stage 1	349	349	-	-	-	-	-	-	-
Stage 2	26	43	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	-	-	-	4.22	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	-	-	-	2.308	-	-
Pot Cap-1 Maneuver	607	529	981	0	-	-	1504	-	0
Stage 1	692	616	-	0	-	-	-	-	0
Stage 2	971	840	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	546	0	981	-	-	-	1504	-	-
Mov Cap-2 Maneuver	546	0	-	-	-	-	-	-	-
Stage 1	692	0	-	-	-	-	-	-	-
Stage 2	874	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.85	0	5.49
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	546	981	1292	-
HCM Lane V/C Ratio	-	-	0.179	0.004	0.097	-
HCM Ctrl Dly (s/v)	-	-	13	8.7	7.7	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.6	0	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	29	0	612	7	197	0	0	979	62
Future Volume (veh/h)	0	0	0	29	0	612	7	197	0	0	979	62
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				31	0	658	8	212	0	0	1053	67
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				486	0	760	25	1992	0	0	1704	760
Arrive On Green				0.28	0.00	0.28	0.03	1.00	0.00	0.00	0.49	0.49
Sat Flow, veh/h				1739	0	2723	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				31	0	658	8	212	0	0	1053	67
Grp Sat Flow(s),veh/h/ln				1739	0	1362	1739	1735	0	0	1735	1547
Q Serve(g_s), s				1.2	0.0	20.7	0.4	0.0	0.0	0.0	20.0	2.1
Cycle Q Clear(g_c), s				1.2	0.0	20.7	0.4	0.0	0.0	0.0	20.0	2.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				486	0	760	25	1992	0	0	1704	760
V/C Ratio(X)				0.06	0.00	0.87	0.33	0.11	0.00	0.00	0.62	0.09
Avail Cap(c_a), veh/h				715	0	1120	135	1992	0	0	1704	760
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				23.8	0.0	30.8	43.3	0.0	0.0	0.0	16.7	12.2
Incr Delay (d2), s/veh				0.1	0.0	5.0	7.5	0.1	0.0	0.0	1.7	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
%ile BackOfQ(50%),veh/ln				0.4	0.0	6.6	0.2	0.0	0.0	0.0	7.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				23.9	0.0	35.8	50.8	0.1	0.0	0.0	18.4	12.4
LnGrp LOS				C		D	D	A			B	B
Approach Vol, veh/h					689			220			1120	
Approach Delay, s/veh					35.3			2.0			18.1	
Approach LOS					D			A			B	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	57.8		7.5	50.3		32.2						
Change Period (Y+Rc), s	6.1		6.2	6.1		7.1						
Max Green Setting (Gmax), s	39.8		7.0	26.6		37.0						
Max Q Clear Time (g_c+I1), s	2.0		2.4	22.0		22.7						
Green Ext Time (p_c), s	1.4		0.0	2.8		2.5						

Intersection Summary		
HCM 7th Control Delay, s/veh	22.2	
HCM 7th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	2	22	0	0	0	0	131	32	0	276	737
Future Volume (veh/h)	74	2	22	0	0	0	0	131	32	0	276	737
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826				0	1826	1826	0	1826	1826
Adj Flow Rate, veh/h	52	40	23				0	139	34	0	294	784
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	5	5	5				0	5	5	0	5	5
Cap, veh/h	164	103	59				0	2240	533	0	2795	2451
Arrive On Green	0.09	0.09	0.09				0.00	0.81	0.81	0.00	0.27	0.27
Sat Flow, veh/h	1739	1088	625				0	2871	661	0	3561	2723
Grp Volume(v), veh/h	52	0	63				0	85	88	0	294	784
Grp Sat Flow(s),veh/h/ln	1739	0	1713				0	1735	1707	0	1735	1362
Q Serve(g_s), s	2.5	0.0	3.1				0.0	0.9	0.9	0.0	5.8	10.8
Cycle Q Clear(g_c), s	2.5	0.0	3.1				0.0	0.9	0.9	0.0	5.8	10.8
Prop In Lane	1.00		0.37				0.00		0.39	0.00		1.00
Lane Grp Cap(c), veh/h	164	0	162				0	1397	1375	0	2795	2451
V/C Ratio(X)	0.32	0.00	0.39				0.00	0.06	0.06	0.00	0.11	0.32
Avail Cap(c_a), veh/h	783	0	771				0	1397	1375	0	2795	2451
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.91	0.91
Uniform Delay (d), s/veh	38.0	0.0	38.3				0.0	1.8	1.8	0.0	8.5	3.7
Incr Delay (d2), s/veh	1.1	0.0	1.5				0.0	0.1	0.1	0.0	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(50%),veh/ln	1.0	0.0	1.3				0.0	0.2	0.2	0.0	1.4	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.1	0.0	39.8				0.0	1.9	1.9	0.0	8.6	3.8
LnGrp LOS	D		D					A	A		A	A
Approach Vol, veh/h		115						173			1078	
Approach Delay, s/veh		39.5						1.9			5.1	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	77.0	13.0	77.0
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	40.5	40.5
Max Q Clear Time (g_c+I1), s	2.9	5.1	12.8
Green Ext Time (p_c), s	1.0	0.4	5.8

Intersection Summary	
HCM 7th Control Delay, s/veh	7.6
HCM 7th 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												
Traffic Volume (veh/h)	22	60	0	28	48	68	125	999	35	140	1412	50
Future Volume (veh/h)	22	60	0	28	48	68	125	999	35	140	1412	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	23	64	0	30	51	72	133	1063	37	149	1502	53
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	65	116	147	91	118	147	162	2069	72	180	2103	74
Arrive On Green	0.09	0.09	0.00	0.09	0.09	0.09	0.09	0.60	0.60	0.10	0.61	0.61
Sat Flow, veh/h	238	1237	1560	474	1258	1560	1753	3448	120	1753	3446	121
Grp Volume(v), veh/h	87	0	0	81	0	72	133	539	561	149	761	794
Grp Sat Flow(s),veh/h/ln	1475	0	1560	1733	0	1560	1753	1749	1819	1753	1749	1819
Q Serve(g_s), s	1.9	0.0	0.0	0.0	0.0	4.7	7.9	18.9	18.9	8.9	31.9	32.1
Cycle Q Clear(g_c), s	6.4	0.0	0.0	4.5	0.0	4.7	7.9	18.9	18.9	8.9	31.9	32.1
Prop In Lane	0.26		1.00	0.37		1.00	1.00		0.07	1.00		0.07
Lane Grp Cap(c), veh/h	182	0	147	209	0	147	162	1049	1092	180	1067	1110
V/C Ratio(X)	0.48	0.00	0.00	0.39	0.00	0.49	0.82	0.51	0.51	0.83	0.71	0.72
Avail Cap(c_a), veh/h	661	0	604	679	0	604	206	1049	1092	272	1067	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	0.0	0.0	45.6	0.0	45.7	47.3	12.3	12.3	46.8	14.3	14.3
Incr Delay (d2), s/veh	2.0	0.0	0.0	1.2	0.0	2.5	18.5	1.8	1.7	12.2	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(50%),veh/ln	2.3	0.0	0.0	2.0	0.0	1.9	4.1	6.6	6.8	4.3	11.3	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.2	0.0	0.0	46.8	0.0	48.2	65.8	14.1	14.0	59.0	18.3	18.3
LnGrp LOS	D			D		D	E	B	B	E	B	B
Approach Vol, veh/h		87			153			1233			1704	
Approach Delay, s/veh		48.2			47.4			19.6			21.9	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.6	72.1		17.5	15.5	73.2		17.5				
Change Period (Y+Rc), s	5.7	8.4		7.5	5.7	8.4		7.5				
Max Green Setting (Gmax), s	10.9	60.8		41.1	12.5	64.8		41.1				
Max Q Clear Time (g_c+I1), s	10.9	20.9		8.4	9.9	34.1		6.7				
Green Ext Time (p_c), s	0.2	7.3		0.4	0.1	11.9		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	22.9
HCM 7th LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	533	308	283	473	144	207
Future Volume (veh/h)	533	308	283	473	144	207
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	561	324	298	498	152	218
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1058	813	412	1829	383	600
Arrive On Green	0.30	0.30	0.12	0.52	0.22	0.22
Sat Flow, veh/h	3618	1572	3428	3618	1767	2768
Grp Volume(v), veh/h	561	324	298	498	152	218
Grp Sat Flow(s),veh/h/ln	1763	1572	1714	1763	1767	1384
Q Serve(g_s), s	6.1	5.7	3.8	3.6	3.4	3.1
Cycle Q Clear(g_c), s	6.1	5.7	3.8	3.6	3.4	3.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1058	813	412	1829	383	600
V/C Ratio(X)	0.53	0.40	0.72	0.27	0.40	0.36
Avail Cap(c_a), veh/h	3469	1888	412	4185	1491	2336
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	13.3	6.7	19.4	6.2	15.4	15.2
Incr Delay (d2), s/veh	0.4	0.3	6.1	0.1	0.7	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.4	1.7	1.0	1.2	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.7	7.0	25.5	6.2	16.0	15.6
LnGrp LOS	B	A	C	A	B	B
Approach Vol, veh/h	885			796	370	
Approach Delay, s/veh	11.3			13.5	15.8	
Approach LOS	B			B	B	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		10.0	20.1		15.6	30.1
Change Period (Y+Rc), s		4.5	* 6.4		5.7	6.4
Max Green Setting (Gmax), s		5.5	* 45		38.6	54.3
Max Q Clear Time (g_c+I1), s		5.8	8.1		5.4	5.6
Green Ext Time (p_c), s		0.0	5.7		1.3	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	12.9
HCM 7th LOS	B

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	186	485	155	158	418	190	199	615	87	281	741	219
Future Volume (veh/h)	186	485	155	158	418	190	199	615	87	281	741	219
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	200	522	167	170	449	204	214	661	94	302	797	235
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	242	788	463	255	786	342	242	961	137	281	1134	506
Arrive On Green	0.07	0.22	0.22	0.07	0.23	0.23	0.07	0.31	0.31	0.08	0.32	0.32
Sat Flow, veh/h	3428	3526	1572	3428	3459	1503	3428	3099	440	3428	3526	1572
Grp Volume(v), veh/h	200	522	167	170	438	215	214	376	379	302	797	235
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1689	1585	1714	1763	1776	1714	1763	1572
Q Serve(g_s), s	4.1	9.5	5.9	3.4	8.1	8.6	4.4	13.2	13.2	5.8	14.0	8.4
Cycle Q Clear(g_c), s	4.1	9.5	5.9	3.4	8.1	8.6	4.4	13.2	13.2	5.8	14.0	8.4
Prop In Lane	1.00		1.00	1.00		0.95	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	242	788	463	255	768	360	242	547	551	281	1134	506
V/C Ratio(X)	0.82	0.66	0.36	0.67	0.57	0.60	0.88	0.69	0.69	1.07	0.70	0.46
Avail Cap(c_a), veh/h	242	1800	914	301	1815	852	242	997	1005	281	2034	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)	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	32.4	25.0	19.7	31.9	24.3	24.4	32.6	21.4	21.4	32.5	21.0	19.1
Incr Delay (d2), s/veh	20.2	1.0	0.5	4.4	0.7	1.6	29.3	1.5	1.5	74.7	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(50%),veh/ln	2.3	3.9	2.1	1.5	3.2	3.2	2.7	5.2	5.3	5.2	5.4	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.6	26.0	20.2	36.2	24.9	26.0	61.9	22.9	22.9	107.1	21.8	19.8
LnGrp LOS	D	C	C	D	C	C	E	C	C	F	C	B
Approach Vol, veh/h		889			823			969			1334	
Approach Delay, s/veh		30.9			27.5			31.5			40.8	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	27.5	10.5	21.7	10.2	28.3	10.2	22.0
Change Period (Y+Rc), s	5.2	5.6	5.2	5.9	5.2	5.6	5.2	* 5.9
Max Green Setting (Gmax), s	5.8	40.0	6.2	36.1	5.0	40.8	5.0	* 38
Max Q Clear Time (g_c+I1), s	7.4	15.2	5.4	11.5	6.4	16.0	6.1	10.6
Green Ext Time (p_c), s	0.0	4.9	0.0	4.3	0.0	6.7	0.0	4.7

Intersection Summary	
HCM 7th Control Delay, s/veh	33.6
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	223	1	38	958	4	13	17	197	406	7	615	274
Future Volume (veh/h)	223	1	38	958	4	13	17	197	406	7	615	274
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	230	1	39	988	4	13	18	203	419	7	634	282
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	266	4	157	864	635	538	62	688	307	230	1024	693
Arrive On Green	0.15	0.10	0.10	0.39	0.34	0.34	0.03	0.20	0.20	0.13	0.29	0.29
Sat Flow, veh/h	1767	39	1539	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	230	0	40	988	4	13	18	203	419	7	634	282
Grp Sat Flow(s),veh/h/ln	1767	0	1579	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	13.7	0.0	2.5	42.0	0.2	0.6	1.1	5.3	21.0	0.4	16.7	13.1
Cycle Q Clear(g_c), s	13.7	0.0	2.5	42.0	0.2	0.6	1.1	5.3	21.0	0.4	16.7	13.1
Prop In Lane	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	0	161	864	635	538	62	688	307	230	1024	693
V/C Ratio(X)	0.87	0.00	0.25	1.14	0.01	0.02	0.29	0.30	1.37	0.03	0.62	0.41
Avail Cap(c_a), veh/h	460	0	563	864	904	766	148	688	307	230	1024	693
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	0.0	44.5	26.1	23.3	23.5	50.6	37.0	43.3	40.9	33.0	20.5
Incr Delay (d2), s/veh	8.3	0.0	0.8	78.4	0.0	0.0	2.6	0.2	184.0	0.1	1.1	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(50%),veh/ln	6.5	0.0	1.0	38.3	0.1	0.2	0.5	2.3	23.7	0.2	7.2	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.9	0.0	45.3	104.6	23.3	23.5	53.2	37.2	227.3	40.9	34.2	20.9
LnGrp LOS	D		D	F	C	C	D	D	F	D	C	C
Approach Vol, veh/h		270			1005			640			923	
Approach Delay, s/veh		51.8			103.2			162.1			30.2	
Approach LOS		D			F			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	47.0	16.0	8.3	36.3	21.2	41.8	18.6	26.0
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	42.0	38.4	9.0	26.0	28.0	52.4	14.0	21.0
Max Q Clear Time (g_c+I1), s	44.0	4.5	3.1	18.7	15.7	2.6	2.4	23.0
Green Ext Time (p_c), s	0.0	0.2	0.0	3.0	0.5	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	87.8
HCM 7th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	368	111	0	5	30	8	13	5	1	15	6	949
Future Volume (veh/h)	368	111	0	5	30	8	13	5	1	15	6	949
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	261	316	0	5	33	9	14	5	1	16	0	1037
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	400	420	0	27	177	47	36	1133	219	41	0	1217
Arrive On Green	0.23	0.23	0.00	0.07	0.07	0.07	0.02	0.38	0.38	0.02	0.00	0.39
Sat Flow, veh/h	1767	1856	0	390	2516	667	1767	2946	570	1767	0	3145
Grp Volume(v), veh/h	261	316	0	24	0	23	14	3	3	16	0	1037
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1836	0	1736	1767	1763	1753	1767	0	1572
Q Serve(g_s), s	8.7	10.3	0.0	0.8	0.0	0.8	0.5	0.1	0.1	0.6	0.0	19.6
Cycle Q Clear(g_c), s	8.7	10.3	0.0	0.8	0.0	0.8	0.5	0.1	0.1	0.6	0.0	19.6
Prop In Lane	1.00		0.00	0.21		0.38	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	400	420	0	129	0	122	36	678	674	41	0	1217
V/C Ratio(X)	0.65	0.75	0.00	0.18	0.00	0.19	0.38	0.00	0.00	0.39	0.00	0.85
Avail Cap(c_a), veh/h	789	828	0	820	0	775	163	863	858	163	0	1540
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.8	23.4	0.0	28.4	0.0	28.4	31.4	12.3	12.3	31.3	0.0	18.2
Incr Delay (d2), s/veh	1.8	2.7	0.0	0.7	0.0	0.8	6.5	0.0	0.0	6.0	0.0	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(50%),veh/ln	3.5	4.5	0.0	0.4	0.0	0.3	0.3	0.0	0.0	0.3	0.0	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.6	26.2	0.0	29.1	0.0	29.2	37.9	12.3	12.3	37.2	0.0	22.1
LnGrp LOS	C	C		C		C	D	B	B	D		C
Approach Vol, veh/h		577			47			20			1053	
Approach Delay, s/veh		25.5			29.1			30.2			22.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	29.7		19.8	6.0	29.8		9.3
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7
Max Green Setting (Gmax), s	6.3	31.8		29.0	6.0	31.8		29.0
Max Q Clear Time (g_c+I1), s	2.6	2.1		12.3	2.5	21.6		2.8
Green Ext Time (p_c), s	0.0	0.0		2.4	0.0	3.6		0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	23.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	18	0	3	10	207	204	0	104	41
Future Vol, veh/h	0	0	0	18	0	3	10	207	204	0	104	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	330
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	19	0	3	11	220	217	0	111	44

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	352	396	220	154	0	-	-	-	0
Stage 1	241	241	-	-	-	-	-	-	-
Stage 2	111	154	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	626	526	795	1367	-	0	0	-	-
Stage 1	776	688	-	-	-	0	0	-	-
Stage 2	890	751	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	620	0	795	1367	-	-	-	-	-
Mov Cap-2 Maneuver	620	0	-	-	-	-	-	-	-
Stage 1	769	0	-	-	-	-	-	-	-
Stage 2	890	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.82	0.35	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	83	-	640	-	-
HCM Lane V/C Ratio	0.008	-	0.035	-	-
HCM Ctrl Dly (s/v)	7.7	0	10.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

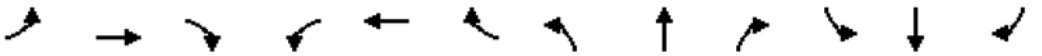
Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	129	0	353	0	0	0	0	293	10	0	120	0
Future Vol, veh/h	129	0	353	0	0	0	0	293	10	0	120	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	470	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	137	0	376	0	0	0	0	312	11	0	128	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	284	450	-	-	0	0	-	-	0
Stage 1	128	128	-	-	-	-	-	-	-
Stage 2	156	322	-	-	-	-	-	-	-
Critical Hdwy	6.78	6.68	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.58	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.98	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.614	4.114	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	671	486	0	0	-	-	0	-	0
Stage 1	871	769	0	0	-	-	0	-	0
Stage 2	831	629	0	0	-	-	0	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	671	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	671	0	-	-	-	-	-	-	-
Stage 1	871	0	-	-	-	-	-	-	-
Stage 2	831	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.74	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBT
Capacity (veh/h)	-	-	671	-
HCM Lane V/C Ratio	-	-	0.205	-
HCM Ctrl Dly (s/v)	-	-	11.7	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.8	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	51	101	53	85	6	129	274	39	3	360	73
Future Volume (veh/h)	31	51	101	53	85	6	129	274	39	3	360	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1455	1752	1752	1752	1455	952	1752	1752	952	1604
Adj Flow Rate, veh/h	34	56	111	58	93	7	142	301	43	3	396	80
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, %	10	10	30	10	10	10	30	64	10	10	64	20
Cap, veh/h	135	229	553	185	282	239	334	991	732	13	480	470
Arrive On Green	0.08	0.13	0.13	0.11	0.16	0.16	0.12	0.38	0.38	0.01	0.27	0.27
Sat Flow, veh/h	1668	1752	2171	1668	1752	1485	2689	2598	1485	1668	1808	1359
Grp Volume(v), veh/h	34	56	111	58	93	7	142	301	43	3	396	80
Grp Sat Flow(s),veh/h/ln	1668	1752	1085	1668	1752	1485	1345	866	1485	1668	904	1359
Q Serve(g_s), s	1.5	2.2	3.1	2.4	3.6	0.3	3.7	6.2	1.2	0.1	15.8	3.1
Cycle Q Clear(g_c), s	1.5	2.2	3.1	2.4	3.6	0.3	3.7	6.2	1.2	0.1	15.8	3.1
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	135	229	553	185	282	239	334	991	732	13	480	470
V/C Ratio(X)	0.25	0.24	0.20	0.31	0.33	0.03	0.42	0.30	0.06	0.22	0.83	0.17
Avail Cap(c_a), veh/h	268	1273	1848	268	1273	1079	503	1491	1017	218	936	813
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	29.9	22.4	31.3	28.4	27.1	31.0	16.5	10.1	37.7	26.4	17.4
Incr Delay (d2), s/veh	1.0	0.6	0.2	1.0	0.7	0.0	0.9	0.2	0.0	8.1	3.7	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(50%),veh/ln	0.6	0.9	0.7	0.9	1.4	0.1	1.1	1.1	0.3	0.1	3.2	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.0	30.4	22.6	32.3	29.1	27.1	31.8	16.7	10.2	45.8	30.1	17.5
LnGrp LOS	C	C	C	C	C	C	C	B	B	D	C	B
Approach Vol, veh/h		201			158			486			479	
Approach Delay, s/veh		26.7			30.2			20.5			28.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	18.4	15.2	28.7	11.9	20.7	6.3	37.6
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	12.3	55.6	14.3	39.6	12.3	55.6	10.0	43.9
Max Q Clear Time (g_c+I1), s	4.4	5.1	5.7	17.8	3.5	5.6	2.1	8.2
Green Ext Time (p_c), s	0.0	0.7	0.2	2.5	0.0	0.5	0.0	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	25.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	135	0	154	5	247	50	95	482	0
Future Volume (veh/h)	0	0	0	135	0	154	5	247	50	95	482	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				952	0	952	1870	952	952	952	952	0
Adj Flow Rate, veh/h				142	0	162	5	260	53	100	507	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, %				64	0	64	2	64	64	64	64	0
Cap, veh/h				218	0	194	24	378	76	152	1056	0
Arrive On Green				0.24	0.00	0.24	0.01	0.25	0.25	0.17	0.41	0.00
Sat Flow, veh/h				906	0	806	1781	1500	301	906	2683	0
Grp Volume(v), veh/h				142	0	162	5	155	158	100	507	0
Grp Sat Flow(s),veh/h/ln				906	0	806	1781	904	897	906	866	0
Q Serve(g_s), s				8.4	0.0	11.4	0.2	9.2	9.5	6.1	8.6	0.0
Cycle Q Clear(g_c), s				8.4	0.0	11.4	0.2	9.2	9.5	6.1	8.6	0.0
Prop In Lane				1.00		1.00	1.00		0.34	1.00		0.00
Lane Grp Cap(c), veh/h				218	0	194	24	228	226	152	1056	0
V/C Ratio(X)				0.65	0.00	0.83	0.21	0.68	0.70	0.66	0.48	0.00
Avail Cap(c_a), veh/h				776	0	691	299	615	610	278	2129	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				20.3	0.0	21.5	29.1	20.1	20.2	23.2	13.0	0.0
Incr Delay (d2), s/veh				3.2	0.0	8.9	4.3	3.6	3.9	4.8	0.3	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(50%),veh/ln				1.8	0.0	2.4	0.1	1.8	1.8	1.3	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				23.6	0.0	30.4	33.4	23.7	24.1	27.9	13.4	0.0
LnGrp LOS				C		C	C	C	C	C	B	
Approach Vol, veh/h					304			318			607	
Approach Delay, s/veh					27.2			24.0			15.8	
Approach LOS					C			C			B	

Timer - Assigned Phs	1	2		5	6		8					
Phs Duration (G+Y+Rc), s	5.7	23.4		6.5	32.6		20.5					
Change Period (Y+Rc), s	5.7	8.4		5.7	8.4		6.1					
Max Green Setting (Gmax), s	18.3	40.5		10.0	48.8		51.0					
Max Q Clear Time (g_c+I1), s	8.1	11.5		2.2	10.6		13.4					
Green Ext Time (p_c), s	0.1	1.7		0.0	3.4		1.1					

Intersection Summary	
HCM 7th Control Delay, s/veh	20.7
HCM 7th LOS	C

FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	91	154	187	431	625	88
Future Volume (veh/h)	91	154	187	431	625	88
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	99	0	203	468	679	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	125		257	1231	809	
Arrive On Green	0.07	0.00	0.15	0.71	0.47	0.00
Sat Flow, veh/h	1668	1485	1668	1737	1737	1485
Grp Volume(v), veh/h	99	0	203	468	679	0
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1737	1737	1485
Q Serve(g_s), s	3.0	0.0	5.9	5.5	17.4	0.0
Cycle Q Clear(g_c), s	3.0	0.0	5.9	5.5	17.4	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	125		257	1231	809	
V/C Ratio(X)	0.79		0.79	0.38	0.84	
Avail Cap(c_a), veh/h	312		575	2379	1626	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.1	0.0	20.7	3.0	11.9	0.0
Incr Delay (d2), s/veh	10.8	0.0	5.4	0.2	2.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	2.2	0.1	4.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	33.9	0.0	26.0	3.1	14.3	0.0
LnGrp LOS	C		C	A	B	
Approach Vol, veh/h	99			671	679	
Approach Delay, s/veh	33.9			10.1	14.3	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		42.5		8.3	12.3	30.1
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		69.5		9.5	17.5	47.5
Max Q Clear Time (g_c+I1), s		7.5		5.0	7.9	19.4
Green Ext Time (p_c), s		2.7		0.1	0.4	4.2

Intersection Summary	
HCM 7th Control Delay, s/veh	13.7
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	139	5	75	140	237	7	566	88	169	507	38
Future Volume (veh/h)	33	139	5	75	140	237	7	566	88	169	507	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	36	151	5	82	152	258	8	615	96	184	551	41
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	46	193	204	114	212	281	18	728	353	223	1104	536
Arrive On Green	0.13	0.13	0.13	0.18	0.18	0.18	0.01	0.23	0.23	0.13	0.35	0.35
Sat Flow, veh/h	348	1460	1547	629	1166	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	187	0	5	234	0	258	8	615	96	184	551	41
Grp Sat Flow(s),veh/h/ln	1808	0	1547	1794	0	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	7.4	0.0	0.2	9.1	0.0	12.2	0.3	13.7	3.8	7.7	10.2	1.3
Cycle Q Clear(g_c), s	7.4	0.0	0.2	9.1	0.0	12.2	0.3	13.7	3.8	7.7	10.2	1.3
Prop In Lane	0.19		1.00	0.35		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	0	204	326	0	281	18	728	353	223	1104	536
V/C Ratio(X)	0.78	0.00	0.02	0.72	0.00	0.92	0.45	0.85	0.27	0.83	0.50	0.08
Avail Cap(c_a), veh/h	280	0	239	326	0	281	117	815	396	269	1104	536
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.2	0.0	28.1	28.6	0.0	29.9	36.6	27.4	23.6	31.6	19.2	16.3
Incr Delay (d2), s/veh	11.7	0.0	0.0	7.4	0.0	32.9	16.7	7.5	0.4	16.0	0.4	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(50%),veh/ln	3.7	0.0	0.1	4.2	0.0	6.6	0.2	5.3	1.3	3.9	3.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.9	0.0	28.1	36.0	0.0	62.8	53.2	34.9	24.0	47.5	19.5	16.4
LnGrp LOS	D		C	D		E	D	C	C	D	B	B
Approach Vol, veh/h		192			492			719			776	
Approach Delay, s/veh		42.5			50.0			33.7			26.0	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.0	24.0		16.3	5.3	32.7		20.0				
Change Period (Y+Rc), s	4.5	7.0		6.5	4.5	7.0		6.5				
Max Green Setting (Gmax), s	11.5	19.0		11.5	5.0	25.5		13.5				
Max Q Clear Time (g_c+I1), s	9.7	15.7		9.4	2.3	12.2		14.2				
Green Ext Time (p_c), s	0.1	1.3		0.2	0.0	2.7		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	35.4
HCM 7th LOS	D

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	83	2	1	176	483	227
Future Vol, veh/h	83	2	1	176	483	227
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	385	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	18	18	10
Mvmt Flow	90	2	1	191	525	247

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	842	648	772	0	-	0
Stage 1	648	-	-	-	-	-
Stage 2	193	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	324	456	809	-	-	-
Stage 1	506	-	-	-	-	-
Stage 2	820	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	324	456	809	-	-	-
Mov Cap-2 Maneuver	417	-	-	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	820	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	16.05	0.05	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	809	-	418	-	-
HCM Lane V/C Ratio	0.001	-	0.221	-	-
HCM Ctrl Dly (s/v)	9.5	-	16.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	279	197	0	112	3	71	0	0	6	0	1
Future Vol, veh/h	4	279	197	0	112	3	71	0	0	6	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	82	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	18	10	10	18	10	10	2	10	10	2	10
Mvmt Flow	4	303	240	0	122	3	77	0	0	7	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	125	0	0	544	0	0	554	557	423	435	676	123
Stage 1	-	-	-	-	-	-	432	432	-	123	123	-
Stage 2	-	-	-	-	-	-	122	125	-	312	552	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.52	6.3	7.2	6.52	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.018	3.39	3.59	4.018	3.39
Pot Cap-1 Maneuver	1413	-	-	986	-	-	431	439	614	518	375	906
Stage 1	-	-	-	-	-	-	586	582	-	862	794	-
Stage 2	-	-	-	-	-	-	863	792	-	682	515	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1413	-	-	986	-	-	429	437	614	515	374	906
Mov Cap-2 Maneuver	-	-	-	-	-	-	429	437	-	515	374	-
Stage 1	-	-	-	-	-	-	584	580	-	862	794	-
Stage 2	-	-	-	-	-	-	862	792	-	679	512	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.06	0	15.23	11.65
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	429	13	-	-	986	-	-	549
HCM Lane V/C Ratio	0.18	0.003	-	-	-	-	-	0.014
HCM Ctrl Dly (s/v)	15.2	7.6	0	-	0	-	-	11.6
HCM Lane LOS	C	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	2	118	2	4	288
Future Vol, veh/h	6	2	118	2	4	288
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	18	10	10	18
Mvmt Flow	7	2	128	2	4	313

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	452	130	0	0	131	0
Stage 1	130	-	-	-	-	-
Stage 2	322	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	551	898	-	-	1406	-
Stage 1	876	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	548	897	-	-	1404	-
Mov Cap-2 Maneuver	601	-	-	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	715	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.57	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	655	1404	-
HCM Lane V/C Ratio	-	-	0.013	0.003	-
HCM Ctrl Dly (s/v)	-	-	10.6	7.6	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	40	0	77	0	0	0	126	143	0	0	263	109
Future Vol, veh/h	40	0	77	0	0	0	126	143	0	0	263	109
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	18	10	10	18	10
Mvmt Flow	43	0	84	0	0	0	137	155	0	0	286	118

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	774	774	345	715	834	155	404	0	0	155	0	0
Stage 1	345	345	-	429	429	-	-	-	-	-	-	-
Stage 2	429	429	-	286	404	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	306	320	680	335	295	870	1112	-	-	1377	-	-
Stage 1	654	622	-	588	570	-	-	-	-	-	-	-
Stage 2	588	570	-	704	585	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	265	277	680	255	256	870	1112	-	-	1377	-	-
Mov Cap-2 Maneuver	265	277	-	255	256	-	-	-	-	-	-	-
Stage 1	654	622	-	509	493	-	-	-	-	-	-	-
Stage 2	509	493	-	618	585	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	16.38	0	4.07	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	843	-	-	443	-	1377	-	-
HCM Lane V/C Ratio	0.123	-	-	0.287	-	-	-	-
HCM Ctrl Dly (s/v)	8.7	0	-	16.4	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	1.2	-	0	-	-

Intersection	
Int Delay, s/veh	112.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	7	192	57	1	8	353	300	69	37	184	83
Future Vol, veh/h	96	7	192	57	1	8	353	300	69	37	184	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	240	-	-	290	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	104	8	209	62	1	9	384	326	75	40	200	90

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1420	1494	245	1415	1502	364	290	0	0	401	0	0
Stage 1	326	326	-	1131	1131	-	-	-	-	-	-	-
Stage 2	1094	1168	-	284	371	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	110	118	774	110	117	664	1227	-	-	1116	-	-
Stage 1	670	635	-	238	269	-	-	-	-	-	-	-
Stage 2	250	258	-	706	606	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 71	78	774	~ 50	77	664	1227	-	-	1116	-	-
Mov Cap-2 Maneuver	~ 71	78	-	~ 50	77	-	-	-	-	-	-	-
Stage 1	646	612	-	164	185	-	-	-	-	-	-	-
Stage 2	169	177	-	491	584	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 442.7	$ 329.44	4.53	1.02
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1227	-	-	175	57	1116	-	-
HCM Lane V/C Ratio	0.313	-	-	1.836	1.269	0.036	-	-
HCM Ctrl Dly (s/v)	9.3	-	-	$ 442.7	$ 329.4	8.3	-	-
HCM Lane LOS	A	-	-	F	F	A	-	-
HCM 95th %tile Q(veh)	1.3	-	-	23.4	6.2	0.1	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	145.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	37	71	34	17	17	174	760	73	37	386	37
Future Vol, veh/h	17	37	71	34	17	17	174	760	73	37	386	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	10	5	5	10	5
Mvmt Flow	18	40	77	37	18	18	189	826	79	40	420	40

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1734	1804	440	1764	1784	866	460	0	0	905	0	0
Stage 1	520	520	-	1244	1244	-	-	-	-	-	-	-
Stage 2	1214	1284	-	520	540	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	68	78	611	64	80	348	1086	-	-	739	-	-
Stage 1	534	527	-	210	243	-	-	-	-	-	-	-
Stage 2	219	232	-	534	516	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	28	46	611	~ 7	48	348	1086	-	-	739	-	-
Mov Cap-2 Maneuver	28	46	-	~ 7	48	-	-	-	-	-	-	-
Stage 1	494	488	-	135	156	-	-	-	-	-	-	-
Stage 2	118	149	-	396	478	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 430.31	$ 2721.71	1.56	0.82
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	306	-	-	82	13	142	-	-
HCM Lane V/C Ratio	0.174	-	-	1.657	5.753	0.054	-	-
HCM Ctrl Dly (s/v)	9	0	-	$ 430.3	$ 2721.7	10.2	0	-
HCM Lane LOS	A	A	-	F	F	B	A	-
HCM 95th %tile Q(veh)	0.6	-	-	11.3	10.3	0.2	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	143.6
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	135	113	81	60	123	112	164	854	122	66	369	73
Future Vol, veh/h	135	113	81	60	123	112	164	854	122	66	369	73
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
Heavy Vehicles, %	8	8	8	8	8	8	7	7	7	5	5	5
Mvmt Flow	147	123	88	65	134	122	178	928	133	72	401	79
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	22.2	19.8	261.5	29.4
HCM LOS	C	C	F	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	28%	0%	70%	0%	49%	0%	26%	0%
Vol Thru, %	72%	78%	30%	41%	51%	35%	74%	72%
Vol Right, %	0%	22%	0%	59%	0%	65%	0%	28%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	591	549	192	138	122	174	251	258
LT Vol	164	0	135	0	60	0	66	0
Through Vol	427	427	57	57	62	62	185	185
RT Vol	0	122	0	81	0	112	0	73
Lane Flow Rate	642	597	208	149	132	189	272	280
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	1.581	1.418	0.567	0.375	0.36	0.478	0.683	0.677
Departure Headway (Hd)	8.858	8.553	10.241	9.446	10.248	9.52	9.396	9.054
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	411	430	354	383	353	381	387	403
Service Time	6.6	6.294	7.941	7.146	7.948	7.22	7.096	6.754
HCM Lane V/C Ratio	1.562	1.388	0.588	0.389	0.374	0.496	0.703	0.695
HCM Control Delay, s/veh	295.4	225	25.5	17.7	18.6	20.6	30.1	28.7
HCM Lane LOS	F	F	D	C	C	C	D	D
HCM 95th-tile Q	36	29.5	3.3	1.7	1.6	2.5	4.9	4.8

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	0	24	1	0	4	22	337	2	0	527	7
Future Vol, veh/h	8	0	24	1	0	4	22	337	2	0	527	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	400	-	400	395	-	510
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	35	10	10	35	10
Mvmt Flow	9	0	26	1	0	4	24	366	2	0	573	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	804	989	286	701	987	183	573	0	0	368	0	0
Stage 1	573	573	-	414	414	-	-	-	-	-	-	-
Stage 2	231	416	-	286	573	-	-	-	-	-	-	-
Critical Hdwy	7.7	6.7	7.1	7.7	6.7	7.1	4.3	-	-	4.3	-	-
Critical Hdwy Stg 1	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.6	4.1	3.4	3.6	4.1	3.4	2.3	-	-	2.3	-	-
Pot Cap-1 Maneuver	261	232	687	311	233	803	943	-	-	1131	-	-
Stage 1	452	483	-	565	572	-	-	-	-	-	-	-
Stage 2	729	570	-	675	483	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	253	226	687	291	227	803	943	-	-	1131	-	-
Mov Cap-2 Maneuver	407	396	-	460	386	-	-	-	-	-	-	-
Stage 1	452	483	-	551	557	-	-	-	-	-	-	-
Stage 2	706	556	-	649	483	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.53	10.19	0.54	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	943	-	-	586	699	1131	-	-
HCM Lane V/C Ratio	0.025	-	-	0.059	0.008	-	-	-
HCM Ctrl Dly (s/v)	8.9	-	-	11.5	10.2	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0	0	-	-

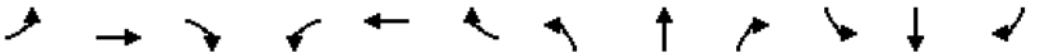
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	486	5	2	335	22	11	4	1	13	2	21
Future Vol, veh/h	43	486	5	2	335	22	11	4	1	13	2	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	11	35	11	11	35	11	11	11	11	11	11	11
Mvmt Flow	45	506	5	2	349	23	11	4	1	14	2	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	372	0	0	511	0	0	776	972	253	698	954	174
Stage 1	-	-	-	-	-	-	596	596	-	353	353	-
Stage 2	-	-	-	-	-	-	180	376	-	345	601	-
Critical Hdwy	4.32	-	-	4.32	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.31	-	-	2.31	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	1121	-	-	990	-	-	272	236	720	310	242	811
Stage 1	-	-	-	-	-	-	436	468	-	613	607	-
Stage 2	-	-	-	-	-	-	779	593	-	620	466	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1121	-	-	990	-	-	252	226	720	294	232	811
Mov Cap-2 Maneuver	-	-	-	-	-	-	383	380	-	471	388	-
Stage 1	-	-	-	-	-	-	418	450	-	611	606	-
Stage 2	-	-	-	-	-	-	754	591	-	589	447	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.67	0.05	14.52	11.05
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	382	720	1121	-	-	990	-	-	458	811
HCM Lane V/C Ratio	0.041	0.001	0.04	-	-	0.002	-	-	0.034	0.027
HCM Ctrl Dly (s/v)	14.8	10	8.3	-	-	8.6	-	-	13.1	9.6
HCM Lane LOS	B	B	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.1	0	0.1	-	-	0	-	-	0.1	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	395	47	11	282	161	57	99	14	100	80	42
Future Volume (veh/h)	83	395	47	11	282	161	57	99	14	100	80	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	88	420	50	12	300	171	61	105	15	106	85	45
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	225	829	98	59	408	226	193	317	45	239	257	136
Arrive On Green	0.14	0.35	0.35	0.04	0.25	0.25	0.12	0.21	0.21	0.14	0.24	0.24
Sat Flow, veh/h	1668	2362	280	1668	1623	900	1668	1496	214	1668	1073	568
Grp Volume(v), veh/h	88	232	238	12	241	230	61	0	120	106	0	130
Grp Sat Flow(s),veh/h/ln	1668	1312	1329	1668	1312	1211	1668	0	1710	1668	0	1641
Q Serve(g_s), s	3.6	10.4	10.5	0.5	12.5	13.1	2.5	0.0	4.4	4.3	0.0	4.9
Cycle Q Clear(g_c), s	3.6	10.4	10.5	0.5	12.5	13.1	2.5	0.0	4.4	4.3	0.0	4.9
Prop In Lane	1.00		0.21	1.00		0.74	1.00		0.13	1.00		0.35
Lane Grp Cap(c), veh/h	225	461	467	59	330	304	193	0	363	239	0	394
V/C Ratio(X)	0.39	0.50	0.51	0.20	0.73	0.76	0.32	0.00	0.33	0.44	0.00	0.33
Avail Cap(c_a), veh/h	289	573	581	269	557	514	271	0	735	321	0	754
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	29.4	19.0	19.1	34.9	25.5	25.7	30.2	0.0	24.8	29.2	0.0	23.3
Incr Delay (d2), s/veh	1.1	0.9	0.9	1.7	3.1	3.8	0.9	0.0	0.5	1.3	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(50%),veh/ln	1.4	3.0	3.1	0.2	3.9	3.8	1.0	0.0	1.8	1.8	0.0	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.5	19.9	19.9	36.5	28.7	29.6	31.1	0.0	25.4	30.4	0.0	23.8
LnGrp LOS	C	B	B	D	C	C	C		C	C		C
Approach Vol, veh/h		558			483			181			236	
Approach Delay, s/veh		21.6			29.3			27.3			26.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	31.2	13.3	22.5	14.8	23.8	15.4	20.5
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.0	32.5	12.1	34.2	12.9	31.6	14.3	32.0
Max Q Clear Time (g_c+I1), s	2.5	12.5	4.5	6.9	5.6	15.1	6.3	6.4
Green Ext Time (p_c), s	0.0	2.7	0.1	0.8	0.1	2.6	0.1	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	25.7
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	2	2	371	5	142	2	419	169	1
Future Volume (veh/h)	1	0	0	2	2	371	5	142	2	419	169	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1381	1752	1381	1381	1752
Adj Flow Rate, veh/h	1	0	0	2	2	0	5	153	2	451	182	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, %	10	10	10	10	10	10	10	35	10	35	35	10
Cap, veh/h	5	14	0	9	19		22	552	312	563	1096	620
Arrive On Green	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.21	0.21	0.22	0.42	0.42
Sat Flow, veh/h	1668	1752	0	1668	1752	1485	1668	2624	1485	2552	2624	1485
Grp Volume(v), veh/h	1	0	0	2	2	0	5	153	2	451	182	1
Grp Sat Flow(s),veh/h/ln	1668	1752	0	1668	1752	1485	1668	1312	1485	1276	1312	1485
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.1	0.0	0.1	2.3	0.1	8.0	2.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.1	0.1	0.0	0.1	2.3	0.1	8.0	2.1	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	14	0	9	19		22	552	312	563	1096	620
V/C Ratio(X)	0.22	0.00	0.00	0.22	0.11		0.22	0.28	0.01	0.80	0.17	0.00
Avail Cap(c_a), veh/h	351	391	0	351	391		351	662	375	714	1096	620
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	0.0	23.5	23.3	0.0	23.2	15.7	14.8	17.5	8.7	8.1
Incr Delay (d2), s/veh	22.1	0.0	0.0	11.5	2.4	0.0	4.9	0.3	0.0	5.1	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(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.0	2.1	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.7	0.0	0.0	35.1	25.7	0.0	28.1	16.0	14.9	22.7	8.7	8.1
LnGrp LOS	D			D	C		C	B	B	C	A	A
Approach Vol, veh/h		1			4			160			634	
Approach Delay, s/veh		45.7			30.4			16.4			18.6	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	16.6	6.0	8.8	6.3	26.5	5.8	8.9
Change Period (Y+Rc), s	5.7	* 6.6	5.7	8.4	5.7	6.6	5.7	8.4
Max Green Setting (Gmax), s	10.5	* 12	10.0	10.6	10.0	13.0	10.0	10.6
Max Q Clear Time (g_c+I1), s	10.0	4.3	2.1	0.0	2.1	4.1	2.0	2.1
Green Ext Time (p_c), s	0.6	0.4	0.0	0.0	0.0	0.6	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	18.3
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

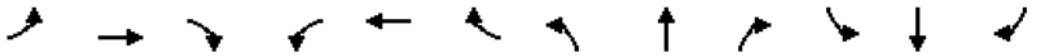
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	422	0	21	361	179	1	53	31	68	22	1
Future Vol, veh/h	0	422	0	21	361	179	1	53	31	68	22	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	570	-	570	650	-	650	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	0	459	0	23	392	195	1	58	34	74	24	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	587	0	0	459	0	0	713	1091	229	696	897	196
Stage 1	-	-	-	-	-	-	459	459	-	438	438	-
Stage 2	-	-	-	-	-	-	254	633	-	258	459	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	931	-	-	1044	-	-	305	201	749	313	264	788
Stage 1	-	-	-	-	-	-	531	545	-	547	557	-
Stage 2	-	-	-	-	-	-	706	452	-	702	545	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	931	-	-	1044	-	-	281	197	749	247	258	788
Mov Cap-2 Maneuver	-	-	-	-	-	-	455	367	-	429	419	-
Stage 1	-	-	-	-	-	-	531	545	-	535	545	-
Stage 2	-	-	-	-	-	-	659	443	-	599	545	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.32	14.21	15.87
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	369	749	931	-	-	1044	-	-	426	788
HCM Lane V/C Ratio	0.159	0.045	-	-	-	0.022	-	-	0.23	0.001
HCM Ctrl Dly (s/v)	16.6	10	0	-	-	8.5	-	-	15.9	9.6
HCM Lane LOS	C	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.6	0.1	0	-	-	0.1	-	-	0.9	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	473	1	33	1	16	11	98	560	4	6	488	19
Future Volume (veh/h)	473	1	33	1	16	11	98	560	4	6	488	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	514	1	36	1	17	12	107	609	4	7	530	21
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	510	645	547	4	115	97	136	767	650	30	1223	48
Arrive On Green	0.30	0.36	0.36	0.00	0.06	0.06	0.16	0.85	0.85	0.02	0.36	0.36
Sat Flow, veh/h	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	3374	134
Grp Volume(v), veh/h	514	1	36	1	17	12	107	609	4	7	270	281
Grp Sat Flow(s),veh/h/ln	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	1721	1787
Q Serve(g_s), s	32.5	0.0	1.7	0.1	1.0	0.8	6.6	17.2	0.0	0.4	13.0	13.1
Cycle Q Clear(g_c), s	32.5	0.0	1.7	0.1	1.0	0.8	6.6	17.2	0.0	0.4	13.0	13.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	510	645	547	4	115	97	136	767	650	30	624	648
V/C Ratio(X)	1.01	0.00	0.07	0.24	0.15	0.12	0.79	0.79	0.01	0.23	0.43	0.43
Avail Cap(c_a), veh/h	510	645	547	141	132	112	215	767	650	157	624	648
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	1.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	22.8	23.3	54.8	48.7	48.6	45.5	6.2	4.8	53.3	26.5	26.5
Incr Delay (d2), s/veh	42.0	0.0	0.1	26.2	0.6	0.6	7.8	6.7	0.0	3.8	2.2	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(50%),veh/ln	18.6	0.0	0.6	0.1	0.4	0.3	2.8	3.8	0.0	0.2	5.3	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	80.8	22.8	23.4	81.0	49.3	49.2	53.2	12.8	4.9	57.2	28.7	28.6
LnGrp LOS	F	C	C	F	D	D	D	B	A	E	C	C
Approach Vol, veh/h		551			30			720			558	
Approach Delay, s/veh		76.9			50.3			18.8			29.0	
Approach LOS		E			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	54.1	5.0	44.3	13.4	47.4	37.2	12.1
Change Period (Y+Rc), s	4.7	7.5	4.7	5.1	4.7	7.5	4.7	5.1
Max Green Setting (Gmax), s	10.0	37.5	9.0	31.5	13.7	33.8	32.5	8.0
Max Q Clear Time (g_c+I1), s	2.4	19.2	2.1	3.7	8.6	15.1	34.5	3.0
Green Ext Time (p_c), s	0.0	3.2	0.0	0.1	0.1	2.6	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	39.6
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	6	54	13	1	1	27	645	24	2	278	240
Future Volume (veh/h)	11	6	54	13	1	1	27	645	24	2	278	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	12	7	59	14	1	1	29	701	26	2	302	261
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	73	43	101	45	3	43	125	1140	966	125	1140	966
Arrive On Green	0.07	0.07	0.07	0.03	0.03	0.03	0.07	0.63	0.63	0.15	1.00	1.00
Sat Flow, veh/h	1109	647	1535	1615	115	1535	1725	1811	1535	1725	1811	1535
Grp Volume(v), veh/h	19	0	59	15	0	1	29	701	26	2	302	261
Grp Sat Flow(s),veh/h/ln	1756	0	1535	1730	0	1535	1725	1811	1535	1725	1811	1535
Q Serve(g_s), s	1.1	0.0	4.1	0.9	0.0	0.1	1.7	25.7	0.7	0.1	0.0	0.0
Cycle Q Clear(g_c), s	1.1	0.0	4.1	0.9	0.0	0.1	1.7	25.7	0.7	0.1	0.0	0.0
Prop In Lane	0.63		1.00	0.93		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	116	0	101	49	0	43	125	1140	966	125	1140	966
V/C Ratio(X)	0.16	0.00	0.58	0.31	0.00	0.02	0.23	0.61	0.03	0.02	0.26	0.27
Avail Cap(c_a), veh/h	128	0	112	126	0	112	130	1140	966	127	1140	966
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	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	48.5	0.0	49.9	52.4	0.0	52.0	48.1	12.3	7.7	43.6	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	6.3	3.5	0.0	0.2	0.9	2.5	0.1	0.0	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(50%),veh/ln	0.5	0.0	1.7	0.4	0.0	0.0	0.7	9.1	0.2	0.0	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.2	0.0	56.1	55.9	0.0	52.2	49.0	14.8	7.7	43.7	0.5	0.6
LnGrp LOS	D		E	E		D	D	B	A	D	A	A
Approach Vol, veh/h		78			16			756			565	
Approach Delay, s/veh		54.4			55.7			15.9			0.7	
Approach LOS		D			E			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.7	76.7		12.4	12.7	76.7		8.2
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1
Max Green Setting (Gmax), s	8.1	63.5		8.0	8.3	63.3		8.0
Max Q Clear Time (g_c+I1), s	2.1	27.7		6.1	3.7	2.0		2.9
Green Ext Time (p_c), s	0.0	4.6		0.0	0.0	2.5		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.4
HCM 7th LOS	B

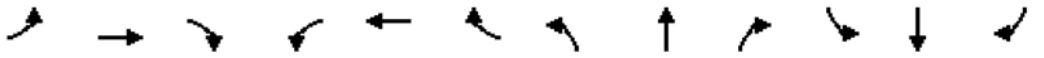
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	129	15	0	173	183	3	1	1	65	7	50
Future Vol, veh/h	23	129	15	0	173	183	3	1	1	65	7	50
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	650	620	-	600	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	25	140	16	0	188	199	3	1	1	71	8	54

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	387	0	0	157	0	0	288	577	70	309	395	94
Stage 1	-	-	-	-	-	-	190	190	-	188	188	-
Stage 2	-	-	-	-	-	-	98	387	-	121	207	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	1113	-	-	1364	-	-	622	409	953	601	523	919
Stage 1	-	-	-	-	-	-	771	723	-	773	724	-
Stage 2	-	-	-	-	-	-	875	588	-	848	711	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1113	-	-	1364	-	-	564	400	953	585	511	919
Mov Cap-2 Maneuver	-	-	-	-	-	-	665	510	-	688	609	-
Stage 1	-	-	-	-	-	-	753	706	-	773	724	-
Stage 2	-	-	-	-	-	-	815	588	-	826	694	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.26	0	10.45	10.24
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	618	953	545	-	-	1364	-	-	680	919
HCM Lane V/C Ratio	0.007	0.001	0.022	-	-	-	-	-	0.115	0.059
HCM Ctrl Dly (s/v)	10.9	8.8	8.3	0.1	-	0	-	-	11	9.2
HCM Lane LOS	B	A	A	A	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0	0.1	-	-	0	-	-	0.4	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	305	145	285	321	48	262	201	479	55	219	19
Future Volume (veh/h)	27	305	145	285	321	48	262	201	479	55	219	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	29	332	158	310	349	52	285	218	521	60	238	21
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	79	443	207	344	1047	155	319	556	777	117	294	26
Arrive On Green	0.05	0.19	0.19	0.20	0.35	0.35	0.18	0.30	0.30	0.07	0.18	0.18
Sat Flow, veh/h	1739	2296	1071	1739	3032	448	1739	1826	1547	1739	1654	146
Grp Volume(v), veh/h	29	249	241	310	198	203	285	218	521	60	0	259
Grp Sat Flow(s),veh/h/ln	1739	1735	1633	1739	1735	1745	1739	1826	1547	1739	0	1800
Q Serve(g_s), s	1.5	12.7	13.1	16.3	7.9	8.0	15.0	8.8	23.6	3.1	0.0	12.9
Cycle Q Clear(g_c), s	1.5	12.7	13.1	16.3	7.9	8.0	15.0	8.8	23.6	3.1	0.0	12.9
Prop In Lane	1.00		0.66	1.00		0.26	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	79	335	315	344	599	603	319	556	777	117	0	320
V/C Ratio(X)	0.37	0.74	0.76	0.90	0.33	0.34	0.89	0.39	0.67	0.51	0.00	0.81
Avail Cap(c_a), veh/h	149	665	626	377	906	912	359	808	990	189	0	634
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	0.00	1.00
Uniform Delay (d), s/veh	43.4	35.6	35.8	36.7	22.6	22.7	37.3	25.7	17.5	42.2	0.0	36.9
Incr Delay (d2), s/veh	2.9	3.3	3.9	22.9	0.3	0.3	22.0	0.4	1.2	3.4	0.0	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(50%),veh/ln	0.7	5.6	5.4	9.0	3.2	3.3	8.0	3.7	7.8	1.4	0.0	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.2	38.9	39.6	59.6	23.0	23.0	59.3	26.1	18.7	45.6	0.0	41.8
LnGrp LOS	D	D	D	E	C	C	E	C	B	D		D
Approach Vol, veh/h		519			711			1024			319	
Approach Delay, s/veh		39.6			38.9			31.6			42.5	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.2	24.5	22.9	23.1	8.9	38.7	11.0	34.9
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	20.3	35.9	19.3	* 33	8.0	* 49	10.2	41.4
Max Q Clear Time (g_c+I1), s	18.3	15.1	17.0	14.9	3.5	10.0	5.1	25.6
Green Ext Time (p_c), s	0.2	3.0	0.2	1.4	0.0	2.6	0.0	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	36.6
HCM 7th LOS	D

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	59	85	115	25	105	87	85	890	43	98	565	23
Future Volume (veh/h)	59	85	115	25	105	87	85	890	43	98	565	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	60	87	117	26	107	89	87	908	44	100	577	23
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, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	161	266	375	98	201	170	326	1071	522	192	1114	543
Arrive On Green	0.10	0.15	0.15	0.06	0.11	0.11	0.10	0.35	0.35	0.11	0.37	0.37
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	3047	1485
Grp Volume(v), veh/h	60	87	117	26	107	89	87	908	44	100	577	23
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1523	1485
Q Serve(g_s), s	2.9	3.9	5.6	1.3	5.0	4.9	2.2	24.1	1.7	4.9	12.9	0.9
Cycle Q Clear(g_c), s	2.9	3.9	5.6	1.3	5.0	4.9	2.2	24.1	1.7	4.9	12.9	0.9
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	161	266	375	98	201	170	326	1071	522	192	1114	543
V/C Ratio(X)	0.37	0.33	0.31	0.26	0.53	0.52	0.27	0.85	0.08	0.52	0.52	0.04
Avail Cap(c_a), veh/h	212	1023	1016	210	1021	865	374	1353	659	210	1385	675
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	37.0	33.0	26.5	39.3	36.5	36.4	36.3	26.2	18.9	36.4	21.7	17.9
Incr Delay (d2), s/veh	1.4	0.7	0.5	1.4	2.2	2.5	0.4	4.3	0.1	2.2	0.4	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(50%),veh/ln	1.2	1.6	1.9	0.5	2.2	1.8	0.8	8.2	0.6	2.0	4.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.4	33.7	26.9	40.7	38.7	38.9	36.7	30.5	19.0	38.6	22.1	17.9
LnGrp LOS	D	C	C	D	D	D	D	C	B	D	C	B
Approach Vol, veh/h		264			222			1039			700	
Approach Delay, s/veh		31.8			39.0			30.5			24.3	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	39.1	10.8	21.7	14.5	40.3	14.1	18.4
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	10.0	38.8	11.0	51.0	10.1	39.7	11.1	50.9
Max Q Clear Time (g_c+I1), s	16.9	26.1	3.3	7.6	4.2	14.9	4.9	7.0
Green Ext Time (p_c), s	0.1	4.6	0.0	0.8	0.1	3.5	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	140	232	55	151	100	115	802	49	79	934	52
Future Volume (veh/h)	112	140	232	55	151	100	115	802	49	79	934	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	122	152	252	60	164	109	125	872	53	86	1015	57
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	162	202	315	77	209	245	95	1138	69	89	1117	63
Arrive On Green	0.20	0.20	0.20	0.16	0.16	0.16	0.05	0.34	0.34	0.05	0.33	0.33
Sat Flow, veh/h	795	991	1547	483	1319	1547	1739	3322	202	1739	3339	188
Grp Volume(v), veh/h	274	0	252	224	0	109	125	455	470	86	527	545
Grp Sat Flow(s),veh/h/ln	1786	0	1547	1802	0	1547	1739	1735	1790	1739	1735	1792
Q Serve(g_s), s	14.1	0.0	15.1	11.6	0.0	6.2	5.3	22.8	22.8	4.8	28.3	28.3
Cycle Q Clear(g_c), s	14.1	0.0	15.1	11.6	0.0	6.2	5.3	22.8	22.8	4.8	28.3	28.3
Prop In Lane	0.45		1.00	0.27		1.00	1.00		0.11	1.00		0.10
Lane Grp Cap(c), veh/h	363	0	315	286	0	245	95	594	613	89	580	599
V/C Ratio(X)	0.75	0.00	0.80	0.78	0.00	0.44	1.32	0.77	0.77	0.96	0.91	0.91
Avail Cap(c_a), veh/h	788	0	682	795	0	682	95	626	646	89	612	632
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	0.0	37.0	39.4	0.0	37.1	46.1	28.6	28.6	46.2	31.0	31.0
Incr Delay (d2), s/veh	3.2	0.0	4.7	4.7	0.0	1.3	201.4	5.4	5.2	83.3	17.1	16.7
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(50%),veh/ln	6.4	0.0	6.1	5.5	0.0	2.4	7.5	9.7	9.9	4.1	13.7	14.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.7	0.0	41.7	44.1	0.0	38.4	247.5	34.0	33.8	129.4	48.1	47.7
LnGrp LOS	D		D	D		D	F	C	C	F	D	D
Approach Vol, veh/h		526			333			1050			1158	
Approach Delay, s/veh		40.7			42.3			59.3			54.0	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	40.6		25.5	11.0	39.8		21.2				
Change Period (Y+Rc), s	5.2	7.2		5.7	5.7	7.2		5.7				
Max Green Setting (Gmax), s	5.0	35.2		43.0	5.3	34.4		43.0				
Max Q Clear Time (g_c+I1), s	16.8	24.8		17.1	7.3	30.3		13.6				
Green Ext Time (p_c), s	0.0	3.9		2.7	0.0	2.3		1.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	52.2
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	70	98	11	79	12	96	1201	14	13	841	40
Future Volume (veh/h)	45	70	98	11	79	12	96	1201	14	13	841	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	49	76	107	12	86	13	104	1305	0	14	914	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	99	103	123	68	247	35	238	1522		68	1199	
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.14	0.48	0.00	0.04	0.38	0.00
Sat Flow, veh/h	234	595	710	84	1424	200	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	232	0	0	111	0	0	104	1305	0	14	914	0
Grp Sat Flow(s),veh/h/ln	1539	0	0	1708	0	0	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	6.6	0.0	0.0	0.0	0.0	0.0	4.2	27.1	0.0	0.6	18.8	0.0
Cycle Q Clear(g_c), s	10.8	0.0	0.0	4.2	0.0	0.0	4.2	27.1	0.0	0.6	18.8	0.0
Prop In Lane	0.21		0.46	0.11		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	326	0	0	350	0	0	238	1522		68	1199	
V/C Ratio(X)	0.71	0.00	0.00	0.32	0.00	0.00	0.44	0.86		0.21	0.76	
Avail Cap(c_a), veh/h	338	0	0	363	0	0	285	1782		269	1752	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.7	0.0	0.0	27.1	0.0	0.0	29.1	17.0	0.0	34.5	20.1	0.0
Incr Delay (d2), s/veh	6.6	0.0	0.0	0.5	0.0	0.0	1.3	3.9	0.0	1.5	1.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	0.0	1.7	0.0	0.0	1.6	8.3	0.0	0.3	5.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.3	0.0	0.0	27.6	0.0	0.0	30.4	20.9	0.0	36.0	21.3	0.0
LnGrp LOS	D			C			C	C		D	C	
Approach Vol, veh/h		232			111			1409			928	
Approach Delay, s/veh		36.3			27.6			21.6			21.5	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	44.2		21.4	16.3	36.6		21.4				
Change Period (Y+Rc), s	5.7	8.4		8.5	5.7	8.4		8.5				
Max Green Setting (Gmax), s	12.6	41.9		13.5	12.7	41.2		13.5				
Max Q Clear Time (g_c+I1), s	2.6	29.1		12.8	6.2	20.8		6.2				
Green Ext Time (p_c), s	0.0	6.7		0.1	0.1	5.6		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	23.1
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	304	54	173	335	157	70	641	112	156	906	386
Future Volume (veh/h)	266	304	54	173	335	157	70	641	112	156	906	386
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	289	330	59	188	364	171	76	697	122	170	985	420
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	292	716	127	217	461	213	96	1065	475	186	1244	555
Arrive On Green	0.17	0.24	0.24	0.13	0.20	0.20	0.06	0.31	0.31	0.11	0.36	0.36
Sat Flow, veh/h	1739	2946	521	1739	2304	1065	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	289	193	196	188	273	262	76	697	122	170	985	420
Grp Sat Flow(s),veh/h/ln	1739	1735	1732	1739	1735	1634	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	19.1	10.9	11.1	12.2	17.2	17.6	5.0	20.0	6.8	11.1	29.3	27.5
Cycle Q Clear(g_c), s	19.1	10.9	11.1	12.2	17.2	17.6	5.0	20.0	6.8	11.1	29.3	27.5
Prop In Lane	1.00		0.30	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	292	421	421	217	347	327	96	1065	475	186	1244	555
V/C Ratio(X)	0.99	0.46	0.47	0.86	0.78	0.80	0.79	0.65	0.26	0.91	0.79	0.76
Avail Cap(c_a), veh/h	292	651	651	289	648	611	101	1065	475	186	1244	555
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	47.8	37.1	37.2	49.4	43.7	43.8	53.7	34.6	30.0	50.8	33.0	32.5
Incr Delay (d2), s/veh	50.0	0.8	0.8	18.4	3.9	4.6	32.2	3.1	1.3	42.5	5.2	9.3
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(50%),veh/ln	12.3	4.7	4.8	6.4	7.7	7.5	3.0	8.9	2.7	7.0	13.0	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	97.7	37.9	38.0	67.8	47.6	48.4	85.9	37.7	31.3	93.4	38.3	41.8
LnGrp LOS	F	D	D	E	D	D	F	D	C	F	D	D
Approach Vol, veh/h		678			723			895			1575	
Approach Delay, s/veh		63.4			53.1			40.9			45.1	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	42.5	20.1	34.5	12.1	48.4	25.0	29.5
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	12.3	35.3	19.1	43.2	6.7	40.9	19.3	43.0
Max Q Clear Time (g_c+I1), s	13.1	22.0	14.2	13.1	7.0	31.3	21.1	19.6
Green Ext Time (p_c), s	0.0	4.4	0.2	2.5	0.0	5.7	0.0	3.4

Intersection Summary	
HCM 7th Control Delay, s/veh	48.9
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	1	226	5	2	2	338	1214	2	1	880	59
Future Volume (veh/h)	97	1	226	5	2	2	338	1214	2	1	880	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	105	1	246	5	2	2	367	1320	2	1	957	64
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	298	3	496	23	9	9	498	1746	3	5	1228	577
Arrive On Green	0.18	0.18	0.18	0.03	0.03	0.03	0.15	0.54	0.54	0.00	0.39	0.39
Sat Flow, veh/h	1653	16	1485	911	365	365	3237	3237	5	1668	3159	1485
Grp Volume(v), veh/h	106	0	246	9	0	0	367	644	678	1	957	64
Grp Sat Flow(s),veh/h/ln	1669	0	1485	1641	0	0	1618	1580	1662	1668	1580	1485
Q Serve(g_s), s	4.0	0.0	9.4	0.4	0.0	0.0	7.7	22.7	22.7	0.0	19.0	2.0
Cycle Q Clear(g_c), s	4.0	0.0	9.4	0.4	0.0	0.0	7.7	22.7	22.7	0.0	19.0	2.0
Prop In Lane	0.99		1.00	0.56		0.22	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	301	0	496	41	0	0	498	852	897	5	1228	577
V/C Ratio(X)	0.35	0.00	0.50	0.22	0.00	0.00	0.74	0.76	0.76	0.20	0.78	0.11
Avail Cap(c_a), veh/h	1168	0	1267	253	0	0	766	1216	1280	257	2172	1020
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	19.0	34.1	0.0	0.0	28.8	12.8	12.8	35.5	19.1	14.0
Incr Delay (d2), s/veh	0.7	0.0	0.8	2.6	0.0	0.0	2.1	1.7	1.6	18.1	1.1	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(50%),veh/ln	1.5	0.0	3.0	0.2	0.0	0.0	2.8	6.0	6.3	0.0	5.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.3	0.0	19.7	36.7	0.0	0.0	31.0	14.5	14.4	53.6	20.3	14.0
LnGrp LOS	C		B	D			C	B	B	D	C	B
Approach Vol, veh/h		352			9			1689			1022	
Approach Delay, s/veh		21.7			36.7			18.0			19.9	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	43.0		17.4	15.5	32.3		6.3
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	1.6	55.0		50.0	16.9	49.1		11.0
Max Q Clear Time (g_c+I1), s	2.0	24.7		11.4	9.7	21.0		2.4
Green Ext Time (p_c), s	0.0	9.3		1.4	0.7	6.8		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	19.1
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	264	118	134	283	391	57	692	94	292	751	59
Future Volume (veh/h)	74	264	118	134	283	391	57	692	94	292	751	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	80	287	128	146	308	0	62	752	102	317	816	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	102	407	177	180	756		83	925	125	441	1378	
Arrive On Green	0.06	0.17	0.17	0.10	0.22	0.00	0.05	0.30	0.30	0.13	0.40	0.00
Sat Flow, veh/h	1739	2353	1024	1739	3469	1547	1739	3069	416	3374	3469	1547
Grp Volume(v), veh/h	80	210	205	146	308	0	62	425	429	317	816	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1642	1739	1735	1547	1739	1735	1751	1687	1735	1547
Q Serve(g_s), s	3.5	8.7	9.0	6.3	5.8	0.0	2.7	17.3	17.3	6.9	14.2	0.0
Cycle Q Clear(g_c), s	3.5	8.7	9.0	6.3	5.8	0.0	2.7	17.3	17.3	6.9	14.2	0.0
Prop In Lane	1.00		0.62	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	102	300	284	180	756		83	523	528	441	1378	
V/C Ratio(X)	0.78	0.70	0.72	0.81	0.41		0.74	0.81	0.81	0.72	0.59	
Avail Cap(c_a), veh/h	168	680	644	196	1433		145	660	666	441	1528	
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.5	29.8	29.9	33.6	25.7	0.0	36.0	24.7	24.7	31.9	18.2	0.0
Incr Delay (d2), s/veh	12.2	2.9	3.5	20.7	0.4	0.0	12.3	6.2	6.1	5.6	0.5	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(50%),veh/ln	1.7	3.6	3.6	3.5	2.3	0.0	1.4	7.5	7.6	3.0	5.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.8	32.7	33.4	54.3	26.0	0.0	48.3	30.9	30.9	37.5	18.7	0.0
LnGrp LOS	D	C	C	D	C		D	C	C	D	B	
Approach Vol, veh/h		495			454			916			1133	
Approach Delay, s/veh		35.4			35.1			32.0			24.0	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	36.5	9.2	22.5	15.7	29.2	12.6	19.0
Change Period (Y+Rc), s	4.7	6.1	4.7	* 5.8	5.7	6.1	4.7	5.8
Max Green Setting (Gmax), s	6.4	33.7	7.4	* 32	10.0	29.1	8.6	30.0
Max Q Clear Time (g_c+I1), s	4.7	16.2	5.5	7.8	8.9	19.3	8.3	11.0
Green Ext Time (p_c), s	0.0	5.2	0.0	1.8	0.1	3.7	0.0	2.2

Intersection Summary	
HCM 7th Control Delay, s/veh	30.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	158	69	82	302	114	139	1273	92	100	864	125
Future Volume (veh/h)	140	158	69	82	302	114	139	1273	92	100	864	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	152	172	75	89	328	124	151	1384	100	109	939	136
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	192	413	173	181	414	154	149	1204	566	144	1194	561
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.09	0.38	0.38	0.09	0.38	0.38
Sat Flow, veh/h	1668	2286	957	1668	2376	882	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	152	123	124	89	228	224	151	1384	100	109	939	136
Grp Sat Flow(s),veh/h/ln	1668	1664	1579	1668	1664	1593	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	9.9	7.3	7.8	5.6	14.7	15.1	10.0	42.7	5.0	7.2	29.5	7.0
Cycle Q Clear(g_c), s	9.9	7.3	7.8	5.6	14.7	15.1	10.0	42.7	5.0	7.2	29.5	7.0
Prop In Lane	1.00		0.61	1.00		0.55	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	300	285	181	290	278	149	1204	566	144	1194	561
V/C Ratio(X)	0.79	0.41	0.43	0.49	0.79	0.81	1.01	1.15	0.18	0.76	0.79	0.24
Avail Cap(c_a), veh/h	347	846	803	194	693	664	149	1204	566	149	1204	566
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	48.3	40.6	40.8	47.0	44.3	44.5	51.0	34.7	23.0	50.1	30.8	23.9
Incr Delay (d2), s/veh	7.2	0.9	1.0	2.0	4.7	5.5	77.6	77.4	0.1	19.3	3.5	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(50%),veh/ln	4.3	2.9	3.0	2.3	6.1	6.1	7.2	27.8	1.7	3.6	10.8	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.5	41.5	41.9	49.1	49.0	50.0	128.6	112.1	23.2	69.3	34.4	24.1
LnGrp LOS	E	D	D	D	D	D	F	F	C	E	C	C
Approach Vol, veh/h		399			541			1635			1184	
Approach Delay, s/veh		47.0			49.4			108.2			36.4	
Approach LOS		D			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	51.1	17.9	27.7	15.7	50.8	18.6	27.0
Change Period (Y+Rc), s	5.7	8.4	5.7	7.5	5.7	8.4	5.7	7.5
Max Green Setting (Gmax), s	10.0	42.7	13.0	57.0	10.0	42.7	23.3	46.7
Max Q Clear Time (g_c+I1), s	9.2	44.7	7.6	9.8	12.0	31.5	11.9	17.1
Green Ext Time (p_c), s	0.0	0.0	0.1	1.3	0.0	4.7	0.3	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	70.6
HCM 7th LOS	E

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	55	1	154	15	137	0	0	0	88
Future Vol, veh/h	0	0	0	55	1	154	15	137	0	0	0	88
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	60	1	167	16	149	0	0	0	96

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	182	277	149	96	0	-	-	-	0
Stage 1	182	182	-	-	-	-	-	-	-
Stage 2	0	96	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	786	614	872	1438	-	0	0	-	-
Stage 1	826	731	-	-	-	0	0	-	-
Stage 2	-	797	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	776	0	872	1438	-	-	-	-	-
Mov Cap-2 Maneuver	776	0	-	-	-	-	-	-	-
Stage 1	816	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.09	0.74	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	178	-	776	872	-	-
HCM Lane V/C Ratio	0.011	-	0.078	0.192	-	-
HCM Ctrl Dly (s/v)	7.5	0	10	10.1	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.7	-	-

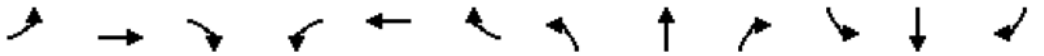
Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	97	1	5	0	0	0	0	59	28	102	118	0
Future Vol, veh/h	97	1	5	0	0	0	0	59	28	102	118	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	105	1	5	0	0	0	0	64	30	111	128	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	414	445	128	-	0	0	95	0	0
Stage 1	350	350	-	-	-	-	-	-	-
Stage 2	64	95	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	-	-	-	4.22	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	-	-	-	2.308	-	-
Pot Cap-1 Maneuver	576	493	896	0	-	-	1439	-	0
Stage 1	692	615	-	0	-	-	-	-	0
Stage 2	934	798	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	528	0	896	-	-	-	1439	-	-
Mov Cap-2 Maneuver	528	0	-	-	-	-	-	-	-
Stage 1	692	0	-	-	-	-	-	-	-
Stage 2	856	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.31	0	3.57
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	528	896	835	-
HCM Lane V/C Ratio	-	-	0.202	0.006	0.077	-
HCM Ctrl Dly (s/v)	-	-	13.5	9	7.7	0
HCM Lane LOS	-	-	B	A	A	A
HCM 95th %tile Q(veh)	-	-	0.7	0	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	23	0	961	34	341	0	0	810	107
Future Volume (veh/h)	0	0	0	23	0	961	34	341	0	0	810	107
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				25	0	1045	37	371	0	0	880	116
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				701	0	1097	82	1562	0	0	1161	518
Arrive On Green				0.40	0.00	0.40	0.09	0.90	0.00	0.00	0.33	0.33
Sat Flow, veh/h				1739	0	2723	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				25	0	1045	37	371	0	0	880	116
Grp Sat Flow(s),veh/h/ln				1739	0	1362	1739	1735	0	0	1735	1547
Q Serve(g_s), s				0.8	0.0	33.5	1.8	1.2	0.0	0.0	20.4	4.9
Cycle Q Clear(g_c), s				0.8	0.0	33.5	1.8	1.2	0.0	0.0	20.4	4.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				701	0	1097	82	1562	0	0	1161	518
V/C Ratio(X)				0.04	0.00	0.95	0.45	0.24	0.00	0.00	0.76	0.22
Avail Cap(c_a), veh/h				715	0	1120	135	1562	0	0	1161	518
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.3	0.0	26.0	39.7	2.5	0.0	0.0	26.7	21.5
Incr Delay (d2), s/veh				0.0	0.0	16.5	3.9	0.4	0.0	0.0	4.7	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
%ile BackOfQ(50%),veh/ln				0.3	0.0	11.8	0.8	0.4	0.0	0.0	8.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				16.3	0.0	42.6	43.5	2.9	0.0	0.0	31.4	22.5
LnGrp LOS				B		D	D	A			C	C
Approach Vol, veh/h					1070			408			996	
Approach Delay, s/veh					42.0			6.6			30.3	
Approach LOS					D			A			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.6			10.4	36.2		43.4				
Change Period (Y+Rc), s		6.1			6.2	6.1		7.1				
Max Green Setting (Gmax), s		39.8			7.0	26.6		37.0				
Max Q Clear Time (g_c+I1), s		3.2			3.8	22.4		35.5				
Green Ext Time (p_c), s		2.6			0.0	2.3		0.8				

Intersection Summary												
HCM 7th Control Delay, s/veh			31.4									
HCM 7th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	2	20	0	0	0	0	279	37	0	255	589
Future Volume (veh/h)	105	2	20	0	0	0	0	279	37	0	255	589
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826				0	1826	1826	0	1826	1826
Adj Flow Rate, veh/h	136	0	0				0	303	40	0	277	640
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5				0	5	5	0	5	5
Cap, veh/h	336	176	0				0	2478	324	0	2787	2451
Arrive On Green	0.10	0.00	0.00				0.00	0.80	0.80	0.00	0.27	0.27
Sat Flow, veh/h	3478	1826	0				0	3176	403	0	3561	2723
Grp Volume(v), veh/h	136	0	0				0	169	174	0	277	640
Grp Sat Flow(s),veh/h/ln	1739	1826	0				0	1735	1753	0	1735	1362
Q Serve(g_s), s	3.3	0.0	0.0				0.0	1.9	1.9	0.0	5.4	8.6
Cycle Q Clear(g_c), s	3.3	0.0	0.0				0.0	1.9	1.9	0.0	5.4	8.6
Prop In Lane	1.00		0.00				0.00		0.23	0.00		1.00
Lane Grp Cap(c), veh/h	336	176	0				0	1393	1408	0	2787	2451
V/C Ratio(X)	0.40	0.00	0.00				0.00	0.12	0.12	0.00	0.10	0.26
Avail Cap(c_a), veh/h	1565	822	0				0	1393	1408	0	2787	2451
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	0.00	0.83	0.83
Uniform Delay (d), s/veh	38.2	0.0	0.0				0.0	1.9	1.9	0.0	8.5	3.3
Incr Delay (d2), s/veh	0.8	0.0	0.0				0.0	0.2	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
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0				0.0	0.4	0.4	0.0	1.3	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.0	0.0	0.0				0.0	2.1	2.1	0.0	8.5	3.3
LnGrp LOS	D							A	A		A	A
Approach Vol, veh/h		136						343			917	
Approach Delay, s/veh		39.0						2.1			4.9	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	76.8	13.2	76.8
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	40.5	40.5
Max Q Clear Time (g_c+I1), s	3.9	5.3	10.6
Green Ext Time (p_c), s	2.1	0.4	4.9

Intersection Summary	
HCM 7th Control Delay, s/veh	7.5
HCM 7th 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												
Traffic Volume (veh/h)	65	39	3	11	81	62	99	1414	15	39	1004	63
Future Volume (veh/h)	65	39	3	11	81	62	99	1414	15	39	1004	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	71	42	3	12	88	67	108	1537	16	42	1091	68
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	40	15	438	27	170	438	130	1837	19	97	1670	104
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.07	0.52	0.52	0.06	0.50	0.50
Sat Flow, veh/h	2	53	1560	0	608	1560	1753	3546	37	1753	3344	208
Grp Volume(v), veh/h	113	0	3	100	0	67	108	757	796	42	570	589
Grp Sat Flow(s),veh/h/ln	55	0	1560	608	0	1560	1753	1749	1834	1753	1749	1803
Q Serve(g_s), s	0.1	0.0	0.2	0.1	0.0	4.8	9.0	54.5	54.6	3.4	35.8	35.9
Cycle Q Clear(g_c), s	41.5	0.0	0.2	41.5	0.0	4.8	9.0	54.5	54.6	3.4	35.8	35.9
Prop In Lane	0.63		1.00	0.12		1.00	1.00		0.02	1.00		0.12
Lane Grp Cap(c), veh/h	55	0	438	198	0	438	130	906	950	97	873	900
V/C Ratio(X)	2.05	0.00	0.01	0.51	0.00	0.15	0.83	0.84	0.84	0.43	0.65	0.65
Avail Cap(c_a), veh/h	55	0	438	198	0	438	215	906	950	122	873	900
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.0	0.0	38.4	43.1	0.0	40.0	67.6	30.3	30.3	67.6	27.5	27.5
Incr Delay (d2), s/veh	530.0	0.0	0.0	2.1	0.0	0.2	12.9	9.0	8.7	3.0	3.8	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(50%),veh/ln	10.2	0.0	0.1	2.9	0.0	1.8	4.4	23.4	24.5	1.6	14.9	15.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	593.0	0.0	38.4	45.2	0.0	40.2	80.4	39.4	39.1	70.6	31.3	31.2
LnGrp LOS	F		D	D		D	F	D	D	E	C	C
Approach Vol, veh/h		116			167			1661			1201	
Approach Delay, s/veh		578.7			43.2			41.9			32.6	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.9	85.0		49.0	16.7	82.2		49.0				
Change Period (Y+Rc), s	5.7	8.4		7.5	5.7	8.4		7.5				
Max Green Setting (Gmax), s	10.3	76.6		41.5	18.1	68.8		41.5				
Max Q Clear Time (g_c+I1), s	5.4	56.6		43.5	11.0	37.9		43.5				
Green Ext Time (p_c), s	0.0	9.8		0.0	0.1	7.6		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	58.2
HCM 7th LOS	E



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	711	174	214	639	245	244
Future Volume (veh/h)	711	174	214	639	245	244
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	773	189	233	695	266	265
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1263	902	347	1930	381	597
Arrive On Green	0.36	0.36	0.10	0.55	0.22	0.22
Sat Flow, veh/h	3618	1572	3428	3618	1767	2768
Grp Volume(v), veh/h	773	189	233	695	266	265
Grp Sat Flow(s),veh/h/ln	1763	1572	1714	1763	1767	1384
Q Serve(g_s), s	9.2	3.0	3.3	5.7	7.1	4.2
Cycle Q Clear(g_c), s	9.2	3.0	3.3	5.7	7.1	4.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1263	902	347	1930	381	597
V/C Ratio(X)	0.61	0.21	0.67	0.36	0.70	0.44
Avail Cap(c_a), veh/h	3107	1725	369	3749	1336	2092
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	13.5	5.3	22.1	6.5	18.5	17.4
Incr Delay (d2), s/veh	0.5	0.1	4.4	0.1	2.3	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.7	1.4	1.6	2.8	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.0	5.4	26.5	6.6	20.8	17.9
LnGrp LOS	B	A	C	A	C	B
Approach Vol, veh/h	962			928	531	
Approach Delay, s/veh	12.3			11.6	19.4	
Approach LOS	B			B	B	

Timer - Assigned Phs	3	4		6	8
Phs Duration (G+Y+Rc), s	9.7	24.7		16.7	34.4
Change Period (Y+Rc), s	4.5	* 6.4		5.7	6.4
Max Green Setting (Gmax), s	5.5	* 45		38.6	54.3
Max Q Clear Time (g_c+I1), s	5.3	11.2		9.1	7.7
Green Ext Time (p_c), s	0.0	7.1		1.9	5.7

Intersection Summary	
HCM 7th Control Delay, s/veh	13.6
HCM 7th LOS	B

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	197	510	178	202	551	298	194	610	79	248	578	160
Future Volume (veh/h)	197	510	178	202	551	298	194	610	79	248	578	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	214	554	193	220	599	324	211	663	86	270	628	174
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	223	1041	566	223	997	464	223	880	114	258	1025	457
Arrive On Green	0.06	0.30	0.30	0.06	0.30	0.30	0.06	0.28	0.28	0.08	0.29	0.29
Sat Flow, veh/h	3428	3526	1572	3428	3377	1572	3428	3138	407	3428	3526	1572
Grp Volume(v), veh/h	214	554	193	220	599	324	211	372	377	270	628	174
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1689	1572	1714	1763	1782	1714	1763	1572
Q Serve(g_s), s	4.8	10.1	6.9	4.9	11.7	14.1	4.7	14.8	14.9	5.8	11.8	6.8
Cycle Q Clear(g_c), s	4.8	10.1	6.9	4.9	11.7	14.1	4.7	14.8	14.9	5.8	11.8	6.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	223	1041	566	223	997	464	223	494	500	258	1025	457
V/C Ratio(X)	0.96	0.53	0.34	0.99	0.60	0.70	0.95	0.75	0.75	1.05	0.61	0.38
Avail Cap(c_a), veh/h	223	1707	864	223	1666	776	223	915	926	258	1868	833
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	35.9	22.7	18.0	36.0	23.3	24.1	35.9	25.3	25.3	35.6	23.6	21.8
Incr Delay (d2), s/veh	49.3	0.4	0.4	56.9	0.6	1.9	45.8	2.4	2.3	68.5	0.6	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(50%),veh/ln	8.5	4.1	2.4	3.8	4.5	5.2	3.3	6.1	6.2	4.8	4.7	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	85.3	23.1	18.3	92.9	23.8	26.0	81.7	27.6	27.6	104.1	24.2	22.3
LnGrp LOS	F	C	B	F	C	C	F	C	C	F	C	C
Approach Vol, veh/h		961			1143			960			1072	
Approach Delay, s/veh		36.0			37.7			39.5			44.0	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	27.2	10.2	28.6	10.2	28.0	10.2	28.6
Change Period (Y+Rc), s	5.2	5.6	5.2	5.9	5.2	5.6	5.2	* 5.9
Max Green Setting (Gmax), s	5.8	40.0	5.0	37.3	5.0	40.8	5.0	* 38
Max Q Clear Time (g_c+I1), s	7.8	16.9	6.9	12.1	6.7	13.8	6.8	16.1
Green Ext Time (p_c), s	0.0	4.7	0.0	4.7	0.0	5.1	0.0	6.6

Intersection Summary	
HCM 7th Control Delay, s/veh	39.4
HCM 7th LOS	D

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	27	31	3	533	22	50	11	430	613	32	259	61
Future Volume (veh/h)	27	31	3	533	22	50	11	430	613	32	259	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	29	34	3	579	24	54	12	467	666	35	282	66
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	251	238	21	535	287	243	47	954	426	319	1497	891
Arrive On Green	0.14	0.14	0.14	0.15	0.15	0.15	0.03	0.27	0.27	0.18	0.42	0.42
Sat Flow, veh/h	1767	1681	148	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	29	0	37	579	24	54	12	467	666	35	282	66
Grp Sat Flow(s),veh/h/ln	1767	0	1829	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	1.1	0.0	1.4	12.0	0.9	2.3	0.5	8.6	21.0	1.3	3.9	1.5
Cycle Q Clear(g_c), s	1.1	0.0	1.4	12.0	0.9	2.3	0.5	8.6	21.0	1.3	3.9	1.5
Prop In Lane	1.00		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	0	259	535	287	243	47	954	426	319	1497	891
V/C Ratio(X)	0.12	0.00	0.14	1.08	0.08	0.22	0.26	0.49	1.56	0.11	0.19	0.07
Avail Cap(c_a), veh/h	251	0	905	535	942	798	205	954	426	319	1497	891
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	0.0	29.2	28.6	28.1	28.7	37.0	23.8	28.3	26.6	14.0	7.6
Incr Delay (d2), s/veh	0.2	0.0	0.2	63.2	0.1	0.5	2.9	0.4	265.5	0.2	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(50%),veh/ln	0.5	0.0	0.6	13.4	0.4	0.9	0.3	3.4	38.7	0.5	1.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.3	0.0	29.4	91.8	28.2	29.2	39.9	24.2	293.8	26.7	14.0	7.7
LnGrp LOS	C		C	F	C	C	D	C	F	C	B	A
Approach Vol, veh/h		66			657			1145			383	
Approach Delay, s/veh		29.3			84.3			181.2			14.1	
Approach LOS		C			F			F			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	16.0	6.7	37.9	16.0	17.0	18.6	26.0
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	12.0	38.4	9.0	26.0	11.0	39.4	14.0	21.0
Max Q Clear Time (g_c+I1), s	14.0	3.4	2.5	5.9	3.1	4.3	3.3	23.0
Green Ext Time (p_c), s	0.0	0.1	0.0	1.8	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	120.0
HCM 7th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	494	181	1	2	135	86	1	2	1	64	2	462
Future Volume (veh/h)	494	181	1	2	135	86	1	2	1	64	2	462
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	364	430	1	2	145	92	1	2	1	69	0	498
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	543	569	1	4	296	177	3	347	160	124	0	681
Arrive On Green	0.31	0.31	0.31	0.14	0.14	0.14	0.00	0.15	0.15	0.07	0.00	0.22
Sat Flow, veh/h	1767	1850	4	30	2159	1288	1767	2344	1080	1767	0	3145
Grp Volume(v), veh/h	364	0	431	123	0	116	1	1	2	69	0	498
Grp Sat Flow(s),veh/h/ln	1767	0	1855	1854	0	1624	1767	1763	1661	1767	0	1572
Q Serve(g_s), s	10.2	0.0	11.9	3.5	0.0	3.8	0.0	0.0	0.0	2.2	0.0	8.4
Cycle Q Clear(g_c), s	10.2	0.0	11.9	3.5	0.0	3.8	0.0	0.0	0.0	2.2	0.0	8.4
Prop In Lane	1.00		0.00	0.02		0.79	1.00		0.65	1.00		1.00
Lane Grp Cap(c), veh/h	543	0	570	255	0	223	3	261	246	124	0	681
V/C Ratio(X)	0.67	0.00	0.76	0.48	0.00	0.52	0.32	0.01	0.01	0.56	0.00	0.73
Avail Cap(c_a), veh/h	990	0	1039	944	0	827	186	855	805	227	0	1596
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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	17.8	22.7	0.0	22.8	28.4	20.7	20.7	25.6	0.0	20.8
Incr Delay (d2), s/veh	1.4	0.0	2.1	1.4	0.0	1.9	51.0	0.0	0.0	3.9	0.0	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(50%),veh/ln	3.8	0.0	4.7	1.5	0.0	1.4	0.1	0.0	0.0	1.0	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.6	0.0	19.9	24.1	0.0	24.7	79.4	20.7	20.7	29.5	0.0	22.3
LnGrp LOS	B		B	C		C	E	C	C	C		C
Approach Vol, veh/h		795			239			4			567	
Approach Delay, s/veh		19.3			24.4			35.4			23.2	
Approach LOS		B			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.7	13.1		22.6	4.8	17.0		12.5
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7
Max Green Setting (Gmax), s	7.3	27.6		31.9	6.0	28.9		29.0
Max Q Clear Time (g_c+I1), s	4.2	2.0		13.9	2.0	10.4		5.8
Green Ext Time (p_c), s	0.0	0.0		3.6	0.0	1.9		1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	21.5
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	7	0	5	16	195	230	0	95	93
Future Vol, veh/h	0	0	0	7	0	5	16	195	230	0	95	93
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	330
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	8	0	5	17	212	250	0	103	101

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	350	451	212	204	0	-	-	-	0
Stage 1	247	247	-	-	-	-	-	-	-
Stage 2	103	204	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	628	489	804	1310	-	0	0	-	-
Stage 1	771	684	-	-	-	0	0	-	-
Stage 2	897	714	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	618	0	804	1310	-	-	-	-	-
Mov Cap-2 Maneuver	618	0	-	-	-	-	-	-	-
Stage 1	760	0	-	-	-	-	-	-	-
Stage 2	897	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.37	0.59	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	136	-	684	-	-
HCM Lane V/C Ratio	0.013	-	0.019	-	-
HCM Ctrl Dly (s/v)	7.8	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

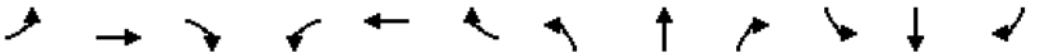
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	0	193	0	0	0	0	357	6	1	101	0
Future Vol, veh/h	60	0	193	0	0	0	0	357	6	1	101	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	470	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	65	0	210	0	0	0	0	388	7	1	110	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	306	507	-	-	0	0	395	0	0
Stage 1	112	112	-	-	-	-	-	-	-
Stage 2	194	395	-	-	-	-	-	-	-
Critical Hdwy	6.78	6.68	-	-	-	-	4.28	-	-
Critical Hdwy Stg 1	5.58	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.98	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.614	4.114	-	-	-	-	2.314	-	-
Pot Cap-1 Maneuver	650	450	0	0	-	-	1102	-	0
Stage 1	885	781	0	0	-	-	-	-	0
Stage 2	794	583	0	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	650	0	-	-	-	-	1102	-	-
Mov Cap-2 Maneuver	650	0	-	-	-	-	-	-	-
Stage 1	885	0	-	-	-	-	-	-	-
Stage 2	793	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.16	0	0.08
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	650	1102	-
HCM Lane V/C Ratio	-	-	0.1	0.001	-
HCM Ctrl Dly (s/v)	-	-	11.2	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	37	90	29	39	4	95	310	35	5	249	43
Future Volume (veh/h)	17	37	90	29	39	4	95	310	35	5	249	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1455	1752	1752	1752	1455	952	1752	1752	952	1604
Adj Flow Rate, veh/h	18	40	98	32	42	4	103	337	38	5	271	47
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, %	10	10	30	10	10	10	30	64	10	10	64	20
Cap, veh/h	86	265	612	136	317	269	351	822	590	22	360	340
Arrive On Green	0.05	0.15	0.15	0.08	0.18	0.18	0.13	0.32	0.32	0.01	0.20	0.20
Sat Flow, veh/h	1668	1752	2171	1668	1752	1485	2689	2598	1485	1668	1808	1359
Grp Volume(v), veh/h	18	40	98	32	42	4	103	337	38	5	271	47
Grp Sat Flow(s),veh/h/ln	1668	1752	1085	1668	1752	1485	1345	866	1485	1668	904	1359
Q Serve(g_s), s	0.7	1.3	2.2	1.2	1.3	0.1	2.2	6.6	1.0	0.2	9.1	1.7
Cycle Q Clear(g_c), s	0.7	1.3	2.2	1.2	1.3	0.1	2.2	6.6	1.0	0.2	9.1	1.7
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	86	265	612	136	317	269	351	822	590	22	360	340
V/C Ratio(X)	0.21	0.15	0.16	0.24	0.13	0.01	0.29	0.41	0.06	0.23	0.75	0.14
Avail Cap(c_a), veh/h	314	1491	2131	314	1491	1263	472	1610	1040	259	1084	884
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	29.3	23.7	17.4	27.7	22.1	21.7	25.3	17.3	12.0	31.4	24.3	18.7
Incr Delay (d2), s/veh	1.2	0.3	0.1	0.9	0.2	0.0	0.5	0.3	0.0	5.0	3.2	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(50%),veh/ln	0.3	0.5	0.5	0.4	0.5	0.0	0.6	1.1	0.3	0.1	1.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.5	24.0	17.5	28.6	22.3	21.7	25.8	17.6	12.0	36.5	27.5	18.9
LnGrp LOS	C	C	B	C	C	C	C	B	B	D	C	B
Approach Vol, veh/h		156			78			478			323	
Approach Delay, s/veh		20.7			24.9			18.9			26.4	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	18.1	14.1	21.2	9.0	20.1	6.6	28.8
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	12.1	54.8	11.3	38.6	12.1	54.8	10.0	39.9
Max Q Clear Time (g_c+I1), s	3.2	4.2	4.2	11.1	2.7	3.3	2.2	8.6
Green Ext Time (p_c), s	0.0	0.6	0.1	1.7	0.0	0.2	0.0	2.2

Intersection Summary	
HCM 7th Control Delay, s/veh	22.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	95	0	90	4	338	52	154	228	0
Future Volume (veh/h)	0	0	0	95	0	90	4	338	52	154	228	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				952	0	952	1870	952	952	952	952	0
Adj Flow Rate, veh/h				103	0	98	4	367	57	167	248	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				64	0	64	2	64	64	64	64	0
Cap, veh/h				145	0	129	19	455	70	194	1281	0
Arrive On Green				0.16	0.00	0.16	0.01	0.29	0.29	0.21	0.49	0.00
Sat Flow, veh/h				906	0	806	1781	1570	242	906	2683	0
Grp Volume(v), veh/h				103	0	98	4	210	214	167	248	0
Grp Sat Flow(s),veh/h/ln				906	0	806	1781	904	908	906	866	0
Q Serve(g_s), s				6.5	0.0	7.0	0.1	12.9	13.2	10.7	3.2	0.0
Cycle Q Clear(g_c), s				6.5	0.0	7.0	0.1	12.9	13.2	10.7	3.2	0.0
Prop In Lane				1.00		1.00	1.00		0.27	1.00		0.00
Lane Grp Cap(c), veh/h				145	0	129	19	262	263	194	1281	0
V/C Ratio(X)				0.71	0.00	0.76	0.21	0.80	0.81	0.86	0.19	0.00
Avail Cap(c_a), veh/h				768	0	683	296	602	605	282	2106	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				23.9	0.0	24.2	29.5	19.8	19.9	22.8	8.5	0.0
Incr Delay (d2), s/veh				6.2	0.0	8.7	5.3	5.6	6.0	16.4	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(50%),veh/ln				1.5	0.0	1.5	0.1	2.6	2.6	2.8	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				30.2	0.0	32.9	34.8	25.4	25.9	39.2	8.6	0.0
LnGrp LOS				C		C	C	C	C	D	A	
Approach Vol, veh/h					201			428			415	
Approach Delay, s/veh					31.5			25.7			20.9	
Approach LOS					C			C			C	

Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	18.6	25.8			6.3	38.1		15.8				
Change Period (Y+Rc), s	5.7	8.4			5.7	8.4		6.1				
Max Green Setting (Gmax), s	13.3	40.1			10.0	48.8		51.0				
Max Q Clear Time (g_c+I1), s	12.7	15.2			2.1	5.2		9.0				
Green Ext Time (p_c), s	0.2	2.3			0.0	1.6		0.7				

Intersection Summary		
HCM 7th Control Delay, s/veh	24.9	
HCM 7th LOS	C	



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	123	161	164	840	618	168
Future Volume (veh/h)	123	161	164	840	618	168
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	134	0	178	913	672	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	171		226	1187	799	
Arrive On Green	0.10	0.00	0.14	0.68	0.46	0.00
Sat Flow, veh/h	1668	1485	1668	1737	1737	1485
Grp Volume(v), veh/h	134	0	178	913	672	0
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1737	1737	1485
Q Serve(g_s), s	4.0	0.0	5.3	18.0	17.5	0.0
Cycle Q Clear(g_c), s	4.0	0.0	5.3	18.0	17.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	171		226	1187	799	
V/C Ratio(X)	0.78		0.79	0.77	0.84	
Avail Cap(c_a), veh/h	406		503	2247	1571	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.5	0.0	21.5	5.4	12.2	0.0
Incr Delay (d2), s/veh	7.6	0.0	5.9	1.1	2.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.0	1.3	4.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	30.1	0.0	27.4	6.5	14.7	0.0
LnGrp LOS	C		C	A	B	
Approach Vol, veh/h	134			1091	672	
Approach Delay, s/veh	30.1			9.9	14.7	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		41.6		9.8	11.5	30.1
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		66.5		12.5	15.5	46.5
Max Q Clear Time (g_c+I1), s		20.0		6.0	7.3	19.5
Green Ext Time (p_c), s		7.3		0.2	0.3	4.1

Intersection Summary	
HCM 7th Control Delay, s/veh	13.0
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	199	8	124	159	226	4	501	81	180	649	35
Future Volume (veh/h)	32	199	8	124	159	226	4	501	81	180	649	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	35	216	9	135	173	246	4	545	88	196	705	38
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	41	251	249	157	201	310	106	656	319	233	888	431
Arrive On Green	0.16	0.16	0.16	0.20	0.20	0.20	0.06	0.21	0.21	0.13	0.28	0.28
Sat Flow, veh/h	253	1560	1547	783	1004	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	251	0	9	308	0	246	4	545	88	196	705	38
Grp Sat Flow(s),veh/h/ln	1813	0	1547	1787	0	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	11.0	0.0	0.4	13.6	0.0	12.4	0.2	13.4	3.9	9.0	16.8	1.5
Cycle Q Clear(g_c), s	11.0	0.0	0.4	13.6	0.0	12.4	0.2	13.4	3.9	9.0	16.8	1.5
Prop In Lane	0.14		1.00	0.44		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	292	0	249	357	0	310	106	656	319	233	888	431
V/C Ratio(X)	0.86	0.00	0.04	0.86	0.00	0.79	0.04	0.83	0.28	0.84	0.79	0.09
Avail Cap(c_a), veh/h	321	0	274	404	0	350	106	779	378	265	1071	520
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	0.0	29.0	31.7	0.0	31.1	36.2	31.1	27.4	34.6	27.4	21.8
Incr Delay (d2), s/veh	19.1	0.0	0.1	15.7	0.0	10.8	0.1	6.5	0.5	19.2	3.5	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(50%),veh/ln	6.0	0.0	0.1	6.9	0.0	5.1	0.1	5.2	1.4	4.7	6.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.5	0.0	29.0	47.4	0.0	41.9	36.3	37.7	27.8	53.8	30.8	21.9
LnGrp LOS	D		C	D		D	D	D	C	D	C	C
Approach Vol, veh/h		260			554			637			939	
Approach Delay, s/veh		51.7			45.0			36.3			35.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.5	23.9		19.7	9.5	29.8		22.9
Change Period (Y+Rc), s	4.5	7.0		6.5	4.5	7.0		6.5
Max Green Setting (Gmax), s	12.5	20.0		14.5	5.0	27.5		18.5
Max Q Clear Time (g_c+I1), s	11.0	15.4		13.0	2.2	18.8		15.6
Green Ext Time (p_c), s	0.1	1.4		0.2	0.0	2.8		0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	39.6
HCM 7th LOS	D

Intersection	
Int Delay, s/veh	10.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	286	4	1	582	299	139
Future Vol, veh/h	286	4	1	582	299	139
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	385	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	18	18	10
Mvmt Flow	311	4	1	633	325	151

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1035	401	476	0	-	0
Stage 1	401	-	-	-	-	-
Stage 2	635	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	~ 248	632	1046	-	-	-
Stage 1	660	-	-	-	-	-
Stage 2	513	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 248	632	1046	-	-	-
Mov Cap-2 Maneuver	373	-	-	-	-	-
Stage 1	659	-	-	-	-	-
Stage 2	513	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	48.66	0.01	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1046	-	375	-	-
HCM Lane V/C Ratio	0.001	-	0.839	-	-
HCM Ctrl Dly (s/v)	8.4	-	48.7	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0	-	7.7	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	9.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	180	122	0	336	4	248	0	1	7	0	2
Future Vol, veh/h	1	180	122	0	336	4	248	0	1	7	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	18	10	10	18	10	10	2	10	10	2	10
Mvmt Flow	1	196	133	0	365	4	270	0	1	8	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	370	0	0	328	0	0	629	634	262	565	698	367
Stage 1	-	-	-	-	-	-	264	264	-	367	367	-
Stage 2	-	-	-	-	-	-	365	370	-	198	330	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.52	6.3	7.2	6.52	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.018	3.39	3.59	4.018	3.39
Pot Cap-1 Maneuver	1146	-	-	1188	-	-	383	397	758	424	364	660
Stage 1	-	-	-	-	-	-	724	690	-	636	622	-
Stage 2	-	-	-	-	-	-	638	620	-	786	645	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1146	-	-	1188	-	-	382	396	758	422	364	660
Mov Cap-2 Maneuver	-	-	-	-	-	-	382	396	-	422	364	-
Stage 1	-	-	-	-	-	-	723	689	-	636	622	-
Stage 2	-	-	-	-	-	-	636	620	-	784	645	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.03	0	34.2	13.01
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	383	5	-	-	1188	-	-	459
HCM Lane V/C Ratio	0.708	0.001	-	-	-	-	-	0.021
HCM Ctrl Dly (s/v)	34.2	8.1	0	-	0	-	-	13
HCM Lane LOS	D	A	A	-	A	-	-	B
HCM 95th %tile Q(veh)	5.3	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	15	349	5	8	198
Future Vol, veh/h	6	15	349	5	8	198
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	10	10	18	10	10	18
Mvmt Flow	6	16	375	5	9	213

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	609	379	0	0	382	0
Stage 1	379	-	-	-	-	-
Stage 2	230	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	446	651	-	-	1134	-
Stage 1	675	-	-	-	-	-
Stage 2	790	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	442	650	-	-	1133	-
Mov Cap-2 Maneuver	530	-	-	-	-	-
Stage 1	674	-	-	-	-	-
Stage 2	784	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.13	0	0.32
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	610	1133	-
HCM Lane V/C Ratio	-	-	0.037	0.008	-
HCM Ctrl Dly (s/v)	-	-	11.1	8.2	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	13.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	137	0	165	0	0	0	107	271	0	0	193	67
Future Vol, veh/h	137	0	165	0	0	0	107	271	0	0	193	67
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	18	10	10	18	10
Mvmt Flow	149	0	179	0	0	0	116	295	0	0	210	73

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	773	773	246	737	810	295	283	0	0	295	0	0
Stage 1	246	246	-	527	527	-	-	-	-	-	-	-
Stage 2	527	527	-	210	283	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	306	320	773	324	305	726	1235	-	-	1223	-	-
Stage 1	740	688	-	520	515	-	-	-	-	-	-	-
Stage 2	520	515	-	774	663	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	272	284	773	221	271	726	1235	-	-	1223	-	-
Mov Cap-2 Maneuver	272	284	-	221	271	-	-	-	-	-	-	-
Stage 1	740	688	-	462	457	-	-	-	-	-	-	-
Stage 2	462	457	-	595	663	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	37.85	0	2.33	0
HCM LOS	E	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	510	-	-	421	-	1223	-	-
HCM Lane V/C Ratio	0.094	-	-	0.78	-	-	-	-
HCM Ctrl Dly (s/v)	8.2	0	-	37.9	0	0	-	-
HCM Lane LOS	A	A	-	E	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	6.7	-	0	-	-

Intersection	
Int Delay, s/veh	332.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	116	0	457	98	2	34	274	226	71	13	368	115
Future Vol, veh/h	116	0	457	98	2	34	274	226	71	13	368	115
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	240	-	-	290	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	121	0	476	102	2	35	285	235	74	14	383	120

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1278	1351	443	1254	1373	272	503	0	0	309	0	0
Stage 1	470	470	-	843	843	-	-	-	-	-	-	-
Stage 2	807	880	-	410	530	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	138	145	598	143	140	747	1021	-	-	1207	-	-
Stage 1	559	547	-	347	369	-	-	-	-	-	-	-
Stage 2	364	354	-	603	514	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 92	103	598	~ 21	100	747	1021	-	-	1207	-	-
Mov Cap-2 Maneuver	~ 92	103	-	~ 21	100	-	-	-	-	-	-	-
Stage 1	553	541	-	250	266	-	-	-	-	-	-	-
Stage 2	248	255	-	122	508	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 539.35	$ 2069.97	4.74	0.21
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1021	-	-	283	28	1207	-	-
HCM Lane V/C Ratio	0.279	-	-	2.108	4.974	0.011	-	-
HCM Ctrl Dly (s/v)	9.9	-	-	$ 539.4	$ 2070	8	-	-
HCM Lane LOS	A	-	-	F	F	A	-	-
HCM 95th %tile Q(veh)	1.1	-	-	44.3	17	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2952.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	28	207	80	40	40	118	535	57	28	957	28
Future Vol, veh/h	40	28	207	80	40	40	118	535	57	28	957	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	10	5	5	10	5
Mvmt Flow	43	30	225	87	43	43	128	582	62	30	1040	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1976	2016	1055	1985	2001	613	1071	0	0	643	0	0
Stage 1	1116	1116	-	869	869	-	-	-	-	-	-	-
Stage 2	860	900	-	1116	1132	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	46	57	270	~ 45	59	487	640	-	-	927	-	-
Stage 1	249	279	-	342	365	-	-	-	-	-	-	-
Stage 2	347	353	-	249	275	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	36	270	~ 1	~ 37	487	640	-	-	927	-	-
Mov Cap-2 Maneuver	-	36	-	~ 1	~ 37	-	-	-	-	-	-	-
Stage 1	228	257	-	234	250	-	-	-	-	-	-	-
Stage 2	178	242	-	~ 34	252	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v		$ 39814.53	2	0.25
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	294	-	-	-	2	49	-	-
HCM Lane V/C Ratio	0.2	-	-	-	82.037	0.033	-	-
HCM Ctrl Dly (s/v)	12	0	-	$ 39814.5	9	0	-	
HCM Lane LOS	B	A	-	-	F	A	A	-
HCM 95th %tile Q(veh)	0.7	-	-	-	24.2	0.1	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	222.1
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	106	92	177	112	80	100	123	556	45	118	1056	140
Future Vol, veh/h	106	92	177	112	80	100	123	556	45	118	1056	140
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
Heavy Vehicles, %	8	8	8	8	8	8	7	7	7	5	5	5
Mvmt Flow	115	100	192	122	87	109	134	604	49	128	1148	152
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	28.1	23.5	89.5	394.6
HCM LOS	D	C	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	31%	0%	70%	0%	74%	0%	18%	0%
Vol Thru, %	69%	86%	30%	21%	26%	29%	82%	79%
Vol Right, %	0%	14%	0%	79%	0%	71%	0%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	401	323	152	223	152	140	646	668
LT Vol	123	0	106	0	112	0	118	0
Through Vol	278	278	46	46	40	40	528	528
RT Vol	0	45	0	177	0	100	0	140
Lane Flow Rate	436	351	165	242	165	152	702	726
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	1.135	0.89	0.477	0.638	0.488	0.413	1.799	1.812
Departure Headway (Hd)	9.567	9.308	11.648	10.713	11.965	11.065	9.526	9.278
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	384	393	312	339	304	327	386	399
Service Time	7.267	7.008	9.348	8.413	9.665	8.765	7.226	6.978
HCM Lane V/C Ratio	1.135	0.893	0.529	0.714	0.543	0.465	1.819	1.82
HCM Control Delay, s/veh	118.9	53.1	24.5	30.5	25.6	21.3	392.1	397
HCM Lane LOS	F	F	C	D	D	C	F	F
HCM 95th-tile Q	16.2	9	2.4	4.2	2.5	2	43.6	45.2

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	1	28	0	1	2	19	531	0	4	574	15
Future Vol, veh/h	8	1	28	0	1	2	19	531	0	4	574	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	400	-	400	395	-	510
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	35	10	10	35	10
Mvmt Flow	9	1	30	0	1	2	21	577	0	4	624	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	963	1251	312	940	1251	289	624	0	0	577	0	0
Stage 1	633	633	-	618	618	-	-	-	-	-	-	-
Stage 2	330	618	-	321	633	-	-	-	-	-	-	-
Critical Hdwy	7.7	6.7	7.1	7.7	6.7	7.1	4.3	-	-	4.3	-	-
Critical Hdwy Stg 1	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.6	4.1	3.4	3.6	4.1	3.4	2.3	-	-	2.3	-	-
Pot Cap-1 Maneuver	199	161	661	207	161	685	901	-	-	939	-	-
Stage 1	416	452	-	424	459	-	-	-	-	-	-	-
Stage 2	635	459	-	643	452	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	192	156	661	191	156	685	901	-	-	939	-	-
Mov Cap-2 Maneuver	360	333	-	358	327	-	-	-	-	-	-	-
Stage 1	414	450	-	414	449	-	-	-	-	-	-	-
Stage 2	617	449	-	609	450	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	12.1	12.22	0.31	0.06
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	901	-	-	547	502	939	-	-
HCM Lane V/C Ratio	0.023	-	-	0.073	0.006	0.005	-	-
HCM Ctrl Dly (s/v)	9.1	-	-	12.1	12.2	8.9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	0	0	-	-

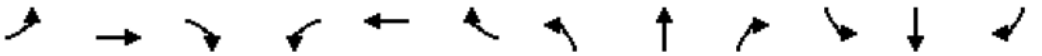
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	604	6	0	478	10	2	0	0	12	5	58
Future Vol, veh/h	26	604	6	0	478	10	2	0	0	12	5	58
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	11	35	11	11	35	11	11	11	11	11	11	11
Mvmt Flow	28	657	7	0	520	11	2	0	0	13	5	63

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	530	0	0	663	0	0	976	1243	328	904	1239	260
Stage 1	-	-	-	-	-	-	713	713	-	520	520	-
Stage 2	-	-	-	-	-	-	263	530	-	385	720	-
Critical Hdwy	4.32	-	-	4.32	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.31	-	-	2.31	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	973	-	-	863	-	-	193	161	642	218	162	712
Stage 1	-	-	-	-	-	-	369	412	-	485	509	-
Stage 2	-	-	-	-	-	-	695	503	-	586	409	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	973	-	-	863	-	-	168	156	642	212	157	712
Mov Cap-2 Maneuver	-	-	-	-	-	-	318	322	-	396	328	-
Stage 1	-	-	-	-	-	-	358	400	-	485	509	-
Stage 2	-	-	-	-	-	-	627	503	-	569	398	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.36	0	16.39	11.59
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	318	-	973	-	-	863	-	-	373	712
HCM Lane V/C Ratio	0.007	-	0.029	-	-	-	-	-	0.05	0.088
HCM Ctrl Dly (s/v)	16.4	0	8.8	-	-	0	-	-	15.2	10.5
HCM Lane LOS	C	A	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0	-	0.1	-	-	0	-	-	0.2	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	512	40	19	355	100	60	61	17	209	103	100
Future Volume (veh/h)	53	512	40	19	355	100	60	61	17	209	103	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	56	545	43	20	378	106	64	65	18	222	110	106
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	186	758	60	91	509	141	199	282	78	270	209	202
Arrive On Green	0.11	0.31	0.31	0.05	0.25	0.25	0.12	0.21	0.21	0.16	0.26	0.26
Sat Flow, veh/h	1668	2463	194	1668	2026	561	1668	1316	364	1668	815	785
Grp Volume(v), veh/h	56	290	298	20	243	241	64	0	83	222	0	216
Grp Sat Flow(s),veh/h/ln	1668	1312	1345	1668	1312	1275	1668	0	1680	1668	0	1600
Q Serve(g_s), s	2.3	14.4	14.5	0.8	12.5	12.8	2.6	0.0	3.0	9.4	0.0	8.5
Cycle Q Clear(g_c), s	2.3	14.4	14.5	0.8	12.5	12.8	2.6	0.0	3.0	9.4	0.0	8.5
Prop In Lane	1.00		0.14	1.00		0.44	1.00		0.22	1.00		0.49
Lane Grp Cap(c), veh/h	186	404	414	91	329	320	199	0	360	270	0	411
V/C Ratio(X)	0.30	0.72	0.72	0.22	0.74	0.75	0.32	0.00	0.23	0.82	0.00	0.53
Avail Cap(c_a), veh/h	273	545	559	273	545	530	273	0	732	370	0	791
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	30.0	22.6	22.6	33.2	25.3	25.4	29.6	0.0	23.8	29.8	0.0	23.4
Incr Delay (d2), s/veh	0.9	2.9	3.0	1.2	3.2	3.6	0.9	0.0	0.3	10.2	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(50%),veh/ln	0.9	4.4	4.6	0.4	3.9	3.9	1.1	0.0	1.2	4.5	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.9	25.5	25.6	34.4	28.5	29.0	30.5	0.0	24.2	40.0	0.0	24.5
LnGrp LOS	C	C	C	C	C	C	C		C	D		C
Approach Vol, veh/h		644			504			147			438	
Approach Delay, s/veh		26.0			29.0			26.9			32.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	27.7	13.4	23.6	12.9	23.5	16.6	20.5
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.0	30.5	12.0	36.3	12.0	30.5	16.3	32.0
Max Q Clear Time (g_c+I1), s	2.8	16.5	4.6	10.5	4.3	14.8	11.4	5.0
Green Ext Time (p_c), s	0.0	3.1	0.1	1.4	0.0	2.6	0.3	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	28.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2	1	2	1	357	2	186	5	529	229	0
Future Volume (veh/h)	0	2	1	2	1	357	2	186	5	529	229	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1381	1752	1381	1381	1752
Adj Flow Rate, veh/h	0	2	1	2	1	0	2	196	5	557	241	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	10	35	10	35	35	10
Cap, veh/h	3	12	6	9	224		9	514	291	691	1210	685
Arrive On Green	0.00	0.01	0.01	0.01	0.13	0.00	0.01	0.20	0.20	0.27	0.46	0.00
Sat Flow, veh/h	1668	1102	551	1668	1752	1485	1668	2624	1485	2552	2624	1485
Grp Volume(v), veh/h	0	0	3	2	1	0	2	196	5	557	241	0
Grp Sat Flow(s),veh/h/ln	1668	0	1653	1668	1752	1485	1668	1312	1485	1276	1312	1485
Q Serve(g_s), s	0.0	0.0	0.1	0.1	0.0	0.0	0.1	3.3	0.1	10.4	2.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	0.1	0.0	0.0	0.1	3.3	0.1	10.4	2.8	0.0
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	3	0	18	9	224		9	514	291	691	1210	685
V/C Ratio(X)	0.00	0.00	0.17	0.22	0.00		0.22	0.38	0.02	0.81	0.20	0.00
Avail Cap(c_a), veh/h	327	0	440	327	467		327	565	320	1065	1210	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)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	25.0	25.3	19.4	0.0	25.3	17.8	16.6	17.4	8.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	4.4	11.5	0.0	0.0	11.5	0.5	0.0	2.6	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(50%),veh/ln	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.8	0.0	2.5	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	29.4	36.8	19.4	0.0	36.8	18.3	16.6	20.0	8.2	0.0
LnGrp LOS			C	D	B		D	B	B	C	A	
Approach Vol, veh/h		3			3			203			798	
Approach Delay, s/veh		29.4			31.0			18.4			16.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	16.6	6.0	9.0	6.0	30.1	0.0	14.9
Change Period (Y+Rc), s	5.7	* 6.6	5.7	8.4	5.7	6.6	5.7	8.4
Max Green Setting (Gmax), s	3.8	* 11	10.0	13.6	10.0	20.0	10.0	13.6
Max Q Clear Time (g_c+I1), s	2.4	5.3	2.1	2.1	2.1	4.8	0.0	2.0
Green Ext Time (p_c), s	1.4	0.4	0.0	0.0	0.0	1.1	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	16.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

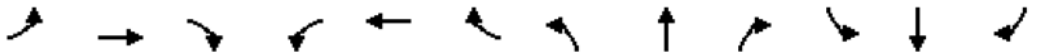
Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	547	1	22	367	111	1	28	11	230	57	0
Future Vol, veh/h	1	547	1	22	367	111	1	28	11	230	57	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	570	-	570	650	-	650	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	1	570	1	23	382	116	1	29	11	240	59	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	498	0	0	571	0	0	839	1116	285	730	1001	191
Stage 1	-	-	-	-	-	-	572	572	-	428	428	-
Stage 2	-	-	-	-	-	-	267	544	-	302	573	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	1008	-	-	945	-	-	246	194	689	296	228	794
Stage 1	-	-	-	-	-	-	453	483	-	554	563	-
Stage 2	-	-	-	-	-	-	694	498	-	661	483	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1008	-	-	945	-	-	203	190	689	261	223	794
Mov Cap-2 Maneuver	-	-	-	-	-	-	384	366	-	438	384	-
Stage 1	-	-	-	-	-	-	452	483	-	541	550	-
Stage 2	-	-	-	-	-	-	604	486	-	610	482	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.02	0.39	14.22	31.04
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	367	689	1008	-	-	945	-	-	426	-
HCM Lane V/C Ratio	0.082	0.017	0.001	-	-	0.024	-	-	0.702	-
HCM Ctrl Dly (s/v)	15.7	10.3	8.6	-	-	8.9	-	-	31	0
HCM Lane LOS	C	B	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	0.3	0.1	0	-	-	0.1	-	-	5.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	302	1	11	13	19	12	73	380	3	7	1295	26
Future Volume (veh/h)	302	1	11	13	19	12	73	380	3	7	1295	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	328	1	12	14	21	13	79	413	3	8	1408	28
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	342	424	360	50	118	100	138	900	762	34	1507	30
Arrive On Green	0.20	0.23	0.23	0.03	0.07	0.07	0.16	0.99	0.99	0.02	0.44	0.44
Sat Flow, veh/h	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	3451	69
Grp Volume(v), veh/h	328	1	12	14	21	13	79	413	3	8	701	735
Grp Sat Flow(s),veh/h/ln	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	1721	1799
Q Serve(g_s), s	18.8	0.0	0.6	0.8	1.1	0.8	4.2	0.3	0.0	0.5	38.8	38.9
Cycle Q Clear(g_c), s	18.8	0.0	0.6	0.8	1.1	0.8	4.2	0.3	0.0	0.5	38.8	38.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	342	424	360	50	118	100	138	900	762	34	751	786
V/C Ratio(X)	0.96	0.00	0.03	0.28	0.18	0.13	0.57	0.46	0.00	0.23	0.93	0.94
Avail Cap(c_a), veh/h	342	424	360	155	145	123	157	900	762	172	751	786
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	1.00	1.00	1.00	1.00	1.00	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.7	29.3	29.5	47.5	44.2	44.1	40.4	0.2	0.2	48.3	26.8	26.8
Incr Delay (d2), s/veh	38.2	0.0	0.0	3.0	0.7	0.6	3.4	1.5	0.0	3.4	20.1	19.7
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(50%),veh/ln	11.0	0.0	0.2	0.4	0.5	0.3	1.8	0.4	0.0	0.2	18.0	18.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	77.9	29.3	29.6	50.5	44.9	44.6	43.8	1.7	0.2	51.7	46.9	46.5
LnGrp LOS	E	C	C	D	D	D	D	A	A	D	D	D
Approach Vol, veh/h		341			48			495			1444	
Approach Delay, s/veh		76.0			46.5			8.4			46.7	
Approach LOS		E			D			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	57.2	7.6	28.5	12.7	51.2	24.5	11.6
Change Period (Y+Rc), s	4.7	7.5	4.7	5.1	4.7	7.5	4.7	5.1
Max Green Setting (Gmax), s	10.0	40.2	9.0	18.8	9.1	41.1	19.8	8.0
Max Q Clear Time (g_c+I1), s	2.5	2.3	2.8	2.6	6.2	40.9	20.8	3.1
Green Ext Time (p_c), s	0.0	2.3	0.0	0.0	0.0	0.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	42.9
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	2	112	27	4	1	18	434	13	0	698	624
Future Volume (veh/h)	20	2	112	27	4	1	18	434	13	0	698	624
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	22	2	122	29	4	1	20	472	14	0	759	678
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	141	13	137	75	10	75	138	1241	1052	2	1011	857
Arrive On Green	0.09	0.09	0.09	0.05	0.05	0.05	0.08	0.69	0.69	0.00	1.00	1.00
Sat Flow, veh/h	1587	144	1535	1525	210	1535	1725	1811	1535	1725	1811	1535
Grp Volume(v), veh/h	24	0	122	33	0	1	20	472	14	0	759	678
Grp Sat Flow(s),veh/h/ln	1732	0	1535	1735	0	1535	1725	1811	1535	1725	1811	1535
Q Serve(g_s), s	1.3	0.0	7.9	1.8	0.0	0.1	1.1	11.1	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.3	0.0	7.9	1.8	0.0	0.1	1.1	11.1	0.3	0.0	0.0	0.0
Prop In Lane	0.92		1.00	0.88		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	0	137	85	0	75	138	1241	1052	2	1011	857
V/C Ratio(X)	0.16	0.00	0.89	0.39	0.00	0.01	0.14	0.38	0.01	0.00	0.75	0.79
Avail Cap(c_a), veh/h	154	0	137	139	0	123	138	1241	1052	138	1011	857
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	1.00	1.00	1.00	1.00	0.00	0.42	0.42
Uniform Delay (d), s/veh	42.1	0.0	45.1	46.1	0.0	45.3	42.8	6.7	5.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	46.6	2.9	0.0	0.1	0.5	0.9	0.0	0.0	2.2	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(50%),veh/ln	0.5	0.0	4.6	0.8	0.0	0.0	0.5	3.3	0.1	0.0	0.6	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.5	0.0	91.7	49.0	0.0	45.3	43.3	7.6	5.0	0.0	2.2	3.2
LnGrp LOS	D		F	D		D	D	A	A		A	A
Approach Vol, veh/h		146			34			506			1437	
Approach Delay, s/veh		83.6			48.9			8.9			2.7	
Approach LOS		F			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	76.0		14.0	12.7	63.3		10.0				
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1				
Max Green Setting (Gmax), s	5.3	52.7		8.9	8.0	52.7		8.0				
Max Q Clear Time (g_c+I1), s	10.0	13.1		9.9	3.1	2.0		3.8				
Green Ext Time (p_c), s	0.0	2.7		0.0	0.0	9.2		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	10.5
HCM 7th LOS	B

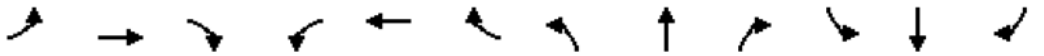
Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	198	7	1	205	112	9	7	1	227	3	38
Future Vol, veh/h	27	198	7	1	205	112	9	7	1	227	3	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	650	620	-	600	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	29	215	8	1	223	122	10	8	1	247	3	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	345	0	0	223	0	0	389	621	108	395	507	111
Stage 1	-	-	-	-	-	-	274	274	-	225	225	-
Stage 2	-	-	-	-	-	-	115	347	-	170	282	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	1155	-	-	1287	-	-	525	386	901	520	450	895
Stage 1	-	-	-	-	-	-	687	662	-	735	697	-
Stage 2	-	-	-	-	-	-	854	614	-	792	657	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1155	-	-	1287	-	-	484	375	901	497	438	895
Mov Cap-2 Maneuver	-	-	-	-	-	-	601	504	-	629	558	-
Stage 1	-	-	-	-	-	-	668	644	-	734	696	-
Stage 2	-	-	-	-	-	-	810	613	-	761	639	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.1	0.02	11.55	13.72
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	554	901	432	-	-	1287	-	-	628	895
HCM Lane V/C Ratio	0.031	0.001	0.025	-	-	0.001	-	-	0.398	0.046
HCM Ctrl Dly (s/v)	11.7	9	8.2	0.2	-	7.8	-	-	14.5	9.2
HCM Lane LOS	B	A	A	A	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.1	0	0.1	-	-	0	-	-	1.9	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	395	327	488	332	48	237	228	357	42	161	26
Future Volume (veh/h)	38	395	327	488	332	48	237	228	357	42	161	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	41	425	352	525	357	52	255	245	384	45	173	28
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	81	467	385	509	1535	222	250	429	817	84	203	33
Arrive On Green	0.05	0.26	0.26	0.29	0.50	0.50	0.14	0.24	0.24	0.05	0.13	0.13
Sat Flow, veh/h	1739	1806	1487	1739	3042	439	1739	1826	1547	1739	1533	248
Grp Volume(v), veh/h	41	408	369	525	202	207	255	245	384	45	0	201
Grp Sat Flow(s),veh/h/ln	1739	1735	1558	1739	1735	1747	1739	1826	1547	1739	0	1781
Q Serve(g_s), s	3.1	30.6	30.9	39.3	8.8	8.9	19.3	15.9	20.9	3.4	0.0	14.8
Cycle Q Clear(g_c), s	3.1	30.6	30.9	39.3	8.8	8.9	19.3	15.9	20.9	3.4	0.0	14.8
Prop In Lane	1.00		0.95	1.00		0.25	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	81	449	403	509	875	881	250	429	817	84	0	236
V/C Ratio(X)	0.51	0.91	0.92	1.03	0.23	0.23	1.02	0.57	0.47	0.53	0.00	0.85
Avail Cap(c_a), veh/h	120	477	428	509	875	881	250	571	937	124	0	438
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	0.00	1.00
Uniform Delay (d), s/veh	62.5	48.3	48.4	47.5	18.7	18.7	57.5	45.4	19.9	62.4	0.0	57.0
Incr Delay (d2), s/veh	4.8	20.8	23.4	48.3	0.1	0.1	62.3	1.2	0.4	5.2	0.0	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(50%),veh/ln	1.5	15.8	14.6	23.7	3.6	3.7	12.7	7.3	7.4	1.6	0.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.3	69.1	71.8	95.8	18.8	18.8	119.8	46.6	20.3	67.6	0.0	65.4
LnGrp LOS	E	E	E	F	B	B	F	D	C	E		E
Approach Vol, veh/h		818			934			884			246	
Approach Delay, s/veh		70.2			62.1			56.3			65.8	
Approach LOS		E			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	44.0	41.1	25.0	24.2	11.0	74.2	11.2	38.0
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	39.3	36.9	19.3	* 33	9.3	* 68	9.6	42.0
Max Q Clear Time (g_c+I1), s	41.3	32.9	21.3	16.8	5.1	10.9	5.4	22.9
Green Ext Time (p_c), s	0.0	1.8	0.0	1.0	0.0	2.7	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	62.9
HCM 7th LOS	E

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	32	69	157	45	110	81	68	620	13	103	1140	38
Future Volume (veh/h)	32	69	157	45	110	81	68	620	13	103	1140	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	34	73	165	47	116	85	72	653	14	108	1200	40
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	112	223	317	133	246	208	279	1242	605	174	1297	632
Arrive On Green	0.07	0.13	0.13	0.08	0.14	0.14	0.09	0.41	0.41	0.10	0.43	0.43
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	3047	1485
Grp Volume(v), veh/h	34	73	165	47	116	85	72	653	14	108	1200	40
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1523	1485
Q Serve(g_s), s	1.9	3.8	9.9	2.7	6.1	5.2	2.1	16.2	0.6	6.2	37.5	1.6
Cycle Q Clear(g_c), s	1.9	3.8	9.9	2.7	6.1	5.2	2.1	16.2	0.6	6.2	37.5	1.6
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	112	223	317	133	246	208	279	1242	605	174	1297	632
V/C Ratio(X)	0.30	0.33	0.52	0.35	0.47	0.41	0.26	0.53	0.02	0.62	0.93	0.06
Avail Cap(c_a), veh/h	183	890	882	183	890	754	322	1262	615	219	1359	662
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	44.6	39.9	34.9	43.7	39.8	39.4	42.9	22.4	17.8	43.1	27.3	17.0
Incr Delay (d2), s/veh	1.5	0.8	1.3	1.6	1.4	1.3	0.5	0.4	0.0	3.6	10.6	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(50%),veh/ln	0.8	1.6	3.5	1.1	2.6	1.9	0.8	5.3	0.2	2.6	13.8	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.1	40.8	36.3	45.3	41.2	40.7	43.4	22.8	17.8	46.7	38.0	17.1
LnGrp LOS	D	D	D	D	D	D	D	C	B	D	D	B
Approach Vol, veh/h		272			248			739			1348	
Approach Delay, s/veh		38.7			41.8			24.7			38.0	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	49.4	13.7	21.2	14.4	51.2	12.4	22.5
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	13.3	41.6	11.0	51.0	10.0	44.8	11.0	51.0
Max Q Clear Time (g_c+I1), s	8.2	18.2	4.7	11.9	4.1	39.5	3.9	8.1
Green Ext Time (p_c), s	0.1	4.0	0.0	0.9	0.1	3.3	0.0	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	34.7
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	95	170	65	132	67	131	996	24	43	976	82
Future Volume (veh/h)	73	95	170	65	132	67	131	996	24	43	976	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	79	103	185	71	143	73	142	1083	26	47	1061	89
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	121	158	241	91	184	237	99	1371	33	66	1203	101
Arrive On Green	0.16	0.16	0.16	0.15	0.15	0.15	0.06	0.40	0.40	0.04	0.37	0.37
Sat Flow, veh/h	776	1011	1547	596	1200	1547	1739	3462	83	1739	3240	272
Grp Volume(v), veh/h	182	0	185	214	0	73	142	543	566	47	568	582
Grp Sat Flow(s),veh/h/ln	1787	0	1547	1796	0	1547	1739	1735	1811	1739	1735	1777
Q Serve(g_s), s	8.9	0.0	10.6	10.6	0.0	3.9	5.3	25.5	25.5	2.5	28.4	28.4
Cycle Q Clear(g_c), s	8.9	0.0	10.6	10.6	0.0	3.9	5.3	25.5	25.5	2.5	28.4	28.4
Prop In Lane	0.43		1.00	0.33		1.00	1.00		0.05	1.00		0.15
Lane Grp Cap(c), veh/h	279	0	241	276	0	237	99	687	717	66	644	660
V/C Ratio(X)	0.65	0.00	0.77	0.78	0.00	0.31	1.43	0.79	0.79	0.71	0.88	0.88
Avail Cap(c_a), veh/h	829	0	718	833	0	718	99	687	717	94	644	660
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	0.0	37.5	37.7	0.0	34.8	43.7	24.6	24.6	44.1	27.2	27.2
Incr Delay (d2), s/veh	2.6	0.0	5.1	4.7	0.0	0.7	240.8	9.0	8.7	13.4	16.0	15.8
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(50%),veh/ln	4.1	0.0	4.3	5.0	0.0	1.5	8.8	11.2	11.6	1.3	13.5	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.3	0.0	42.6	42.4	0.0	35.6	284.4	33.6	33.3	57.5	43.3	43.0
LnGrp LOS	D		D	D		D	F	C	C	E	D	D
Approach Vol, veh/h		367			287			1251			1197	
Approach Delay, s/veh		41.0			40.6			61.9			43.7	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.7	43.9		20.1	11.0	41.6		19.9				
Change Period (Y+Rc), s	5.2	7.2		5.7	5.7	7.2		5.7				
Max Green Setting (Gmax), s	5.0	35.2		43.0	5.3	34.4		43.0				
Max Q Clear Time (g_c+I1), s	4.5	27.5		12.6	7.3	30.4		12.6				
Green Ext Time (p_c), s	0.0	3.9		1.8	0.0	2.4		1.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	50.4
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	38	87	14	57	12	76	919	12	20	1481	64
Future Volume (veh/h)	24	38	87	14	57	12	76	919	12	20	1481	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	26	41	95	15	62	13	83	999	0	22	1610	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	66	54	103	65	145	27	197	1816		95	1622	
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.57	0.00	0.06	0.51	0.00
Sat Flow, veh/h	167	475	910	157	1279	242	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	162	0	0	90	0	0	83	999	0	22	1610	0
Grp Sat Flow(s),veh/h/ln	1552	0	0	1678	0	0	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	4.7	0.0	0.0	0.0	0.0	0.0	4.1	17.4	0.0	1.1	44.7	0.0
Cycle Q Clear(g_c), s	9.1	0.0	0.0	4.4	0.0	0.0	4.1	17.4	0.0	1.1	44.7	0.0
Prop In Lane	0.16		0.59	0.17		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	0	0	237	0	0	197	1816		95	1622	
V/C Ratio(X)	0.73	0.00	0.00	0.38	0.00	0.00	0.42	0.55		0.23	0.99	
Avail Cap(c_a), veh/h	223	0	0	237	0	0	226	1816		226	1622	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.7	0.0	0.0	36.7	0.0	0.0	36.2	11.7	0.0	39.9	21.4	0.0
Incr Delay (d2), s/veh	11.3	0.0	0.0	1.0	0.0	0.0	1.4	0.4	0.0	1.2	20.5	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(50%),veh/ln	4.1	0.0	0.0	1.9	0.0	0.0	1.6	4.8	0.0	0.5	17.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.1	0.0	0.0	37.7	0.0	0.0	37.6	12.1	0.0	41.1	41.9	0.0
LnGrp LOS	D			D			D	B		D	D	
Approach Vol, veh/h		162			90			1082			1632	
Approach Delay, s/veh		50.1			37.7			14.0			41.9	
Approach LOS		D			D			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	59.2		18.5	16.1	53.8		18.5				
Change Period (Y+Rc), s	5.7	8.4		8.5	5.7	8.4		8.5				
Max Green Setting (Gmax), s	12.0	45.4		10.0	12.0	45.4		10.0				
Max Q Clear Time (g_c+I1), s	13.1	19.4		11.1	6.1	46.7		6.4				
Green Ext Time (p_c), s	0.0	6.8		0.0	0.1	0.0		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	32.0
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	294	83	201	281	148	90	956	151	152	906	237
Future Volume (veh/h)	235	294	83	201	281	148	90	956	151	152	906	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	253	316	89	216	302	159	97	1028	162	163	974	255
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	278	518	143	242	382	196	120	1227	547	188	1364	608
Arrive On Green	0.16	0.19	0.19	0.14	0.17	0.17	0.07	0.35	0.35	0.11	0.39	0.39
Sat Flow, veh/h	1739	2683	744	1739	2217	1139	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	253	202	203	216	235	226	97	1028	162	163	974	255
Grp Sat Flow(s),veh/h/ln	1739	1735	1692	1739	1735	1621	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	17.5	13.0	13.4	14.9	15.8	16.4	6.7	33.2	9.2	11.3	28.9	14.6
Cycle Q Clear(g_c), s	17.5	13.0	13.4	14.9	15.8	16.4	6.7	33.2	9.2	11.3	28.9	14.6
Prop In Lane	1.00		0.44	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	278	335	327	242	299	280	120	1227	547	188	1364	608
V/C Ratio(X)	0.91	0.60	0.62	0.89	0.78	0.81	0.81	0.84	0.30	0.87	0.71	0.42
Avail Cap(c_a), veh/h	289	626	611	273	611	571	131	1227	547	191	1364	608
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	50.4	45.0	45.2	51.6	48.3	48.6	56.1	36.2	28.5	53.6	31.3	26.9
Incr Delay (d2), s/veh	30.1	1.8	1.9	26.4	4.5	5.5	28.6	6.9	1.4	31.4	3.2	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(50%),veh/ln	9.8	5.7	5.7	8.2	7.1	6.9	3.8	14.6	3.6	6.4	12.1	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	80.5	46.8	47.1	78.0	52.9	54.1	84.7	43.1	29.9	85.0	34.5	29.0
LnGrp LOS	F	D	D	E	D	D	F	D	C	F	C	C
Approach Vol, veh/h		658			677			1287			1392	
Approach Delay, s/veh		59.9			61.3			44.6			39.4	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	50.4	22.7	30.1	14.1	55.2	25.2	27.6
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	13.2	43.2	19.2	44.1	9.2	47.4	20.3	43.0
Max Q Clear Time (g_c+I1), s	13.3	35.2	16.9	15.4	8.7	30.9	19.5	18.4
Green Ext Time (p_c), s	0.0	4.3	0.1	2.3	0.0	6.7	0.1	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	48.1
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	2	287	3	3	1	238	920	2	1	1474	99
Future Volume (veh/h)	70	2	287	3	3	1	238	920	2	1	1474	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	76	2	312	3	3	1	259	1000	2	1	1602	108
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	349	9	467	14	14	5	325	1938	4	5	1586	745
Arrive On Green	0.21	0.21	0.21	0.02	0.02	0.02	0.10	0.60	0.60	0.00	0.50	0.50
Sat Flow, veh/h	1628	43	1485	717	717	239	3237	3235	6	1668	3159	1485
Grp Volume(v), veh/h	78	0	312	7	0	0	259	488	514	1	1602	108
Grp Sat Flow(s),veh/h/ln	1670	0	1485	1673	0	0	1618	1580	1662	1668	1580	1485
Q Serve(g_s), s	4.2	0.0	20.0	0.5	0.0	0.0	8.6	19.7	19.7	0.1	55.0	4.3
Cycle Q Clear(g_c), s	4.2	0.0	20.0	0.5	0.0	0.0	8.6	19.7	19.7	0.1	55.0	4.3
Prop In Lane	0.97		1.00	0.43		0.14	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	358	0	467	32	0	0	325	947	996	5	1586	745
V/C Ratio(X)	0.22	0.00	0.67	0.22	0.00	0.00	0.80	0.52	0.52	0.20	1.01	0.14
Avail Cap(c_a), veh/h	762	0	826	168	0	0	325	947	996	167	1586	745
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.5	0.0	32.6	52.9	0.0	0.0	48.2	12.7	12.7	54.5	27.3	14.7
Incr Delay (d2), s/veh	0.3	0.0	1.7	3.3	0.0	0.0	13.0	0.5	0.5	18.3	25.2	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(50%),veh/ln	1.7	0.0	7.1	0.2	0.0	0.0	3.9	5.9	6.2	0.1	23.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.8	0.0	34.2	56.2	0.0	0.0	61.2	13.2	13.2	72.8	52.5	14.8
LnGrp LOS	D		C	E			E	B	B	E	F	B
Approach Vol, veh/h		390			7			1261			1711	
Approach Delay, s/veh		34.6			56.2			23.1			50.1	
Approach LOS		C			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	70.2		28.0	15.5	59.5		6.6
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	11.3	55.0		50.0	11.0	55.0		11.0
Max Q Clear Time (g_c+I1), s	2.1	21.7		22.0	10.6	57.0		2.5
Green Ext Time (p_c), s	0.0	6.3		1.5	0.0	0.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	38.2
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	206	94	98	213	498	94	936	71	461	990	88
Future Volume (veh/h)	83	206	94	98	213	498	94	936	71	461	990	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	86	212	97	101	220	0	97	965	73	475	1021	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	109	313	138	128	501		124	1150	87	567	1600	
Arrive On Green	0.06	0.13	0.13	0.07	0.14	0.00	0.07	0.35	0.35	0.17	0.46	0.00
Sat Flow, veh/h	1739	2341	1033	1739	3469	1547	1739	3269	247	3374	3469	1547
Grp Volume(v), veh/h	86	155	154	101	220	0	97	512	526	475	1021	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1640	1739	1735	1547	1739	1735	1781	1687	1735	1547
Q Serve(g_s), s	4.0	7.0	7.3	4.7	4.7	0.0	4.5	22.2	22.2	11.1	18.4	0.0
Cycle Q Clear(g_c), s	4.0	7.0	7.3	4.7	4.7	0.0	4.5	22.2	22.2	11.1	18.4	0.0
Prop In Lane	1.00		0.63	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	109	232	219	128	501		124	611	627	567	1600	
V/C Ratio(X)	0.79	0.67	0.70	0.79	0.44		0.78	0.84	0.84	0.84	0.64	
Avail Cap(c_a), veh/h	140	636	602	155	1320		198	723	743	673	1786	
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.8	33.7	33.9	37.3	32.0	0.0	37.4	24.4	24.4	32.9	16.8	0.0
Incr Delay (d2), s/veh	19.7	3.3	4.0	19.8	0.6	0.0	10.4	7.5	7.4	8.0	0.6	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(50%),veh/ln	2.2	3.0	3.0	2.6	1.9	0.0	2.2	9.7	9.9	5.0	6.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.5	37.0	37.9	57.1	32.6	0.0	47.7	31.9	31.7	40.9	17.5	0.0
LnGrp LOS	E	D	D	E	C		D	C	C	D	B	
Approach Vol, veh/h		395			321			1135			1496	
Approach Delay, s/veh		41.8			40.3			33.2			24.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	43.8	9.8	17.6	19.4	34.9	10.7	16.7
Change Period (Y+Rc), s	4.7	6.1	4.7	* 5.8	5.7	6.1	4.7	5.8
Max Green Setting (Gmax), s	5.8	42.1	6.6	* 31	16.3	34.1	7.3	30.0
Max Q Clear Time (g_c+I1), s	6.5	20.4	6.0	6.7	13.1	24.2	6.7	9.3
Green Ext Time (p_c), s	0.0	7.5	0.0	1.3	0.6	4.6	0.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	31.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	241	155	99	196	88	108	992	122	106	1464	186
Future Volume (veh/h)	87	241	155	99	196	88	108	992	122	106	1464	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	95	262	168	108	213	96	117	1078	133	115	1591	202
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	185	338	209	188	391	170	146	1212	570	146	1212	569
Arrive On Green	0.11	0.17	0.17	0.11	0.17	0.17	0.09	0.38	0.38	0.09	0.38	0.38
Sat Flow, veh/h	1668	1973	1223	1668	2257	982	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	95	220	210	108	155	154	117	1078	133	115	1591	202
Grp Sat Flow(s),veh/h/ln	1668	1664	1532	1668	1664	1575	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	6.0	14.0	14.7	6.8	9.5	10.0	7.7	35.5	6.8	7.5	42.7	10.8
Cycle Q Clear(g_c), s	6.0	14.0	14.7	6.8	9.5	10.0	7.7	35.5	6.8	7.5	42.7	10.8
Prop In Lane	1.00		0.80	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	285	262	188	288	273	146	1212	570	146	1212	569
V/C Ratio(X)	0.51	0.77	0.80	0.57	0.54	0.56	0.80	0.89	0.23	0.79	1.31	0.35
Avail Cap(c_a), veh/h	250	852	784	195	797	754	150	1212	570	150	1212	569
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	46.7	44.1	44.3	46.9	42.0	42.2	49.9	32.1	23.2	49.8	34.3	24.5
Incr Delay (d2), s/veh	2.2	4.4	5.7	3.8	1.6	1.8	25.5	8.4	0.2	23.6	146.8	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(50%),veh/ln	2.5	5.8	5.7	2.9	3.8	3.8	4.1	13.7	2.2	3.9	39.5	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.9	48.5	50.0	50.7	43.5	44.0	75.4	40.5	23.4	73.4	181.1	24.9
LnGrp LOS	D	D	D	D	D	D	E	D	C	E	F	C
Approach Vol, veh/h		525			417			1328			1908	
Approach Delay, s/veh		49.2			45.6			41.9			158.0	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	51.1	18.2	26.6	15.4	51.1	18.0	26.8
Change Period (Y+Rc), s	5.7	8.4	5.7	7.5	5.7	8.4	5.7	7.5
Max Green Setting (Gmax), s	10.0	42.7	13.0	57.0	10.0	42.7	16.7	53.3
Max Q Clear Time (g_c+I1), s	9.5	37.5	8.8	16.7	9.7	44.7	8.0	12.0
Green Ext Time (p_c), s	0.0	3.0	0.1	2.4	0.0	0.0	0.1	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	96.2
HCM 7th LOS	F

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	20	0	110	5	165	0	0	217	110
Future Vol, veh/h	0	0	0	20	0	110	5	165	0	0	217	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	22	0	120	5	179	0	0	236	120

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	426	546	179	355	0	-	-	-	0
Stage 1	190	190	-	-	-	-	-	-	-
Stage 2	236	355	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	567	432	838	1150	-	0	0	-	-
Stage 1	819	724	-	-	-	0	0	-	-
Stage 2	780	612	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	564	0	838	1150	-	-	-	-	-
Mov Cap-2 Maneuver	564	0	-	-	-	-	-	-	-
Stage 1	814	0	-	-	-	-	-	-	-
Stage 2	780	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.26	0.24	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	53	-	564	838	-	-
HCM Lane V/C Ratio	0.005	-	0.039	0.143	-	-
HCM Ctrl Dly (s/v)	8.1	0	11.6	10	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	0.5	-	-

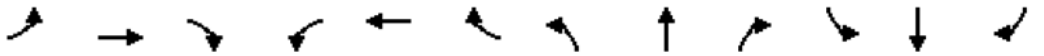
Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	135	0	5	0	0	0	0	30	19	170	67	0
Future Vol, veh/h	135	0	5	0	0	0	0	30	19	170	67	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	141	0	5	0	0	0	0	31	20	177	70	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	455	475	70	-	0	0	51	0	0
Stage 1	424	424	-	-	-	-	-	-	-
Stage 2	31	51	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	-	-	-	4.22	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	-	-	-	2.308	-	-
Pot Cap-1 Maneuver	545	474	966	0	-	-	1493	-	0
Stage 1	639	570	-	0	-	-	-	-	0
Stage 2	966	833	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	478	0	966	-	-	-	1493	-	-
Mov Cap-2 Maneuver	478	0	-	-	-	-	-	-	-
Stage 1	639	0	-	-	-	-	-	-	-
Stage 2	847	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.4	0	5.55
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	478	966	1291	-
HCM Lane V/C Ratio	-	-	0.294	0.005	0.119	-
HCM Ctrl Dly (s/v)	-	-	15.7	8.7	7.7	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	1.2	0	0.4	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	35	0	748	9	266	0	0	1223	103
Future Volume (veh/h)	0	0	0	35	0	748	9	266	0	0	1223	103
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				38	0	804	10	286	0	0	1315	111
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				576	0	903	30	1811	0	0	1512	674
Arrive On Green				0.33	0.00	0.33	0.03	1.00	0.00	0.00	0.44	0.44
Sat Flow, veh/h				1739	0	2723	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				38	0	804	10	286	0	0	1315	111
Grp Sat Flow(s),veh/h/ln				1739	0	1362	1739	1735	0	0	1735	1547
Q Serve(g_s), s				1.3	0.0	25.2	0.5	0.0	0.0	0.0	31.0	3.9
Cycle Q Clear(g_c), s				1.3	0.0	25.2	0.5	0.0	0.0	0.0	31.0	3.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				576	0	903	30	1811	0	0	1512	674
V/C Ratio(X)				0.07	0.00	0.89	0.33	0.16	0.00	0.00	0.87	0.16
Avail Cap(c_a), veh/h				715	0	1120	135	1811	0	0	1512	674
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				20.6	0.0	28.5	42.9	0.0	0.0	0.0	23.1	15.4
Incr Delay (d2), s/veh				0.0	0.0	7.8	6.4	0.2	0.0	0.0	7.1	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
%ile BackOfQ(50%),veh/ln				0.5	0.0	8.2	0.3	0.0	0.0	0.0	13.1	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				20.6	0.0	36.4	49.3	0.2	0.0	0.0	30.2	16.0
LnGrp LOS				C		D	D	A			C	B
Approach Vol, veh/h					842			296			1426	
Approach Delay, s/veh					35.7			1.8			29.1	
Approach LOS					D			A			C	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	53.1		7.7	45.3		36.9						
Change Period (Y+Rc), s	6.1		6.2	6.1		7.1						
Max Green Setting (Gmax), s	39.8		7.0	26.6		37.0						
Max Q Clear Time (g_c+I1), s	2.0		2.5	33.0		27.2						
Green Ext Time (p_c), s	1.9		0.0	0.0		2.6						

Intersection Summary		
HCM 7th Control Delay, s/veh	28.1	
HCM 7th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	2	27	0	0	0	0	172	39	0	364	901
Future Volume (veh/h)	104	2	27	0	0	0	0	172	39	0	364	901
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826				0	1826	1826	0	1826	1826
Adj Flow Rate, veh/h	71	58	29				0	183	41	0	387	959
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	5	5	5				0	5	5	0	5	5
Cap, veh/h	171	113	56				0	2269	497	0	2782	2451
Arrive On Green	0.10	0.10	0.10				0.00	0.80	0.80	0.00	0.26	0.26
Sat Flow, veh/h	1739	1148	574				0	2920	620	0	3561	2723
Grp Volume(v), veh/h	71	0	87				0	111	113	0	387	959
Grp Sat Flow(s),veh/h/ln	1739	0	1723				0	1735	1714	0	1735	1362
Q Serve(g_s), s	3.5	0.0	4.3				0.0	1.2	1.3	0.0	7.7	13.3
Cycle Q Clear(g_c), s	3.5	0.0	4.3				0.0	1.2	1.3	0.0	7.7	13.3
Prop In Lane	1.00		0.33				0.00		0.36	0.00		1.00
Lane Grp Cap(c), veh/h	171	0	169				0	1391	1375	0	2782	2451
V/C Ratio(X)	0.42	0.00	0.51				0.00	0.08	0.08	0.00	0.14	0.39
Avail Cap(c_a), veh/h	783	0	775				0	1391	1375	0	2782	2451
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.82	0.82
Uniform Delay (d), s/veh	38.2	0.0	38.6				0.0	1.9	1.9	0.0	9.4	4.1
Incr Delay (d2), s/veh	1.6	0.0	2.4				0.0	0.1	0.1	0.0	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(50%),veh/ln	1.4	0.0	1.8				0.0	0.3	0.3	0.0	2.3	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.8	0.0	41.0				0.0	2.0	2.0	0.0	9.4	4.2
LnGrp LOS	D		D					A	A		A	A
Approach Vol, veh/h		158						224			1346	
Approach Delay, s/veh		40.4						2.0			5.7	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	76.7	13.3	76.7
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	40.5	40.5
Max Q Clear Time (g_c+I1), s	3.3	6.3	15.3
Green Ext Time (p_c), s	1.3	0.6	7.6

Intersection Summary	
HCM 7th Control Delay, s/veh	8.4
HCM 7th 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												
Traffic Volume (veh/h)	36	62	0	29	50	71	130	1158	36	145	1715	80
Future Volume (veh/h)	36	62	0	29	50	71	130	1158	36	145	1715	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	38	66	0	31	53	76	138	1232	38	154	1824	85
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	77	100	167	88	128	167	155	2089	64	182	2106	97
Arrive On Green	0.11	0.11	0.00	0.11	0.11	0.11	0.09	0.60	0.60	0.10	0.62	0.62
Sat Flow, veh/h	326	933	1560	424	1190	1560	1753	3463	107	1753	3404	157
Grp Volume(v), veh/h	104	0	0	84	0	76	138	622	648	154	931	978
Grp Sat Flow(s),veh/h/ln	1258	0	1560	1614	0	1560	1753	1749	1822	1753	1749	1812
Q Serve(g_s), s	4.6	0.0	0.0	0.0	0.0	5.3	9.1	25.5	25.5	10.1	50.5	52.1
Cycle Q Clear(g_c), s	10.0	0.0	0.0	5.4	0.0	5.3	9.1	25.5	25.5	10.1	50.5	52.1
Prop In Lane	0.37		1.00	0.37		1.00	1.00		0.06	1.00		0.09
Lane Grp Cap(c), veh/h	177	0	167	216	0	167	155	1055	1099	182	1082	1122
V/C Ratio(X)	0.59	0.00	0.00	0.39	0.00	0.45	0.89	0.59	0.59	0.84	0.86	0.87
Avail Cap(c_a), veh/h	560	0	549	608	0	549	155	1055	1099	260	1082	1122
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	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	0.0	0.0	48.7	0.0	48.8	52.5	14.2	14.2	51.3	18.1	18.4
Incr Delay (d2), s/veh	3.1	0.0	0.0	1.1	0.0	1.9	42.1	2.4	2.3	15.7	8.9	9.4
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(50%),veh/ln	3.0	0.0	0.0	2.3	0.0	2.1	5.6	9.2	9.6	5.0	19.3	20.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.1	0.0	0.0	49.9	0.0	50.7	94.7	16.7	16.6	67.0	27.0	27.8
LnGrp LOS	D			D		D	F	B	B	E	C	C
Approach Vol, veh/h		104			160			1408			2063	
Approach Delay, s/veh		54.1			50.3			24.3			30.4	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.8	78.7		20.0	16.0	80.5		20.0
Change Period (Y+Rc), s	5.7	8.4		7.5	5.7	8.4		7.5
Max Green Setting (Gmax), s	12.1	65.1		41.0	10.3	72.1		41.0
Max Q Clear Time (g_c+I1), s	12.1	27.5		12.0	11.1	54.1		7.4
Green Ext Time (p_c), s	0.2	9.0		0.5	0.0	12.0		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	29.6
HCM 7th LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	621	353	373	565	165	260
Future Volume (veh/h)	621	353	373	565	165	260
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	654	372	393	595	174	274
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1181	852	391	1912	365	572
Arrive On Green	0.34	0.34	0.11	0.54	0.21	0.21
Sat Flow, veh/h	3618	1572	3428	3618	1767	2768
Grp Volume(v), veh/h	654	372	393	595	174	274
Grp Sat Flow(s),veh/h/ln	1763	1572	1714	1763	1767	1384
Q Serve(g_s), s	7.3	6.8	5.5	4.5	4.2	4.2
Cycle Q Clear(g_c), s	7.3	6.8	5.5	4.5	4.2	4.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1181	852	391	1912	365	572
V/C Ratio(X)	0.55	0.44	1.01	0.31	0.48	0.48
Avail Cap(c_a), veh/h	3289	1792	391	3969	1414	2215
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	13.1	6.6	21.4	6.1	16.8	16.8
Incr Delay (d2), s/veh	0.4	0.4	46.9	0.1	1.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	1.7	4.5	1.2	1.6	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.5	7.0	68.2	6.2	17.8	17.5
LnGrp LOS	B	A	F	A	B	B
Approach Vol, veh/h	1026			988	448	
Approach Delay, s/veh	11.1			30.9	17.6	
Approach LOS	B			C	B	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		10.0	22.6		15.7	32.6
Change Period (Y+Rc), s		4.5	* 6.4		5.7	6.4
Max Green Setting (Gmax), s		5.5	* 45		38.6	54.3
Max Q Clear Time (g_c+I1), s		7.5	9.3		6.2	6.5
Green Ext Time (p_c), s		0.0	6.9		1.7	4.7

Intersection Summary	
HCM 7th Control Delay, s/veh	20.2
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	237	526	168	171	453	231	216	718	94	358	907	310
Future Volume (veh/h)	237	526	168	171	453	231	216	718	94	358	907	310
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	255	566	181	184	487	248	232	772	101	385	975	333
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	325	859	525	257	756	352	309	965	126	456	1237	552
Arrive On Green	0.09	0.24	0.24	0.08	0.22	0.22	0.09	0.31	0.31	0.13	0.35	0.35
Sat Flow, veh/h	3428	3526	1572	3428	3377	1572	3428	3135	410	3428	3526	1572
Grp Volume(v), veh/h	255	566	181	184	487	248	232	434	439	385	975	333
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1689	1572	1714	1763	1782	1714	1763	1572
Q Serve(g_s), s	6.6	13.2	7.9	4.8	11.9	13.2	6.0	20.6	20.6	10.0	22.6	15.9
Cycle Q Clear(g_c), s	6.6	13.2	7.9	4.8	11.9	13.2	6.0	20.6	20.6	10.0	22.6	15.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	325	859	525	257	756	352	309	543	549	456	1237	552
V/C Ratio(X)	0.79	0.66	0.34	0.72	0.64	0.70	0.75	0.80	0.80	0.84	0.79	0.60
Avail Cap(c_a), veh/h	331	1435	782	339	1408	656	414	758	767	482	1586	708
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	40.3	31.0	22.9	41.2	32.1	32.6	40.5	29.0	29.0	38.6	26.5	24.4
Incr Delay (d2), s/veh	11.6	0.9	0.4	4.8	0.9	2.6	5.2	4.2	4.1	12.4	2.1	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(50%),veh/ln	3.3	5.6	2.9	2.2	4.9	5.2	2.7	8.9	9.0	4.9	9.3	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.9	31.9	23.2	46.0	33.0	35.2	45.7	33.1	33.1	51.0	28.6	25.4
LnGrp LOS	D	C	C	D	C	D	D	C	C	D	C	C
Approach Vol, veh/h		1002			919			1105			1693	
Approach Delay, s/veh		35.4			36.2			35.8			33.1	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	33.7	12.0	28.1	13.4	37.6	13.8	26.3
Change Period (Y+Rc), s	5.2	5.6	5.2	5.9	5.2	5.6	5.2	* 5.9
Max Green Setting (Gmax), s	12.0	39.2	9.0	37.1	11.0	41.0	8.8	* 38
Max Q Clear Time (g_c+I1), s	12.0	22.6	6.8	15.2	8.0	24.6	8.6	15.2
Green Ext Time (p_c), s	0.1	5.0	0.1	4.6	0.2	7.4	0.0	5.2

Intersection Summary	
HCM 7th Control Delay, s/veh	34.8
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	243	1	41	1120	4	14	19	238	480	8	719	299
Future Volume (veh/h)	243	1	41	1120	4	14	19	238	480	8	719	299
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	251	1	42	1155	4	14	20	245	495	8	741	308
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	285	3	145	928	688	583	65	635	283	212	929	667
Arrive On Green	0.16	0.09	0.09	0.44	0.37	0.37	0.04	0.18	0.18	0.12	0.26	0.26
Sat Flow, veh/h	1767	37	1541	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	251	0	43	1155	4	14	20	245	495	8	741	308
Grp Sat Flow(s),veh/h/ln	1767	0	1578	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	16.2	0.0	3.0	51.0	0.2	0.7	1.3	7.1	21.0	0.5	22.9	16.3
Cycle Q Clear(g_c), s	16.2	0.0	3.0	51.0	0.2	0.7	1.3	7.1	21.0	0.5	22.9	16.3
Prop In Lane	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	285	0	149	928	688	583	65	635	283	212	929	667
V/C Ratio(X)	0.88	0.00	0.29	1.24	0.01	0.02	0.31	0.39	1.75	0.04	0.80	0.46
Avail Cap(c_a), veh/h	485	0	533	928	929	788	136	635	283	212	929	667
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.8	0.0	49.2	25.8	23.1	23.3	54.7	42.1	47.8	45.3	40.1	24.0
Incr Delay (d2), s/veh	9.7	0.0	1.1	119.2	0.0	0.0	2.6	0.4	350.8	0.1	5.0	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(50%),veh/ln	7.8	0.0	1.2	53.2	0.1	0.2	0.6	3.1	35.7	0.2	10.4	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.5	0.0	50.2	145.0	23.1	23.3	57.3	42.5	398.6	45.4	45.0	24.5
LnGrp LOS	E		D	F	C	C	E	D	F	D	D	C
Approach Vol, veh/h		294			1173			760			1057	
Approach Delay, s/veh		56.5			143.2			274.8			39.0	
Approach LOS		E			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	56.0	16.0	8.9	35.7	23.8	48.2	18.6	26.0
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	51.0	39.4	9.0	26.0	32.0	58.4	14.0	21.0
Max Q Clear Time (g_c+I1), s	53.0	5.0	3.3	24.9	18.2	2.7	2.5	23.0
Green Ext Time (p_c), s	0.0	0.2	0.0	0.7	0.6	0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	132.3
HCM 7th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	431	119	0	5	32	9	14	5	1	16	6	1091
Future Volume (veh/h)	431	119	0	5	32	9	14	5	1	16	6	1091
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	299	366	0	5	35	10	15	5	1	17	0	1191
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	437	459	0	25	174	48	38	1184	229	42	0	1272
Arrive On Green	0.25	0.25	0.00	0.07	0.07	0.07	0.02	0.40	0.40	0.02	0.00	0.40
Sat Flow, veh/h	1767	1856	0	366	2507	694	1767	2946	570	1767	0	3145
Grp Volume(v), veh/h	299	366	0	25	0	25	15	3	3	17	0	1191
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1837	0	1731	1767	1763	1753	1767	0	1572
Q Serve(g_s), s	11.4	13.8	0.0	1.0	0.0	1.0	0.6	0.1	0.1	0.7	0.0	27.1
Cycle Q Clear(g_c), s	11.4	13.8	0.0	1.0	0.0	1.0	0.6	0.1	0.1	0.7	0.0	27.1
Prop In Lane	1.00		0.00	0.20		0.40	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	437	459	0	127	0	120	38	709	705	42	0	1272
V/C Ratio(X)	0.68	0.80	0.00	0.20	0.00	0.21	0.39	0.00	0.00	0.40	0.00	0.94
Avail Cap(c_a), veh/h	709	744	0	715	0	673	142	731	727	142	0	1304
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.4	26.3	0.0	32.7	0.0	32.8	36.0	13.4	13.4	35.9	0.0	21.3
Incr Delay (d2), s/veh	1.9	3.2	0.0	0.7	0.0	0.9	6.5	0.0	0.0	6.1	0.0	12.6
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(50%),veh/ln	4.7	6.1	0.0	0.4	0.0	0.4	0.3	0.0	0.0	0.4	0.0	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.3	29.5	0.0	33.5	0.0	33.6	42.5	13.4	13.4	41.9	0.0	33.8
LnGrp LOS	C	C		C		C	D	B	B	D		C
Approach Vol, veh/h		665			50			21			1208	
Approach Delay, s/veh		28.5			33.6			34.2			34.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	34.7		23.5	6.3	34.8		9.9				
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7				
Max Green Setting (Gmax), s	6.8	30.9		29.9	6.0	30.9		29.0				
Max Q Clear Time (g_c+I1), s	2.7	2.1		15.8	2.6	29.1		3.0				
Green Ext Time (p_c), s	0.0	0.0		2.7	0.0	1.1		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	32.1
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	19	0	3	11	246	217	0	164	44
Future Vol, veh/h	0	0	0	19	0	3	11	246	217	0	164	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	330
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	20	0	3	12	262	231	0	174	47

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	460	506	262	221	0	-	-	-	0
Stage 1	285	285	-	-	-	-	-	-	-
Stage 2	174	221	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	542	455	753	1291	-	0	0	-	-
Stage 1	741	658	-	-	-	0	0	-	-
Stage 2	832	702	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	536	0	753	1291	-	-	-	-	-
Mov Cap-2 Maneuver	536	0	-	-	-	-	-	-	-
Stage 1	733	0	-	-	-	-	-	-	-
Stage 2	832	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.74	0.33	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	77	-	558	-	-
HCM Lane V/C Ratio	0.009	-	0.042	-	-
HCM Ctrl Dly (s/v)	7.8	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

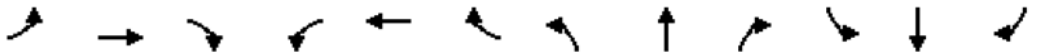
Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	0	381	0	0	0	0	341	11	0	183	0
Future Vol, veh/h	139	0	381	0	0	0	0	341	11	0	183	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	470	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	148	0	405	0	0	0	0	363	12	0	195	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	376	569	-	-	0	0	-	-	0
Stage 1	195	195	-	-	-	-	-	-	-
Stage 2	181	374	-	-	-	-	-	-	-
Critical Hdwy	6.78	6.68	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.58	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.98	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.614	4.114	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	589	414	0	0	-	-	0	-	0
Stage 1	811	718	0	0	-	-	0	-	0
Stage 2	806	596	0	0	-	-	0	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	589	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	589	0	-	-	-	-	-	-	-
Stage 1	811	0	-	-	-	-	-	-	-
Stage 2	806	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.15	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBT
Capacity (veh/h)	-	-	589	-
HCM Lane V/C Ratio	-	-	0.251	-
HCM Ctrl Dly (s/v)	-	-	13.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	55	109	57	92	6	140	322	42	3	443	79
Future Volume (veh/h)	34	55	109	57	92	6	140	322	42	3	443	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1455	1752	1752	1752	1455	952	1752	1752	952	1604
Adj Flow Rate, veh/h	37	60	118	62	100	7	152	350	46	3	482	86
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, %	10	10	30	10	10	10	30	64	10	10	64	20
Cap, veh/h	139	212	518	184	260	220	316	1088	786	13	560	534
Arrive On Green	0.08	0.12	0.12	0.11	0.15	0.15	0.12	0.42	0.42	0.01	0.31	0.31
Sat Flow, veh/h	1668	1752	2171	1668	1752	1485	2689	2598	1485	1668	1808	1359
Grp Volume(v), veh/h	37	60	118	62	100	7	152	350	46	3	482	86
Grp Sat Flow(s),veh/h/ln	1668	1752	1085	1668	1752	1485	1345	866	1485	1668	904	1359
Q Serve(g_s), s	1.7	2.6	3.6	2.8	4.3	0.3	4.4	7.5	1.2	0.1	20.7	3.4
Cycle Q Clear(g_c), s	1.7	2.6	3.6	2.8	4.3	0.3	4.4	7.5	1.2	0.1	20.7	3.4
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	139	212	518	184	260	220	316	1088	786	13	560	534
V/C Ratio(X)	0.27	0.28	0.23	0.34	0.39	0.03	0.48	0.32	0.06	0.22	0.86	0.16
Avail Cap(c_a), veh/h	243	1165	1699	243	1165	987	368	1256	881	202	846	749
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	35.5	33.0	25.3	33.9	31.8	30.1	34.1	16.1	9.4	40.7	26.8	16.3
Incr Delay (d2), s/veh	1.0	0.7	0.2	1.1	0.9	0.1	1.1	0.2	0.0	8.1	5.9	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(50%),veh/ln	0.7	1.0	0.9	1.1	1.7	0.1	1.4	1.3	0.3	0.1	4.3	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.5	33.7	25.5	35.0	32.7	30.1	35.2	16.3	9.5	48.8	32.8	16.4
LnGrp LOS	D	C	C	C	C	C	D	B	A	D	C	B
Approach Vol, veh/h		215			169			548			571	
Approach Delay, s/veh		29.7			33.4			21.0			30.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	18.4	15.4	33.9	12.6	20.6	6.4	43.0
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	12.0	54.9	11.3	38.6	12.0	54.9	10.0	39.9
Max Q Clear Time (g_c+I1), s	4.8	5.6	6.4	22.7	3.7	6.3	2.1	9.5
Green Ext Time (p_c), s	0.1	0.7	0.2	2.8	0.0	0.5	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	27.2
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	148	0	168	5	295	55	104	580	0
Future Volume (veh/h)	0	0	0	148	0	168	5	295	55	104	580	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				952	0	952	1870	952	952	952	952	0
Adj Flow Rate, veh/h				156	0	177	5	311	58	109	611	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, %				64	0	64	2	64	64	64	64	0
Cap, veh/h				235	0	209	24	392	72	145	1049	0
Arrive On Green				0.26	0.00	0.26	0.01	0.26	0.26	0.16	0.40	0.00
Sat Flow, veh/h				906	0	806	1781	1524	281	906	2683	0
Grp Volume(v), veh/h				156	0	177	5	183	186	109	611	0
Grp Sat Flow(s),veh/h/ln				906	0	806	1781	904	901	906	866	0
Q Serve(g_s), s				9.6	0.0	13.0	0.2	11.8	12.1	7.2	11.4	0.0
Cycle Q Clear(g_c), s				9.6	0.0	13.0	0.2	11.8	12.1	7.2	11.4	0.0
Prop In Lane				1.00		1.00	1.00		0.31	1.00		0.00
Lane Grp Cap(c), veh/h				235	0	209	24	232	231	145	1049	0
V/C Ratio(X)				0.67	0.00	0.85	0.21	0.79	0.80	0.75	0.58	0.00
Avail Cap(c_a), veh/h				741	0	659	286	587	585	266	2033	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				20.7	0.0	21.9	30.4	21.6	21.7	25.0	14.5	0.0
Incr Delay (d2), s/veh				3.2	0.0	9.2	4.3	5.9	6.4	7.5	0.5	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(50%),veh/ln				2.0	0.0	2.7	0.1	2.4	2.5	1.6	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				23.9	0.0	31.1	34.8	27.4	28.1	32.5	15.0	0.0
LnGrp LOS				C		C	C	C	C	C	B	
Approach Vol, veh/h					333			374			720	
Approach Delay, s/veh					27.7			27.9			17.7	
Approach LOS					C			C			B	

Timer - Assigned Phs	1	2		5	6		8					
Phs Duration (G+Y+Rc), s	5.7	24.4		6.5	33.6		22.2					
Change Period (Y+Rc), s	5.7	8.4		5.7	8.4		6.1					
Max Green Setting (Gmax), s	18.3	40.5		10.0	48.8		51.0					
Max Q Clear Time (g_c+I1), s	9.2	14.1		2.2	13.4		15.0					
Green Ext Time (p_c), s	0.2	2.0		0.0	4.2		1.2					

Intersection Summary		
HCM 7th Control Delay, s/veh	22.7	
HCM 7th LOS	C	

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	92	443	283	421	636	89
Future Volume (veh/h)	92	443	283	421	636	89
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	100	0	308	458	691	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	128		360	1293	791	
Arrive On Green	0.08	0.00	0.22	0.74	0.46	0.00
Sat Flow, veh/h	1668	1485	1668	1737	1737	1485
Grp Volume(v), veh/h	100	0	308	458	691	0
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1737	1737	1485
Q Serve(g_s), s	3.6	0.0	10.9	5.6	22.1	0.0
Cycle Q Clear(g_c), s	3.6	0.0	10.9	5.6	22.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	128		360	1293	791	
V/C Ratio(X)	0.78		0.85	0.35	0.87	
Avail Cap(c_a), veh/h	366		502	1851	1201	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	27.9	0.0	23.2	2.7	15.1	0.0
Incr Delay (d2), s/veh	10.0	0.0	10.0	0.2	4.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	4.5	0.3	7.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	37.9	0.0	33.2	2.9	20.0	0.0
LnGrp LOS	D		C	A	B	
Approach Vol, veh/h	100			766	691	
Approach Delay, s/veh	37.9			15.1	20.0	
Approach LOS	D			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		52.3		9.2	17.8	34.5
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		65.5		13.5	18.5	42.5
Max Q Clear Time (g_c+I1), s		7.6		5.6	12.9	24.1
Green Ext Time (p_c), s		2.6		0.1	0.4	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	18.7
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	172	6	93	174	380	9	746	110	479	767	47
Future Volume (veh/h)	41	172	6	93	174	380	9	746	110	479	767	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	45	187	7	101	189	413	10	811	120	521	834	51
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	44	182	193	96	180	685	20	820	398	503	1705	828
Arrive On Green	0.13	0.13	0.13	0.15	0.15	0.15	0.01	0.26	0.26	0.29	0.53	0.53
Sat Flow, veh/h	351	1458	1547	625	1170	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	232	0	7	290	0	413	10	811	120	521	834	51
Grp Sat Flow(s),veh/h/ln	1808	0	1547	1795	0	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	17.5	0.0	0.6	21.5	0.0	21.5	0.8	35.5	8.7	40.5	23.1	2.2
Cycle Q Clear(g_c), s	17.5	0.0	0.6	21.5	0.0	21.5	0.8	35.5	8.7	40.5	23.1	2.2
Prop In Lane	0.19		1.00	0.35		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	0	193	276	0	685	20	820	398	503	1705	828
V/C Ratio(X)	1.03	0.00	0.04	1.05	0.00	0.60	0.50	0.99	0.30	1.04	0.49	0.06
Avail Cap(c_a), veh/h	226	0	193	276	0	685	62	820	398	503	1705	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	0.00	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	61.3	0.0	53.8	59.3	0.0	29.6	68.8	51.8	41.9	49.8	20.5	15.7
Incr Delay (d2), s/veh	66.9	0.0	0.1	68.6	0.0	1.5	18.0	28.7	0.4	49.6	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	0.0	0.2	14.7	0.0	10.4	0.4	16.8	3.3	23.7	8.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	128.1	0.0	53.9	127.8	0.0	31.1	86.8	80.5	42.3	99.4	20.7	15.7
LnGrp LOS	F		D	F		C	F	F	D	F	C	B
Approach Vol, veh/h		239			703			941			1406	
Approach Delay, s/veh		125.9			71.0			75.7			49.7	
Approach LOS		F			E			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	45.0	43.0		24.0	6.1	81.9		28.0				
Change Period (Y+Rc), s	4.5	7.0		6.5	4.5	7.0		6.5				
Max Green Setting (Gmax), s	40.5	36.0		17.5	5.0	71.5		21.5				
Max Q Clear Time (g_c+I1), s	42.5	37.5		19.5	2.8	25.1		23.5				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	67.2
HCM 7th LOS	E



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	108	2	1	255	761	324
Future Volume (veh/h)	108	2	1	255	761	324
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	117	2	1	277	827	352
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	157	3	145	1147	910	796
Arrive On Green	0.10	0.10	0.09	0.70	0.54	0.54
Sat Flow, veh/h	1624	28	1668	1633	1699	1485
Grp Volume(v), veh/h	120	0	1	277	827	352
Grp Sat Flow(s),veh/h/ln	1666	0	1668	1633	1699	1485
Q Serve(g_s), s	4.0	0.0	0.0	3.5	25.0	8.2
Cycle Q Clear(g_c), s	4.0	0.0	0.0	3.5	25.0	8.2
Prop In Lane	0.97	0.02	1.00			1.00
Lane Grp Cap(c), veh/h	161	0	145	1147	910	796
V/C Ratio(X)	0.74	0.00	0.01	0.24	0.91	0.44
Avail Cap(c_a), veh/h	161	0	147	1240	1005	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	0.0	23.7	3.0	11.9	8.0
Incr Delay (d2), s/veh	16.9	0.0	0.0	0.1	11.1	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	0.3	8.1	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	41.8	0.0	23.7	3.1	23.0	8.4
LnGrp LOS	D		C	A	C	A
Approach Vol, veh/h	120			278	1179	
Approach Delay, s/veh	41.8			3.2	18.7	
Approach LOS	D			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	46.8		10.0	9.4	37.3
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	43.1		5.5	5.0	33.6
Max Q Clear Time (g_c+I1), s	5.5		6.0	2.0	27.0
Green Ext Time (p_c), s	1.4		0.0	0.0	3.4

Intersection Summary		
HCM 7th Control Delay, s/veh	17.7	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	326	240	37	122	189	81	0	12	68	0	63
Future Volume (veh/h)	191	326	240	37	122	189	81	0	12	68	0	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	208	354	293	40	133	205	88	0	13	74	0	68
Peak Hour Factor	0.92	0.92	0.82	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	482	618	562	414	174	269	350	6	27	242	8	98
Arrive On Green	0.12	0.38	0.38	0.05	0.30	0.30	0.13	0.00	0.13	0.13	0.00	0.13
Sat Flow, veh/h	1668	1633	1485	1668	579	893	1379	44	210	782	60	774
Grp Volume(v), veh/h	208	354	293	40	0	338	101	0	0	142	0	0
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	0	1472	1633	0	0	1616	0	0
Q Serve(g_s), s	3.1	6.6	5.9	0.6	0.0	8.0	0.0	0.0	0.0	1.1	0.0	0.0
Cycle Q Clear(g_c), s	3.1	6.6	5.9	0.6	0.0	8.0	2.0	0.0	0.0	3.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.61	0.87		0.13	0.52		0.48
Lane Grp Cap(c), veh/h	482	618	562	414	0	443	382	0	0	347	0	0
V/C Ratio(X)	0.43	0.57	0.52	0.10	0.00	0.76	0.26	0.00	0.00	0.41	0.00	0.00
Avail Cap(c_a), veh/h	638	1193	1084	568	0	960	539	0	0	518	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	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.3	9.5	9.3	8.6	0.0	12.2	15.5	0.0	0.0	16.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.8	0.8	0.1	0.0	2.7	0.4	0.0	0.0	0.8	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(50%),veh/ln	0.6	1.3	1.1	0.1	0.0	1.8	0.6	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.9	10.3	10.0	8.7	0.0	14.9	15.9	0.0	0.0	16.7	0.0	0.0
LnGrp LOS	A	B	B	A		B	B			B		
Approach Vol, veh/h		855			378			101			142	
Approach Delay, s/veh		9.9			14.3			15.9			16.7	
Approach LOS		A			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	21.5		10.6	9.4	18.5		10.6
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	5.3	28.1		9.3	8.3	25.1		9.3
Max Q Clear Time (g_c+I1), s	2.6	8.6		5.1	5.1	10.0		4.0
Green Ext Time (p_c), s	0.0	2.7		0.2	0.2	1.6		0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	12.1
HCM 7th LOS	B

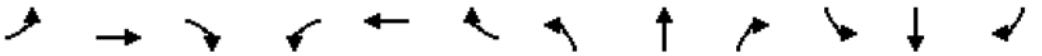
Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	21	333	39	60	356
Future Vol, veh/h	19	21	333	39	60	356
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	18	10	10	18
Mvmt Flow	21	23	362	42	65	387

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	902	384	0	0	405	0
Stage 1	384	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	299	646	-	-	1111	-
Stage 1	671	-	-	-	-	-
Stage 2	582	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	281	646	-	-	1110	-
Mov Cap-2 Maneuver	401	-	-	-	-	-
Stage 1	671	-	-	-	-	-
Stage 2	548	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.88	0	1.22
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	501	1110	-
HCM Lane V/C Ratio	-	-	0.087	0.059	-
HCM Ctrl Dly (s/v)	-	-	12.9	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	0	117	0	0	0	143	422	0	0	404	93
Future Volume (veh/h)	31	0	117	0	0	0	143	422	0	0	404	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1633	1752	1752	1633	1752
Adj Flow Rate, veh/h	34	0	127	0	0	0	155	459	0	0	439	101
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, %	10	10	10	10	10	10	10	18	10	10	18	10
Cap, veh/h	369	0	168	180	198	0	442	932	0	491	572	520
Arrive On Green	0.11	0.00	0.11	0.00	0.00	0.00	0.10	0.57	0.00	0.00	0.35	0.35
Sat Flow, veh/h	1668	0	1485	1183	1752	0	1668	1633	0	1668	1633	1485
Grp Volume(v), veh/h	34	0	127	0	0	0	155	459	0	0	439	101
Grp Sat Flow(s),veh/h/ln	1668	0	1485	1183	1752	0	1668	1633	0	1668	1633	1485
Q Serve(g_s), s	0.7	0.0	3.3	0.0	0.0	0.0	2.0	6.7	0.0	0.0	9.5	1.9
Cycle Q Clear(g_c), s	0.7	0.0	3.3	0.0	0.0	0.0	2.0	6.7	0.0	0.0	9.5	1.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	369	0	168	180	198	0	442	932	0	491	572	520
V/C Ratio(X)	0.09	0.00	0.76	0.00	0.00	0.00	0.35	0.49	0.00	0.00	0.77	0.19
Avail Cap(c_a), veh/h	486	0	272	263	321	0	534	1244	0	696	1191	1083
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	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	0.0	17.2	0.0	0.0	0.0	7.5	5.1	0.0	0.0	11.5	9.0
Incr Delay (d2), s/veh	0.1	0.0	6.7	0.0	0.0	0.0	0.5	0.4	0.0	0.0	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(50%),veh/ln	0.2	0.0	1.2	0.0	0.0	0.0	0.3	0.6	0.0	0.0	2.3	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.1	0.0	23.9	0.0	0.0	0.0	8.0	5.5	0.0	0.0	13.7	9.2
LnGrp LOS	B		C				A	A			B	A
Approach Vol, veh/h		161			0			614			540	
Approach Delay, s/veh		22.2			0.0			6.1			12.9	
Approach LOS		C						A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	29.7		10.2	8.8	20.9		10.2				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.0	30.4		7.3	6.3	29.1		7.3				
Max Q Clear Time (g_c+I1), s	0.0	8.7		5.3	4.0	11.5		0.0				
Green Ext Time (p_c), s	0.0	2.4		0.1	0.1	2.4		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh		10.9
HCM 7th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	18	265	97	4	7	378	594	79	35	287	101
Future Volume (veh/h)	178	18	265	97	4	7	378	594	79	35	287	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	193	20	288	105	4	8	411	646	86	38	312	110
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	396	363	613	330	108	216	577	766	649	272	476	404
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.44	0.44	0.04	0.27	0.27
Sat Flow, veh/h	1313	1752	1485	1003	521	1043	1668	1752	1485	1668	1752	1485
Grp Volume(v), veh/h	193	20	288	105	0	12	411	646	86	38	312	110
Grp Sat Flow(s),veh/h/ln	1313	1752	1485	1003	0	1564	1668	1752	1485	1668	1752	1485
Q Serve(g_s), s	7.5	0.5	7.8	5.1	0.0	0.3	8.7	18.0	1.9	0.9	8.7	3.2
Cycle Q Clear(g_c), s	7.9	0.5	7.8	5.6	0.0	0.3	8.7	18.0	1.9	0.9	8.7	3.2
Prop In Lane	1.00		1.00	1.00		0.67	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	396	363	613	330	0	324	577	766	649	272	476	404
V/C Ratio(X)	0.49	0.06	0.47	0.32	0.00	0.04	0.71	0.84	0.13	0.14	0.65	0.27
Avail Cap(c_a), veh/h	770	862	1035	616	0	770	700	1300	1101	357	971	823
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	20.5	17.4	11.7	19.7	0.0	17.4	10.4	13.8	9.2	14.1	17.7	15.7
Incr Delay (d2), s/veh	0.9	0.1	0.6	0.5	0.0	0.0	2.7	2.6	0.1	0.2	1.5	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(50%),veh/ln	1.9	0.2	1.8	1.0	0.0	0.1	2.3	5.2	0.4	0.3	2.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.4	17.5	12.3	20.2	0.0	17.4	13.1	16.4	9.3	14.3	19.2	16.1
LnGrp LOS	C	B	B	C		B	B	B	A	B	B	B
Approach Vol, veh/h		501			117			1143			460	
Approach Delay, s/veh		16.0			19.9			14.7			18.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	30.9		17.1	16.0	21.8		17.1				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	40.7		27.0	15.3	30.4		27.0				
Max Q Clear Time (g_c+I1), s	2.9	20.0		9.9	10.7	10.7		7.6				
Green Ext Time (p_c), s	0.0	3.9		1.5	0.6	1.8		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	16.0
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	80	88	74	32	32	227	1074	185	80	512	80
Future Volume (veh/h)	32	80	88	74	32	32	227	1074	185	80	512	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	35	87	96	80	35	35	247	1167	201	87	557	87
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	175	236	200	157	108	108	564	1223	1080	158	1180	1043
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.06	0.70	0.70	0.04	0.67	0.67
Sat Flow, veh/h	1299	1826	1547	1172	838	838	1739	1752	1547	1739	1752	1547
Grp Volume(v), veh/h	35	87	96	80	0	70	247	1167	201	87	557	87
Grp Sat Flow(s),veh/h/ln	1299	1826	1547	1172	0	1675	1739	1752	1547	1739	1752	1547
Q Serve(g_s), s	3.2	5.6	7.4	8.6	0.0	4.9	5.5	77.0	5.8	1.9	19.4	2.5
Cycle Q Clear(g_c), s	8.1	5.6	7.4	14.1	0.0	4.9	5.5	77.0	5.8	1.9	19.4	2.5
Prop In Lane	1.00		1.00	1.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	236	200	157	0	216	564	1223	1080	158	1180	1043
V/C Ratio(X)	0.20	0.37	0.48	0.51	0.00	0.32	0.44	0.95	0.19	0.55	0.47	0.08
Avail Cap(c_a), veh/h	281	386	327	253	0	354	646	1380	1219	161	1258	1111
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	54.3	50.9	51.7	57.4	0.0	50.6	7.4	17.4	6.7	32.0	10.0	7.2
Incr Delay (d2), s/veh	0.6	1.0	1.8	2.6	0.0	0.9	0.5	13.9	0.1	3.8	0.3	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(50%),veh/ln	1.1	2.6	2.9	2.6	0.0	2.1	1.6	28.2	1.6	1.9	6.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.8	51.9	53.5	59.9	0.0	51.5	7.9	31.3	6.8	35.8	10.3	7.2
LnGrp LOS	D	D	D	E		D	A	C	A	D	B	A
Approach Vol, veh/h		218			150			1615			731	
Approach Delay, s/veh		53.0			56.0			24.7			12.9	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	96.2		22.2	12.6	93.1		22.2				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.0	100.7		27.0	13.9	91.8		27.0				
Max Q Clear Time (g_c+I1), s	3.9	79.0		10.1	7.5	21.4		16.1				
Green Ext Time (p_c), s	0.0	10.3		0.7	0.4	3.7		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	25.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	236	119	93	63	129	220	208	1228	129	105	477	109
Future Volume (veh/h)	236	119	93	63	129	220	208	1228	129	105	477	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	257	129	101	68	140	239	226	1335	140	114	518	118
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, %	8	8	8	8	8	8	7	7	7	5	5	5
Cap, veh/h	287	372	314	305	351	296	259	1471	154	141	1127	255
Arrive On Green	0.06	0.21	0.21	0.04	0.20	0.20	0.15	0.47	0.47	0.08	0.40	0.40
Sat Flow, veh/h	1697	1781	1503	1697	1781	1503	1711	3117	325	1739	2806	636
Grp Volume(v), veh/h	257	129	101	68	140	239	226	728	747	114	319	317
Grp Sat Flow(s),veh/h/ln	1697	1781	1503	1697	1781	1503	1711	1706	1736	1739	1735	1707
Q Serve(g_s), s	5.7	6.3	5.9	3.3	7.0	15.6	13.3	40.4	41.0	6.6	13.9	14.0
Cycle Q Clear(g_c), s	5.7	6.3	5.9	3.3	7.0	15.6	13.3	40.4	41.0	6.6	13.9	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		0.37
Lane Grp Cap(c), veh/h	287	372	314	305	351	296	259	805	819	141	696	686
V/C Ratio(X)	0.90	0.35	0.32	0.22	0.40	0.81	0.87	0.90	0.91	0.81	0.46	0.46
Avail Cap(c_a), veh/h	287	600	506	315	589	497	341	850	865	154	696	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	39.8	34.7	34.5	31.0	35.9	39.4	42.7	25.0	25.2	46.5	22.6	22.6
Incr Delay (d2), s/veh	28.1	0.6	0.6	0.4	0.7	5.2	17.4	12.6	13.4	25.2	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(50%),veh/ln	6.2	2.8	2.2	1.3	3.1	6.0	6.7	17.7	18.4	3.8	5.5	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.9	35.2	35.1	31.3	36.7	44.5	60.0	37.6	38.5	71.6	23.0	23.1
LnGrp LOS	E	D	D	C	D	D	E	D	D	E	C	C
Approach Vol, veh/h		487			447			1701			750	
Approach Delay, s/veh		52.4			40.1			41.0			30.4	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	54.0	9.0	27.0	20.0	46.8	10.2	25.8
Change Period (Y+Rc), s	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5
Max Green Setting (Gmax), s	9.1	51.2	5.1	34.6	20.5	39.8	5.7	34.0
Max Q Clear Time (g_c+I1), s	8.3	43.0	5.3	8.3	15.3	16.0	7.7	17.6
Green Ext Time (p_c), s	0.0	5.5	0.0	1.1	0.3	3.8	0.0	1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	40.2
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	29	1	0	4	28	454	3	0	776	9
Future Vol, veh/h	10	0	29	1	0	4	28	454	3	0	776	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	400	-	400	395	-	510
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	35	10	10	35	10
Mvmt Flow	11	0	32	1	0	4	30	493	3	0	843	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1151	1401	422	976	1398	247	843	0	0	497	0	0
Stage 1	843	843	-	554	554	-	-	-	-	-	-	-
Stage 2	308	558	-	422	843	-	-	-	-	-	-	-
Critical Hdwy	7.7	6.7	7.1	7.7	6.7	7.1	4.3	-	-	4.3	-	-
Critical Hdwy Stg 1	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.6	4.1	3.4	3.6	4.1	3.4	2.3	-	-	2.3	-	-
Pot Cap-1 Maneuver	144	130	559	194	130	730	739	-	-	1009	-	-
Stage 1	308	359	-	464	492	-	-	-	-	-	-	-
Stage 2	655	491	-	559	359	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	137	124	559	176	125	730	739	-	-	1009	-	-
Mov Cap-2 Maneuver	279	293	-	352	278	-	-	-	-	-	-	-
Stage 1	308	359	-	445	472	-	-	-	-	-	-	-
Stage 2	625	470	-	528	359	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	13.95	11.05	0.58	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	739	-	-	444	601	1009	-	-
HCM Lane V/C Ratio	0.041	-	-	0.095	0.009	-	-	-
HCM Ctrl Dly (s/v)	10.1	-	-	14	11	0	-	-
HCM Lane LOS	B	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0	0	-	-

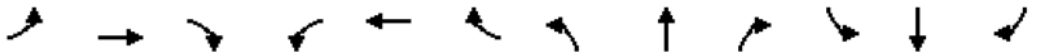
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	78	730	6	3	466	28	14	5	2	17	3	33
Future Vol, veh/h	78	730	6	3	466	28	14	5	2	17	3	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	11	35	11	11	35	11	11	11	11	11	11	11
Mvmt Flow	81	760	6	3	485	29	15	5	2	18	3	34

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	515	0	0	767	0	0	1173	1444	380	1037	1421	243
Stage 1	-	-	-	-	-	-	923	923	-	492	492	-
Stage 2	-	-	-	-	-	-	251	521	-	545	929	-
Critical Hdwy	4.32	-	-	4.32	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.31	-	-	2.31	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	987	-	-	786	-	-	137	121	593	174	125	731
Stage 1	-	-	-	-	-	-	273	327	-	505	524	-
Stage 2	-	-	-	-	-	-	706	508	-	468	325	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	987	-	-	786	-	-	118	110	593	155	114	731
Mov Cap-2 Maneuver	-	-	-	-	-	-	230	251	-	335	259	-
Stage 1	-	-	-	-	-	-	251	300	-	503	522	-
Stage 2	-	-	-	-	-	-	667	506	-	420	298	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.86	0.06	20.67	12.74
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	236	593	987	-	-	786	-	-	321	731
HCM Lane V/C Ratio	0.084	0.004	0.082	-	-	0.004	-	-	0.065	0.047
HCM Ctrl Dly (s/v)	21.7	11.1	9	-	-	9.6	-	-	17	10.2
HCM Lane LOS	C	B	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.3	0	0.3	-	-	0	-	-	0.2	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	494	59	13	353	180	71	132	18	113	102	84
Future Volume (veh/h)	205	494	59	13	353	180	71	132	18	113	102	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	218	526	63	14	376	191	76	140	19	120	109	89
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	256	922	110	67	469	234	201	297	40	229	189	155
Arrive On Green	0.15	0.39	0.39	0.04	0.28	0.28	0.12	0.20	0.20	0.14	0.21	0.21
Sat Flow, veh/h	1668	2359	282	1668	1689	845	1668	1507	204	1668	886	723
Grp Volume(v), veh/h	218	292	297	14	291	276	76	0	159	120	0	198
Grp Sat Flow(s),veh/h/ln	1668	1312	1329	1668	1312	1222	1668	0	1711	1668	0	1609
Q Serve(g_s), s	10.4	14.2	14.4	0.7	16.8	17.3	3.4	0.0	6.7	5.5	0.0	9.0
Cycle Q Clear(g_c), s	10.4	14.2	14.4	0.7	16.8	17.3	3.4	0.0	6.7	5.5	0.0	9.0
Prop In Lane	1.00		0.21	1.00		0.69	1.00		0.12	1.00		0.45
Lane Grp Cap(c), veh/h	256	513	519	67	364	339	201	0	338	229	0	344
V/C Ratio(X)	0.85	0.57	0.57	0.21	0.80	0.82	0.38	0.00	0.47	0.52	0.00	0.58
Avail Cap(c_a), veh/h	333	559	566	245	490	456	245	0	670	245	0	630
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	33.7	19.5	19.5	38.0	27.4	27.6	33.1	0.0	29.0	32.8	0.0	28.8
Incr Delay (d2), s/veh	15.2	1.2	1.2	1.5	6.6	8.2	1.2	0.0	1.0	1.9	0.0	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(50%),veh/ln	5.1	4.2	4.3	0.3	5.6	5.5	1.4	0.0	2.8	2.3	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.9	20.7	20.7	39.5	34.1	35.7	34.3	0.0	30.1	34.7	0.0	30.3
LnGrp LOS	D	C	C	D	C	D	C		C	C		C
Approach Vol, veh/h		807			581			235			318	
Approach Delay, s/veh		28.3			35.0			31.4			32.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	37.0	14.6	22.2	17.2	27.8	15.9	20.8
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.0	34.8	12.0	32.0	16.3	30.5	12.0	32.0
Max Q Clear Time (g_c+I1), s	2.7	16.4	5.4	11.0	12.4	19.3	7.5	8.7
Green Ext Time (p_c), s	0.0	3.4	0.1	1.2	0.2	2.7	0.1	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	31.3
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	3	3	445	6	177	3	513	209	1
Future Volume (veh/h)	1	0	0	3	3	445	6	177	3	513	209	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1381	1752	1381	1381	1752
Adj Flow Rate, veh/h	1	0	0	3	3	0	6	190	3	552	225	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, %	10	10	10	10	10	10	10	35	10	35	35	10
Cap, veh/h	5	19	0	14	28		27	518	293	670	1165	659
Arrive On Green	0.00	0.00	0.00	0.01	0.02	0.00	0.02	0.20	0.20	0.26	0.44	0.44
Sat Flow, veh/h	1668	1752	0	1668	1752	1485	1668	2624	1485	2552	2624	1485
Grp Volume(v), veh/h	1	0	0	3	3	0	6	190	3	552	225	1
Grp Sat Flow(s),veh/h/ln	1668	1752	0	1668	1752	1485	1668	1312	1485	1276	1312	1485
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.1	0.0	0.2	3.2	0.1	10.3	2.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.1	0.1	0.0	0.2	3.2	0.1	10.3	2.6	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	19	0	14	28		27	518	293	670	1165	659
V/C Ratio(X)	0.22	0.00	0.00	0.22	0.11		0.23	0.37	0.01	0.82	0.19	0.00
Avail Cap(c_a), veh/h	329	401	0	329	401		329	622	352	872	1165	659
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	0.0	0.0	25.0	24.6	0.0	24.6	17.6	16.3	17.6	8.6	7.8
Incr Delay (d2), s/veh	22.1	0.0	0.0	7.9	1.7	0.0	4.2	0.4	0.0	5.0	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(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.8	0.0	2.7	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.3	0.0	0.0	32.9	26.2	0.0	28.8	18.0	16.4	22.6	8.6	7.8
LnGrp LOS	D			C	C		C	B	B	C	A	A
Approach Vol, veh/h		1			6			199			778	
Approach Delay, s/veh		47.3			29.5			18.3			18.5	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	16.6	6.1	8.9	6.5	29.1	5.8	9.2
Change Period (Y+Rc), s	5.7	* 6.6	5.7	8.4	5.7	6.6	5.7	8.4
Max Green Setting (Gmax), s	17.3	* 12	10.0	11.6	10.0	17.0	10.0	11.6
Max Q Clear Time (g_c+I1), s	2.3	5.2	2.1	0.0	2.2	4.6	2.0	2.1
Green Ext Time (p_c), s	1.0	0.5	0.0	0.0	0.0	0.9	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	18.6
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	488	0	24	412	263	1	73	36	90	28	1
Future Volume (veh/h)	0	488	0	24	412	263	1	73	36	90	28	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	0	530	0	26	448	286	1	79	39	98	30	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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	4	736	416	51	1085	614	79	449	463	139	23	463
Arrive On Green	0.00	0.28	0.00	0.03	0.41	0.41	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	0	1440	1485	0	75	1485
Grp Volume(v), veh/h	0	530	0	26	448	286	80	0	39	128	0	1
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1440	0	1485	75	0	1485
Q Serve(g_s), s	0.0	8.4	0.0	0.7	5.5	6.4	0.0	0.0	0.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.4	0.0	0.7	5.5	6.4	14.3	0.0	0.9	14.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.01		1.00	0.77		1.00
Lane Grp Cap(c), veh/h	4	736	416	51	1085	614	529	0	463	162	0	463
V/C Ratio(X)	0.00	0.72	0.00	0.51	0.41	0.47	0.15	0.00	0.08	0.79	0.00	0.00
Avail Cap(c_a), veh/h	182	1322	748	193	1339	757	529	0	463	162	0	463
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	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.9	0.0	21.9	9.5	9.8	11.5	0.0	11.2	20.4	0.0	10.9
Incr Delay (d2), s/veh	0.0	1.3	0.0	7.5	0.3	0.6	0.1	0.0	0.1	22.7	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(50%),veh/ln	0.0	1.9	0.0	0.3	1.0	1.3	0.4	0.0	0.2	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	16.2	0.0	29.4	9.8	10.3	11.6	0.0	11.2	43.0	0.0	10.9
LnGrp LOS		B		C	A	B	B		B	D		B
Approach Vol, veh/h		530			760			119			129	
Approach Delay, s/veh		16.2			10.6			11.5			42.8	
Approach LOS		B			B			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	19.8		20.0	0.0	25.9		20.0				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.3	23.1		14.3	5.0	23.4		14.3				
Max Q Clear Time (g_c+I1), s	2.7	10.4		16.3	0.0	8.4		16.3				
Green Ext Time (p_c), s	0.0	2.5		0.0	0.0	3.1		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	15.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	599	1	35	1	17	12	115	769	5	6	585	20
Future Volume (veh/h)	599	1	35	1	17	12	115	769	5	6	585	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	651	1	38	1	18	13	125	836	5	7	636	22
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	618	628	532	119	92	78	146	882	748	29	1422	49
Arrive On Green	0.30	0.35	0.35	0.00	0.05	0.05	0.11	0.65	0.65	0.02	0.42	0.42
Sat Flow, veh/h	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	3393	117
Grp Volume(v), veh/h	651	1	38	1	18	13	125	836	5	7	322	336
Grp Sat Flow(s),veh/h/ln	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	1721	1790
Q Serve(g_s), s	44.8	0.1	2.5	0.1	1.4	1.2	10.7	63.1	0.2	0.6	20.1	20.1
Cycle Q Clear(g_c), s	44.8	0.1	2.5	0.1	1.4	1.2	10.7	63.1	0.2	0.6	20.1	20.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	618	628	532	119	92	78	146	882	748	29	721	750
V/C Ratio(X)	1.05	0.00	0.07	0.01	0.20	0.17	0.85	0.95	0.01	0.24	0.45	0.45
Avail Cap(c_a), veh/h	618	628	532	218	97	82	223	882	748	115	721	750
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)	1.00	1.00	1.00	1.00	1.00	1.00	0.56	0.56	0.56	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	32.0	32.8	67.3	68.3	68.2	65.6	24.6	13.6	72.8	31.1	31.1
Incr Delay (d2), s/veh	51.1	0.0	0.1	0.0	1.0	1.0	10.7	13.2	0.0	4.2	2.0	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(50%),veh/ln	10.2	0.0	0.9	0.0	0.7	0.5	4.9	23.5	0.1	0.3	8.4	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	99.2	32.0	32.9	67.3	69.3	69.2	76.3	37.9	13.6	77.0	33.1	33.1
LnGrp LOS	F	C	C	E	E	E	E	D	B	E	C	C
Approach Vol, veh/h		690			32			966			665	
Approach Delay, s/veh		95.4			69.2			42.7			33.6	
Approach LOS		F			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.2	80.6	5.1	57.1	17.4	70.4	49.5	12.7
Change Period (Y+Rc), s	4.7	7.5	4.7	5.1	4.7	7.5	4.7	5.1
Max Green Setting (Gmax), s	10.0	65.2	9.0	43.8	19.4	55.8	44.8	8.0
Max Q Clear Time (g_c+I1), s	12.6	65.1	2.1	4.5	12.7	22.1	46.8	3.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	0.1	3.6	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	55.9
HCM 7th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	6	59	14	1	1	29	871	25	2	344	273
Future Volume (veh/h)	12	6	59	14	1	1	29	871	25	2	344	273
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	13	7	64	15	1	1	32	947	27	2	374	297
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	61	33	82	86	6	82	92	1251	1060	92	1251	1060
Arrive On Green	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.69	0.69	0.11	1.00	1.00
Sat Flow, veh/h	1140	614	1535	1622	108	1535	1725	1811	1535	1725	1811	1535
Grp Volume(v), veh/h	20	0	64	16	0	1	32	947	27	2	374	297
Grp Sat Flow(s),veh/h/ln	1754	0	1535	1730	0	1535	1725	1811	1535	1725	1811	1535
Q Serve(g_s), s	1.6	0.0	6.2	1.3	0.0	0.1	2.7	50.9	0.8	0.2	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	6.2	1.3	0.0	0.1	2.7	50.9	0.8	0.2	0.0	0.0
Prop In Lane	0.65		1.00	0.94		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	0	82	92	0	82	92	1251	1060	92	1251	1060
V/C Ratio(X)	0.21	0.00	0.78	0.17	0.00	0.01	0.35	0.76	0.03	0.02	0.30	0.28
Avail Cap(c_a), veh/h	94	0	82	92	0	82	92	1251	1060	92	1251	1060
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	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Uniform Delay (d), s/veh	68.0	0.0	70.1	67.8	0.0	67.3	68.5	15.0	7.3	63.5	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	37.5	0.9	0.0	0.1	2.2	4.3	0.0	0.1	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(50%),veh/ln	0.7	0.0	3.2	0.6	0.0	0.0	1.2	19.1	0.3	0.1	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.1	0.0	107.7	68.7	0.0	67.3	70.7	19.4	7.3	63.6	0.6	0.6
LnGrp LOS	E		F	E		E	E	B	A	E	A	A
Approach Vol, veh/h		84			17			1006			673	
Approach Delay, s/veh		98.5			68.6			20.7			0.8	
Approach LOS		F			E			C			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	111.1		13.1	12.7	111.1		13.1				
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1				
Max Green Setting (Gmax), s	8.0	103.6		8.0	8.0	103.6		8.0				
Max Q Clear Time (g_c+I1), s	2.2	52.9		8.2	4.7	2.0		3.3				
Green Ext Time (p_c), s	0.0	8.0		0.0	0.0	3.1		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	17.3
HCM 7th LOS	B

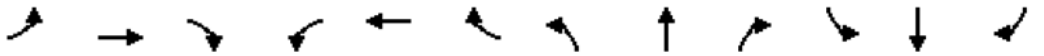
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	170	20	0	230	284	5	2	2	92	9	68
Future Vol, veh/h	31	170	20	0	230	284	5	2	2	92	9	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	650	620	-	600	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	34	185	22	0	250	309	5	2	2	100	10	74

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	559	0	0	207	0	0	382	811	92	411	524	125
Stage 1	-	-	-	-	-	-	252	252	-	250	250	-
Stage 2	-	-	-	-	-	-	130	559	-	161	274	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	955	-	-	1306	-	-	531	297	922	506	440	877
Stage 1	-	-	-	-	-	-	708	678	-	710	679	-
Stage 2	-	-	-	-	-	-	837	490	-	802	662	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	955	-	-	1306	-	-	460	286	922	484	423	877
Mov Cap-2 Maneuver	-	-	-	-	-	-	588	412	-	618	549	-
Stage 1	-	-	-	-	-	-	681	652	-	710	679	-
Stage 2	-	-	-	-	-	-	756	490	-	768	638	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.44	0	11.29	11.09
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	524	922	555	-	-	1306	-	-	611	877
HCM Lane V/C Ratio	0.015	0.002	0.035	-	-	-	-	-	0.18	0.084
HCM Ctrl Dly (s/v)	12	8.9	8.9	0.2	-	0	-	-	12.2	9.5
HCM Lane LOS	B	A	A	A	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0	0.1	-	-	0	-	-	0.7	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	360	185	352	388	57	375	235	636	64	256	22
Future Volume (veh/h)	32	360	185	352	388	57	375	235	636	64	256	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	35	391	201	383	422	62	408	255	691	70	278	24
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	80	430	643	442	499	73	487	703	799	316	427	37
Arrive On Green	0.05	0.24	0.24	0.13	0.32	0.32	0.18	0.39	0.39	0.06	0.26	0.26
Sat Flow, veh/h	1739	1826	1547	3374	1556	229	1739	1826	1547	1739	1657	143
Grp Volume(v), veh/h	35	391	201	383	0	484	408	255	691	70	0	302
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1687	0	1785	1739	1826	1547	1739	0	1800
Q Serve(g_s), s	2.3	24.7	10.3	13.2	0.0	29.9	19.8	11.8	45.6	3.4	0.0	17.7
Cycle Q Clear(g_c), s	2.3	24.7	10.3	13.2	0.0	29.9	19.8	11.8	45.6	3.4	0.0	17.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	80	430	643	442	0	572	487	703	799	316	0	464
V/C Ratio(X)	0.44	0.91	0.31	0.87	0.00	0.85	0.84	0.36	0.87	0.22	0.00	0.65
Avail Cap(c_a), veh/h	117	569	761	493	0	707	487	703	799	327	0	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)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.0	44.0	23.2	50.4	0.0	37.5	25.7	26.0	25.1	28.7	0.0	39.2
Incr Delay (d2), s/veh	3.7	15.4	0.3	14.0	0.0	7.9	12.2	0.3	9.8	0.4	0.0	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(50%),veh/ln	1.1	12.9	3.7	6.4	0.0	14.2	9.4	5.1	17.9	1.5	0.0	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.7	59.4	23.5	64.4	0.0	45.4	37.9	26.3	34.9	29.0	0.0	41.9
LnGrp LOS	E	E	C	E		D	D	C	C	C		D
Approach Vol, veh/h		627			867			1354			372	
Approach Delay, s/veh		47.9			53.8			34.2			39.5	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.2	34.3	27.0	36.9	10.2	44.3	11.9	52.0
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	17.3	36.9	21.3	* 33	8.0	* 47	8.0	45.6
Max Q Clear Time (g_c+I1), s	15.2	26.7	21.8	19.7	4.3	31.9	5.4	47.6
Green Ext Time (p_c), s	0.3	1.2	0.0	1.4	0.0	2.8	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	42.7
HCM 7th LOS	D

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	67	96	130	28	119	86	96	1132	48	104	661	26
Future Volume (veh/h)	67	96	130	28	119	86	96	1132	48	104	661	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	68	98	133	29	121	88	98	1155	49	106	674	27
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, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	157	235	339	102	177	150	305	1264	616	175	1297	632
Arrive On Green	0.09	0.13	0.13	0.06	0.10	0.10	0.09	0.41	0.41	0.11	0.43	0.43
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	3047	1485
Grp Volume(v), veh/h	68	98	133	29	121	88	98	1155	49	106	674	27
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1523	1485
Q Serve(g_s), s	3.8	5.1	7.5	1.6	6.6	5.6	2.8	35.4	2.0	6.0	16.1	1.1
Cycle Q Clear(g_c), s	3.8	5.1	7.5	1.6	6.6	5.6	2.8	35.4	2.0	6.0	16.1	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	157	235	339	102	177	150	305	1264	616	175	1297	632
V/C Ratio(X)	0.43	0.42	0.39	0.28	0.68	0.59	0.32	0.91	0.08	0.60	0.52	0.04
Avail Cap(c_a), veh/h	219	903	905	185	867	735	327	1348	657	185	1379	672
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	42.3	39.3	32.4	44.4	43.0	42.5	41.9	27.3	17.5	42.3	20.9	16.6
Incr Delay (d2), s/veh	1.9	1.2	0.7	1.5	4.6	3.6	0.6	9.4	0.1	5.0	0.3	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(50%),veh/ln	1.6	2.2	2.6	0.7	3.0	2.1	1.1	12.9	0.6	2.6	5.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.2	40.5	33.1	45.9	47.6	46.1	42.5	36.7	17.6	47.3	21.3	16.6
LnGrp LOS	D	D	C	D	D	D	D	D	B	D	C	B
Approach Vol, veh/h		299			238			1302			807	
Approach Delay, s/veh		38.1			46.8			36.4			24.5	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	49.5	11.7	21.7	15.0	50.5	15.0	18.4
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	10.4	43.8	11.0	51.0	10.0	44.8	13.0	49.0
Max Q Clear Time (g_c+I1), s	8.0	37.4	3.6	9.5	4.8	18.1	5.8	8.6
Green Ext Time (p_c), s	0.1	3.7	0.0	0.9	0.1	4.3	0.1	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	33.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	152	251	59	164	108	125	988	53	86	1041	59
Future Volume (veh/h)	132	152	251	59	164	108	125	988	53	86	1041	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	143	165	273	64	178	117	136	1074	58	93	1132	64
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	246	405	343	234	405	343	171	1553	84	119	1425	81
Arrive On Green	0.00	0.22	0.22	0.00	0.22	0.22	0.10	0.46	0.46	0.07	0.43	0.43
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3347	181	1739	3338	189
Grp Volume(v), veh/h	143	165	273	64	178	117	136	556	576	93	588	608
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1735	1793	1739	1735	1792
Q Serve(g_s), s	0.1	5.7	12.3	0.1	6.2	4.7	5.6	18.6	18.6	3.9	21.6	21.6
Cycle Q Clear(g_c), s	0.1	5.7	12.3	0.1	6.2	4.7	5.6	18.6	18.6	3.9	21.6	21.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		0.11
Lane Grp Cap(c), veh/h	246	405	343	234	405	343	171	805	832	119	741	765
V/C Ratio(X)	0.58	0.41	0.80	0.27	0.44	0.34	0.79	0.69	0.69	0.78	0.79	0.79
Avail Cap(c_a), veh/h	482	1070	907	471	1070	907	274	1165	1204	203	1082	1118
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	31.4	24.5	27.1	28.6	24.7	24.1	32.4	15.6	15.6	33.7	18.3	18.3
Incr Delay (d2), s/veh	2.2	0.7	4.2	0.6	0.8	0.6	8.0	1.1	1.0	10.6	2.6	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(50%),veh/ln	2.6	2.5	4.8	1.0	2.7	1.7	2.6	6.3	6.5	1.9	7.8	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.6	25.2	31.3	29.2	25.4	24.7	40.4	16.6	16.6	44.3	20.9	20.8
LnGrp LOS	C	C	C	C	C	C	D	B	B	D	C	C
Approach Vol, veh/h		581			359			1268			1289	
Approach Delay, s/veh		30.1			25.9			19.2			22.5	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	41.3	0.0	22.0	13.0	38.6	0.0	22.0
Change Period (Y+Rc), s	5.2	7.2	5.7	5.7	5.7	7.2	5.7	5.7
Max Green Setting (Gmax), s	8.6	49.4	10.1	43.1	11.6	45.9	10.1	43.1
Max Q Clear Time (g_c+I1), s	5.9	20.6	0.0	14.3	7.6	23.6	0.0	8.2
Green Ext Time (p_c), s	0.0	7.8	0.0	2.0	0.1	7.8	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	81	112	12	91	14	111	1487	16	15	981	49
Future Volume (veh/h)	60	81	112	12	91	14	111	1487	16	15	981	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	65	88	122	13	99	15	121	1616	0	16	1066	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	99	104	127	54	258	36	193	1727		72	1498	
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.12	0.55	0.00	0.04	0.47	0.00
Sat Flow, veh/h	296	563	685	78	1390	197	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	275	0	0	127	0	0	121	1616	0	16	1066	0
Grp Sat Flow(s),veh/h/ln	1544	0	0	1665	0	0	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	11.1	0.0	0.0	0.0	0.0	0.0	6.9	47.7	0.0	0.9	26.9	0.0
Cycle Q Clear(g_c), s	17.7	0.0	0.0	6.5	0.0	0.0	6.9	47.7	0.0	0.9	26.9	0.0
Prop In Lane	0.24		0.44	0.10		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	330	0	0	348	0	0	193	1727		72	1498	
V/C Ratio(X)	0.83	0.00	0.00	0.36	0.00	0.00	0.63	0.94		0.22	0.71	
Avail Cap(c_a), veh/h	330	0	0	348	0	0	268	1788		199	1659	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.3	0.0	0.0	36.0	0.0	0.0	42.3	21.1	0.0	46.4	20.9	0.0
Incr Delay (d2), s/veh	16.3	0.0	0.0	0.6	0.0	0.0	3.3	9.7	0.0	1.5	1.3	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(50%),veh/ln	8.1	0.0	0.0	2.8	0.0	0.0	2.9	16.6	0.0	0.4	8.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.6	0.0	0.0	36.6	0.0	0.0	45.7	30.8	0.0	48.0	22.2	0.0
LnGrp LOS	E			D			D	C		D	C	
Approach Vol, veh/h		275			127			1737			1082	
Approach Delay, s/veh		56.6			36.6			31.8			22.6	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	63.3		27.1	17.3	56.0		27.1
Change Period (Y+Rc), s	5.7	8.4		8.5	5.7	8.4		8.5
Max Green Setting (Gmax), s	12.6	56.8		18.6	16.1	52.7		18.6
Max Q Clear Time (g_c+I1), s	12.9	49.7		19.7	8.9	28.9		8.5
Green Ext Time (p_c), s	0.0	5.2		0.0	0.1	7.2		0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	31.0
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	291	323	57	183	356	167	74	797	119	166	994	413
Future Volume (veh/h)	291	323	57	183	356	167	74	797	119	166	994	413
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	316	351	62	199	387	182	80	866	129	180	1080	449
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	317	675	118	363	485	225	101	1144	510	207	1357	796
Arrive On Green	0.12	0.23	0.23	0.11	0.21	0.21	0.06	0.33	0.33	0.12	0.39	0.39
Sat Flow, veh/h	1739	2951	516	1739	2301	1067	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	316	205	208	199	290	279	80	866	129	180	1080	449
Grp Sat Flow(s),veh/h/ln	1739	1735	1733	1739	1735	1634	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	14.3	12.0	12.2	10.2	18.4	18.8	5.3	25.8	7.1	11.8	31.9	23.0
Cycle Q Clear(g_c), s	14.3	12.0	12.2	10.2	18.4	18.8	5.3	25.8	7.1	11.8	31.9	23.0
Prop In Lane	1.00		0.30	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	397	396	363	366	345	101	1144	510	207	1357	796
V/C Ratio(X)	1.00	0.52	0.53	0.55	0.79	0.81	0.79	0.76	0.25	0.87	0.80	0.56
Avail Cap(c_a), veh/h	317	665	664	373	644	606	110	1144	510	230	1357	796
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	36.1	39.1	39.2	31.1	43.3	43.5	53.9	34.7	28.4	50.1	31.2	19.2
Incr Delay (d2), s/veh	49.8	1.0	1.1	1.6	3.9	4.5	30.0	4.7	1.2	26.2	4.9	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(50%),veh/ln	6.7	5.2	5.3	4.4	8.3	8.0	3.1	11.5	2.8	6.6	14.0	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	85.9	40.1	40.3	32.7	47.2	48.0	83.9	39.4	29.6	76.3	36.1	22.1
LnGrp LOS	F	D	D	C	D	D	F	D	C	E	D	C
Approach Vol, veh/h		729			768			1075			1709	
Approach Delay, s/veh		60.0			43.8			41.5			36.7	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	45.4	17.9	33.0	12.4	52.5	20.0	30.9
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	15.3	37.3	12.9	44.4	7.3	45.3	14.3	43.0
Max Q Clear Time (g_c+I1), s	13.8	27.8	12.2	14.2	7.3	33.9	16.3	20.8
Green Ext Time (p_c), s	0.1	4.4	0.0	2.6	0.0	6.9	0.0	3.6

Intersection Summary	
HCM 7th Control Delay, s/veh	43.1
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	1	254	6	2	2	382	1481	2	1	1014	70
Future Volume (veh/h)	117	1	254	6	2	2	382	1481	2	1	1014	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	127	1	276	7	2	2	415	1610	2	1	1102	76
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	318	3	512	31	9	9	494	1837	2	5	1320	620
Arrive On Green	0.19	0.19	0.19	0.03	0.03	0.03	0.15	0.57	0.57	0.00	0.42	0.42
Sat Flow, veh/h	1656	13	1485	1047	299	299	3237	3238	4	1668	3159	1485
Grp Volume(v), veh/h	128	0	276	11	0	0	415	785	827	1	1102	76
Grp Sat Flow(s),veh/h/ln	1669	0	1485	1646	0	0	1618	1580	1662	1668	1580	1485
Q Serve(g_s), s	5.8	0.0	13.0	0.6	0.0	0.0	10.8	37.1	37.1	0.1	27.0	2.7
Cycle Q Clear(g_c), s	5.8	0.0	13.0	0.6	0.0	0.0	10.8	37.1	37.1	0.1	27.0	2.7
Prop In Lane	0.99		1.00	0.64		0.18	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	321	0	512	49	0	0	494	896	943	5	1320	620
V/C Ratio(X)	0.40	0.00	0.54	0.23	0.00	0.00	0.84	0.88	0.88	0.20	0.83	0.12
Avail Cap(c_a), veh/h	983	0	1101	228	0	0	579	948	998	231	1769	831
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	22.8	41.1	0.0	0.0	35.7	16.1	16.1	43.1	22.5	15.5
Incr Delay (d2), s/veh	0.8	0.0	0.9	2.3	0.0	0.0	9.4	9.0	8.6	18.2	2.7	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(50%),veh/ln	2.3	0.0	4.3	0.3	0.0	0.0	4.5	12.2	12.8	0.0	9.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.4	0.0	23.7	43.4	0.0	0.0	45.1	25.1	24.7	61.3	25.3	15.6
LnGrp LOS	C		C	D			D	C	C	E	C	B
Approach Vol, veh/h		404			11			2027			1179	
Approach Delay, s/veh		26.2			43.4			29.0			24.7	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	53.6		21.1	17.7	40.7		7.1				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	12.6	52.0		51.0	15.5	48.5		12.0				
Max Q Clear Time (g_c+I1), s	12.1	39.1		15.0	12.8	29.0		2.6				
Green Ext Time (p_c), s	0.0	7.9		1.7	0.4	7.2		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.3
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	283	126	143	304	444	61	794	100	318	822	69
Future Volume (veh/h)	102	283	126	143	304	444	61	794	100	318	822	69
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	111	308	137	155	330	0	66	863	109	346	893	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	140	416	181	189	710		84	1024	129	425	1455	
Arrive On Green	0.08	0.18	0.18	0.11	0.20	0.00	0.05	0.33	0.33	0.13	0.42	0.00
Sat Flow, veh/h	1739	2353	1024	1739	3469	1547	1739	3099	391	3374	3469	1547
Grp Volume(v), veh/h	111	225	220	155	330	0	66	483	489	346	893	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1642	1739	1735	1547	1739	1735	1755	1687	1735	1547
Q Serve(g_s), s	5.4	10.6	11.0	7.5	7.2	0.0	3.2	22.3	22.3	8.6	17.4	0.0
Cycle Q Clear(g_c), s	5.4	10.6	11.0	7.5	7.2	0.0	3.2	22.3	22.3	8.6	17.4	0.0
Prop In Lane	1.00		0.62	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	140	307	290	189	710		84	573	580	425	1455	
V/C Ratio(X)	0.79	0.73	0.76	0.82	0.46		0.78	0.84	0.84	0.81	0.61	
Avail Cap(c_a), veh/h	208	603	571	228	1262		141	681	690	489	1624	
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.0	33.6	33.8	37.7	30.2	0.0	40.6	26.8	26.8	36.7	19.6	0.0
Incr Delay (d2), s/veh	11.8	3.4	4.0	18.0	0.5	0.0	14.6	8.2	8.1	9.1	0.6	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(50%),veh/ln	2.7	4.5	4.5	4.0	2.9	0.0	1.7	10.0	10.1	4.0	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.8	37.0	37.8	55.6	30.6	0.0	55.2	35.0	34.9	45.8	20.2	0.0
LnGrp LOS	D	D	D	E	C		E	D	C	D	C	
Approach Vol, veh/h		556			485			1038			1239	
Approach Delay, s/veh		40.1			38.6			36.3			27.3	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	42.3	11.6	23.5	16.6	34.6	14.1	21.1
Change Period (Y+Rc), s	4.7	6.1	4.7	* 5.8	5.7	6.1	4.7	5.8
Max Green Setting (Gmax), s	7.6	40.4	10.3	* 31	12.5	33.9	11.3	30.0
Max Q Clear Time (g_c+I1), s	5.2	19.4	7.4	9.2	10.6	24.3	9.5	13.0
Green Ext Time (p_c), s	0.0	6.3	0.1	1.9	0.3	4.2	0.1	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	33.9
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	178	78	93	340	128	156	1530	103	112	990	143
Future Volume (veh/h)	175	178	78	93	340	128	156	1530	103	112	990	143
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	190	193	85	101	370	139	170	1663	112	122	1076	155
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	211	516	219	135	431	160	189	1420	667	119	1287	605
Arrive On Green	0.13	0.23	0.23	0.08	0.18	0.18	0.11	0.45	0.45	0.07	0.41	0.41
Sat Flow, veh/h	1668	2277	966	1668	2377	880	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	190	139	139	101	257	252	170	1663	112	122	1076	155
Grp Sat Flow(s),veh/h/ln	1668	1664	1578	1668	1664	1593	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	17.8	11.2	11.9	9.4	23.8	24.4	16.0	71.4	7.1	11.3	48.6	11.0
Cycle Q Clear(g_c), s	17.8	11.2	11.9	9.4	23.8	24.4	16.0	71.4	7.1	11.3	48.6	11.0
Prop In Lane	1.00		0.61	1.00		0.55	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	211	377	358	135	302	289	189	1420	667	119	1287	605
V/C Ratio(X)	0.90	0.37	0.39	0.75	0.85	0.87	0.90	1.17	0.17	1.03	0.84	0.26
Avail Cap(c_a), veh/h	278	597	566	137	456	436	196	1420	667	119	1287	605
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	68.4	51.8	52.1	71.4	63.0	63.2	69.5	43.7	26.0	73.8	42.3	31.2
Incr Delay (d2), s/veh	25.0	0.6	0.7	20.0	9.6	11.8	37.0	84.9	0.1	90.3	5.0	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(50%),veh/ln	8.9	4.6	4.7	4.7	10.6	10.5	8.6	42.9	2.5	7.7	19.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	93.4	52.4	52.8	91.4	72.6	75.0	106.5	128.7	26.2	164.1	47.3	31.4
LnGrp LOS	F	D	D	F	E	E	F	F	C	F	D	C
Approach Vol, veh/h		468			610			1945			1353	
Approach Delay, s/veh		69.2			76.7			120.8			56.0	
Approach LOS		E			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	79.8	18.5	43.5	23.7	73.1	25.8	36.3
Change Period (Y+Rc), s	5.7	8.4	5.7	7.5	5.7	8.4	5.7	7.5
Max Green Setting (Gmax), s	11.3	71.4	13.0	57.0	18.7	64.0	26.5	43.5
Max Q Clear Time (g_c+I1), s	13.3	73.4	11.4	13.9	18.0	50.6	19.8	26.4
Green Ext Time (p_c), s	0.0	0.0	0.0	1.4	0.0	6.0	0.3	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	89.1
HCM 7th LOS	F

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	68	2	190	19	179	0	0	0	111
Future Vol, veh/h	0	0	0	68	2	190	19	179	0	0	0	111
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	74	2	207	21	195	0	0	0	121

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	236	357	195	121	0	-	-	-	0
Stage 1	236	236	-	-	-	-	-	-	-
Stage 2	0	121	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	731	554	822	1407	-	0	0	-	-
Stage 1	780	692	-	-	-	0	0	-	-
Stage 2	-	777	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	719	0	822	1407	-	-	-	-	-
Mov Cap-2 Maneuver	719	0	-	-	-	-	-	-	-
Stage 1	768	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.78	0.73	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	173	-	719	822	-	-
HCM Lane V/C Ratio	0.015	-	0.106	0.251	-	-
HCM Ctrl Dly (s/v)	7.6	0	10.6	10.8	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	1	-	-

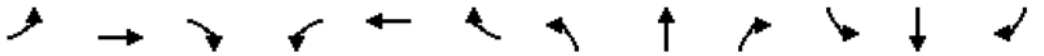
Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	127	1	6	0	0	0	0	71	34	122	141	0
Future Vol, veh/h	127	1	6	0	0	0	0	71	34	122	141	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	138	1	7	0	0	0	0	77	37	133	153	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	496	533	153	-	0	0	114	0	0
Stage 1	418	418	-	-	-	-	-	-	-
Stage 2	77	114	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	-	-	-	4.22	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	-	-	-	2.308	-	-
Pot Cap-1 Maneuver	516	439	867	0	-	-	1415	-	0
Stage 1	643	573	-	0	-	-	-	-	0
Stage 2	921	782	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	463	0	867	-	-	-	1415	-	-
Mov Cap-2 Maneuver	463	0	-	-	-	-	-	-	-
Stage 1	643	0	-	-	-	-	-	-	-
Stage 2	827	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.77	0	3.62
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	463	867	835	-
HCM Lane V/C Ratio	-	-	0.3	0.008	0.094	-
HCM Ctrl Dly (s/v)	-	-	16.1	9.2	7.8	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	1.2	0	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	25	0	1040	37	424	0	0	877	132
Future Volume (veh/h)	0	0	0	25	0	1040	37	424	0	0	877	132
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				27	0	1130	40	461	0	0	953	143
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				715	0	1120	85	1534	0	0	1125	502
Arrive On Green				0.41	0.00	0.41	0.10	0.88	0.00	0.00	0.32	0.32
Sat Flow, veh/h				1739	0	2723	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				27	0	1130	40	461	0	0	953	143
Grp Sat Flow(s),veh/h/ln				1739	0	1362	1739	1735	0	0	1735	1547
Q Serve(g_s), s				0.8	0.0	37.0	2.0	1.9	0.0	0.0	23.0	6.2
Cycle Q Clear(g_c), s				0.8	0.0	37.0	2.0	1.9	0.0	0.0	23.0	6.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				715	0	1120	85	1534	0	0	1125	502
V/C Ratio(X)				0.04	0.00	1.01	0.47	0.30	0.00	0.00	0.85	0.29
Avail Cap(c_a), veh/h				715	0	1120	135	1534	0	0	1125	502
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.9	0.0	26.5	39.5	3.0	0.0	0.0	28.3	22.6
Incr Delay (d2), s/veh				0.0	0.0	29.2	3.9	0.5	0.0	0.0	8.0	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
%ile BackOfQ(50%),veh/ln				0.3	0.0	14.7	0.9	0.6	0.0	0.0	10.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				15.9	0.0	55.7	43.4	3.5	0.0	0.0	36.3	24.1
LnGrp LOS				B		F	D	A			D	C
Approach Vol, veh/h					1157			501			1096	
Approach Delay, s/veh					54.8			6.7			34.7	
Approach LOS					D			A			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		45.9			10.6	35.3		44.1				
Change Period (Y+Rc), s		6.1			6.2	6.1		7.1				
Max Green Setting (Gmax), s		39.8			7.0	26.6		37.0				
Max Q Clear Time (g_c+I1), s		3.9			4.0	25.0		39.0				
Green Ext Time (p_c), s		3.3			0.0	1.0		0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			38.0									
HCM 7th 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												
Traffic Volume (veh/h)	164	3	21	0	0	0	0	306	40	0	276	637
Future Volume (veh/h)	164	3	21	0	0	0	0	306	40	0	276	637
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826				0	1826	1826	0	1826	1826
Adj Flow Rate, veh/h	202	0	0				0	333	43	0	300	692
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5				0	5	5	0	5	5
Cap, veh/h	346	181	0				0	2476	317	0	2778	2451
Arrive On Green	0.10	0.00	0.00				0.00	0.80	0.80	0.00	0.26	0.26
Sat Flow, veh/h	3478	1826	0				0	3184	396	0	3561	2723
Grp Volume(v), veh/h	202	0	0				0	186	190	0	300	692
Grp Sat Flow(s),veh/h/ln	1739	1826	0				0	1735	1755	0	1735	1362
Q Serve(g_s), s	5.0	0.0	0.0				0.0	2.1	2.2	0.0	5.9	9.2
Cycle Q Clear(g_c), s	5.0	0.0	0.0				0.0	2.1	2.2	0.0	5.9	9.2
Prop In Lane	1.00		0.00				0.00		0.23	0.00		1.00
Lane Grp Cap(c), veh/h	346	181	0				0	1389	1405	0	2778	2451
V/C Ratio(X)	0.58	0.00	0.00				0.00	0.13	0.14	0.00	0.11	0.28
Avail Cap(c_a), veh/h	1565	822	0				0	1389	1405	0	2778	2451
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	0.00	0.68	0.68
Uniform Delay (d), s/veh	38.8	0.0	0.0				0.0	2.0	2.0	0.0	8.8	3.4
Incr Delay (d2), s/veh	1.6	0.0	0.0				0.0	0.2	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
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.0				0.0	0.5	0.5	0.0	1.5	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.3	0.0	0.0				0.0	2.2	2.2	0.0	8.8	3.4
LnGrp LOS	D							A	A		A	A
Approach Vol, veh/h		202						376			992	
Approach Delay, s/veh		40.3						2.2			5.0	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	76.6	13.4	76.6
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	40.5	40.5
Max Q Clear Time (g_c+I1), s	4.2	7.0	11.2
Green Ext Time (p_c), s	2.3	0.6	5.4

Intersection Summary	
HCM 7th Control Delay, s/veh	8.9
HCM 7th 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												
Traffic Volume (veh/h)	78	42	3	12	87	67	106	1582	16	42	1094	71
Future Volume (veh/h)	78	42	3	12	87	67	106	1582	16	42	1094	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	85	46	3	13	95	73	115	1720	17	46	1189	77
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	38	13	409	25	158	409	136	1940	19	96	1747	113
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.08	0.55	0.55	0.05	0.52	0.52
Sat Flow, veh/h	0	48	1560	0	603	1560	1753	3548	35	1753	3335	216
Grp Volume(v), veh/h	131	0	3	108	0	73	115	847	890	46	623	643
Grp Sat Flow(s),veh/h/ln	48	0	1560	603	0	1560	1753	1749	1834	1753	1749	1802
Q Serve(g_s), s	0.0	0.0	0.2	0.0	0.0	5.7	10.3	67.4	67.7	4.0	41.7	41.8
Cycle Q Clear(g_c), s	41.5	0.0	0.2	41.5	0.0	5.7	10.3	67.4	67.7	4.0	41.7	41.8
Prop In Lane	0.65		1.00	0.12		1.00	1.00		0.02	1.00		0.12
Lane Grp Cap(c), veh/h	50	0	409	184	0	409	136	956	1003	96	916	944
V/C Ratio(X)	2.61	0.00	0.01	0.59	0.00	0.18	0.84	0.89	0.89	0.48	0.68	0.68
Avail Cap(c_a), veh/h	50	0	409	184	0	409	215	956	1003	114	916	944
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.9	0.0	43.2	48.3	0.0	45.2	72.1	31.5	31.6	72.7	27.9	27.9
Incr Delay (d2), s/veh	780.8	0.0	0.0	4.8	0.0	0.2	15.9	11.8	11.5	3.7	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(50%),veh/ln	12.9	0.0	0.1	3.6	0.0	2.2	5.1	29.3	30.8	1.9	17.4	18.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	849.7	0.0	43.2	53.1	0.0	45.5	88.0	43.4	43.1	76.3	31.9	31.9
LnGrp LOS	F		D	D		D	F	D	D	E	C	C
Approach Vol, veh/h		134			181			1852			1312	
Approach Delay, s/veh		831.6			50.0			46.0			33.5	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.4	95.0		49.0	18.0	91.4		49.0				
Change Period (Y+Rc), s	5.7	8.4		7.5	5.7	8.4		7.5				
Max Green Setting (Gmax), s	10.3	86.6		41.5	19.4	77.5		41.5				
Max Q Clear Time (g_c+I1), s	16.0	69.7		43.5	12.3	43.8		43.5				
Green Ext Time (p_c), s	0.0	10.2		0.0	0.1	8.8		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	71.8
HCM 7th LOS	E



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	763	185	233	682	260	276
Future Volume (veh/h)	763	185	233	682	260	276
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	829	201	253	741	283	300
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1308	935	346	1955	395	619
Arrive On Green	0.37	0.37	0.10	0.55	0.22	0.22
Sat Flow, veh/h	3618	1572	3428	3618	1767	2768
Grp Volume(v), veh/h	829	201	253	741	283	300
Grp Sat Flow(s),veh/h/ln	1763	1572	1714	1763	1767	1384
Q Serve(g_s), s	10.5	3.2	3.9	6.5	8.1	5.1
Cycle Q Clear(g_c), s	10.5	3.2	3.9	6.5	8.1	5.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1308	935	346	1955	395	619
V/C Ratio(X)	0.63	0.21	0.73	0.38	0.72	0.48
Avail Cap(c_a), veh/h	2908	1649	346	3509	1250	1958
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	14.1	5.1	23.8	6.9	19.6	18.4
Incr Delay (d2), s/veh	0.5	0.1	7.7	0.1	2.4	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.8	1.8	1.9	3.3	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.6	5.2	31.6	7.0	22.0	19.0
LnGrp LOS	B	A	C	A	C	B
Approach Vol, veh/h	1030			994	583	
Approach Delay, s/veh	12.8			13.2	20.5	
Approach LOS	B			B	C	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		10.0	26.6		17.9	36.6
Change Period (Y+Rc), s		4.5	* 6.4		5.7	6.4
Max Green Setting (Gmax), s		5.5	* 45		38.6	54.3
Max Q Clear Time (g_c+I1), s		5.9	12.5		10.1	8.5
Green Ext Time (p_c), s		0.0	7.7		2.1	6.2

Intersection Summary	
HCM 7th Control Delay, s/veh	14.7
HCM 7th LOS	B

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	237	548	191	217	593	338	209	665	85	271	621	180
Future Volume (veh/h)	237	548	191	217	593	338	209	665	85	271	621	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	258	596	208	236	645	367	227	723	92	295	675	196
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	332	1060	611	312	995	463	302	887	113	372	1066	475
Arrive On Green	0.10	0.30	0.30	0.09	0.29	0.29	0.09	0.28	0.28	0.11	0.30	0.30
Sat Flow, veh/h	3428	3526	1572	3428	3377	1572	3428	3146	400	3428	3526	1572
Grp Volume(v), veh/h	258	596	208	236	645	367	227	405	410	295	675	196
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1689	1572	1714	1763	1784	1714	1763	1572
Q Serve(g_s), s	7.4	14.3	9.4	6.8	16.7	21.6	6.5	21.5	21.5	8.4	16.6	10.0
Cycle Q Clear(g_c), s	7.4	14.3	9.4	6.8	16.7	21.6	6.5	21.5	21.5	8.4	16.6	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	332	1060	611	312	995	463	302	497	503	372	1066	475
V/C Ratio(X)	0.78	0.56	0.34	0.76	0.65	0.79	0.75	0.82	0.82	0.79	0.63	0.41
Avail Cap(c_a), veh/h	471	1267	704	512	1277	595	491	723	731	539	1495	667
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	44.3	29.6	21.6	44.6	30.9	32.6	44.7	33.6	33.6	43.7	30.2	27.9
Incr Delay (d2), s/veh	5.2	0.5	0.3	3.7	0.7	5.6	3.8	4.7	4.7	5.1	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(50%),veh/ln	3.4	6.0	3.5	3.0	6.8	8.8	2.9	9.5	9.7	3.8	6.9	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.5	30.0	22.0	48.3	31.6	38.2	48.5	38.3	38.3	48.7	30.9	28.5
LnGrp LOS	D	C	C	D	C	D	D	D	D	D	C	C
Approach Vol, veh/h		1062			1248			1042			1166	
Approach Delay, s/veh		33.2			36.7			40.5			35.0	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	33.9	14.3	36.1	14.0	36.0	14.9	35.5
Change Period (Y+Rc), s	5.2	5.6	5.2	5.9	5.2	5.6	5.2	* 5.9
Max Green Setting (Gmax), s	15.8	41.2	15.0	36.1	14.4	42.6	13.8	* 38
Max Q Clear Time (g_c+I1), s	10.4	23.5	8.8	16.3	8.5	18.6	9.4	23.6
Green Ext Time (p_c), s	0.5	4.8	0.4	4.7	0.4	5.4	0.4	6.0

Intersection Summary	
HCM 7th Control Delay, s/veh	36.3
HCM 7th LOS	D

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	30	34	4	599	24	56	12	493	706	35	293	68
Future Volume (veh/h)	30	34	4	599	24	56	12	493	706	35	293	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	33	37	4	651	26	61	13	536	767	38	318	74
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	191	178	19	764	603	511	48	833	882	244	1223	716
Arrive On Green	0.11	0.11	0.11	0.32	0.32	0.32	0.03	0.24	0.24	0.14	0.35	0.35
Sat Flow, veh/h	1767	1646	178	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	33	0	41	651	26	61	13	536	767	38	318	74
Grp Sat Flow(s),veh/h/ln	1767	0	1824	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	1.7	0.0	2.1	32.4	1.0	2.8	0.7	13.9	24.0	1.9	6.6	2.7
Cycle Q Clear(g_c), s	1.7	0.0	2.1	32.4	1.0	2.8	0.7	13.9	24.0	1.9	6.6	2.7
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	191	0	197	764	603	511	48	833	882	244	1223	716
V/C Ratio(X)	0.17	0.00	0.21	0.85	0.04	0.12	0.27	0.64	0.87	0.16	0.26	0.10
Avail Cap(c_a), veh/h	191	0	707	764	1121	950	157	833	882	244	1223	716
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	0.0	41.3	24.2	23.5	24.1	48.4	34.9	19.1	38.6	23.8	15.8
Incr Delay (d2), s/veh	0.4	0.0	0.5	9.2	0.0	0.1	3.0	1.7	9.3	0.3	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(50%),veh/ln	0.8	0.0	1.0	14.6	0.4	1.0	0.4	6.0	16.2	0.8	2.7	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.6	0.0	41.8	33.4	23.5	24.2	51.4	36.7	28.4	38.9	23.9	15.9
LnGrp LOS	D		D	C	C	C	D	D	C	D	C	B
Approach Vol, veh/h		74			738			1316			430	
Approach Delay, s/veh		41.7			32.3			32.0			23.9	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	38.0	16.0	7.4	40.2	16.0	38.0	18.6	29.0
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	33.0	39.4	9.0	29.0	11.0	61.4	14.0	24.0
Max Q Clear Time (g_c+I1), s	34.4	4.1	2.7	8.6	3.7	4.8	3.9	26.0
Green Ext Time (p_c), s	0.0	0.2	0.0	2.1	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	31.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	557	194	1	2	144	92	1	2	1	69	2	502
Future Volume (veh/h)	557	194	1	2	144	92	1	2	1	69	2	502
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	405	481	1	2	155	99	1	2	1	74	0	541
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	584	612	1	4	277	167	3	371	171	124	0	714
Arrive On Green	0.33	0.33	0.33	0.13	0.13	0.13	0.00	0.16	0.16	0.07	0.00	0.23
Sat Flow, veh/h	1767	1851	4	28	2153	1296	1767	2344	1080	1767	0	3145
Grp Volume(v), veh/h	405	0	482	132	0	124	1	1	2	74	0	541
Grp Sat Flow(s),veh/h/ln	1767	0	1855	1854	0	1622	1767	1763	1661	1767	0	1572
Q Serve(g_s), s	12.2	0.0	14.4	4.1	0.0	4.4	0.0	0.0	0.0	2.5	0.0	9.9
Cycle Q Clear(g_c), s	12.2	0.0	14.4	4.1	0.0	4.4	0.0	0.0	0.0	2.5	0.0	9.9
Prop In Lane	1.00		0.00	0.02		0.80	1.00		0.65	1.00		1.00
Lane Grp Cap(c), veh/h	584	0	613	238	0	209	3	279	263	124	0	714
V/C Ratio(X)	0.69	0.00	0.79	0.55	0.00	0.59	0.34	0.01	0.01	0.60	0.00	0.76
Avail Cap(c_a), veh/h	917	0	963	875	0	765	173	820	773	181	0	1479
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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.9	0.0	18.6	25.1	0.0	25.3	30.6	21.8	21.8	27.7	0.0	22.2
Incr Delay (d2), s/veh	1.5	0.0	2.3	2.0	0.0	2.7	58.0	0.0	0.0	4.6	0.0	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(50%),veh/ln	4.6	0.0	5.8	1.8	0.0	1.7	0.1	0.0	0.0	1.1	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.4	0.0	20.9	27.1	0.0	28.0	88.6	21.8	21.8	32.3	0.0	23.9
LnGrp LOS	B		C	C		C	F	C	C	C		C
Approach Vol, veh/h		887			256			4			615	
Approach Delay, s/veh		20.2			27.5			38.5			24.9	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	14.4		25.4	4.8	18.6		12.6
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7
Max Green Setting (Gmax), s	6.3	28.6		31.9	6.0	28.9		29.0
Max Q Clear Time (g_c+I1), s	4.5	2.0		16.4	2.0	11.9		6.4
Green Ext Time (p_c), s	0.0	0.0		3.9	0.0	2.1		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	22.9
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	8	0	6	17	204	252	0	98	101
Future Vol, veh/h	0	0	0	8	0	6	17	204	252	0	98	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	330
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	9	0	7	18	222	274	0	107	110

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	365	475	222	216	0	-	-	-	0
Stage 1	259	259	-	-	-	-	-	-	-
Stage 2	107	216	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	615	474	793	1296	-	0	0	-	-
Stage 1	762	676	-	-	-	0	0	-	-
Stage 2	893	706	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	605	0	793	1296	-	-	-	-	-
Mov Cap-2 Maneuver	605	0	-	-	-	-	-	-	-
Stage 1	749	0	-	-	-	-	-	-	-
Stage 2	893	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.47	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	138	-	674	-	-
HCM Lane V/C Ratio	0.014	-	0.023	-	-
HCM Ctrl Dly (s/v)	7.8	0	10.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	0	205	0	0	0	0	370	7	1	102	0
Future Vol, veh/h	64	0	205	0	0	0	0	370	7	1	102	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	470	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	70	0	223	0	0	0	0	402	8	1	111	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	314	523	-	-	0	0	410	0	0
Stage 1	113	113	-	-	-	-	-	-	-
Stage 2	201	410	-	-	-	-	-	-	-
Critical Hdwy	6.78	6.68	-	-	-	-	4.28	-	-
Critical Hdwy Stg 1	5.58	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.98	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.614	4.114	-	-	-	-	2.314	-	-
Pot Cap-1 Maneuver	643	441	0	0	-	-	1087	-	0
Stage 1	884	780	0	0	-	-	-	-	0
Stage 2	788	574	0	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	642	0	-	-	-	-	1087	-	-
Mov Cap-2 Maneuver	642	0	-	-	-	-	-	-	-
Stage 1	884	0	-	-	-	-	-	-	-
Stage 2	787	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.29	0	0.08
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	642	1087	-
HCM Lane V/C Ratio	-	-	0.108	0.001	-
HCM Ctrl Dly (s/v)	-	-	11.3	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	40	98	32	42	5	104	329	38	6	266	47
Future Volume (veh/h)	19	40	98	32	42	5	104	329	38	6	266	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1455	1752	1752	1752	1455	952	1752	1752	952	1604
Adj Flow Rate, veh/h	21	43	107	35	46	5	113	358	41	7	289	51
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, %	10	10	30	10	10	10	30	64	10	10	64	20
Cap, veh/h	97	260	608	143	309	262	355	837	606	30	377	362
Arrive On Green	0.06	0.15	0.15	0.09	0.18	0.18	0.13	0.32	0.32	0.02	0.21	0.21
Sat Flow, veh/h	1668	1752	2171	1668	1752	1485	2689	2598	1485	1668	1808	1359
Grp Volume(v), veh/h	21	43	107	35	46	5	113	358	41	7	289	51
Grp Sat Flow(s),veh/h/ln	1668	1752	1085	1668	1752	1485	1345	866	1485	1668	904	1359
Q Serve(g_s), s	0.8	1.4	2.5	1.3	1.5	0.2	2.5	7.2	1.1	0.3	10.0	1.9
Cycle Q Clear(g_c), s	0.8	1.4	2.5	1.3	1.5	0.2	2.5	7.2	1.1	0.3	10.0	1.9
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	97	260	608	143	309	262	355	837	606	30	377	362
V/C Ratio(X)	0.22	0.17	0.18	0.24	0.15	0.02	0.32	0.43	0.07	0.23	0.77	0.14
Avail Cap(c_a), veh/h	302	1453	2087	302	1453	1231	479	1559	1019	252	1036	858
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	29.8	24.7	18.1	28.3	23.1	22.6	26.1	17.7	11.9	32.1	24.7	18.5
Incr Delay (d2), s/veh	1.1	0.3	0.1	0.9	0.2	0.0	0.5	0.3	0.0	3.8	3.3	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(50%),veh/ln	0.3	0.5	0.5	0.5	0.5	0.1	0.7	1.2	0.3	0.1	2.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.9	25.0	18.2	29.2	23.3	22.6	26.6	18.0	12.0	35.9	28.0	18.7
LnGrp LOS	C	C	B	C	C	C	C	B	B	D	C	B
Approach Vol, veh/h		171			86			512			347	
Approach Delay, s/veh		21.5			25.7			19.4			26.8	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	18.2	14.5	22.2	9.5	20.1	6.9	29.8
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	12.0	55.0	11.8	38.0	12.0	55.0	10.0	39.8
Max Q Clear Time (g_c+I1), s	3.3	4.5	4.5	12.0	2.8	3.5	2.3	9.2
Green Ext Time (p_c), s	0.0	0.6	0.2	1.8	0.0	0.2	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	22.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	105	0	99	5	363	58	170	246	0
Future Volume (veh/h)	0	0	0	105	0	99	5	363	58	170	246	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				952	0	952	1870	952	952	952	952	0
Adj Flow Rate, veh/h				114	0	108	5	395	63	185	267	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				64	0	64	2	64	64	64	64	0
Cap, veh/h				152	0	135	24	474	75	208	1350	0
Arrive On Green				0.17	0.00	0.17	0.01	0.30	0.30	0.23	0.52	0.00
Sat Flow, veh/h				906	0	806	1781	1563	247	906	2683	0
Grp Volume(v), veh/h				114	0	108	5	227	231	185	267	0
Grp Sat Flow(s),veh/h/ln				906	0	806	1781	904	907	906	866	0
Q Serve(g_s), s				8.1	0.0	8.7	0.2	15.7	16.0	13.3	3.7	0.0
Cycle Q Clear(g_c), s				8.1	0.0	8.7	0.2	15.7	16.0	13.3	3.7	0.0
Prop In Lane				1.00		1.00	1.00		0.27	1.00		0.00
Lane Grp Cap(c), veh/h				152	0	135	24	274	275	208	1350	0
V/C Ratio(X)				0.75	0.00	0.80	0.21	0.83	0.84	0.89	0.20	0.00
Avail Cap(c_a), veh/h				686	0	611	264	544	545	246	1882	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				26.7	0.0	27.0	32.9	21.8	21.9	25.1	8.7	0.0
Incr Delay (d2), s/veh				7.3	0.0	10.4	4.4	6.3	6.7	27.5	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(50%),veh/ln				1.9	0.0	1.9	0.1	3.2	3.3	4.0	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				34.0	0.0	37.3	37.3	28.1	28.7	52.6	8.7	0.0
LnGrp LOS				C		D	D	C	C	D	A	
Approach Vol, veh/h					222			463			452	
Approach Delay, s/veh					35.6			28.5			26.7	
Approach LOS					D			C			C	

Timer - Assigned Phs	1	2		5	6		8					
Phs Duration (G+Y+Rc), s	11.2	28.8		6.6	43.4		17.4					
Change Period (Y+Rc), s	5.7	8.4		5.7	8.4		6.1					
Max Green Setting (Gmax), s	18.3	40.5		10.0	48.8		51.0					
Max Q Clear Time (g_c+I1), s	5.3	18.0		2.2	5.7		10.7					
Green Ext Time (p_c), s	0.1	2.4		0.0	1.7		0.8					

Intersection Summary		
HCM 7th Control Delay, s/veh	29.2	
HCM 7th LOS	C	



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	124	322	522	848	603	170
Future Volume (veh/h)	124	322	522	848	603	170
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	135	0	567	922	655	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	161		596	1393	701	
Arrive On Green	0.10	0.00	0.36	0.80	0.40	0.00
Sat Flow, veh/h	1668	1485	1668	1737	1737	1485
Grp Volume(v), veh/h	135	0	567	922	655	0
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1737	1737	1485
Q Serve(g_s), s	8.6	0.0	35.9	24.3	39.2	0.0
Cycle Q Clear(g_c), s	8.6	0.0	35.9	24.3	39.2	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	161		596	1393	701	
V/C Ratio(X)	0.84		0.95	0.66	0.93	
Avail Cap(c_a), veh/h	177		653	1560	808	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.2	0.0	34.0	4.5	31.0	0.0
Incr Delay (d2), s/veh	26.7	0.0	22.9	0.9	16.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	17.0	4.2	17.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	74.9	0.0	56.9	5.4	47.6	0.0
LnGrp LOS	E		E	A	D	
Approach Vol, veh/h	135			1489	655	
Approach Delay, s/veh	74.9			25.0	47.6	
Approach LOS	E			C	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		93.6		15.0	43.3	50.3
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		97.5		11.5	42.5	50.5
Max Q Clear Time (g_c+I1), s		26.3		10.6	37.9	41.2
Green Ext Time (p_c), s		7.6		0.0	0.9	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	34.4
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	247	10	153	197	614	4	793	101	371	881	44
Future Volume (veh/h)	39	247	10	153	197	614	4	793	101	371	881	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	42	268	11	166	214	667	4	862	110	403	958	48
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	40	254	251	156	201	646	58	820	398	378	1407	683
Arrive On Green	0.16	0.16	0.16	0.20	0.20	0.20	0.03	0.26	0.26	0.22	0.44	0.44
Sat Flow, veh/h	246	1568	1547	781	1006	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	310	0	11	380	0	667	4	862	110	403	958	48
Grp Sat Flow(s),veh/h/ln	1814	0	1547	1787	0	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	24.3	0.0	0.9	30.0	0.0	30.0	0.3	38.6	8.5	32.6	36.0	2.7
Cycle Q Clear(g_c), s	24.3	0.0	0.9	30.0	0.0	30.0	0.3	38.6	8.5	32.6	36.0	2.7
Prop In Lane	0.14		1.00	0.44		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	0	251	357	0	646	58	820	398	378	1407	683
V/C Ratio(X)	1.06	0.00	0.04	1.06	0.00	1.03	0.07	1.05	0.28	1.07	0.68	0.07
Avail Cap(c_a), veh/h	294	0	251	357	0	646	58	820	398	378	1407	683
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	0.0	53.0	60.0	0.0	43.7	70.2	55.7	44.5	58.7	33.5	24.2
Incr Delay (d2), s/veh	67.7	0.0	0.1	65.4	0.0	44.1	0.5	45.6	0.4	65.0	1.4	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(50%),veh/ln	16.4	0.0	0.3	19.7	0.0	30.6	0.2	20.1	3.2	20.6	13.5	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	130.6	0.0	53.1	125.4	0.0	87.8	70.7	101.3	44.9	123.7	34.8	24.2
LnGrp LOS	F		D	F		F	E	F	D	F	C	C
Approach Vol, veh/h		321			1047			976			1409	
Approach Delay, s/veh		127.9			101.5			94.8			59.9	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	37.1	45.6		30.8	9.5	73.2		36.5				
Change Period (Y+Rc), s	4.5	7.0		6.5	4.5	7.0		6.5				
Max Green Setting (Gmax), s	32.6	38.6		24.3	5.0	66.2		30.0				
Max Q Clear Time (g_c+I1), s	34.6	40.6		26.3	2.3	38.0		32.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.7		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	86.4
HCM 7th LOS	F



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	403	5	1	923	440	184
Future Volume (veh/h)	403	5	1	923	440	184
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	438	5	1	1003	478	200
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	443	5	71	1033	937	819
Arrive On Green	0.27	0.27	0.04	0.63	0.55	0.55
Sat Flow, veh/h	1644	19	1668	1633	1699	1485
Grp Volume(v), veh/h	444	0	1	1003	478	200
Grp Sat Flow(s),veh/h/ln	1666	0	1668	1633	1699	1485
Q Serve(g_s), s	31.0	0.0	0.1	68.3	20.5	8.2
Cycle Q Clear(g_c), s	31.0	0.0	0.1	68.3	20.5	8.2
Prop In Lane	0.99	0.01	1.00			1.00
Lane Grp Cap(c), veh/h	449	0	71	1033	937	819
V/C Ratio(X)	0.99	0.00	0.01	0.97	0.51	0.24
Avail Cap(c_a), veh/h	449	0	71	1078	983	859
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	53.5	20.4	16.4	13.6
Incr Delay (d2), s/veh	39.2	0.0	0.1	20.2	0.4	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.5	0.0	0.0	26.3	7.1	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	81.7	0.0	53.6	40.7	16.8	13.7
LnGrp LOS	F		D	D	B	B
Approach Vol, veh/h	444			1004	678	
Approach Delay, s/veh	81.7			40.7	15.9	
Approach LOS	F			D	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	80.8		36.0	9.5	71.3
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	77.1		31.5	5.0	67.6
Max Q Clear Time (g_c+I1), s	70.3		33.0	2.1	22.5
Green Ext Time (p_c), s	3.6		0.0	0.0	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	41.3
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	197	137	21	392	111	299	0	47	239	0	234
Future Volume (veh/h)	107	197	137	21	392	111	299	0	47	239	0	234
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	116	214	149	23	426	121	325	0	51	260	0	254
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, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	207	658	598	422	448	127	422	0	54	385	1	316
Arrive On Green	0.06	0.40	0.40	0.02	0.37	0.37	0.37	0.00	0.37	0.37	0.00	0.37
Sat Flow, veh/h	1668	1633	1485	1668	1223	347	923	0	145	862	3	846
Grp Volume(v), veh/h	116	214	149	23	0	547	376	0	0	514	0	0
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	0	1571	1068	0	0	1711	0	0
Q Serve(g_s), s	3.7	7.8	5.8	0.7	0.0	29.5	7.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.7	7.8	5.8	0.7	0.0	29.5	30.0	0.0	0.0	23.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.22	0.86		0.14	0.51		0.49
Lane Grp Cap(c), veh/h	207	658	598	422	0	576	477	0	0	702	0	0
V/C Ratio(X)	0.56	0.33	0.25	0.05	0.00	0.95	0.79	0.00	0.00	0.73	0.00	0.00
Avail Cap(c_a), veh/h	207	658	598	479	0	591	503	0	0	736	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	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.9	17.9	17.3	16.5	0.0	26.8	26.8	0.0	0.0	24.3	0.0	0.0
Incr Delay (d2), s/veh	3.4	0.3	0.2	0.1	0.0	24.9	7.9	0.0	0.0	3.6	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(50%),veh/ln	1.4	2.6	1.8	0.3	0.0	13.5	7.7	0.0	0.0	8.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.3	18.2	17.5	16.6	0.0	51.8	34.7	0.0	0.0	27.8	0.0	0.0
LnGrp LOS	C	B	B	B		D	C			C		
Approach Vol, veh/h		479			570			376			514	
Approach Delay, s/veh		19.4			50.4			34.7			27.8	
Approach LOS		B			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	42.0		38.3	10.0	38.8		38.3				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.1	33.0		34.6	5.3	32.8		34.6				
Max Q Clear Time (g_c+I1), s	2.7	9.8		25.0	5.7	31.5		32.0				
Green Ext Time (p_c), s	0.0	1.5		2.1	0.0	0.4		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	33.7
HCM 7th LOS	C

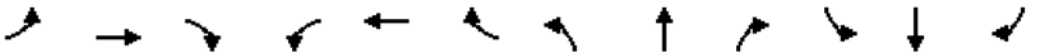
Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	53	85	466	27	41	464
Future Vol, veh/h	53	85	466	27	41	464
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	10	10	18	10	10	18
Mvmt Flow	57	91	501	29	44	499

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1104	517	0	0	531	0
Stage 1	517	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	225	543	-	-	997	-
Stage 1	583	-	-	-	-	-
Stage 2	540	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	215	543	-	-	996	-
Mov Cap-2 Maneuver	347	-	-	-	-	-
Stage 1	582	-	-	-	-	-
Stage 2	516	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	17.03	0	0.71
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	446	996	-
HCM Lane V/C Ratio	-	-	0.332	0.044	-
HCM Ctrl Dly (s/v)	-	-	17	8.8	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	0	211	0	0	0	167	496	0	0	567	53
Future Volume (veh/h)	116	0	211	0	0	0	167	496	0	0	567	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1633	1752	1752	1633	1752
Adj Flow Rate, veh/h	126	0	229	0	0	0	182	539	0	0	616	58
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, %	10	10	10	10	10	10	10	18	10	10	18	10
Cap, veh/h	411	0	247	133	292	0	335	980	0	464	697	634
Arrive On Green	0.17	0.00	0.17	0.00	0.00	0.00	0.09	0.60	0.00	0.00	0.43	0.43
Sat Flow, veh/h	1668	0	1485	1079	1752	0	1668	1633	0	1668	1633	1485
Grp Volume(v), veh/h	126	0	229	0	0	0	182	539	0	0	616	58
Grp Sat Flow(s),veh/h/ln	1668	0	1485	1079	1752	0	1668	1633	0	1668	1633	1485
Q Serve(g_s), s	3.7	0.0	8.2	0.0	0.0	0.0	3.0	10.6	0.0	0.0	18.8	1.3
Cycle Q Clear(g_c), s	3.7	0.0	8.2	0.0	0.0	0.0	3.0	10.6	0.0	0.0	18.8	1.3
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	411	0	247	133	292	0	335	980	0	464	697	634
V/C Ratio(X)	0.31	0.00	0.93	0.00	0.00	0.00	0.54	0.55	0.00	0.00	0.88	0.09
Avail Cap(c_a), veh/h	411	0	247	133	292	0	348	980	0	615	864	786
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	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	0.0	22.2	0.0	0.0	0.0	11.3	6.4	0.0	0.0	14.3	9.2
Incr Delay (d2), s/veh	0.4	0.0	37.8	0.0	0.0	0.0	1.6	0.7	0.0	0.0	9.2	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(50%),veh/ln	1.3	0.0	5.0	0.0	0.0	0.0	0.7	1.8	0.0	0.0	6.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.7	0.0	60.0	0.0	0.0	0.0	12.9	7.1	0.0	0.0	23.4	9.3
LnGrp LOS	C		E				B	A			C	A
Approach Vol, veh/h		355			0			721			674	
Approach Delay, s/veh		46.0			0.0			8.6			22.2	
Approach LOS		D						A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	39.3		14.7	9.4	30.0		14.7				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.0	28.7		9.0	5.1	28.6		9.0				
Max Q Clear Time (g_c+I1), s	0.0	12.6		10.2	5.0	20.8		0.0				
Green Ext Time (p_c), s	0.0	2.7		0.0	0.0	2.3		0.0				

Intersection Summary												
HCM 7th Control Delay, s/veh			21.4									
HCM 7th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	6	530	137	15	34	384	397	130	12	736	235
Future Volume (veh/h)	187	6	530	137	15	34	384	397	130	12	736	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	195	6	552	143	16	35	400	414	135	12	767	245
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	273	351	603	211	98	215	423	1155	978	450	817	693
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.21	0.66	0.66	0.01	0.47	0.47
Sat Flow, veh/h	1268	1752	1485	797	489	1070	1668	1752	1485	1668	1752	1485
Grp Volume(v), veh/h	195	6	552	143	0	51	400	414	135	12	767	245
Grp Sat Flow(s),veh/h/ln	1268	1752	1485	797	0	1559	1668	1752	1485	1668	1752	1485
Q Serve(g_s), s	20.5	0.4	27.3	23.9	0.0	3.7	25.6	14.4	4.6	0.5	56.6	14.4
Cycle Q Clear(g_c), s	24.1	0.4	27.3	24.2	0.0	3.7	25.6	14.4	4.6	0.5	56.6	14.4
Prop In Lane	1.00		1.00	1.00		0.69	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	273	351	603	211	0	313	423	1155	978	450	817	693
V/C Ratio(X)	0.71	0.02	0.92	0.68	0.00	0.16	0.95	0.36	0.14	0.03	0.94	0.35
Avail Cap(c_a), veh/h	273	351	603	211	0	313	463	1292	1095	489	953	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	43.7	38.2	53.4	0.0	45.0	41.8	10.4	8.7	18.5	34.5	23.2
Incr Delay (d2), s/veh	8.6	0.0	18.7	8.5	0.0	0.2	27.4	0.2	0.1	0.0	15.1	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(50%),veh/ln	6.9	0.2	19.3	5.1	0.0	1.4	16.0	4.9	1.3	0.2	25.5	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.5	43.7	56.9	61.9	0.0	45.2	69.3	10.6	8.8	18.6	49.5	23.5
LnGrp LOS	E	D	E	E		D	E	B	A	B	D	C
Approach Vol, veh/h		753			194			949			1024	
Approach Delay, s/veh		58.5			57.5			35.1			42.9	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	96.6		33.0	32.7	70.4		33.0				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.8	100.4		27.3	31.3	74.1		27.3				
Max Q Clear Time (g_c+I1), s	2.5	16.4		29.3	27.6	58.6		26.2				
Green Ext Time (p_c), s	0.0	2.8		0.0	0.5	5.0		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	45.4
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	72	293	240	104	104	182	742	159	72	1367	72
Future Volume (veh/h)	104	72	293	240	104	104	182	742	159	72	1367	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	113	78	318	261	113	113	198	807	173	78	1486	78
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	109	332	378	188	152	152	156	1175	1038	322	1122	991
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.06	0.67	0.67	0.03	0.64	0.64
Sat Flow, veh/h	1127	1826	1547	965	838	838	1739	1752	1547	1739	1752	1547
Grp Volume(v), veh/h	113	78	318	261	0	226	198	807	173	78	1486	78
Grp Sat Flow(s),veh/h/ln	1127	1826	1547	965	0	1675	1739	1752	1547	1739	1752	1547
Q Serve(g_s), s	8.2	5.5	27.3	21.8	0.0	19.1	9.3	42.2	6.2	2.3	96.1	2.9
Cycle Q Clear(g_c), s	27.3	5.5	27.3	27.3	0.0	19.1	9.3	42.2	6.2	2.3	96.1	2.9
Prop In Lane	1.00		1.00	1.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	109	332	378	188	0	305	156	1175	1038	322	1122	991
V/C Ratio(X)	1.03	0.23	0.84	1.39	0.00	0.74	1.27	0.69	0.17	0.24	1.32	0.08
Avail Cap(c_a), veh/h	109	332	378	188	0	305	156	1175	1038	335	1122	991
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	72.7	52.4	54.0	66.9	0.0	58.0	55.7	15.1	9.2	13.9	26.9	10.2
Incr Delay (d2), s/veh	95.3	0.4	15.7	202.8	0.0	9.3	162.5	1.7	0.1	0.4	152.1	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(50%),veh/ln	7.1	2.5	12.8	17.8	0.0	8.8	12.8	15.1	1.9	0.8	81.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	168.0	52.8	69.6	269.7	0.0	67.3	218.2	16.8	9.2	14.3	179.1	10.2
LnGrp LOS	F	D	E	F		E	F	B	A	B	F	B
Approach Vol, veh/h		509			487			1178			1642	
Approach Delay, s/veh		88.9			175.8			49.5			163.2	
Approach LOS		F			F			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	107.5		33.0	14.0	103.0		33.0
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	5.3	99.5		27.3	9.3	96.1		27.3
Max Q Clear Time (g_c+I1), s	4.3	44.2		29.3	11.3	98.1		29.3
Green Ext Time (p_c), s	0.0	6.6		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 7th Control Delay, s/veh		119.8
HCM 7th LOS		F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	97	231	118	84	199	145	777	48	271	1534	284
Future Volume (veh/h)	201	97	231	118	84	199	145	777	48	271	1534	284
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	218	105	251	128	91	216	158	845	52	295	1667	309
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, %	8	8	8	8	8	8	7	7	7	5	5	5
Cap, veh/h	261	338	286	246	332	280	150	1472	91	320	1606	288
Arrive On Green	0.04	0.19	0.19	0.04	0.19	0.19	0.09	0.45	0.45	0.18	0.55	0.55
Sat Flow, veh/h	1697	1781	1503	1697	1781	1502	1711	3265	201	1739	2936	527
Grp Volume(v), veh/h	218	105	251	128	91	216	158	442	455	295	963	1013
Grp Sat Flow(s),veh/h/ln	1697	1781	1503	1697	1781	1502	1711	1706	1759	1739	1735	1729
Q Serve(g_s), s	5.5	7.2	23.2	5.0	6.2	19.5	12.5	27.3	27.4	23.8	78.0	78.0
Cycle Q Clear(g_c), s	5.5	7.2	23.2	5.0	6.2	19.5	12.5	27.3	27.4	23.8	78.0	78.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.30
Lane Grp Cap(c), veh/h	261	338	286	246	332	280	150	769	793	320	949	946
V/C Ratio(X)	0.83	0.31	0.88	0.52	0.27	0.77	1.05	0.57	0.57	0.92	1.01	1.07
Avail Cap(c_a), veh/h	261	431	364	246	425	358	150	769	793	384	949	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)	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	55.7	49.7	56.2	50.2	49.7	55.1	65.0	29.0	29.0	57.2	32.3	32.3
Incr Delay (d2), s/veh	20.2	0.5	17.8	2.0	0.4	7.6	88.5	1.0	1.0	24.9	32.9	50.4
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(50%),veh/ln	6.8	3.3	10.1	2.0	2.8	7.9	9.1	11.2	11.5	12.5	39.3	43.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	75.9	50.2	73.9	52.2	50.2	62.7	153.5	30.1	30.0	82.1	65.2	82.7
LnGrp LOS	E	D	E	D	D	E	F	C	C	F	F	F
Approach Vol, veh/h		574			435			1055			2271	
Approach Delay, s/veh		70.4			57.0			48.5			75.2	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.7	69.8	9.5	32.6	17.0	83.5	10.0	32.1
Change Period (Y+Rc), s	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5
Max Green Setting (Gmax), s	21.5	59.0	5.0	34.5	12.5	78.0	5.5	34.0
Max Q Clear Time (g_c+I1), s	25.2	29.4	7.0	25.2	14.5	80.0	7.5	21.5
Green Ext Time (p_c), s	0.4	6.0	0.0	1.0	0.0	0.0	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	66.3
HCM 7th LOS	E

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1	35	0	1	3	23	813	0	4	774	19
Future Vol, veh/h	10	1	35	0	1	3	23	813	0	4	774	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	400	-	400	395	-	510
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	35	10	10	35	10
Mvmt Flow	11	1	38	0	1	3	25	884	0	4	841	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1342	1784	421	1364	1784	442	841	0	0	884	0	0
Stage 1	850	850	-	934	934	-	-	-	-	-	-	-
Stage 2	492	934	-	430	850	-	-	-	-	-	-	-
Critical Hdwy	7.7	6.7	7.1	7.7	6.7	7.1	4.3	-	-	4.3	-	-
Critical Hdwy Stg 1	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.6	4.1	3.4	3.6	4.1	3.4	2.3	-	-	2.3	-	-
Pot Cap-1 Maneuver	103	74	560	99	74	542	741	-	-	713	-	-
Stage 1	305	357	-	271	325	-	-	-	-	-	-	-
Stage 2	506	325	-	553	357	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	98	71	560	88	71	542	741	-	-	713	-	-
Mov Cap-2 Maneuver	257	231	-	229	226	-	-	-	-	-	-	-
Stage 1	303	355	-	262	314	-	-	-	-	-	-	-
Stage 2	485	314	-	510	355	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	14.35	14.06	0.28	0.05
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	741	-	-	435	402	713	-	-
HCM Lane V/C Ratio	0.034	-	-	0.115	0.011	0.006	-	-
HCM Ctrl Dly (s/v)	10	-	-	14.3	14.1	10.1	-	-
HCM Lane LOS	B	-	-	B	B	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0	0	-	-

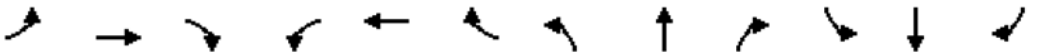
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	839	8	0	744	13	3	0	0	16	6	102
Future Vol, veh/h	45	839	8	0	744	13	3	0	0	16	6	102
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	11	35	11	11	35	11	11	11	11	11	11	11
Mvmt Flow	49	912	9	0	809	14	3	0	0	17	7	111

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	823	0	0	921	0	0	1417	1833	456	1363	1827	404
Stage 1	-	-	-	-	-	-	1010	1010	-	809	809	-
Stage 2	-	-	-	-	-	-	408	823	-	554	1018	-
Critical Hdwy	4.32	-	-	4.32	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.31	-	-	2.31	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	747	-	-	684	-	-	89	68	528	98	69	571
Stage 1	-	-	-	-	-	-	241	297	-	322	371	-
Stage 2	-	-	-	-	-	-	568	365	-	462	294	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	747	-	-	684	-	-	65	64	528	92	64	571
Mov Cap-2 Maneuver	-	-	-	-	-	-	193	207	-	259	217	-
Stage 1	-	-	-	-	-	-	225	277	-	322	371	-
Stage 2	-	-	-	-	-	-	449	365	-	432	275	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.51	0	23.93	14.31
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	193	-	747	-	-	684	-	-	246	571
HCM Lane V/C Ratio	0.017	-	0.065	-	-	-	-	-	0.097	0.194
HCM Ctrl Dly (s/v)	23.9	0	10.2	-	-	0	-	-	21.2	12.8
HCM Lane LOS	C	A	B	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-	0	-	-	0.3	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	640	50	24	444	107	75	80	21	234	141	252
Future Volume (veh/h)	121	640	50	24	444	107	75	80	21	234	141	252
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	129	681	53	26	472	114	80	85	22	249	150	268
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	196	811	63	103	574	138	179	327	85	287	173	309
Arrive On Green	0.12	0.33	0.33	0.06	0.27	0.27	0.11	0.24	0.24	0.17	0.31	0.31
Sat Flow, veh/h	1668	2466	192	1668	2096	503	1668	1338	346	1668	560	1000
Grp Volume(v), veh/h	129	362	372	26	294	292	80	0	107	249	0	418
Grp Sat Flow(s),veh/h/ln	1668	1312	1345	1668	1312	1286	1668	0	1684	1668	0	1560
Q Serve(g_s), s	7.4	25.4	25.5	1.5	20.9	21.2	4.5	0.0	5.1	14.5	0.0	25.2
Cycle Q Clear(g_c), s	7.4	25.4	25.5	1.5	20.9	21.2	4.5	0.0	5.1	14.5	0.0	25.2
Prop In Lane	1.00		0.14	1.00		0.39	1.00		0.21	1.00		0.64
Lane Grp Cap(c), veh/h	196	432	443	103	359	352	179	0	411	287	0	482
V/C Ratio(X)	0.66	0.84	0.84	0.25	0.82	0.83	0.45	0.00	0.26	0.87	0.00	0.87
Avail Cap(c_a), veh/h	324	703	721	203	608	596	223	0	543	558	0	817
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	42.0	30.9	31.0	44.5	33.8	33.9	41.6	0.0	30.3	40.1	0.0	32.5
Incr Delay (d2), s/veh	3.8	4.9	4.8	1.3	4.6	5.0	1.7	0.0	0.3	7.9	0.0	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(50%),veh/ln	3.2	8.3	8.5	0.6	6.9	6.9	1.9	0.0	2.1	6.5	0.0	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.8	35.8	35.8	45.8	38.5	38.9	43.4	0.0	30.7	48.0	0.0	37.7
LnGrp LOS	D	D	D	D	D	D	D		C	D		D
Approach Vol, veh/h		863			612			187			667	
Approach Delay, s/veh		37.3			39.0			36.1			41.6	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	37.8	15.4	35.4	16.4	32.3	21.8	29.0
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.1	53.3	13.3	52.1	19.3	46.1	33.3	32.1
Max Q Clear Time (g_c+I1), s	3.5	27.5	6.5	27.2	9.4	23.2	16.5	7.1
Green Ext Time (p_c), s	0.0	4.9	0.1	3.1	0.2	3.7	0.7	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	38.9
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3	1	3	1	430	3	230	6	636	286	0
Future Volume (veh/h)	0	3	1	3	1	430	3	230	6	636	286	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1381	1752	1381	1381	1752
Adj Flow Rate, veh/h	0	3	1	3	1	0	3	242	6	669	301	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	10	35	10	35	35	10
Cap, veh/h	3	17	6	14	221		14	482	273	792	1275	721
Arrive On Green	0.00	0.01	0.01	0.01	0.13	0.00	0.01	0.18	0.18	0.31	0.49	0.00
Sat Flow, veh/h	1668	1257	419	1668	1752	1485	1668	2624	1485	2552	2624	1485
Grp Volume(v), veh/h	0	0	4	3	1	0	3	242	6	669	301	0
Grp Sat Flow(s),veh/h/ln	1668	0	1676	1668	1752	1485	1668	1312	1485	1276	1312	1485
Q Serve(g_s), s	0.0	0.0	0.1	0.1	0.0	0.0	0.1	4.5	0.2	13.3	3.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	0.1	0.0	0.0	0.1	4.5	0.2	13.3	3.6	0.0
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	3	0	22	14	221		14	482	273	792	1275	721
V/C Ratio(X)	0.00	0.00	0.18	0.22	0.00		0.22	0.50	0.02	0.85	0.24	0.00
Avail Cap(c_a), veh/h	306	0	357	306	373		306	578	327	1045	1275	721
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	26.6	26.8	20.8	0.0	26.8	20.0	18.2	17.6	8.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.7	7.9	0.0	0.0	7.9	0.8	0.0	5.0	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(50%),veh/ln	0.0	0.0	0.1	0.1	0.0	0.0	0.1	1.2	0.1	3.5	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	30.3	34.8	20.8	0.0	34.8	20.8	18.3	22.6	8.2	0.0
LnGrp LOS			C	C	C		C	C	B	C	A	
Approach Vol, veh/h		4			4			251			970	
Approach Delay, s/veh		30.3			31.3			20.9			18.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.6	16.6	6.1	9.1	6.1	33.1	0.0	15.3
Change Period (Y+Rc), s	5.7	* 6.6	5.7	8.4	5.7	6.6	5.7	8.4
Max Green Setting (Gmax), s	22.3	* 12	10.0	11.6	10.0	22.0	10.0	11.6
Max Q Clear Time (g_c+I1), s	15.3	6.5	2.1	2.1	2.1	5.6	0.0	2.0
Green Ext Time (p_c), s	1.5	0.6	0.0	0.0	0.0	1.5	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	18.8
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	627	1	26	420	152	1	39	13	335	81	0
Future Volume (veh/h)	1	627	1	26	420	152	1	39	13	335	81	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	1	653	1	27	438	158	1	41	14	349	84	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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	3	795	450	50	871	493	64	660	562	499	94	562
Arrive On Green	0.00	0.30	0.30	0.03	0.33	0.33	0.38	0.38	0.38	0.38	0.38	0.00
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	6	1744	1485	1033	249	1485
Grp Volume(v), veh/h	1	653	1	27	438	158	42	0	14	433	0	0
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1749	0	1485	1282	0	1485
Q Serve(g_s), s	0.0	13.8	0.0	1.0	8.0	4.8	0.0	0.0	0.4	18.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	13.8	0.0	1.0	8.0	4.8	0.9	0.0	0.4	19.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	0.81		1.00
Lane Grp Cap(c), veh/h	3	795	450	50	871	493	723	0	562	593	0	562
V/C Ratio(X)	0.36	0.82	0.00	0.54	0.50	0.32	0.06	0.00	0.02	0.73	0.00	0.00
Avail Cap(c_a), veh/h	139	1024	579	139	1024	579	914	0	725	740	0	725
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	29.9	19.4	14.6	28.7	16.1	15.0	11.9	0.0	11.7	18.0	0.0	0.0
Incr Delay (d2), s/veh	64.2	4.3	0.0	8.6	0.5	0.4	0.0	0.0	0.0	2.8	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(50%),veh/ln	0.1	3.8	0.0	0.5	1.9	1.3	0.3	0.0	0.1	4.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	94.1	23.7	14.6	37.2	16.5	15.4	11.9	0.0	11.7	20.8	0.0	0.0
LnGrp LOS	F	C	B	D	B	B	B		B	C		
Approach Vol, veh/h		655			623			56			433	
Approach Delay, s/veh		23.8			17.1			11.9			20.8	
Approach LOS		C			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.5	25.1		28.4	4.8	26.8		28.4				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.8	23.4		29.3	5.0	23.4		29.3				
Max Q Clear Time (g_c+I1), s	3.0	15.8		21.2	2.0	10.0		2.9				
Green Ext Time (p_c), s	0.0	2.3		1.5	0.0	2.5		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	20.3
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	1	12	14	20	13	81	487	4	7	1707	28
Future Volume (veh/h)	358	1	12	14	20	13	81	487	4	7	1707	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	389	1	13	15	22	14	88	529	4	8	1855	30
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	418	375	318	164	90	76	106	1085	920	33	1929	31
Arrive On Green	0.19	0.21	0.21	0.03	0.05	0.05	0.12	1.00	1.00	0.02	0.56	0.56
Sat Flow, veh/h	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	3466	56
Grp Volume(v), veh/h	389	1	13	15	22	14	88	529	4	8	919	966
Grp Sat Flow(s),veh/h/ln	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	1721	1801
Q Serve(g_s), s	27.8	0.1	1.0	1.2	1.8	1.3	7.5	0.0	0.0	0.7	76.2	77.0
Cycle Q Clear(g_c), s	27.8	0.1	1.0	1.2	1.8	1.3	7.5	0.0	0.0	0.7	76.2	77.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	418	375	318	164	90	76	106	1085	920	33	958	1003
V/C Ratio(X)	0.93	0.00	0.04	0.09	0.24	0.18	0.83	0.49	0.00	0.25	0.96	0.96
Avail Cap(c_a), veh/h	418	375	318	220	98	83	112	1085	920	116	958	1003
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	1.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.4	47.2	47.5	64.4	68.6	68.3	65.0	0.0	0.0	72.5	31.6	31.8
Incr Delay (d2), s/veh	27.3	0.0	0.1	0.2	1.4	1.1	33.6	1.4	0.0	3.8	20.7	20.9
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(50%),veh/ln	17.5	0.0	0.4	0.5	0.8	0.5	4.0	0.4	0.0	0.3	34.1	36.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	82.7	47.2	47.6	64.6	69.9	69.5	98.6	1.4	0.0	76.4	52.4	52.7
LnGrp LOS	F	D	D	E	E	E	F	A	A	E	D	D
Approach Vol, veh/h		403			51			621			1893	
Approach Delay, s/veh		81.5			68.2			15.2			52.7	
Approach LOS		F			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	97.4	8.9	36.2	13.9	91.0	32.5	12.6
Change Period (Y+Rc), s	4.7	7.5	4.7	5.1	4.7	7.5	4.7	5.1
Max Green Setting (Gmax), s	10.1	82.0	9.1	26.8	9.7	82.4	27.8	8.1
Max Q Clear Time (g_c+I1), s	2.7	2.0	3.2	3.0	9.5	79.0	29.8	3.8
Green Ext Time (p_c), s	0.0	3.2	0.0	0.0	0.0	2.9	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	49.0
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	2	132	29	5	1	19	548	14	0	954	781
Future Volume (veh/h)	22	2	132	29	5	1	19	548	14	0	954	781
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	24	2	143	32	5	1	21	596	15	0	1037	849
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	105	9	101	64	10	65	92	1401	1187	1	1248	1057
Arrive On Green	0.07	0.07	0.07	0.04	0.04	0.04	0.05	0.77	0.77	0.00	1.00	1.00
Sat Flow, veh/h	1598	133	1535	1501	235	1535	1725	1811	1535	1725	1811	1535
Grp Volume(v), veh/h	26	0	143	37	0	1	21	596	15	0	1037	849
Grp Sat Flow(s),veh/h/ln	1731	0	1535	1736	0	1535	1725	1811	1535	1725	1811	1535
Q Serve(g_s), s	2.1	0.0	9.9	3.1	0.0	0.1	1.8	16.7	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.1	0.0	9.9	3.1	0.0	0.1	1.8	16.7	0.3	0.0	0.0	0.0
Prop In Lane	0.92		1.00	0.86		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	114	0	101	74	0	65	92	1401	1187	1	1248	1057
V/C Ratio(X)	0.23	0.00	1.41	0.50	0.00	0.02	0.23	0.43	0.01	0.00	0.83	0.80
Avail Cap(c_a), veh/h	114	0	101	120	0	106	97	1401	1187	92	1248	1057
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	1.00	1.00	1.00	1.00	0.00	0.24	0.24
Uniform Delay (d), s/veh	66.4	0.0	70.1	70.3	0.0	68.8	68.0	5.7	3.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	233.6	5.2	0.0	0.1	1.2	0.9	0.0	0.0	1.7	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(50%),veh/ln	1.0	0.0	10.4	1.5	0.0	0.0	0.8	5.2	0.1	0.0	0.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.4	0.0	303.6	75.5	0.0	68.9	69.3	6.7	3.9	0.0	1.7	1.6
LnGrp LOS	E		F	E		E	E	A	A		A	A
Approach Vol, veh/h		169			38			632			1886	
Approach Delay, s/veh		267.3			75.3			8.7			1.7	
Approach LOS		F			E			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	123.5		15.0	12.7	110.8		11.5				
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1				
Max Green Setting (Gmax), s	5.3	99.3		9.9	8.4	98.9		10.4				
Max Q Clear Time (g_c+I1), s	10.0	18.7		11.9	3.8	2.0		5.1				
Green Ext Time (p_c), s	0.0	3.7		0.0	0.0	18.3		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	20.8
HCM 7th LOS	C

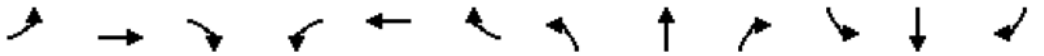
Intersection	
Int Delay, s/veh	8.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	261	9	2	274	160	12	9	2	350	5	51
Future Vol, veh/h	37	261	9	2	274	160	12	9	2	350	5	51
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	650	620	-	600	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	40	284	10	2	298	174	13	10	2	380	5	55

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	472	0	0	293	0	0	520	840	142	529	676	149
Stage 1	-	-	-	-	-	-	364	364	-	302	302	-
Stage 2	-	-	-	-	-	-	156	476	-	227	374	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	1032	-	-	1209	-	-	422	286	855	415	358	846
Stage 1	-	-	-	-	-	-	606	603	-	660	643	-
Stage 2	-	-	-	-	-	-	808	535	-	732	596	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1032	-	-	1209	-	-	373	273	855	387	342	846
Mov Cap-2 Maneuver	-	-	-	-	-	-	513	420	-	547	487	-
Stage 1	-	-	-	-	-	-	580	577	-	659	642	-
Stage 2	-	-	-	-	-	-	747	534	-	688	571	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.28	0.04	12.75	23.83
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	468	855	447	-	-	1209	-	-	546	846
HCM Lane V/C Ratio	0.049	0.003	0.039	-	-	0.002	-	-	0.706	0.066
HCM Ctrl Dly (s/v)	13.1	9.2	8.6	0.3	-	8	-	-	25.9	9.6
HCM Lane LOS	B	A	A	A	-	A	-	-	D	A
HCM 95th %tile Q(veh)	0.2	0	0.1	-	-	0	-	-	5.6	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	479	465	662	394	57	307	267	451	49	188	30
Future Volume (veh/h)	45	479	465	662	394	57	307	267	451	49	188	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	48	515	500	712	424	61	330	287	485	53	202	32
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	84	556	678	758	751	108	337	482	756	224	265	42
Arrive On Green	0.05	0.30	0.30	0.22	0.48	0.48	0.13	0.26	0.26	0.05	0.17	0.17
Sat Flow, veh/h	1739	1826	1547	3374	1561	225	1739	1826	1547	1739	1538	244
Grp Volume(v), veh/h	48	515	500	712	0	485	330	287	485	53	0	234
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1687	0	1785	1739	1826	1547	1739	0	1782
Q Serve(g_s), s	3.8	38.5	37.8	29.2	0.0	27.3	18.9	19.4	32.9	3.4	0.0	17.6
Cycle Q Clear(g_c), s	3.8	38.5	37.8	29.2	0.0	27.3	18.9	19.4	32.9	3.4	0.0	17.6
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	84	556	678	758	0	859	337	482	756	224	0	307
V/C Ratio(X)	0.57	0.93	0.74	0.94	0.00	0.56	0.98	0.60	0.64	0.24	0.00	0.76
Avail Cap(c_a), veh/h	122	571	691	778	0	859	337	560	822	236	0	417
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	0.00	1.00
Uniform Delay (d), s/veh	65.7	47.5	32.8	53.7	0.0	26.1	44.7	45.3	26.9	44.2	0.0	55.6
Incr Delay (d2), s/veh	6.1	21.1	4.1	18.9	0.0	0.9	43.2	1.3	1.5	0.5	0.0	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(50%),veh/ln	1.8	20.7	14.5	14.4	0.0	11.8	6.7	8.9	12.1	1.5	0.0	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	71.8	68.7	36.9	72.6	0.0	26.9	87.9	46.6	28.4	44.7	0.0	61.1
LnGrp LOS	E	E	D	E		C	F	D	C	D		E
Approach Vol, veh/h		1063			1197			1102			287	
Approach Delay, s/veh		53.9			54.1			50.9			58.1	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.4	49.3	24.6	30.7	11.5	74.2	11.7	43.6
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	32.5	44.1	18.9	* 33	9.9	* 67	8.0	43.2
Max Q Clear Time (g_c+I1), s	31.2	41.5	20.9	19.6	5.8	29.3	6.4	34.9
Green Ext Time (p_c), s	0.4	1.4	0.0	1.1	0.0	3.6	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	53.4
HCM 7th LOS	D

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	37	78	177	50	124	85	77	744	15	103	1438	43
Future Volume (veh/h)	37	78	177	50	124	85	77	744	15	103	1438	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	39	82	186	53	131	89	81	783	16	108	1514	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	110	240	316	124	256	217	246	1442	702	145	1475	719
Arrive On Green	0.07	0.14	0.14	0.07	0.15	0.15	0.08	0.47	0.47	0.09	0.48	0.48
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	3047	1485
Grp Volume(v), veh/h	39	82	186	53	131	89	81	783	16	108	1514	45
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1523	1485
Q Serve(g_s), s	2.8	5.2	13.9	3.8	8.5	6.7	2.9	22.5	0.7	7.8	59.8	2.0
Cycle Q Clear(g_c), s	2.8	5.2	13.9	3.8	8.5	6.7	2.9	22.5	0.7	7.8	59.8	2.0
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	110	240	316	124	256	217	246	1442	702	145	1475	719
V/C Ratio(X)	0.36	0.34	0.59	0.43	0.51	0.41	0.33	0.54	0.02	0.75	1.03	0.06
Avail Cap(c_a), veh/h	149	723	726	149	723	613	262	1442	702	196	1475	719
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	55.2	48.2	43.7	54.6	48.7	47.9	54.1	23.1	17.3	55.1	31.9	17.0
Incr Delay (d2), s/veh	1.9	0.8	1.7	2.3	1.6	1.2	0.8	0.4	0.0	9.9	30.5	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(50%),veh/ln	1.2	2.3	5.1	1.6	3.8	2.5	1.2	7.5	0.2	3.6	25.8	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.2	49.1	45.5	56.9	50.3	49.2	54.9	23.5	17.3	65.0	62.3	17.0
LnGrp LOS	E	D	D	E	D	D	D	C	B	E	F	B
Approach Vol, veh/h		307			273			880			1667	
Approach Delay, s/veh		47.9			51.2			26.3			61.3	
Approach LOS		D			D			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.4	66.8	14.9	25.3	15.1	68.2	13.8	26.4
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	14.5	55.3	11.0	51.0	10.0	59.8	11.0	51.0
Max Q Clear Time (g_c+I1), s	19.8	24.5	5.8	15.9	4.9	61.8	4.8	10.5
Green Ext Time (p_c), s	0.1	5.2	0.0	1.0	0.1	0.0	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	49.2
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	102	184	70	143	72	141	1135	26	47	1201	101
Future Volume (veh/h)	84	102	184	70	143	72	141	1135	26	47	1201	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	91	111	200	76	155	78	153	1234	28	51	1305	110
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	190	303	256	208	303	256	189	1969	45	73	1604	135
Arrive On Green	0.00	0.17	0.17	0.00	0.17	0.17	0.11	0.57	0.57	0.04	0.50	0.50
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3468	79	1739	3239	272
Grp Volume(v), veh/h	91	111	200	76	155	78	153	617	645	51	697	718
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1735	1812	1739	1735	1777
Q Serve(g_s), s	0.1	4.4	10.0	0.1	6.3	3.6	6.9	19.3	19.3	2.3	27.4	27.6
Cycle Q Clear(g_c), s	0.1	4.4	10.0	0.1	6.3	3.6	6.9	19.3	19.3	2.3	27.4	27.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		0.15
Lane Grp Cap(c), veh/h	190	303	256	208	303	256	189	985	1029	73	859	880
V/C Ratio(X)	0.48	0.37	0.78	0.37	0.51	0.30	0.81	0.63	0.63	0.70	0.81	0.82
Avail Cap(c_a), veh/h	403	972	824	421	972	824	278	1314	1373	151	1177	1206
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	36.3	29.9	32.3	34.1	30.7	29.6	35.2	11.7	11.7	38.2	17.2	17.3
Incr Delay (d2), s/veh	1.9	0.7	5.1	1.1	1.3	0.7	10.6	0.7	0.6	11.2	3.1	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(50%),veh/ln	1.8	2.0	4.0	1.4	2.8	1.4	3.3	6.0	6.3	1.2	9.8	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.1	30.7	37.4	35.2	32.1	30.3	45.8	12.4	12.3	49.3	20.3	20.5
LnGrp LOS	D	C	D	D	C	C	D	B	B	D	C	C
Approach Vol, veh/h		402			309			1415			1466	
Approach Delay, s/veh		35.7			32.4			16.0			21.4	
Approach LOS		D			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	53.1	0.0	19.1	14.5	47.2	0.0	19.1
Change Period (Y+Rc), s	5.2	7.2	5.7	5.7	5.7	7.2	5.7	5.7
Max Green Setting (Gmax), s	7.6	61.2	10.0	43.0	12.9	54.8	10.0	43.0
Max Q Clear Time (g_c+I1), s	4.3	21.3	0.0	12.0	8.9	29.6	0.0	8.3
Green Ext Time (p_c), s	0.0	9.9	0.0	1.4	0.1	10.4	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	21.8
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	43	99	16	66	14	87	1088	14	22	1826	82
Future Volume (veh/h)	30	43	99	16	66	14	87	1088	14	22	1826	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	33	47	108	17	72	15	95	1183	0	24	1985	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	53	49	96	46	126	24	140	2144		87	2042	
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.08	0.68	0.00	0.05	0.65	0.00
Sat Flow, veh/h	210	456	899	148	1184	224	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	188	0	0	104	0	0	95	1183	0	24	1985	0
Grp Sat Flow(s),veh/h/ln	1566	0	0	1556	0	0	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	6.3	0.0	0.0	0.0	0.0	0.0	7.7	26.7	0.0	1.9	83.0	0.0
Cycle Q Clear(g_c), s	14.8	0.0	0.0	8.5	0.0	0.0	7.7	26.7	0.0	1.9	83.0	0.0
Prop In Lane	0.18		0.57	0.16		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	0	0	196	0	0	140	2144		87	2042	
V/C Ratio(X)	0.95	0.00	0.00	0.53	0.00	0.00	0.68	0.55		0.28	0.97	
Avail Cap(c_a), veh/h	197	0	0	196	0	0	144	2144		144	2061	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	62.7	0.0	0.0	59.1	0.0	0.0	61.7	11.5	0.0	63.3	23.3	0.0
Incr Delay (d2), s/veh	50.5	0.0	0.0	2.7	0.0	0.0	11.5	0.3	0.0	1.7	13.7	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(50%),veh/ln	9.5	0.0	0.0	3.7	0.0	0.0	3.6	8.0	0.0	0.8	29.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	113.2	0.0	0.0	61.8	0.0	0.0	73.3	11.8	0.0	65.0	37.1	0.0
LnGrp LOS	F			E			E	B		E	D	
Approach Vol, veh/h		188			104			1278			2009	
Approach Delay, s/veh		113.2			61.8			16.4			37.4	
Approach LOS		F			E			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.9	102.6		23.3	17.4	98.2		23.3				
Change Period (Y+Rc), s	5.7	8.4		8.5	5.7	8.4		8.5				
Max Green Setting (Gmax), s	12.6	90.6		14.8	12.0	90.6		14.8				
Max Q Clear Time (g_c+I1), s	13.9	28.7		16.8	9.7	85.0		10.5				
Green Ext Time (p_c), s	0.0	9.9		0.0	0.0	4.8		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	34.6
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	255	312	88	213	299	157	95	1072	160	161	1103	261
Future Volume (veh/h)	255	312	88	213	299	157	95	1072	160	161	1103	261
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	274	335	95	229	322	169	102	1153	172	173	1186	281
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	229	498	139	254	416	214	127	1353	603	202	1502	777
Arrive On Green	0.07	0.19	0.19	0.07	0.19	0.19	0.07	0.39	0.39	0.12	0.43	0.43
Sat Flow, veh/h	1739	2678	748	1739	2217	1139	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	274	215	215	229	250	241	102	1153	172	173	1186	281
Grp Sat Flow(s),veh/h/ln	1739	1735	1691	1739	1735	1621	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	7.3	12.2	12.5	7.5	14.5	15.0	6.1	32.2	8.1	10.3	31.2	11.7
Cycle Q Clear(g_c), s	7.3	12.2	12.5	7.5	14.5	15.0	6.1	32.2	8.1	10.3	31.2	11.7
Prop In Lane	1.00		0.44	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	229	323	315	254	326	305	127	1353	603	202	1502	777
V/C Ratio(X)	1.20	0.67	0.68	0.90	0.77	0.79	0.80	0.85	0.29	0.86	0.79	0.36
Avail Cap(c_a), veh/h	229	701	684	254	704	658	176	1353	603	218	1502	777
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	40.3	40.1	40.2	39.4	40.8	41.0	48.3	29.5	22.2	45.9	25.9	16.1
Incr Delay (d2), s/veh	123.3	2.4	2.6	31.7	3.8	4.6	16.4	6.9	1.2	25.6	4.3	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(50%),veh/ln	10.3	5.3	5.3	4.6	6.4	6.2	3.2	13.7	3.0	5.7	12.7	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	163.6	42.4	42.8	71.0	44.6	45.6	64.8	36.5	23.4	71.5	30.2	17.4
LnGrp LOS	F	D	D	E	D	D	E	D	C	E	C	B
Approach Vol, veh/h		704			720			1427			1640	
Approach Delay, s/veh		89.7			53.3			36.9			32.3	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	48.5	13.2	26.2	13.5	53.0	13.0	26.4
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	12.3	41.3	7.5	42.8	10.7	43.9	7.3	43.0
Max Q Clear Time (g_c+I1), s	12.3	34.2	9.5	14.5	8.1	33.2	9.3	17.0
Green Ext Time (p_c), s	0.0	4.3	0.0	2.5	0.0	6.2	0.0	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	46.1
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	2	324	4	4	1	269	1077	2	1	1795	121
Future Volume (veh/h)	82	2	324	4	4	1	269	1077	2	1	1795	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	89	2	352	4	4	1	292	1171	2	1	1951	132
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	379	9	480	17	17	4	294	2037	3	5	1711	804
Arrive On Green	0.23	0.23	0.23	0.02	0.02	0.02	0.09	0.63	0.63	0.00	0.54	0.54
Sat Flow, veh/h	1633	37	1485	747	747	187	3237	3236	6	1668	3159	1485
Grp Volume(v), veh/h	91	0	352	9	0	0	292	572	601	1	1951	132
Grp Sat Flow(s),veh/h/ln	1670	0	1485	1681	0	0	1618	1580	1662	1668	1580	1485
Q Serve(g_s), s	7.1	0.0	33.6	0.8	0.0	0.0	14.4	33.6	33.6	0.1	86.5	7.1
Cycle Q Clear(g_c), s	7.1	0.0	33.6	0.8	0.0	0.0	14.4	33.6	33.6	0.1	86.5	7.1
Prop In Lane	0.98		1.00	0.44		0.11	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	388	0	480	38	0	0	294	994	1046	5	1711	804
V/C Ratio(X)	0.23	0.00	0.73	0.24	0.00	0.00	0.99	0.57	0.57	0.20	1.14	0.16
Avail Cap(c_a), veh/h	523	0	600	116	0	0	294	994	1046	115	1711	804
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	0.0	48.0	76.7	0.0	0.0	72.6	17.2	17.2	79.4	36.6	18.4
Incr Delay (d2), s/veh	0.3	0.0	3.5	3.1	0.0	0.0	50.7	0.8	0.8	18.6	70.7	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(50%),veh/ln	3.0	0.0	12.8	0.4	0.0	0.0	7.9	11.4	11.9	0.1	47.3	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.1	0.0	51.5	79.8	0.0	0.0	123.2	18.0	18.0	98.0	107.3	18.5
LnGrp LOS	D		D	E			F	B	B	F	F	B
Approach Vol, veh/h		443			9			1465			2084	
Approach Delay, s/veh		51.2			79.8			39.0			101.7	
Approach LOS		D			E			D			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.0	105.0		41.6	19.0	91.0		8.1
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	11.0	90.0		50.0	14.5	86.5		11.0
Max Q Clear Time (g_c+I1), s	2.1	35.6		35.6	16.4	88.5		2.8
Green Ext Time (p_c), s	0.0	8.3		1.5	0.0	0.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	73.1
HCM 7th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	221	100	105	228	546	100	1031	76	524	1128	124
Future Volume (veh/h)	102	221	100	105	228	546	100	1031	76	524	1128	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	105	228	103	108	235	0	103	1063	78	540	1163	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	131	309	135	135	462		130	1285	94	638	1790	
Arrive On Green	0.08	0.13	0.13	0.08	0.13	0.00	0.07	0.39	0.39	0.19	0.52	0.00
Sat Flow, veh/h	1739	2349	1027	1739	3469	1547	1739	3277	240	3374	3469	1547
Grp Volume(v), veh/h	105	166	165	108	235	0	103	563	578	540	1163	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1641	1739	1735	1547	1739	1735	1783	1687	1735	1547
Q Serve(g_s), s	6.3	9.8	10.3	6.5	6.7	0.0	6.2	31.0	31.0	16.4	25.9	0.0
Cycle Q Clear(g_c), s	6.3	9.8	10.3	6.5	6.7	0.0	6.2	31.0	31.0	16.4	25.9	0.0
Prop In Lane	1.00		0.63	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	131	228	216	135	462		130	680	699	638	1790	
V/C Ratio(X)	0.80	0.73	0.76	0.80	0.51		0.79	0.83	0.83	0.85	0.65	
Avail Cap(c_a), veh/h	234	499	472	234	1012		293	1003	1031	993	2477	
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.3	44.4	44.6	48.2	42.8	0.0	48.4	29.1	29.1	41.6	18.7	0.0
Incr Delay (d2), s/veh	10.5	4.5	5.5	10.4	0.9	0.0	10.3	3.7	3.7	4.2	0.4	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(50%),veh/ln	3.1	4.4	4.4	3.1	2.9	0.0	3.0	13.1	13.4	7.1	9.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.8	48.8	50.1	58.6	43.7	0.0	58.7	32.8	32.7	45.8	19.1	0.0
LnGrp LOS	E	D	D	E	D		E	C	C	D	B	
Approach Vol, veh/h		436			343			1244			1703	
Approach Delay, s/veh		51.7			48.4			34.9			27.6	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	61.0	12.7	20.0	25.8	47.8	12.9	19.8
Change Period (Y+Rc), s	4.7	6.1	4.7	* 5.8	5.7	6.1	4.7	5.8
Max Green Setting (Gmax), s	7.9	75.9	14.3	* 31	31.3	61.5	14.3	30.6
Max Q Clear Time (g_c+I1), s	8.3	27.9	8.3	8.7	18.4	33.0	8.5	12.3
Green Ext Time (p_c), s	0.1	11.2	0.1	1.3	1.7	8.7	0.1	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	34.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	271	174	111	220	99	122	1151	138	119	1763	227
Future Volume (veh/h)	103	271	174	111	220	99	122	1151	138	119	1763	227
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	112	295	189	121	239	108	133	1251	150	129	1916	247
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	143	355	221	144	407	178	126	1460	686	149	1504	834
Arrive On Green	0.09	0.18	0.18	0.09	0.18	0.18	0.08	0.46	0.46	0.09	0.48	0.48
Sat Flow, veh/h	1668	1968	1227	1668	2252	986	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	112	248	236	121	175	172	133	1251	150	129	1916	247
Grp Sat Flow(s),veh/h/ln	1668	1664	1531	1668	1664	1574	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	9.9	21.5	22.4	10.7	14.4	15.1	11.3	52.9	9.1	11.4	71.4	13.1
Cycle Q Clear(g_c), s	9.9	21.5	22.4	10.7	14.4	15.1	11.3	52.9	9.1	11.4	71.4	13.1
Prop In Lane	1.00		0.80	1.00		0.63	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	143	300	276	144	300	284	126	1460	686	149	1504	834
V/C Ratio(X)	0.78	0.83	0.85	0.84	0.58	0.61	1.06	0.86	0.22	0.87	1.27	0.30
Avail Cap(c_a), veh/h	244	633	582	145	534	505	126	1460	686	152	1504	834
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	67.2	59.2	59.6	67.5	56.2	56.5	69.3	35.9	24.1	67.4	39.3	17.3
Incr Delay (d2), s/veh	8.9	5.8	7.4	33.7	1.8	2.1	96.6	5.3	0.2	36.8	128.5	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(50%),veh/ln	4.4	9.3	9.0	5.8	6.0	6.0	8.1	20.1	3.1	6.3	52.4	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	76.1	65.0	67.0	101.2	58.0	58.6	165.9	41.2	24.3	104.2	167.7	17.4
LnGrp LOS	E	E	E	F	E	E	F	D	C	F	F	B
Approach Vol, veh/h		596			468			1534			2292	
Approach Delay, s/veh		67.9			69.4			50.3			148.0	
Approach LOS		E			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	77.7	18.6	34.5	17.0	79.8	18.6	34.6
Change Period (Y+Rc), s	5.7	8.4	5.7	7.5	5.7	8.4	5.7	7.5
Max Green Setting (Gmax), s	13.3	69.0	13.0	57.0	11.3	71.4	21.9	48.1
Max Q Clear Time (g_c+I1), s	13.4	54.9	12.7	24.4	13.3	73.4	11.9	17.1
Green Ext Time (p_c), s	0.0	7.2	0.0	2.7	0.0	0.0	0.2	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	100.1
HCM 7th LOS	F

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	25	0	136	6	208	0	0	269	149
Future Vol, veh/h	0	0	0	25	0	136	6	208	0	0	269	149
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	27	0	148	7	226	0	0	292	162

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	532	693	226	454	0	-	-	-	0
Stage 1	239	239	-	-	-	-	-	-	-
Stage 2	292	454	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	491	354	789	1056	-	0	0	-	-
Stage 1	778	689	-	-	-	0	0	-	-
Stage 2	735	553	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	488	0	789	1056	-	-	-	-	-
Mov Cap-2 Maneuver	488	0	-	-	-	-	-	-	-
Stage 1	772	0	-	-	-	-	-	-	-
Stage 2	735	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.95	0.24	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	50	-	488	789	-	-
HCM Lane V/C Ratio	0.006	-	0.056	0.187	-	-
HCM Ctrl Dly (s/v)	8.4	0	12.8	10.6	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0.7	-	-

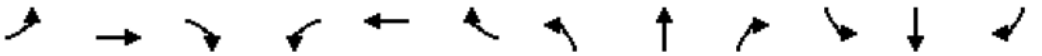
Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	167	0	6	0	0	0	0	36	23	204	80	0
Future Vol, veh/h	167	0	6	0	0	0	0	36	23	204	80	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	174	0	6	0	0	0	0	38	24	213	83	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	546	570	83	-	0	0	61	0	0
Stage 1	508	508	-	-	-	-	-	-	-
Stage 2	38	61	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	-	-	-	4.22	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	-	-	-	2.308	-	-
Pot Cap-1 Maneuver	482	418	949	0	-	-	1480	-	0
Stage 1	584	522	-	0	-	-	-	-	0
Stage 2	960	824	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	409	0	949	-	-	-	1480	-	-
Mov Cap-2 Maneuver	409	0	-	-	-	-	-	-	-
Stage 1	584	0	-	-	-	-	-	-	-
Stage 2	815	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	19.74	0	5.63
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	409	949	1293	-
HCM Lane V/C Ratio	-	-	0.425	0.007	0.144	-
HCM Ctrl Dly (s/v)	-	-	20.1	8.8	7.8	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	2.1	0	0.5	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	38	0	809	9	318	0	0	1329	175
Future Volume (veh/h)	0	0	0	38	0	809	9	318	0	0	1329	175
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				41	0	870	10	342	0	0	1429	188
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				580	0	908	29	1896	0	0	1642	732
Arrive On Green				0.33	0.00	0.33	0.02	0.55	0.00	0.00	0.47	0.47
Sat Flow, veh/h				1739	0	2723	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				41	0	870	10	342	0	0	1429	188
Grp Sat Flow(s),veh/h/ln				1739	0	1362	1739	1735	0	0	1735	1547
Q Serve(g_s), s				1.8	0.0	34.4	0.6	5.5	0.0	0.0	40.6	8.0
Cycle Q Clear(g_c), s				1.8	0.0	34.4	0.6	5.5	0.0	0.0	40.6	8.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				580	0	908	29	1896	0	0	1642	732
V/C Ratio(X)				0.07	0.00	0.96	0.34	0.18	0.00	0.00	0.87	0.26
Avail Cap(c_a), veh/h				585	0	916	111	1896	0	0	1642	732
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	1.00	0.99	0.99	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				25.0	0.0	35.9	53.5	12.6	0.0	0.0	25.9	17.4
Incr Delay (d2), s/veh				0.1	0.0	20.1	6.8	0.2	0.0	0.0	6.6	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
%ile BackOfQ(50%),veh/ln				0.7	0.0	13.0	0.3	2.1	0.0	0.0	17.3	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				25.1	0.0	56.0	60.2	12.8	0.0	0.0	32.5	18.2
LnGrp LOS				C		E	E	B			C	B
Approach Vol, veh/h					911			352			1617	
Approach Delay, s/veh					54.6			14.1			30.9	
Approach LOS					D			B			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		66.2			8.0	58.2		43.8				
Change Period (Y+Rc), s		6.1			6.2	6.1		7.1				
Max Green Setting (Gmax), s		59.8			7.0	46.6		37.0				
Max Q Clear Time (g_c+I1), s		7.5			2.6	42.6		36.4				
Green Ext Time (p_c), s		2.4			0.0	3.2		0.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			36.3									
HCM 7th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	3	29	0	0	0	0	188	42	0	399	974
Future Volume (veh/h)	140	3	29	0	0	0	0	188	42	0	399	974
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826				0	1826	1826	0	1826	1826
Adj Flow Rate, veh/h	180	0	0				0	200	45	0	424	1036
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	5	5	5				0	5	5	0	5	5
Cap, veh/h	344	181	0				0	2264	499	0	2779	2451
Arrive On Green	0.10	0.00	0.00				0.00	0.80	0.80	0.00	0.80	0.80
Sat Flow, veh/h	3478	1826	0				0	2917	622	0	3561	2723
Grp Volume(v), veh/h	180	0	0				0	121	124	0	424	1036
Grp Sat Flow(s),veh/h/ln	1739	1826	0				0	1735	1714	0	1735	1362
Q Serve(g_s), s	4.4	0.0	0.0				0.0	1.3	1.4	0.0	2.5	5.5
Cycle Q Clear(g_c), s	4.4	0.0	0.0				0.0	1.3	1.4	0.0	2.5	5.5
Prop In Lane	1.00		0.00				0.00		0.36	0.00		1.00
Lane Grp Cap(c), veh/h	344	181	0				0	1390	1373	0	2779	2451
V/C Ratio(X)	0.52	0.00	0.00				0.00	0.09	0.09	0.00	0.15	0.42
Avail Cap(c_a), veh/h	1565	822	0				0	1390	1373	0	2779	2451
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	1.00	1.00	0.00	0.81	0.81
Uniform Delay (d), s/veh	38.5	0.0	0.0				0.0	1.9	1.9	0.0	2.0	0.7
Incr Delay (d2), s/veh	1.2	0.0	0.0				0.0	0.1	0.1	0.0	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(50%),veh/ln	1.8	0.0	0.0				0.0	0.3	0.3	0.0	0.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.8	0.0	0.0				0.0	2.0	2.0	0.0	2.0	0.8
LnGrp LOS	D							A	A		A	A
Approach Vol, veh/h		180						245			1460	
Approach Delay, s/veh		39.8						2.0			1.2	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	76.6	13.4	76.6
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	40.5	40.5
Max Q Clear Time (g_c+I1), s	3.4	6.4	7.5
Green Ext Time (p_c), s	1.4	0.6	9.1

Intersection Summary	
HCM 7th Control Delay, s/veh	5.0
HCM 7th 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												
Traffic Volume (veh/h)	44	67	0	31	54	76	140	1272	39	157	1920	95
Future Volume (veh/h)	44	67	0	31	54	76	140	1272	39	157	1920	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	47	71	0	33	57	81	149	1353	41	167	2043	101
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	81	100	195	87	134	195	159	2103	64	192	2124	104
Arrive On Green	0.12	0.12	0.00	0.12	0.12	0.12	0.09	0.61	0.61	0.11	0.63	0.63
Sat Flow, veh/h	354	804	1560	411	1076	1560	1753	3466	105	1753	3393	166
Grp Volume(v), veh/h	118	0	0	90	0	81	149	682	712	167	1045	1099
Grp Sat Flow(s),veh/h/ln	1157	0	1560	1487	0	1560	1753	1749	1822	1753	1749	1811
Q Serve(g_s), s	7.3	0.0	0.0	0.0	0.0	6.5	11.5	34.2	34.3	12.7	75.5	78.6
Cycle Q Clear(g_c), s	14.4	0.0	0.0	7.2	0.0	6.5	11.5	34.2	34.3	12.7	75.5	78.6
Prop In Lane	0.40		1.00	0.37		1.00	1.00		0.06	1.00		0.09
Lane Grp Cap(c), veh/h	181	0	195	222	0	195	159	1061	1105	192	1094	1133
V/C Ratio(X)	0.65	0.00	0.00	0.41	0.00	0.42	0.94	0.64	0.64	0.87	0.95	0.97
Avail Cap(c_a), veh/h	453	0	470	505	0	470	159	1061	1105	259	1094	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)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.2	0.0	0.0	55.0	0.0	54.9	61.5	17.2	17.3	59.6	23.6	24.2
Incr Delay (d2), s/veh	3.9	0.0	0.0	1.2	0.0	1.4	53.7	3.0	2.9	20.5	18.2	20.5
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(50%),veh/ln	4.1	0.0	0.0	2.9	0.0	2.6	7.3	13.0	13.5	6.6	31.8	34.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.1	0.0	0.0	56.1	0.0	56.3	115.2	20.2	20.2	80.1	41.9	44.7
LnGrp LOS	E			E		E	F	C	C	F	D	D
Approach Vol, veh/h		118			171			1543			2311	
Approach Delay, s/veh		63.1			56.2			29.4			46.0	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.6	90.9		24.5	18.0	93.5		24.5
Change Period (Y+Rc), s	5.7	8.4		7.5	5.7	8.4		7.5
Max Green Setting (Gmax), s	20.1	77.3		41.0	12.3	85.1		41.0
Max Q Clear Time (g_c+I1), s	14.7	36.3		16.4	13.5	80.6		9.2
Green Ext Time (p_c), s	0.2	10.7		0.5	0.0	4.0		0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	40.7
HCM 7th LOS	D



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	664	375	417	608	175	285
Future Volume (veh/h)	664	375	417	608	175	285
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	699	395	439	640	184	300
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1239	870	381	1952	357	559
Arrive On Green	0.35	0.35	0.11	0.55	0.20	0.20
Sat Flow, veh/h	3618	1572	3428	3618	1767	2768
Grp Volume(v), veh/h	699	395	439	640	184	300
Grp Sat Flow(s),veh/h/ln	1763	1572	1714	1763	1767	1384
Q Serve(g_s), s	7.9	7.4	5.5	4.9	4.6	4.8
Cycle Q Clear(g_c), s	7.9	7.4	5.5	4.9	4.6	4.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1239	870	381	1952	357	559
V/C Ratio(X)	0.56	0.45	1.15	0.33	0.52	0.54
Avail Cap(c_a), veh/h	3206	1748	381	3869	1379	2159
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	13.0	6.6	22.0	6.0	17.6	17.7
Incr Delay (d2), s/veh	0.4	0.4	94.3	0.1	1.2	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	1.8	7.0	1.3	1.8	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.4	7.0	116.3	6.1	18.7	18.5
LnGrp LOS	B	A	F	A	B	B
Approach Vol, veh/h	1094			1079	484	
Approach Delay, s/veh	11.1			51.0	18.6	
Approach LOS	B			D	B	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		10.0	23.8		15.7	33.8
Change Period (Y+Rc), s		4.5	* 6.4		5.7	6.4
Max Green Setting (Gmax), s		5.5	* 45		38.6	54.3
Max Q Clear Time (g_c+I1), s		7.5	9.9		6.8	6.9
Green Ext Time (p_c), s		0.0	7.5		1.8	5.1

Intersection Summary	
HCM 7th Control Delay, s/veh	28.6
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	266	566	181	184	488	258	232	773	102	408	985	363
Future Volume (veh/h)	266	566	181	184	488	258	232	773	102	408	985	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	286	609	195	198	525	277	249	831	110	439	1059	390
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	356	902	547	265	774	360	316	996	132	522	1334	595
Arrive On Green	0.10	0.26	0.26	0.08	0.23	0.23	0.09	0.32	0.32	0.15	0.38	0.38
Sat Flow, veh/h	3428	3526	1572	3428	3377	1572	3428	3129	414	3428	3526	1572
Grp Volume(v), veh/h	286	609	195	198	525	277	249	468	473	439	1059	390
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1689	1572	1714	1763	1781	1714	1763	1572
Q Serve(g_s), s	9.1	17.3	10.3	6.3	15.8	18.4	7.9	27.5	27.5	13.9	29.8	22.9
Cycle Q Clear(g_c), s	9.1	17.3	10.3	6.3	15.8	18.4	7.9	27.5	27.5	13.9	29.8	22.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	356	902	547	265	774	360	316	561	567	522	1334	595
V/C Ratio(X)	0.80	0.68	0.36	0.75	0.68	0.77	0.79	0.83	0.83	0.84	0.79	0.66
Avail Cap(c_a), veh/h	516	1251	703	446	1150	536	455	777	785	762	1871	834
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	48.9	37.3	27.1	50.4	39.2	40.2	49.6	35.3	35.3	46.0	30.8	28.7
Incr Delay (d2), s/veh	5.8	0.9	0.4	4.2	1.1	3.9	5.8	5.6	5.6	5.7	1.6	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(50%),veh/ln	4.2	7.5	3.9	2.9	6.6	7.5	3.6	12.4	12.5	6.2	12.5	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.7	38.2	27.5	54.6	40.3	44.1	55.4	40.9	40.9	51.6	32.4	29.9
LnGrp LOS	D	D	C	D	D	D	E	D	D	D	C	C
Approach Vol, veh/h		1090			1000			1190			1888	
Approach Delay, s/veh		40.6			44.2			43.9			36.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	41.1	13.8	34.5	15.5	47.8	16.8	31.5
Change Period (Y+Rc), s	5.2	5.6	5.2	5.9	5.2	5.6	5.2	* 5.9
Max Green Setting (Gmax), s	24.8	49.2	14.5	39.6	14.8	59.2	16.8	* 38
Max Q Clear Time (g_c+I1), s	15.9	29.5	8.3	19.3	9.9	31.8	11.1	20.4
Green Ext Time (p_c), s	1.1	5.9	0.3	4.8	0.4	10.5	0.5	5.2

Intersection Summary	
HCM 7th Control Delay, s/veh	40.5
HCM 7th LOS	D

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	270	1	46	1275	5	16	21	272	544	8	819	332
Future Volume (veh/h)	270	1	46	1275	5	16	21	272	544	8	819	332
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	278	1	47	1314	5	16	22	280	561	8	844	342
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	305	2	114	1012	765	649	64	666	1101	166	870	660
Arrive On Green	0.17	0.07	0.07	0.51	0.41	0.41	0.04	0.19	0.19	0.09	0.25	0.25
Sat Flow, veh/h	1767	33	1545	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	278	0	48	1314	5	16	22	280	561	8	844	342
Grp Sat Flow(s),veh/h/ln	1767	0	1578	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	23.0	0.0	4.3	76.0	0.2	0.9	1.8	10.4	24.7	0.6	35.2	24.0
Cycle Q Clear(g_c), s	23.0	0.0	4.3	76.0	0.2	0.9	1.8	10.4	24.7	0.6	35.2	24.0
Prop In Lane	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	0	117	1012	765	649	64	666	1101	166	870	660
V/C Ratio(X)	0.91	0.00	0.41	1.30	0.01	0.02	0.34	0.42	0.51	0.05	0.97	0.52
Avail Cap(c_a), veh/h	487	0	429	1012	941	798	107	711	1121	166	870	660
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.4	0.0	65.7	28.6	25.7	25.9	69.9	53.1	10.4	61.3	55.4	32.0
Incr Delay (d2), s/veh	14.5	0.0	2.3	141.4	0.0	0.0	3.2	0.4	0.4	0.1	23.3	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(50%),veh/ln	11.5	0.0	1.8	71.7	0.1	0.3	0.9	4.7	8.2	0.3	18.4	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.9	0.0	68.0	170.1	25.7	25.9	73.1	53.6	10.8	61.4	78.8	32.7
LnGrp LOS	E		E	F	C	C	E	D	B	E	E	C
Approach Vol, veh/h		326			1335			863			1194	
Approach Delay, s/veh		73.9			167.8			26.2			65.5	
Approach LOS		E			F			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	81.0	16.0	10.0	41.7	30.7	66.3	18.6	33.1
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	76.0	40.4	9.0	35.0	41.0	75.4	14.0	30.0
Max Q Clear Time (g_c+I1), s	78.0	6.3	3.8	37.2	25.0	2.9	2.6	26.7
Green Ext Time (p_c), s	0.0	0.2	0.0	0.0	0.7	0.1	0.0	1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	93.8
HCM 7th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	475	128	0	6	35	9	15	6	1	17	7	1204
Future Volume (veh/h)	475	128	0	6	35	9	15	6	1	17	7	1204
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	328	403	0	7	38	10	16	7	1	18	0	1314
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	459	482	0	29	156	40	38	1423	199	42	0	1447
Arrive On Green	0.26	0.26	0.00	0.06	0.06	0.06	0.02	0.46	0.46	0.02	0.00	0.46
Sat Flow, veh/h	1767	1856	0	465	2473	635	1767	3107	433	1767	0	3145
Grp Volume(v), veh/h	328	403	0	28	0	27	16	4	4	18	0	1314
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1832	0	1741	1767	1763	1778	1767	0	1572
Q Serve(g_s), s	16.6	20.2	0.0	1.4	0.0	1.5	0.9	0.1	0.1	1.0	0.0	38.1
Cycle Q Clear(g_c), s	16.6	20.2	0.0	1.4	0.0	1.5	0.9	0.1	0.1	1.0	0.0	38.1
Prop In Lane	1.00		0.00	0.25		0.36	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	459	482	0	116	0	110	38	807	814	42	0	1447
V/C Ratio(X)	0.71	0.84	0.00	0.24	0.00	0.25	0.42	0.00	0.01	0.43	0.00	0.91
Avail Cap(c_a), veh/h	776	814	0	540	0	513	110	940	948	110	0	1677
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.1	34.4	0.0	43.9	0.0	43.9	47.5	14.5	14.5	47.4	0.0	24.6
Incr Delay (d2), s/veh	2.1	3.9	0.0	1.0	0.0	1.2	7.2	0.0	0.0	6.8	0.0	6.9
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(50%),veh/ln	7.2	9.3	0.0	0.7	0.0	0.7	0.5	0.0	0.0	0.5	0.0	14.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.2	38.3	0.0	44.9	0.0	45.1	54.7	14.5	14.5	54.2	0.0	31.6
LnGrp LOS	D	D		D		D	D	B	B	D		C
Approach Vol, veh/h		731			55			24			1332	
Approach Delay, s/veh		36.9			45.0			41.3			31.9	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	49.8		30.7	6.8	50.0		10.9				
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7				
Max Green Setting (Gmax), s	6.1	52.5		43.2	6.1	52.5		29.0				
Max Q Clear Time (g_c+I1), s	3.0	2.1		22.2	2.9	40.1		3.5				
Green Ext Time (p_c), s	0.0	0.0		3.4	0.0	5.2		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	34.0
HCM 7th LOS	C

Notes
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	21	0	3	12	263	238	0	167	48
Future Vol, veh/h	0	0	0	21	0	3	12	263	238	0	167	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	330
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	22	0	3	13	280	253	0	178	51

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	483	534	280	229	0	-	-	-	0
Stage 1	305	305	-	-	-	-	-	-	-
Stage 2	178	229	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	525	438	736	1283	-	0	0	-	-
Stage 1	725	644	-	-	-	0	0	-	-
Stage 2	830	697	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	519	0	736	1283	-	-	-	-	-
Mov Cap-2 Maneuver	519	0	-	-	-	-	-	-	-
Stage 1	717	0	-	-	-	-	-	-	-
Stage 2	830	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.02	0.34	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	79	-	539	-	-
HCM Lane V/C Ratio	0.01	-	0.047	-	-
HCM Ctrl Dly (s/v)	7.8	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

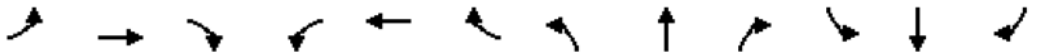
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	147	0	403	0	0	0	0	357	11	0	183	0
Future Vol, veh/h	147	0	403	0	0	0	0	357	11	0	183	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	470	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	156	0	429	0	0	0	0	380	12	0	195	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	385	586	-	-	0	0	-	-	0
Stage 1	195	195	-	-	-	-	-	-	-
Stage 2	190	391	-	-	-	-	-	-	-
Critical Hdwy	6.78	6.68	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.58	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.98	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.614	4.114	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	582	405	0	0	-	-	0	-	0
Stage 1	811	718	0	0	-	-	0	-	0
Stage 2	798	585	0	0	-	-	0	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	582	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	582	0	-	-	-	-	-	-	-
Stage 1	811	0	-	-	-	-	-	-	-
Stage 2	798	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.44	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBT
Capacity (veh/h)	-	-	582	-
HCM Lane V/C Ratio	-	-	0.269	-
HCM Ctrl Dly (s/v)	-	-	13.4	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	1.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	60	119	63	100	7	152	345	46	4	471	86
Future Volume (veh/h)	37	60	119	63	100	7	152	345	46	4	471	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1455	1752	1752	1752	1455	952	1752	1752	952	1604
Adj Flow Rate, veh/h	40	65	129	68	109	8	165	375	50	4	512	93
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, %	10	10	30	10	10	10	30	64	10	10	64	20
Cap, veh/h	144	206	504	188	252	213	309	1113	803	18	586	558
Arrive On Green	0.09	0.12	0.12	0.11	0.14	0.14	0.11	0.43	0.43	0.01	0.32	0.32
Sat Flow, veh/h	1668	1752	2171	1668	1752	1485	2689	2598	1485	1668	1808	1359
Grp Volume(v), veh/h	40	65	129	68	109	8	165	375	50	4	512	93
Grp Sat Flow(s),veh/h/ln	1668	1752	1085	1668	1752	1485	1345	866	1485	1668	904	1359
Q Serve(g_s), s	1.9	2.9	4.1	3.2	4.8	0.4	4.9	8.2	1.4	0.2	22.8	3.7
Cycle Q Clear(g_c), s	1.9	2.9	4.1	3.2	4.8	0.4	4.9	8.2	1.4	0.2	22.8	3.7
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	144	206	504	188	252	213	309	1113	803	18	586	558
V/C Ratio(X)	0.28	0.32	0.26	0.36	0.43	0.04	0.53	0.34	0.06	0.23	0.87	0.17
Avail Cap(c_a), veh/h	235	1129	1648	235	1129	956	357	1216	862	196	819	733
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	36.5	34.5	26.7	35.0	33.3	31.4	35.6	16.3	9.3	41.8	27.2	15.9
Incr Delay (d2), s/veh	1.0	0.9	0.3	1.2	1.2	0.1	1.4	0.2	0.0	6.3	7.7	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(50%),veh/ln	0.8	1.2	1.0	1.3	2.0	0.1	1.5	1.4	0.4	0.1	4.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.5	35.3	27.0	36.1	34.5	31.5	37.0	16.4	9.3	48.1	34.9	16.0
LnGrp LOS	D	D	C	D	C	C	D	B	A	D	C	B
Approach Vol, veh/h		234			185			590			609	
Approach Delay, s/veh		31.1			35.0			21.6			32.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	18.4	15.5	36.0	13.0	20.7	6.6	44.9
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	12.0	54.9	11.3	38.6	12.0	54.9	10.0	39.9
Max Q Clear Time (g_c+I1), s	5.2	6.1	6.9	24.8	3.9	6.8	2.2	10.2
Green Ext Time (p_c), s	0.1	0.8	0.2	2.9	0.0	0.5	0.0	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	28.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	163	0	186	6	321	60	115	629	0
Future Volume (veh/h)	0	0	0	163	0	186	6	321	60	115	629	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				952	0	952	1870	952	952	952	952	0
Adj Flow Rate, veh/h				172	0	196	6	338	63	121	662	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, %				64	0	64	2	64	64	64	64	0
Cap, veh/h				253	0	225	28	412	76	145	1077	0
Arrive On Green				0.28	0.00	0.28	0.02	0.27	0.27	0.16	0.41	0.00
Sat Flow, veh/h				906	0	806	1781	1524	281	906	2683	0
Grp Volume(v), veh/h				172	0	196	6	199	202	121	662	0
Grp Sat Flow(s),veh/h/ln				906	0	806	1781	904	901	906	866	0
Q Serve(g_s), s				11.7	0.0	16.1	0.2	14.3	14.7	9.0	13.9	0.0
Cycle Q Clear(g_c), s				11.7	0.0	16.1	0.2	14.3	14.7	9.0	13.9	0.0
Prop In Lane				1.00		1.00	1.00		0.31	1.00		0.00
Lane Grp Cap(c), veh/h				253	0	225	28	244	243	145	1077	0
V/C Ratio(X)				0.68	0.00	0.87	0.21	0.82	0.83	0.83	0.61	0.00
Avail Cap(c_a), veh/h				665	0	591	256	527	525	238	1823	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				22.3	0.0	23.9	33.8	23.8	23.9	28.3	16.0	0.0
Incr Delay (d2), s/veh				3.2	0.0	10.0	3.7	6.5	7.2	12.1	0.6	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(50%),veh/ln				2.5	0.0	3.4	0.1	3.0	3.1	2.2	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				25.5	0.0	33.8	37.5	30.3	31.0	40.4	16.6	0.0
LnGrp LOS				C		C	D	C	C	D	B	
Approach Vol, veh/h					368			407			783	
Approach Delay, s/veh					29.9			30.8			20.2	
Approach LOS					C			C			C	

Timer - Assigned Phs	1	2		5	6		8					
Phs Duration (G+Y+Rc), s	16.9	27.2		6.8	37.2		25.5					
Change Period (Y+Rc), s	5.7	8.4		5.7	8.4		6.1					
Max Green Setting (Gmax), s	18.3	40.5		10.0	48.8		51.0					
Max Q Clear Time (g_c+I1), s	11.0	16.7		2.2	15.9		18.1					
Green Ext Time (p_c), s	0.2	2.1		0.0	4.5		1.3					

Intersection Summary		
HCM 7th Control Delay, s/veh		25.3
HCM 7th LOS		C

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	92	771	377	425	689	89
Future Volume (veh/h)	92	771	377	425	689	89
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	100	0	410	462	749	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	129		452	1385	825	
Arrive On Green	0.08	0.00	0.27	0.80	0.47	0.00
Sat Flow, veh/h	1668	1485	1668	1737	1737	1485
Grp Volume(v), veh/h	100	0	410	462	749	0
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1737	1737	1485
Q Serve(g_s), s	5.2	0.0	20.8	6.4	34.9	0.0
Cycle Q Clear(g_c), s	5.2	0.0	20.8	6.4	34.9	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	129		452	1385	825	
V/C Ratio(X)	0.78		0.91	0.33	0.91	
Avail Cap(c_a), veh/h	771		638	1953	1200	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.7	0.0	30.9	2.5	21.2	0.0
Incr Delay (d2), s/veh	9.6	0.0	13.0	0.1	7.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	9.1	0.6	13.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	49.2	0.0	43.9	2.6	28.7	0.0
LnGrp LOS	D		D	A	C	
Approach Vol, veh/h	100			872	749	
Approach Delay, s/veh	49.2			22.0	28.7	
Approach LOS	D			C	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.3		11.3	28.2	48.1
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		98.5		40.5	33.5	60.5
Max Q Clear Time (g_c+I1), s		8.4		7.2	22.8	36.9
Green Ext Time (p_c), s		2.7		0.3	0.9	4.7

Intersection Summary	
HCM 7th Control Delay, s/veh	26.5
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	172	6	93	174	474	9	781	110	807	896	47
Future Volume (veh/h)	41	172	6	93	174	474	9	781	110	807	896	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	45	187	7	101	189	515	10	849	120	877	974	51
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	119	177	150	164	377	995	20	754	366	759	2110	1024
Arrive On Green	0.00	0.10	0.10	0.07	0.21	0.21	0.01	0.24	0.24	0.44	0.66	0.66
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	45	187	7	101	189	515	10	849	120	877	974	51
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	0.1	14.5	0.6	7.6	13.7	26.7	0.9	35.5	9.6	65.5	22.3	1.7
Cycle Q Clear(g_c), s	0.1	14.5	0.6	7.6	13.7	26.7	0.9	35.5	9.6	65.5	22.3	1.7
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	119	177	150	164	377	995	20	754	366	759	2110	1024
V/C Ratio(X)	0.38	1.06	0.05	0.62	0.50	0.52	0.51	1.13	0.33	1.15	0.46	0.05
Avail Cap(c_a), veh/h	234	177	150	164	377	995	58	754	366	759	2110	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	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.1	67.8	61.5	54.9	52.7	14.3	73.7	57.2	47.4	42.3	12.3	8.9
Incr Delay (d2), s/veh	2.0	84.4	0.1	6.8	1.0	0.5	18.6	73.0	0.5	84.3	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	10.7	0.2	3.6	6.3	8.7	0.5	21.4	3.7	44.0	7.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.0	152.1	61.6	61.6	53.7	14.8	92.4	130.2	47.9	126.6	12.5	8.9
LnGrp LOS	E	F	E	E	D	B	F	F	D	F	B	A
Approach Vol, veh/h		239			805			979			1902	
Approach Delay, s/veh		133.5			29.8			119.8			65.0	
Approach LOS		F			C			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	42.5	16.5	21.0	6.2	106.3	0.0	37.5
Change Period (Y+Rc), s	4.5	7.0	6.5	6.5	4.5	7.0	6.5	6.5
Max Green Setting (Gmax), s	5.5	35.5	10.0	14.5	5.0	96.0	10.0	14.5
Max Q Clear Time (g_c+I1), s	37.5	37.5	9.6	16.5	2.9	24.3	0.0	28.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	75.6
HCM 7th LOS	E



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	127	2	1	329	1045	408
Future Volume (veh/h)	127	2	1	329	1045	408
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	140	0	1	358	1136	443
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	193	86	96	1324	1191	1041
Arrive On Green	0.06	0.00	0.06	0.81	0.70	0.70
Sat Flow, veh/h	3337	1485	1668	1633	1699	1485
Grp Volume(v), veh/h	140	0	1	358	1136	443
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1633	1699	1485
Q Serve(g_s), s	3.6	0.0	0.0	4.6	52.3	11.0
Cycle Q Clear(g_c), s	3.6	0.0	0.0	4.6	52.3	11.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	193	86	96	1324	1191	1041
V/C Ratio(X)	0.73	0.00	0.01	0.27	0.95	0.43
Avail Cap(c_a), veh/h	193	86	96	1387	1257	1098
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	0.0	38.5	2.0	11.7	5.5
Incr Delay (d2), s/veh	12.9	0.0	0.0	0.1	15.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	0.3	16.0	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	53.0	0.0	38.5	2.1	27.0	5.8
LnGrp LOS	D		D	A	C	A
Approach Vol, veh/h	140			359	1579	
Approach Delay, s/veh	53.0			2.2	21.0	
Approach LOS	D			A	C	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	77.1		9.5	9.5	67.6
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	73.6		5.0	5.0	64.1
Max Q Clear Time (g_c+I1), s	6.6		5.6	2.0	54.3
Green Ext Time (p_c), s	2.0		0.0	0.0	6.4

Intersection Summary	
HCM 7th Control Delay, s/veh	19.9
HCM 7th 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												
Traffic Volume (veh/h)	277	411	352	54	143	275	110	0	17	91	0	86
Future Volume (veh/h)	277	411	352	54	143	275	110	0	17	91	0	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	301	447	429	59	155	299	120	0	18	99	0	93
Peak Hour Factor	0.92	0.92	0.82	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	597	608	552	336	437	397	327	0	298	392	0	298
Arrive On Green	0.16	0.37	0.37	0.06	0.27	0.27	0.19	0.00	0.19	0.19	0.00	0.19
Sat Flow, veh/h	1668	1633	1485	1668	1633	1485	1221	0	1585	1306	0	1585
Grp Volume(v), veh/h	301	447	429	59	155	299	120	0	18	99	0	93
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	1633	1485	1221	0	1585	1306	0	1585
Q Serve(g_s), s	5.2	10.7	11.6	1.1	3.5	8.4	4.3	0.0	0.4	3.0	0.0	2.3
Cycle Q Clear(g_c), s	5.2	10.7	11.6	1.1	3.5	8.4	6.6	0.0	0.4	3.5	0.0	2.3
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	597	608	552	336	437	397	327	0	298	392	0	298
V/C Ratio(X)	0.50	0.74	0.78	0.18	0.35	0.75	0.37	0.00	0.06	0.25	0.00	0.31
Avail Cap(c_a), veh/h	717	952	866	424	750	682	402	0	396	473	0	396
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	8.1	12.3	12.6	11.1	13.4	15.2	18.7	0.0	15.1	16.5	0.0	15.9
Incr Delay (d2), s/veh	0.7	1.8	2.4	0.2	0.5	2.9	0.7	0.0	0.1	0.3	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(50%),veh/ln	1.1	2.7	2.7	0.3	0.9	2.3	1.0	0.0	0.1	0.7	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.8	14.0	14.9	11.4	13.9	18.1	19.4	0.0	15.2	16.9	0.0	16.5
LnGrp LOS	A	B	B	B	B	B	B		B	B		B
Approach Vol, veh/h		1177			513			138			192	
Approach Delay, s/veh		13.0			16.1			18.8			16.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	23.8		14.2	12.1	19.0		14.2				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	26.4		11.3	10.6	20.8		11.3				
Max Q Clear Time (g_c+I1), s	13.1	13.6		5.5	7.2	10.4		8.6				
Green Ext Time (p_c), s	0.0	3.3		0.3	0.3	1.3		0.1				

Intersection Summary		
HCM 7th Control Delay, s/veh	14.5	
HCM 7th LOS	B	

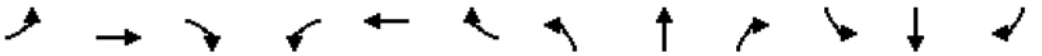
Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	27	451	56	86	442
Future Vol, veh/h	24	27	451	56	86	442
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	18	10	10	18
Mvmt Flow	26	29	490	61	93	480

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1189	522	0	0	552	0
Stage 1	522	-	-	-	-	-
Stage 2	667	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	200	539	-	-	979	-
Stage 1	580	-	-	-	-	-
Stage 2	495	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	181	539	-	-	978	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	579	-	-	-	-	-
Stage 2	448	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.42	0	1.48
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	401	978	-
HCM Lane V/C Ratio	-	-	0.138	0.096	-
HCM Ctrl Dly (s/v)	-	-	15.4	9.1	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	0	131	0	0	0	195	546	0	0	451	136
Future Volume (veh/h)	42	0	131	0	0	0	195	546	0	0	451	136
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1633	1752	1752	1633	1752
Adj Flow Rate, veh/h	46	0	142	0	0	0	212	593	0	0	490	148
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, %	10	10	10	10	10	10	10	18	10	10	18	10
Cap, veh/h	371	0	185	163	218	0	422	964	0	442	616	560
Arrive On Green	0.12	0.00	0.12	0.00	0.00	0.00	0.11	0.59	0.00	0.00	0.38	0.38
Sat Flow, veh/h	1668	0	1485	1167	1752	0	1668	1633	0	1668	1633	1485
Grp Volume(v), veh/h	46	0	142	0	0	0	212	593	0	0	490	148
Grp Sat Flow(s),veh/h/ln	1668	0	1485	1167	1752	0	1668	1633	0	1668	1633	1485
Q Serve(g_s), s	1.1	0.0	4.1	0.0	0.0	0.0	3.0	10.3	0.0	0.0	11.8	3.0
Cycle Q Clear(g_c), s	1.1	0.0	4.1	0.0	0.0	0.0	3.0	10.3	0.0	0.0	11.8	3.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	0	185	163	218	0	422	964	0	442	616	560
V/C Ratio(X)	0.12	0.00	0.77	0.00	0.00	0.00	0.50	0.62	0.00	0.00	0.80	0.26
Avail Cap(c_a), veh/h	401	0	212	184	250	0	468	1161	0	627	1128	1025
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	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	0.0	18.7	0.0	0.0	0.0	8.6	5.8	0.0	0.0	12.2	9.5
Incr Delay (d2), s/veh	0.1	0.0	13.8	0.0	0.0	0.0	0.9	0.7	0.0	0.0	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(50%),veh/ln	0.4	0.0	1.8	0.0	0.0	0.0	0.5	1.1	0.0	0.0	2.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.6	0.0	32.5	0.0	0.0	0.0	9.5	6.5	0.0	0.0	14.6	9.8
LnGrp LOS	B		C				A	A			B	A
Approach Vol, veh/h		188			0			805			638	
Approach Delay, s/veh		28.8			0.0			7.3			13.5	
Approach LOS		C						A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	33.0		11.2	9.4	23.6		11.2				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.0	31.4		6.3	5.9	30.5		6.3				
Max Q Clear Time (g_c+I1), s	0.0	12.3		6.1	5.0	13.8		0.0				
Green Ext Time (p_c), s	0.0	3.2		0.0	0.1	2.9		0.0				

Intersection Summary			
HCM 7th Control Delay, s/veh		12.2	
HCM 7th LOS		B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	28	301	99	7	8	514	807	87	42	339	100
Future Volume (veh/h)	176	28	301	99	7	8	514	807	87	42	339	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	191	30	327	108	8	9	559	877	95	46	368	109
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	351	367	621	276	158	177	676	943	799	66	1229	548
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.54	0.54	0.04	0.37	0.37
Sat Flow, veh/h	1307	1752	1485	959	753	847	3237	1752	1485	1668	3328	1485
Grp Volume(v), veh/h	191	30	327	108	0	17	559	877	95	46	368	109
Grp Sat Flow(s),veh/h/ln	1307	1752	1485	959	0	1599	1618	1752	1485	1668	1664	1485
Q Serve(g_s), s	11.1	1.1	13.4	8.3	0.0	0.7	13.5	37.7	2.6	2.2	6.4	4.1
Cycle Q Clear(g_c), s	11.8	1.1	13.4	9.4	0.0	0.7	13.5	37.7	2.6	2.2	6.4	4.1
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	351	367	621	276	0	335	676	943	799	66	1229	548
V/C Ratio(X)	0.54	0.08	0.53	0.39	0.00	0.05	0.83	0.93	0.12	0.69	0.30	0.20
Avail Cap(c_a), veh/h	606	709	911	463	0	647	1060	1068	905	102	1229	548
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	30.5	25.9	17.7	29.7	0.0	25.7	30.8	17.4	9.3	38.7	18.2	17.5
Incr Delay (d2), s/veh	1.3	0.1	0.7	0.9	0.0	0.1	3.2	12.9	0.1	12.3	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(50%),veh/ln	8.3	0.4	4.0	1.8	0.0	0.2	5.0	14.7	0.7	1.1	2.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.8	26.0	18.4	30.6	0.0	25.8	34.0	30.3	9.3	50.9	18.4	17.7
LnGrp LOS	C	C	B	C		C	C	C	A	D	B	B
Approach Vol, veh/h		548			125			1531			523	
Approach Delay, s/veh		23.5			30.0			30.3			21.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	50.8		22.8	21.7	37.0		22.8				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	49.7		33.0	26.7	28.0		33.0				
Max Q Clear Time (g_c+I1), s	4.2	39.7		15.4	15.5	8.4		11.4				
Green Ext Time (p_c), s	0.0	4.2		1.7	1.6	2.3		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.2
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	80	105	75	32	32	287	1470	193	80	613	80
Future Volume (veh/h)	32	80	105	75	32	32	287	1470	193	80	613	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	35	87	114	82	35	35	312	1598	210	87	666	87
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	262	264	224	214	264	224	563	1894	880	236	1702	791
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.11	0.57	0.57	0.06	0.51	0.51
Sat Flow, veh/h	1299	1826	1547	1153	1826	1547	1739	3328	1547	1739	3328	1547
Grp Volume(v), veh/h	35	87	114	82	35	35	312	1598	210	87	666	87
Grp Sat Flow(s),veh/h/ln	1299	1826	1547	1153	1826	1547	1739	1664	1547	1739	1664	1547
Q Serve(g_s), s	1.8	3.2	5.1	5.2	1.3	1.5	5.8	29.9	5.1	1.7	9.2	2.2
Cycle Q Clear(g_c), s	3.1	3.2	5.1	8.4	1.3	1.5	5.8	29.9	5.1	1.7	9.2	2.2
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	262	264	224	214	264	224	563	1894	880	236	1702	791
V/C Ratio(X)	0.13	0.33	0.51	0.38	0.13	0.16	0.55	0.84	0.24	0.37	0.39	0.11
Avail Cap(c_a), veh/h	645	803	680	554	803	680	855	2203	1024	255	1702	791
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	29.3	28.8	29.6	32.6	28.0	28.1	7.1	13.4	8.1	14.0	11.2	9.5
Incr Delay (d2), s/veh	0.2	0.7	1.8	1.1	0.2	0.3	0.9	2.8	0.1	1.0	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(50%),veh/ln	0.5	1.4	1.9	1.4	0.5	0.5	1.4	8.4	1.2	0.5	2.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.6	29.5	31.4	33.7	28.2	28.4	8.0	16.2	8.2	15.0	11.3	9.6
LnGrp LOS	C	C	C	C	C	C	A	B	A	B	B	A
Approach Vol, veh/h		236			152			2120			840	
Approach Delay, s/veh		30.5			31.2			14.2			11.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	49.6		16.6	13.2	45.3		16.6				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	49.7		33.0	21.1	33.6		33.0				
Max Q Clear Time (g_c+I1), s	3.7	31.9		7.1	7.8	11.2		10.4				
Green Ext Time (p_c), s	0.0	10.8		0.9	0.7	4.2		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	15.5
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	119	120	63	129	233	304	1626	129	108	578	113
Future Volume (veh/h)	250	119	120	63	129	233	304	1626	129	108	578	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	272	129	130	68	140	253	330	1767	140	117	628	123
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, %	8	8	8	8	8	8	7	7	7	5	5	5
Cap, veh/h	255	350	611	267	323	387	358	1849	888	132	1418	720
Arrive On Green	0.06	0.20	0.20	0.04	0.18	0.18	0.21	0.54	0.54	0.08	0.41	0.41
Sat Flow, veh/h	1697	1781	1503	1697	1781	1502	1711	3413	1516	1739	3469	1539
Grp Volume(v), veh/h	272	129	130	68	140	253	330	1767	140	117	628	123
Grp Sat Flow(s),veh/h/ln	1697	1781	1503	1697	1781	1502	1711	1706	1516	1739	1735	1539
Q Serve(g_s), s	8.2	8.8	7.9	4.5	9.8	21.1	26.5	69.1	5.9	9.4	18.4	6.5
Cycle Q Clear(g_c), s	8.2	8.8	7.9	4.5	9.8	21.1	26.5	69.1	5.9	9.4	18.4	6.5
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	255	350	611	267	323	387	358	1849	888	132	1418	720
V/C Ratio(X)	1.07	0.37	0.21	0.25	0.43	0.65	0.92	0.96	0.16	0.88	0.44	0.17
Avail Cap(c_a), veh/h	255	458	702	267	431	479	524	1874	898	132	1418	720
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	55.5	48.9	27.2	44.2	51.1	46.6	54.4	30.6	13.3	64.3	30.0	21.7
Incr Delay (d2), s/veh	74.9	0.6	0.2	0.5	0.9	2.3	16.9	11.9	0.1	45.1	0.2	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(50%),veh/ln	10.7	4.1	2.9	2.0	4.5	8.1	12.9	29.7	2.0	5.8	7.6	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	130.4	49.6	27.3	44.7	52.0	48.8	71.3	42.5	13.4	109.4	30.2	21.8
LnGrp LOS	F	D	C	D	D	D	E	D	B	F	C	C
Approach Vol, veh/h		531			461			2237			868	
Approach Delay, s/veh		85.5			49.2			44.9			39.7	
Approach LOS		F			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	81.6	10.6	33.1	33.9	62.9	12.7	30.9
Change Period (Y+Rc), s	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5
Max Green Setting (Gmax), s	10.7	77.1	6.1	36.1	43.0	44.8	8.2	34.0
Max Q Clear Time (g_c+I1), s	11.4	71.1	6.5	10.8	28.5	20.4	10.2	23.1
Green Ext Time (p_c), s	0.0	5.0	0.0	1.2	0.8	4.6	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	49.5
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	29	1	0	4	28	506	3	0	959	9
Future Vol, veh/h	10	0	29	1	0	4	28	506	3	0	959	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	400	-	400	395	-	510
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	35	10	10	35	10
Mvmt Flow	11	0	32	1	0	4	30	550	3	0	1042	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1378	1657	521	1132	1653	275	1042	0	0	553	0	0
Stage 1	1042	1042	-	611	611	-	-	-	-	-	-	-
Stage 2	336	614	-	521	1042	-	-	-	-	-	-	-
Critical Hdwy	7.7	6.7	7.1	7.7	6.7	7.1	4.3	-	-	4.3	-	-
Critical Hdwy Stg 1	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.6	4.1	3.4	3.6	4.1	3.4	2.3	-	-	2.3	-	-
Pot Cap-1 Maneuver	97	89	480	148	90	699	617	-	-	960	-	-
Stage 1	231	288	-	429	463	-	-	-	-	-	-	-
Stage 2	630	462	-	486	288	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	91	85	480	132	85	699	617	-	-	960	-	-
Mov Cap-2 Maneuver	212	240	-	305	222	-	-	-	-	-	-	-
Stage 1	231	288	-	408	440	-	-	-	-	-	-	-
Stage 2	595	439	-	454	288	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	16.25	11.55	0.58	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	617	-	-	362	555	960	-	-
HCM Lane V/C Ratio	0.049	-	-	0.117	0.01	-	-	-
HCM Ctrl Dly (s/v)	11.1	-	-	16.2	11.5	0	-	-
HCM Lane LOS	B	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.4	0	0	-	-

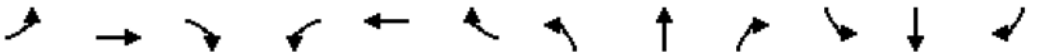
Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	113	877	6	3	508	28	14	5	2	17	3	42
Future Vol, veh/h	113	877	6	3	508	28	14	5	2	17	3	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	11	35	11	11	35	11	11	11	11	11	11	11
Mvmt Flow	118	914	6	3	529	29	15	5	2	18	3	44

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	558	0	0	920	0	0	1421	1714	457	1230	1691	265
Stage 1	-	-	-	-	-	-	1149	1149	-	535	535	-
Stage 2	-	-	-	-	-	-	272	565	-	695	1155	-
Critical Hdwy	4.32	-	-	4.32	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.31	-	-	2.31	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	949	-	-	684	-	-	89	81	527	124	84	707
Stage 1	-	-	-	-	-	-	197	253	-	474	500	-
Stage 2	-	-	-	-	-	-	685	485	-	379	252	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	949	-	-	684	-	-	72	71	527	105	73	707
Mov Cap-2 Maneuver	-	-	-	-	-	-	160	189	-	267	195	-
Stage 1	-	-	-	-	-	-	172	222	-	472	498	-
Stage 2	-	-	-	-	-	-	636	482	-	322	220	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.06	0.06	27.82	13.67
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	167	527	949	-	-	684	-	-	253	707
HCM Lane V/C Ratio	0.119	0.004	0.124	-	-	0.005	-	-	0.082	0.062
HCM Ctrl Dly (s/v)	29.5	11.9	9.3	-	-	10.3	-	-	20.5	10.4
HCM Lane LOS	D	B	A	-	-	B	-	-	C	B
HCM 95th %tile Q(veh)	0.4	0	0.4	-	-	0	-	-	0.3	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	352	494	59	13	353	243	71	157	18	130	109	126
Future Volume (veh/h)	352	494	59	13	353	243	71	157	18	130	109	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	374	526	63	14	376	259	76	167	19	138	116	134
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	402	1140	136	64	418	284	173	271	31	192	327	631
Arrive On Green	0.24	0.48	0.48	0.04	0.28	0.28	0.10	0.18	0.18	0.11	0.19	0.19
Sat Flow, veh/h	1668	2360	282	1668	1491	1012	1668	1541	175	1668	1752	1461
Grp Volume(v), veh/h	374	292	297	14	330	305	76	0	186	138	116	134
Grp Sat Flow(s),veh/h/ln	1668	1312	1329	1668	1312	1191	1668	0	1717	1668	1752	1461
Q Serve(g_s), s	22.4	15.1	15.2	0.8	24.8	25.3	4.4	0.0	10.3	8.2	5.9	5.9
Cycle Q Clear(g_c), s	22.4	15.1	15.2	0.8	24.8	25.3	4.4	0.0	10.3	8.2	5.9	5.9
Prop In Lane	1.00		0.21	1.00		0.85	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	402	634	642	64	368	334	173	0	302	192	327	631
V/C Ratio(X)	0.93	0.46	0.46	0.22	0.90	0.91	0.44	0.00	0.62	0.72	0.35	0.21
Avail Cap(c_a), veh/h	429	634	642	196	391	355	196	0	537	196	548	815
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	1.00	1.00
Uniform Delay (d), s/veh	38.0	17.6	17.6	47.7	35.4	35.6	43.1	0.0	39.0	43.7	36.2	18.4
Incr Delay (d2), s/veh	25.9	0.5	0.5	1.7	21.9	26.2	1.7	0.0	2.1	11.9	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(50%),veh/ln	11.8	4.4	4.5	0.4	9.9	9.5	1.9	0.0	4.5	4.0	2.6	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.9	18.1	18.1	49.4	57.3	61.8	44.8	0.0	41.0	55.5	36.9	18.6
LnGrp LOS	E	B	B	D	E	E	D		D	E	D	B
Approach Vol, veh/h		963			649			262			388	
Approach Delay, s/veh		35.9			59.2			42.1			37.2	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	54.6	15.3	23.8	29.4	33.8	16.5	22.7
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.0	44.8	12.0	32.0	26.3	30.5	12.0	32.0
Max Q Clear Time (g_c+I1), s	2.8	17.2	6.4	7.9	24.4	27.3	10.2	12.3
Green Ext Time (p_c), s	0.0	3.9	0.1	0.3	0.3	1.2	0.1	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	43.5
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	3	3	492	6	193	3	526	213	1
Future Volume (veh/h)	1	0	0	3	3	492	6	193	3	526	213	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1381	1752	1381	1381	1752
Adj Flow Rate, veh/h	1	0	0	3	3	0	6	208	3	566	229	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, %	10	10	10	10	10	10	10	35	10	35	35	10
Cap, veh/h	5	19	0	14	28		27	512	290	691	1181	668
Arrive On Green	0.00	0.00	0.00	0.01	0.02	0.00	0.02	0.20	0.20	0.27	0.45	0.45
Sat Flow, veh/h	1668	1752	0	1668	1752	1485	1668	2624	1485	2552	2624	1485
Grp Volume(v), veh/h	1	0	0	3	3	0	6	208	3	566	229	1
Grp Sat Flow(s),veh/h/ln	1668	1752	0	1668	1752	1485	1668	1312	1485	1276	1312	1485
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.1	0.0	0.2	3.5	0.1	10.6	2.7	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.1	0.1	0.0	0.2	3.5	0.1	10.6	2.7	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	19	0	14	28		27	512	290	691	1181	668
V/C Ratio(X)	0.22	0.00	0.00	0.22	0.11		0.23	0.41	0.01	0.82	0.19	0.00
Avail Cap(c_a), veh/h	326	499	0	326	499		326	615	348	961	1181	668
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	0.0	0.0	25.2	24.9	0.0	24.9	18.0	16.6	17.5	8.5	7.8
Incr Delay (d2), s/veh	22.1	0.0	0.0	7.9	1.7	0.0	4.2	0.5	0.0	4.0	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(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.9	0.0	2.7	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.6	0.0	0.0	33.2	26.5	0.0	29.1	18.5	16.6	21.5	8.6	7.8
LnGrp LOS	D			C	C		C	B	B	C	A	A
Approach Vol, veh/h		1			6			217			796	
Approach Delay, s/veh		47.6			29.8			18.8			17.7	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	16.6	6.1	8.9	6.5	29.7	5.8	9.2
Change Period (Y+Rc), s	5.7	* 6.6	5.7	8.4	5.7	6.6	5.7	8.4
Max Green Setting (Gmax), s	3.9	* 12	10.0	14.6	10.0	19.0	10.0	14.6
Max Q Clear Time (g_c+I1), s	2.6	5.5	2.1	0.0	2.2	4.7	2.0	2.1
Green Ext Time (p_c), s	1.2	0.5	0.0	0.0	0.0	1.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	18.1
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	501	0	24	459	378	1	90	36	121	33	1
Future Volume (veh/h)	0	501	0	24	459	378	1	90	36	121	33	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	0	545	0	26	499	411	1	98	39	132	36	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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	4	750	424	51	1097	621	79	445	459	139	21	459
Arrive On Green	0.00	0.29	0.00	0.03	0.42	0.42	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	0	1440	1485	0	67	1485
Grp Volume(v), veh/h	0	545	0	26	499	411	99	0	39	168	0	1
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1440	0	1485	67	0	1485
Q Serve(g_s), s	0.0	8.7	0.0	0.7	6.3	10.3	0.0	0.0	0.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.7	0.0	0.7	6.3	10.3	14.3	0.0	0.9	14.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.01		1.00	0.79		1.00
Lane Grp Cap(c), veh/h	4	750	424	51	1097	621	524	0	459	160	0	459
V/C Ratio(X)	0.00	0.73	0.00	0.51	0.45	0.66	0.19	0.00	0.08	1.05	0.00	0.00
Avail Cap(c_a), veh/h	180	1311	742	191	1328	751	524	0	459	160	0	459
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	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	14.9	0.0	22.1	9.7	10.8	11.8	0.0	11.3	21.3	0.0	11.0
Incr Delay (d2), s/veh	0.0	1.4	0.0	7.6	0.3	1.6	0.2	0.0	0.1	85.6	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(50%),veh/ln	0.0	1.9	0.0	0.3	1.1	2.2	0.5	0.0	0.2	5.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	16.2	0.0	29.6	10.0	12.5	11.9	0.0	11.4	106.9	0.0	11.0
LnGrp LOS		B		C	A	B	B		B	F		B
Approach Vol, veh/h		545			936			138			169	
Approach Delay, s/veh		16.2			11.6			11.8			106.4	
Approach LOS		B			B			B			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	20.1		20.0	0.0	26.2		20.0				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.3	23.1		14.3	5.0	23.4		14.3				
Max Q Clear Time (g_c+I1), s	2.7	10.7		16.3	0.0	12.3		16.3				
Green Ext Time (p_c), s	0.0	2.6		0.0	0.0	3.4		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	22.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	821	1	35	1	17	12	155	1049	5	6	714	20
Future Volume (veh/h)	821	1	35	1	17	12	155	1049	5	6	714	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	893	0	38	1	18	13	168	1140	5	7	776	22
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	975	0	434	70	74	62	189	1756	8	29	1392	39
Arrive On Green	0.28	0.00	0.28	0.04	0.04	0.04	0.22	1.00	1.00	0.02	0.41	0.41
Sat Flow, veh/h	3450	0	1535	1725	1811	1535	1725	3513	15	1725	3417	97
Grp Volume(v), veh/h	893	0	38	1	18	13	168	558	587	7	391	407
Grp Sat Flow(s),veh/h/ln	1725	0	1535	1725	1811	1535	1725	1721	1808	1725	1721	1794
Q Serve(g_s), s	35.1	0.0	2.5	0.1	1.3	1.1	13.2	0.1	0.1	0.6	24.4	24.4
Cycle Q Clear(g_c), s	35.1	0.0	2.5	0.1	1.3	1.1	13.2	0.1	0.1	0.6	24.4	24.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		0.05
Lane Grp Cap(c), veh/h	975	0	434	70	74	62	189	860	904	29	701	731
V/C Ratio(X)	0.92	0.00	0.09	0.01	0.24	0.21	0.89	0.65	0.65	0.24	0.56	0.56
Avail Cap(c_a), veh/h	1131	0	503	99	103	88	228	860	904	123	701	731
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	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	0.0	36.9	64.5	65.1	65.0	53.9	0.0	0.0	67.9	31.8	31.8
Incr Delay (d2), s/veh	10.6	0.0	0.1	0.1	1.7	1.6	3.8	0.3	0.3	4.1	3.2	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(50%),veh/ln	15.8	0.0	0.9	0.0	0.6	0.5	5.1	0.1	0.1	0.3	10.2	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.2	0.0	37.0	64.5	66.8	66.6	57.6	0.4	0.4	72.0	35.0	34.9
LnGrp LOS	E		D	E	E	E	E	A	A	E	C	C
Approach Vol, veh/h		931			32			1313			805	
Approach Delay, s/veh		58.3			66.6			7.7			35.3	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	77.5		44.7	20.0	64.5		10.8				
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1				
Max Green Setting (Gmax), s	10.0	53.7		45.9	18.5	45.2		8.0				
Max Q Clear Time (g_c+I1), s	2.6	2.1		37.1	15.2	26.4		3.3				
Green Ext Time (p_c), s	0.0	7.9		2.5	0.1	4.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	30.8
HCM 7th 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												
Traffic Volume (veh/h)	12	6	69	14	1	1	29	1190	25	2	417	330
Future Volume (veh/h)	12	6	69	14	1	1	29	1190	25	2	417	330
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	13	7	75	15	1	1	32	1293	27	2	453	359
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	65	35	88	93	6	88	99	1211	1026	99	1211	1026
Arrive On Green	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.67	0.67	0.11	1.00	1.00
Sat Flow, veh/h	1140	614	1535	1622	108	1535	1725	1811	1535	1725	1811	1535
Grp Volume(v), veh/h	20	0	75	16	0	1	32	1293	27	2	453	359
Grp Sat Flow(s),veh/h/ln	1754	0	1535	1730	0	1535	1725	1811	1535	1725	1811	1535
Q Serve(g_s), s	1.5	0.0	6.8	1.2	0.0	0.1	2.5	93.6	0.8	0.1	0.0	0.0
Cycle Q Clear(g_c), s	1.5	0.0	6.8	1.2	0.0	0.1	2.5	93.6	0.8	0.1	0.0	0.0
Prop In Lane	0.65		1.00	0.94		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	100	0	88	99	0	88	99	1211	1026	99	1211	1026
V/C Ratio(X)	0.20	0.00	0.86	0.16	0.00	0.01	0.32	1.07	0.03	0.02	0.37	0.35
Avail Cap(c_a), veh/h	100	0	88	99	0	88	99	1211	1026	99	1211	1026
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	1.00	1.00	1.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	62.9	0.0	65.4	62.8	0.0	62.3	63.4	23.2	7.8	58.5	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	52.1	0.8	0.0	0.1	1.9	46.0	0.0	0.1	0.7	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(50%),veh/ln	0.7	0.0	3.8	0.5	0.0	0.0	1.1	47.9	0.3	0.1	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.9	0.0	117.5	63.6	0.0	62.3	65.3	69.2	7.9	58.6	0.7	0.8
LnGrp LOS	E		F	E		E	E	F	A	E	A	A
Approach Vol, veh/h		95			17			1352			814	
Approach Delay, s/veh		106.2			63.5			67.9			0.9	
Approach LOS		F			E			E			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.7	101.1		13.1	12.7	101.1		13.1
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1
Max Green Setting (Gmax), s	8.0	93.6		8.0	8.0	93.6		8.0
Max Q Clear Time (g_c+I1), s	2.1	95.6		8.8	4.5	2.0		3.2
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.9		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	45.5
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	174	20	0	246	438	5	2	2	135	9	68
Future Volume (veh/h)	31	174	20	0	246	438	5	2	2	135	9	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	34	189	22	0	267	476	5	2	2	154	0	74
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	411	1319	746	555	964	545	14	6	17	329	0	146
Arrive On Green	0.04	0.50	0.50	0.00	0.37	0.37	0.01	0.01	0.01	0.10	0.00	0.10
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	1208	483	1485	3337	0	1485
Grp Volume(v), veh/h	34	189	22	0	267	476	7	0	2	154	0	74
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1691	0	1485	1668	0	1485
Q Serve(g_s), s	0.6	1.9	0.4	0.0	3.5	14.4	0.2	0.0	0.1	2.1	0.0	2.3
Cycle Q Clear(g_c), s	0.6	1.9	0.4	0.0	3.5	14.4	0.2	0.0	0.1	2.1	0.0	2.3
Prop In Lane	1.00		1.00	1.00		1.00	0.71		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	411	1319	746	555	964	545	20	0	17	329	0	146
V/C Ratio(X)	0.08	0.14	0.03	0.00	0.28	0.87	0.35	0.00	0.11	0.47	0.00	0.51
Avail Cap(c_a), veh/h	520	1319	746	724	1113	630	175	0	154	421	0	187
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.9	6.4	6.1	0.0	10.8	14.2	23.7	0.0	23.6	20.6	0.0	20.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.2	11.6	10.2	0.0	2.9	1.0	0.0	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(50%),veh/ln	0.1	0.3	0.1	0.0	0.7	4.9	0.1	0.0	0.0	0.7	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.0	6.5	6.1	0.0	10.9	25.8	33.9	0.0	26.5	21.6	0.0	23.3
LnGrp LOS	A	A	A		B	C	C		C	C		C
Approach Vol, veh/h		245			743			9			228	
Approach Delay, s/veh		6.7			20.5			32.3			22.2	
Approach LOS		A			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	31.2		10.7	6.5	24.7		6.5				
Change Period (Y+Rc), s	4.7	6.9		5.9	4.7	6.9		5.9				
Max Green Setting (Gmax), s	5.3	20.5		6.1	5.0	20.5		5.0				
Max Q Clear Time (g_c+I1), s	10.0	3.9		4.3	2.6	16.4		2.2				
Green Ext Time (p_c), s	0.0	0.9		0.0	0.0	1.3		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.1
HCM 7th 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												
Traffic Volume (veh/h)	32	369	228	390	421	57	529	235	781	64	256	22
Future Volume (veh/h)	32	369	228	390	421	57	529	235	781	64	256	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	35	401	248	424	458	62	575	255	849	70	278	24
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	73	427	751	475	524	71	545	766	867	247	354	31
Arrive On Green	0.04	0.23	0.23	0.14	0.33	0.33	0.25	0.42	0.42	0.05	0.21	0.21
Sat Flow, veh/h	1739	1826	1547	3374	1574	213	1739	1826	1547	1739	1657	143
Grp Volume(v), veh/h	35	401	248	424	0	520	575	255	849	70	0	302
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1687	0	1788	1739	1826	1547	1739	0	1800
Q Serve(g_s), s	2.8	31.1	14.2	17.8	0.0	39.5	36.3	13.6	60.6	4.4	0.0	22.9
Cycle Q Clear(g_c), s	2.8	31.1	14.2	17.8	0.0	39.5	36.3	13.6	60.6	4.4	0.0	22.9
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	73	427	751	475	0	595	545	766	867	247	0	384
V/C Ratio(X)	0.48	0.94	0.33	0.89	0.00	0.87	1.06	0.33	0.98	0.28	0.00	0.79
Avail Cap(c_a), veh/h	96	462	780	530	0	642	545	766	867	253	0	411
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	0.00	1.00
Uniform Delay (d), s/veh	67.7	54.3	22.8	61.0	0.0	45.3	35.2	28.3	30.9	40.6	0.0	53.7
Incr Delay (d2), s/veh	4.9	26.4	0.3	16.3	0.0	12.2	54.0	0.3	25.4	0.6	0.0	9.2
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(50%),veh/ln	1.4	17.4	5.2	8.7	0.0	19.5	23.0	6.0	33.0	2.0	0.0	11.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	72.5	80.7	23.0	77.2	0.0	57.5	89.2	28.5	56.3	41.2	0.0	62.8
LnGrp LOS	E	F	C	E		E	F	C	E	D		E
Approach Vol, veh/h		684			944			1679			372	
Approach Delay, s/veh		59.4			66.4			63.4			58.8	
Approach LOS		E			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	40.2	42.0	37.2	10.7	54.4	12.2	67.0
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	22.3	36.5	36.3	* 33	8.0	* 52	8.0	60.6
Max Q Clear Time (g_c+I1), s	19.8	33.1	38.3	24.9	4.8	41.5	6.4	62.6
Green Ext Time (p_c), s	0.5	0.6	0.0	1.1	0.0	2.5	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	62.9
HCM 7th LOS	E

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	67	96	130	28	119	101	96	1447	48	112	742	26
Future Volume (veh/h)	67	96	130	28	119	101	96	1447	48	112	742	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	68	98	133	29	121	103	98	1477	49	114	757	27
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, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	154	227	329	101	172	146	298	1309	638	173	1344	655
Arrive On Green	0.09	0.13	0.13	0.06	0.10	0.10	0.09	0.43	0.43	0.10	0.44	0.44
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	3047	1485
Grp Volume(v), veh/h	68	98	133	29	121	103	98	1477	49	114	757	27
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1523	1485
Q Serve(g_s), s	3.9	5.3	7.8	1.7	6.8	6.9	2.9	43.8	2.0	6.7	18.8	1.1
Cycle Q Clear(g_c), s	3.9	5.3	7.8	1.7	6.8	6.9	2.9	43.8	2.0	6.7	18.8	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	154	227	329	101	172	146	298	1309	638	173	1344	655
V/C Ratio(X)	0.44	0.43	0.40	0.29	0.70	0.71	0.33	1.13	0.08	0.66	0.56	0.04
Avail Cap(c_a), veh/h	213	876	879	180	842	713	317	1309	638	180	1344	655
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	43.8	40.9	33.9	45.8	44.5	44.6	43.3	29.1	17.2	44.0	21.2	16.2
Incr Delay (d2), s/veh	2.0	1.3	0.8	1.5	5.2	6.2	0.6	68.1	0.1	8.1	0.5	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(50%),veh/ln	1.7	2.3	2.8	0.7	3.1	2.7	1.1	26.3	0.6	3.0	6.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.8	42.2	34.7	47.4	49.7	50.7	44.0	97.2	17.2	52.1	21.7	16.2
LnGrp LOS	D	D	C	D	D	D	D	F	B	D	C	B
Approach Vol, veh/h		299			253			1624			898	
Approach Delay, s/veh		39.7			49.9			91.5			25.4	
Approach LOS		D			D			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	52.2	11.9	21.6	15.1	53.4	15.1	18.4
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	10.6	43.8	11.0	51.0	10.0	44.8	13.0	49.0
Max Q Clear Time (g_c+I1), s	8.7	45.8	3.7	9.8	4.9	20.8	5.9	8.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.1	4.8	0.1	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	63.7
HCM 7th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	152	251	59	164	108	125	1170	53	86	1090	63
Future Volume (veh/h)	147	152	251	59	164	108	125	1170	53	86	1090	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	160	165	273	64	178	117	136	1272	58	93	1185	68
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	240	401	340	228	401	340	170	1608	73	119	1466	84
Arrive On Green	0.00	0.22	0.22	0.00	0.22	0.22	0.10	0.48	0.48	0.07	0.44	0.44
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3379	154	1739	3335	191
Grp Volume(v), veh/h	160	165	273	64	178	117	136	652	678	93	616	637
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1735	1798	1739	1735	1791
Q Serve(g_s), s	0.1	5.9	12.8	0.1	6.5	4.9	5.9	24.2	24.3	4.0	23.7	23.7
Cycle Q Clear(g_c), s	0.1	5.9	12.8	0.1	6.5	4.9	5.9	24.2	24.3	4.0	23.7	23.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		0.11
Lane Grp Cap(c), veh/h	240	401	340	228	401	340	170	826	856	119	763	788
V/C Ratio(X)	0.67	0.41	0.80	0.28	0.44	0.34	0.80	0.79	0.79	0.78	0.81	0.81
Avail Cap(c_a), veh/h	466	1031	874	453	1029	872	252	1129	1170	181	1048	1082
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	33.5	25.7	28.3	29.9	25.9	25.2	33.8	16.9	16.9	35.2	18.7	18.7
Incr Delay (d2), s/veh	3.2	0.7	4.4	0.7	0.8	0.6	10.4	2.7	2.6	11.6	3.4	3.3
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(50%),veh/ln	3.1	2.6	5.0	1.1	2.8	1.8	2.8	8.6	8.9	2.0	8.7	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.7	26.3	32.8	30.6	26.6	25.8	44.3	19.6	19.5	46.8	22.0	22.0
LnGrp LOS	D	C	C	C	C	C	D	B	B	D	C	C
Approach Vol, veh/h		598			359			1466			1346	
Approach Delay, s/veh		32.0			27.1			21.8			23.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	43.7	0.0	22.5	13.2	40.9	0.0	22.5
Change Period (Y+Rc), s	5.2	7.2	5.7	5.7	5.7	7.2	5.7	5.7
Max Green Setting (Gmax), s	8.6	49.9	10.0	43.3	11.1	46.3	10.1	43.2
Max Q Clear Time (g_c+I1), s	6.0	26.3	0.0	14.8	7.9	25.7	0.0	8.5
Green Ext Time (p_c), s	0.0	9.2	0.0	2.0	0.1	8.0	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	24.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	81	112	12	91	14	111	1783	16	15	1057	53
Future Volume (veh/h)	78	81	112	12	91	14	111	1783	16	15	1057	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	85	88	122	13	99	15	121	1938	0	16	1149	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	107	93	118	43	262	37	143	1920		66	1774	
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.09	0.61	0.00	0.04	0.56	0.00
Sat Flow, veh/h	380	475	603	79	1340	190	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	295	0	0	127	0	0	121	1938	0	16	1149	0
Grp Sat Flow(s),veh/h/ln	1458	0	0	1609	0	0	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	18.9	0.0	0.0	0.0	0.0	0.0	10.3	87.3	0.0	1.3	36.0	0.0
Cycle Q Clear(g_c), s	28.1	0.0	0.0	9.2	0.0	0.0	10.3	87.3	0.0	1.3	36.0	0.0
Prop In Lane	0.29		0.41	0.10		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	318	0	0	342	0	0	143	1920		66	1774	
V/C Ratio(X)	0.93	0.00	0.00	0.37	0.00	0.00	0.85	1.01		0.24	0.65	
Avail Cap(c_a), veh/h	318	0	0	342	0	0	229	1920		139	1774	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.2	0.0	0.0	50.2	0.0	0.0	64.7	28.2	0.0	66.9	21.7	0.0
Incr Delay (d2), s/veh	32.6	0.0	0.0	0.7	0.0	0.0	14.9	22.9	0.0	1.9	0.8	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(50%),veh/ln	18.7	0.0	0.0	4.1	0.0	0.0	4.8	34.6	0.0	0.6	12.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	90.8	0.0	0.0	50.9	0.0	0.0	79.6	51.0	0.0	68.8	22.6	0.0
LnGrp LOS	F			D			E	F		E	C	
Approach Vol, veh/h		295			127			2059			1165	
Approach Delay, s/veh		90.8			50.9			52.7			23.2	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2	4	5	6	8
Phs Duration (G+Y+Rc), s	11.4	95.7	36.6	18.0	89.0	36.6
Change Period (Y+Rc), s	5.7	8.4	8.5	5.7	8.4	8.5
Max Green Setting (Gmax), s	12.6	87.3	28.1	19.7	79.6	28.1
Max Q Clear Time (g_c+I1), s	13.3	89.3	30.1	12.3	38.0	11.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1	9.1	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	46.3
HCM 7th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	305	323	57	183	356	167	74	948	119	166	1033	416
Future Volume (veh/h)	305	323	57	183	356	167	74	948	119	166	1033	416
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	332	351	62	199	387	182	80	1030	129	180	1123	452
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	298	642	112	351	485	225	101	1186	529	206	1397	797
Arrive On Green	0.11	0.22	0.22	0.11	0.21	0.21	0.06	0.34	0.34	0.12	0.40	0.40
Sat Flow, veh/h	1739	2951	516	1739	2301	1067	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	332	205	208	199	290	279	80	1030	129	180	1123	452
Grp Sat Flow(s),veh/h/ln	1739	1735	1733	1739	1735	1634	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	13.1	12.2	12.4	10.3	18.4	18.8	5.3	32.3	7.0	11.8	33.2	23.2
Cycle Q Clear(g_c), s	13.1	12.2	12.4	10.3	18.4	18.8	5.3	32.3	7.0	11.8	33.2	23.2
Prop In Lane	1.00		0.30	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	298	378	377	351	366	344	101	1186	529	206	1397	797
V/C Ratio(X)	1.11	0.54	0.55	0.57	0.79	0.81	0.79	0.87	0.24	0.87	0.80	0.57
Avail Cap(c_a), veh/h	298	639	638	366	642	605	108	1186	529	211	1397	797
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	37.3	40.3	40.4	31.4	43.5	43.6	54.0	35.8	27.5	50.3	30.7	19.3
Incr Delay (d2), s/veh	86.5	1.2	1.3	1.9	3.9	4.5	30.9	8.8	1.1	30.0	5.0	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(50%),veh/ln	9.6	5.3	5.4	4.5	8.3	8.0	3.2	14.9	2.7	6.9	14.6	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	123.8	41.5	41.7	33.2	47.4	48.2	84.9	44.6	28.6	80.3	35.7	22.2
LnGrp LOS	F	D	D	C	D	D	F	D	C	F	D	C
Approach Vol, veh/h		745			768			1239			1755	
Approach Delay, s/veh		78.2			44.0			45.5			36.8	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	46.9	18.0	31.8	12.4	54.0	18.8	31.0
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	14.1	39.7	13.3	42.8	7.2	46.6	13.1	43.0
Max Q Clear Time (g_c+I1), s	13.8	34.3	12.3	14.4	7.3	35.2	15.1	20.8
Green Ext Time (p_c), s	0.0	3.3	0.1	2.6	0.0	7.1	0.0	3.6

Intersection Summary	
HCM 7th Control Delay, s/veh	47.3
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	1	254	6	2	2	382	1760	2	1	1084	74
Future Volume (veh/h)	135	1	254	6	2	2	382	1760	2	1	1084	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	147	1	276	7	2	2	415	1913	2	1	1178	80
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	318	2	509	31	9	9	487	1873	2	5	1361	640
Arrive On Green	0.19	0.19	0.19	0.03	0.03	0.03	0.15	0.58	0.58	0.00	0.43	0.43
Sat Flow, veh/h	1658	11	1485	1047	299	299	3237	3239	3	1668	3159	1485
Grp Volume(v), veh/h	148	0	276	11	0	0	415	933	982	1	1178	80
Grp Sat Flow(s),veh/h/ln	1669	0	1485	1646	0	0	1618	1580	1662	1668	1580	1485
Q Serve(g_s), s	7.2	0.0	13.7	0.6	0.0	0.0	11.4	52.8	52.8	0.1	30.9	3.0
Cycle Q Clear(g_c), s	7.2	0.0	13.7	0.6	0.0	0.0	11.4	52.8	52.8	0.1	30.9	3.0
Prop In Lane	0.99		1.00	0.64		0.18	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	320	0	509	48	0	0	487	914	961	5	1361	640
V/C Ratio(X)	0.46	0.00	0.54	0.23	0.00	0.00	0.85	1.02	1.02	0.20	0.87	0.13
Avail Cap(c_a), veh/h	951	0	1070	234	0	0	550	914	961	238	1610	757
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	0.0	24.2	43.3	0.0	0.0	37.8	19.2	19.2	45.4	23.6	15.6
Incr Delay (d2), s/veh	1.0	0.0	0.9	2.4	0.0	0.0	11.2	35.2	34.5	18.2	4.6	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(50%),veh/ln	2.9	0.0	4.6	0.3	0.0	0.0	4.9	23.4	24.4	0.0	10.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.7	0.0	25.1	45.6	0.0	0.0	48.9	54.4	53.8	63.6	28.1	15.7
LnGrp LOS	C		C	D			D	F	F	E	C	B
Approach Vol, veh/h		424			11			2330			1259	
Approach Delay, s/veh		28.1			45.6			53.2			27.4	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.8	57.3		22.0	18.2	43.8		7.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	13.6	49.0		52.0	15.5	46.5		13.0				
Max Q Clear Time (g_c+I1), s	12.1	54.8		15.7	13.4	32.9		2.6				
Green Ext Time (p_c), s	0.0	0.0		1.8	0.3	6.4		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	42.4
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	283	126	143	304	478	61	864	100	327	840	74
Future Volume (veh/h)	121	283	126	143	304	478	61	864	100	327	840	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	132	308	137	155	330	0	66	939	109	355	913	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	162	411	179	187	655		84	1079	125	427	1504	
Arrive On Green	0.09	0.17	0.17	0.11	0.19	0.00	0.05	0.34	0.34	0.13	0.43	0.00
Sat Flow, veh/h	1739	2353	1024	1739	3469	1547	1739	3132	363	3374	3469	1547
Grp Volume(v), veh/h	132	225	220	155	330	0	66	520	528	355	913	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1642	1739	1735	1547	1739	1735	1760	1687	1735	1547
Q Serve(g_s), s	6.7	11.1	11.5	7.9	7.7	0.0	3.4	25.4	25.4	9.3	18.3	0.0
Cycle Q Clear(g_c), s	6.7	11.1	11.5	7.9	7.7	0.0	3.4	25.4	25.4	9.3	18.3	0.0
Prop In Lane	1.00		0.62	1.00		1.00	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	162	303	287	187	655		84	598	606	427	1504	
V/C Ratio(X)	0.81	0.74	0.77	0.83	0.50		0.78	0.87	0.87	0.83	0.61	
Avail Cap(c_a), veh/h	183	576	545	206	1213		135	666	676	459	1574	
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.2	35.4	35.5	39.5	32.8	0.0	42.5	27.7	27.7	38.5	19.7	0.0
Incr Delay (d2), s/veh	21.7	3.6	4.3	22.1	0.6	0.0	14.6	11.1	11.0	11.6	0.6	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(50%),veh/ln	3.7	4.8	4.7	4.4	3.2	0.0	1.8	11.8	11.9	4.4	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.8	39.0	39.8	61.6	33.4	0.0	57.1	38.9	38.7	50.2	20.3	0.0
LnGrp LOS	E	D	D	E	C		E	D	D	D	C	
Approach Vol, veh/h		577			485			1114			1268	
Approach Delay, s/veh		44.5			42.5			39.9			28.7	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	45.3	13.1	22.9	17.1	37.2	14.4	21.6
Change Period (Y+Rc), s	4.7	6.1	4.7	* 5.8	5.7	6.1	4.7	5.8
Max Green Setting (Gmax), s	7.0	41.0	9.5	* 32	12.3	34.7	10.7	30.0
Max Q Clear Time (g_c+I1), s	5.4	20.3	8.7	9.7	11.3	27.4	9.9	13.5
Green Ext Time (p_c), s	0.0	6.4	0.0	1.9	0.1	3.8	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	36.9
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	178	78	93	340	128	156	1756	103	112	1046	155
Future Volume (veh/h)	228	178	78	93	340	128	156	1756	103	112	1046	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	248	193	85	101	370	139	170	1909	112	122	1137	168
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	277	572	243	170	444	164	135	1091	513	135	1091	513
Arrive On Green	0.17	0.25	0.25	0.10	0.19	0.19	0.08	0.35	0.35	0.08	0.35	0.35
Sat Flow, veh/h	1668	2277	966	1668	2377	880	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	248	139	139	101	257	252	170	1909	112	122	1137	168
Grp Sat Flow(s),veh/h/ln	1668	1664	1578	1668	1664	1593	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	18.0	8.4	8.9	7.2	18.4	18.9	10.0	42.7	6.6	9.0	42.7	10.3
Cycle Q Clear(g_c), s	18.0	8.4	8.9	7.2	18.4	18.9	10.0	42.7	6.6	9.0	42.7	10.3
Prop In Lane	1.00		0.61	1.00		0.55	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	418	396	170	311	298	135	1091	513	135	1091	513
V/C Ratio(X)	0.89	0.33	0.35	0.59	0.83	0.85	1.26	1.75	0.22	0.90	1.04	0.33
Avail Cap(c_a), veh/h	471	767	727	175	472	452	135	1091	513	135	1091	513
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	50.5	37.8	38.0	53.1	48.4	48.6	56.8	40.5	28.7	56.4	40.5	29.9
Incr Delay (d2), s/veh	11.4	0.5	0.5	5.1	7.3	8.9	163.3	341.2	0.2	49.7	38.9	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(50%),veh/ln	8.0	3.3	3.4	3.1	7.9	7.9	10.2	67.1	2.3	5.5	21.3	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.9	38.3	38.5	58.1	55.7	57.5	220.1	381.7	28.9	106.1	79.4	30.3
LnGrp LOS	E	D	D	E	E	E	F	F	C	F	F	C
Approach Vol, veh/h		526			610			2191			1427	
Approach Delay, s/veh		49.5			56.8			351.1			75.9	
Approach LOS		D			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	51.1	18.3	38.6	15.7	51.1	26.3	30.6
Change Period (Y+Rc), s	5.7	8.4	5.7	7.5	5.7	8.4	5.7	7.5
Max Green Setting (Gmax), s	10.0	42.7	13.0	57.0	10.0	42.7	34.9	35.1
Max Q Clear Time (g_c+I1), s	11.0	44.7	9.2	10.9	12.0	44.7	20.0	20.9
Green Ext Time (p_c), s	0.0	0.0	0.1	1.5	0.0	0.0	0.6	2.2

Intersection Summary	
HCM 7th Control Delay, s/veh	197.4
HCM 7th LOS	F

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	68	2	190	19	204	0	0	0	118
Future Vol, veh/h	0	0	0	68	2	190	19	204	0	0	0	118
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	74	2	207	21	222	0	0	0	128

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	263	391	222	128	0	-	-	-	0
Stage 1	263	263	-	-	-	-	-	-	-
Stage 2	0	128	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	705	529	793	1398	-	0	0	-	-
Stage 1	758	673	-	-	-	0	0	-	-
Stage 2	-	771	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	693	0	793	1398	-	-	-	-	-
Mov Cap-2 Maneuver	693	0	-	-	-	-	-	-	-
Stage 1	746	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.05	0.65	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	153	-	693	793	-	-
HCM Lane V/C Ratio	0.015	-	0.11	0.26	-	-
HCM Ctrl Dly (s/v)	7.6	0	10.8	11.1	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	1	-	-

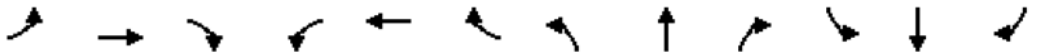
Intersection	
Int Delay, s/veh	6.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	152	1	6	0	0	0	0	71	34	122	141	0
Future Vol, veh/h	152	1	6	0	0	0	0	71	34	122	141	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	165	1	7	0	0	0	0	77	37	133	153	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	496	533	153	-	0	0	114	0	0
Stage 1	418	418	-	-	-	-	-	-	-
Stage 2	77	114	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	-	-	-	4.22	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	-	-	-	2.308	-	-
Pot Cap-1 Maneuver	516	439	867	0	-	-	1415	-	0
Stage 1	643	573	-	0	-	-	-	-	0
Stage 2	921	782	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	463	0	867	-	-	-	1415	-	-
Mov Cap-2 Maneuver	463	0	-	-	-	-	-	-	-
Stage 1	643	0	-	-	-	-	-	-	-
Stage 2	827	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	16.77	0	3.62
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	463	867	835	-
HCM Lane V/C Ratio	-	-	0.359	0.008	0.094	-
HCM Ctrl Dly (s/v)	-	-	17.1	9.2	7.8	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	1.6	0	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	25	0	1040	37	415	0	0	880	124
Future Volume (veh/h)	0	0	0	25	0	1040	37	415	0	0	880	124
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				0	0	1159	40	451	0	0	957	135
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				0	555	1410	85	1907	0	0	1497	668
Arrive On Green				0.00	0.00	0.30	0.10	1.00	0.00	0.00	0.43	0.43
Sat Flow, veh/h				0	1826	4642	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				0	0	1159	40	451	0	0	957	135
Grp Sat Flow(s),veh/h/ln				0	1826	1547	1739	1735	0	0	1735	1547
Q Serve(g_s), s				0.0	0.0	20.9	2.0	0.0	0.0	0.0	19.5	4.9
Cycle Q Clear(g_c), s				0.0	0.0	20.9	2.0	0.0	0.0	0.0	19.5	4.9
Prop In Lane				0.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				0	555	1410	85	1907	0	0	1497	668
V/C Ratio(X)				0.00	0.00	0.82	0.47	0.24	0.00	0.00	0.64	0.20
Avail Cap(c_a), veh/h				0	751	1908	135	1907	0	0	1497	668
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				0.0	0.0	29.1	39.5	0.0	0.0	0.0	20.1	15.9
Incr Delay (d2), s/veh				0.0	0.0	2.2	3.9	0.3	0.0	0.0	2.1	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
%ile BackOfQ(50%),veh/ln				0.0	0.0	7.2	0.9	0.1	0.0	0.0	7.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				0.0	0.0	31.3	43.4	0.3	0.0	0.0	22.2	16.6
LnGrp LOS						C	D	A			C	B
Approach Vol, veh/h					1159			491			1092	
Approach Delay, s/veh					31.3			3.8			21.5	
Approach LOS					C			A			C	

Timer - Assigned Phs	2		5	6		8				
Phs Duration (G+Y+Rc), s	55.6		10.6	44.9		34.4				
Change Period (Y+Rc), s	6.1		6.2	6.1		7.1				
Max Green Setting (Gmax), s	39.8		7.0	26.6		37.0				
Max Q Clear Time (g_c+I1), s	2.0		4.0	21.5		22.9				
Green Ext Time (p_c), s	3.2		0.0	2.9		4.5				

Intersection Summary		
HCM 7th Control Delay, s/veh	22.5	
HCM 7th 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												
Traffic Volume (veh/h)	144	3	21	0	0	0	0	317	40	0	279	637
Future Volume (veh/h)	144	3	21	0	0	0	0	317	40	0	279	637
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826				0	1826	1826	0	1826	1826
Adj Flow Rate, veh/h	181	0	0				0	345	43	0	303	692
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5				0	5	5	0	5	5
Cap, veh/h	344	181	0				0	2489	308	0	2779	2451
Arrive On Green	0.10	0.00	0.00				0.00	0.80	0.80	0.00	0.26	0.26
Sat Flow, veh/h	3478	1826	0				0	3198	384	0	3561	2723
Grp Volume(v), veh/h	181	0	0				0	191	197	0	303	692
Grp Sat Flow(s),veh/h/ln	1739	1826	0				0	1735	1757	0	1735	1362
Q Serve(g_s), s	4.5	0.0	0.0				0.0	2.2	2.3	0.0	6.0	9.2
Cycle Q Clear(g_c), s	4.5	0.0	0.0				0.0	2.2	2.3	0.0	6.0	9.2
Prop In Lane	1.00		0.00				0.00		0.22	0.00		1.00
Lane Grp Cap(c), veh/h	344	181	0				0	1390	1407	0	2779	2451
V/C Ratio(X)	0.53	0.00	0.00				0.00	0.14	0.14	0.00	0.11	0.28
Avail Cap(c_a), veh/h	1565	822	0				0	1390	1407	0	2779	2451
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	0.00	0.85	0.85
Uniform Delay (d), s/veh	38.5	0.0	0.0				0.0	2.0	2.0	0.0	8.8	3.4
Incr Delay (d2), s/veh	1.2	0.0	0.0				0.0	0.2	0.2	0.0	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(50%),veh/ln	1.8	0.0	0.0				0.0	0.5	0.5	0.0	1.6	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.8	0.0	0.0				0.0	2.2	2.2	0.0	8.8	3.4
LnGrp LOS	D							A	A		A	A
Approach Vol, veh/h		181						388			995	
Approach Delay, s/veh		39.8						2.2			5.1	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	76.6	13.4	76.6
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	40.5	40.5
Max Q Clear Time (g_c+I1), s	4.3	6.5	11.2
Green Ext Time (p_c), s	2.4	0.6	5.4

Intersection Summary	
HCM 7th Control Delay, s/veh	8.4
HCM 7th 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												
Traffic Volume (veh/h)	92	42	3	12	87	67	106	1704	16	42	1126	74
Future Volume (veh/h)	92	42	3	12	87	67	106	1704	16	42	1126	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	100	46	3	13	95	73	115	1852	17	46	1224	80
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	42	12	450	28	175	450	137	1782	16	103	1607	105
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.08	0.50	0.50	0.06	0.48	0.48
Sat Flow, veh/h	0	41	1560	0	605	1560	1753	3551	33	1753	3333	218
Grp Volume(v), veh/h	146	0	3	108	0	73	115	911	958	46	641	663
Grp Sat Flow(s),veh/h/ln	41	0	1560	606	0	1560	1753	1749	1835	1753	1749	1802
Q Serve(g_s), s	0.0	0.0	0.2	0.0	0.0	5.0	9.3	71.8	71.8	3.6	42.9	43.1
Cycle Q Clear(g_c), s	41.3	0.0	0.2	41.3	0.0	5.0	9.3	71.8	71.8	3.6	42.9	43.1
Prop In Lane	0.68		1.00	0.12		1.00	1.00		0.02	1.00		0.12
Lane Grp Cap(c), veh/h	54	0	450	203	0	450	137	877	921	103	843	869
V/C Ratio(X)	2.69	0.00	0.01	0.53	0.00	0.16	0.84	1.04	1.04	0.45	0.76	0.76
Avail Cap(c_a), veh/h	54	0	450	203	0	450	170	877	921	126	843	869
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.6	0.0	36.3	41.1	0.0	38.0	65.1	35.6	35.6	65.1	30.3	30.3
Incr Delay (d2), s/veh	810.2	0.0	0.0	2.7	0.0	0.2	24.9	40.7	40.8	3.0	6.4	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(50%),veh/ln	14.2	0.0	0.1	3.0	0.0	1.9	5.0	37.7	39.6	1.7	18.3	18.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	872.8	0.0	36.3	43.8	0.0	38.2	89.9	76.3	76.4	68.1	36.7	36.6
LnGrp LOS	F		D	D		D	F	F	F	E	D	D
Approach Vol, veh/h		149			181			1984			1350	
Approach Delay, s/veh		856.0			41.5			77.2			37.7	
Approach LOS		F			D			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.1	80.2		48.8	16.9	77.4		48.8				
Change Period (Y+Rc), s	5.7	8.4		7.5	5.7	8.4		7.5				
Max Green Setting (Gmax), s	10.3	71.8		41.3	13.9	68.2		41.3				
Max Q Clear Time (g_c+I1), s	5.6	73.8		43.3	11.3	45.1		43.3				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	8.2		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	92.5
HCM 7th LOS	F



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	775	185	240	685	260	303
Future Volume (veh/h)	775	185	240	685	260	303
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	842	201	261	745	283	329
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1320	943	342	1959	398	623
Arrive On Green	0.37	0.37	0.10	0.56	0.23	0.23
Sat Flow, veh/h	3618	1572	3428	3618	1767	2768
Grp Volume(v), veh/h	842	201	261	745	283	329
Grp Sat Flow(s),veh/h/ln	1763	1572	1714	1763	1767	1384
Q Serve(g_s), s	10.8	3.2	4.1	6.6	8.2	5.8
Cycle Q Clear(g_c), s	10.8	3.2	4.1	6.6	8.2	5.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1320	943	342	1959	398	623
V/C Ratio(X)	0.64	0.21	0.76	0.38	0.71	0.53
Avail Cap(c_a), veh/h	2875	1636	342	3470	1236	1936
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	14.2	5.1	24.2	6.9	19.7	18.8
Incr Delay (d2), s/veh	0.5	0.1	9.8	0.1	2.4	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.8	2.0	1.9	3.3	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.7	5.2	34.0	7.0	22.1	19.5
LnGrp LOS	B	A	C	A	C	B
Approach Vol, veh/h	1043			1006	612	
Approach Delay, s/veh	12.9			14.0	20.7	
Approach LOS	B			B	C	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		10.0	27.1		18.1	37.1
Change Period (Y+Rc), s		4.5	* 6.4		5.7	6.4
Max Green Setting (Gmax), s		5.5	* 45		38.6	54.3
Max Q Clear Time (g_c+I1), s		6.1	12.8		10.2	8.6
Green Ext Time (p_c), s		0.0	7.8		2.3	6.2

Intersection Summary	
HCM 7th Control Delay, s/veh	15.1
HCM 7th LOS	B

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	277	548	191	217	593	366	209	708	85	279	631	189
Future Volume (veh/h)	277	548	191	217	593	366	209	708	85	279	631	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	301	596	208	236	645	398	227	770	92	303	686	205
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	347	1119	632	300	1026	478	290	914	109	347	1075	479
Arrive On Green	0.10	0.32	0.32	0.09	0.30	0.30	0.08	0.29	0.29	0.10	0.30	0.30
Sat Flow, veh/h	3428	3526	1572	3428	3377	1572	3428	3171	379	3428	3526	1572
Grp Volume(v), veh/h	301	596	208	236	645	398	227	428	434	303	686	205
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1689	1572	1714	1763	1787	1714	1763	1572
Q Serve(g_s), s	9.2	14.8	9.7	7.2	17.5	25.2	6.9	24.3	24.3	9.3	17.9	11.1
Cycle Q Clear(g_c), s	9.2	14.8	9.7	7.2	17.5	25.2	6.9	24.3	24.3	9.3	17.9	11.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	347	1119	632	300	1026	478	290	508	515	347	1075	479
V/C Ratio(X)	0.87	0.53	0.33	0.79	0.63	0.83	0.78	0.84	0.84	0.87	0.64	0.43
Avail Cap(c_a), veh/h	347	1224	679	357	1204	561	334	648	657	347	1310	584
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	47.2	29.9	22.0	47.7	31.9	34.6	47.8	35.7	35.7	47.2	32.0	29.6
Incr Delay (d2), s/veh	20.0	0.4	0.3	9.4	0.8	9.2	10.0	8.0	7.9	20.8	0.7	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(50%),veh/ln	4.9	6.3	3.6	3.5	7.2	10.7	3.3	11.3	11.4	4.9	7.6	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.2	30.3	22.3	57.1	32.7	43.7	57.9	43.6	43.6	68.0	32.7	30.2
LnGrp LOS	E	C	C	E	C	D	E	D	D	E	C	C
Approach Vol, veh/h		1105			1279			1089			1194	
Approach Delay, s/veh		38.8			40.7			46.6			41.2	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	36.3	14.5	39.7	14.2	38.1	16.0	38.3
Change Period (Y+Rc), s	5.2	5.6	5.2	5.9	5.2	5.6	5.2	* 5.9
Max Green Setting (Gmax), s	10.8	39.2	11.1	37.0	10.4	39.6	10.8	* 38
Max Q Clear Time (g_c+I1), s	11.3	26.3	9.2	16.8	8.9	19.9	11.2	27.2
Green Ext Time (p_c), s	0.0	4.4	0.2	4.8	0.1	5.2	0.0	5.2

Intersection Summary	
HCM 7th Control Delay, s/veh	41.7
HCM 7th LOS	D

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	30	34	4	609	24	56	12	520	747	35	300	68
Future Volume (veh/h)	30	34	4	609	24	56	12	520	747	35	300	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	33	37	4	662	26	61	13	565	812	38	326	74
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	251	233	25	531	287	243	50	954	669	319	1490	888
Arrive On Green	0.14	0.14	0.14	0.15	0.15	0.15	0.03	0.27	0.27	0.18	0.42	0.42
Sat Flow, veh/h	1767	1646	178	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	33	0	41	662	26	61	13	565	812	38	326	74
Grp Sat Flow(s),veh/h/ln	1767	0	1824	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	1.3	0.0	1.5	12.0	0.9	2.6	0.6	10.8	21.0	1.4	4.6	1.7
Cycle Q Clear(g_c), s	1.3	0.0	1.5	12.0	0.9	2.6	0.6	10.8	21.0	1.4	4.6	1.7
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	0	258	531	287	243	50	954	669	319	1490	888
V/C Ratio(X)	0.13	0.00	0.16	1.25	0.09	0.25	0.26	0.59	1.21	0.12	0.22	0.08
Avail Cap(c_a), veh/h	251	0	902	531	942	798	205	954	669	319	1490	888
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	0.0	29.2	28.6	28.1	28.8	36.9	24.6	22.3	26.6	14.2	7.7
Incr Delay (d2), s/veh	0.2	0.0	0.3	125.7	0.1	0.5	2.7	1.0	109.8	0.2	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(50%),veh/ln	0.5	0.0	0.7	22.5	0.4	1.0	0.3	4.4	31.2	0.6	1.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.4	0.0	29.5	154.3	28.3	29.4	39.6	25.6	132.1	26.8	14.3	7.8
LnGrp LOS	C		C	F	C	C	D	C	F	C	B	A
Approach Vol, veh/h		74			749			1390			438	
Approach Delay, s/veh		29.4			139.7			87.9			14.3	
Approach LOS		C			F			F			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	16.0	6.8	37.8	16.0	17.0	18.6	26.0
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	12.0	38.4	9.0	26.0	11.0	39.4	14.0	21.0
Max Q Clear Time (g_c+I1), s	14.0	3.5	2.6	6.6	3.3	4.6	3.4	23.0
Green Ext Time (p_c), s	0.0	0.2	0.0	2.1	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	88.8
HCM 7th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	598	194	1	2	144	92	1	2	1	69	2	512
Future Volume (veh/h)	598	194	1	2	144	92	1	2	1	69	2	512
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	427	512	1	2	155	99	1	2	1	74	0	552
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	611	640	1	3	267	161	3	377	174	121	0	717
Arrive On Green	0.35	0.35	0.35	0.12	0.12	0.12	0.00	0.16	0.16	0.07	0.00	0.23
Sat Flow, veh/h	1767	1851	4	28	2153	1296	1767	2344	1080	1767	0	3145
Grp Volume(v), veh/h	427	0	513	132	0	124	1	1	2	74	0	552
Grp Sat Flow(s),veh/h/ln	1767	0	1855	1854	0	1622	1767	1763	1661	1767	0	1572
Q Serve(g_s), s	13.3	0.0	16.0	4.3	0.0	4.6	0.0	0.0	0.0	2.6	0.0	10.5
Cycle Q Clear(g_c), s	13.3	0.0	16.0	4.3	0.0	4.6	0.0	0.0	0.0	2.6	0.0	10.5
Prop In Lane	1.00		0.00	0.02		0.80	1.00		0.65	1.00		1.00
Lane Grp Cap(c), veh/h	611	0	641	230	0	202	3	284	267	121	0	717
V/C Ratio(X)	0.70	0.00	0.80	0.57	0.00	0.62	0.34	0.01	0.01	0.61	0.00	0.77
Avail Cap(c_a), veh/h	910	0	955	842	0	737	166	762	718	174	0	1374
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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	18.9	26.4	0.0	26.5	31.8	22.5	22.5	28.9	0.0	23.1
Incr Delay (d2), s/veh	1.5	0.0	3.0	2.2	0.0	3.0	58.0	0.0	0.0	4.9	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(50%),veh/ln	5.0	0.0	6.5	1.9	0.0	1.8	0.1	0.0	0.0	1.2	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.5	0.0	21.9	28.6	0.0	29.6	89.9	22.5	22.5	33.8	0.0	24.9
LnGrp LOS	B		C	C		C	F	C	C	C		C
Approach Vol, veh/h		940			256			4			626	
Approach Delay, s/veh		20.8			29.1			39.4			25.9	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	15.0		27.2	4.8	19.3		12.6				
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7				
Max Green Setting (Gmax), s	6.3	27.6		32.9	6.0	27.9		29.0				
Max Q Clear Time (g_c+I1), s	4.6	2.0		18.0	2.0	12.5		6.6				
Green Ext Time (p_c), s	0.0	0.0		4.1	0.0	2.1		1.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	23.8
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	8	0	6	17	232	252	0	106	101
Future Vol, veh/h	0	0	0	8	0	6	17	232	252	0	106	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	330
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	9	0	7	18	252	274	0	115	110

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	404	514	252	225	0	-	-	-	0
Stage 1	289	289	-	-	-	-	-	-	-
Stage 2	115	225	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	583	450	763	1287	-	0	0	-	-
Stage 1	738	655	-	-	-	0	0	-	-
Stage 2	885	699	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	574	0	763	1287	-	-	-	-	-
Mov Cap-2 Maneuver	574	0	-	-	-	-	-	-	-
Stage 1	725	0	-	-	-	-	-	-	-
Stage 2	885	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.74	0.54	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	123	-	642	-	-
HCM Lane V/C Ratio	0.014	-	0.024	-	-
HCM Ctrl Dly (s/v)	7.8	0	10.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

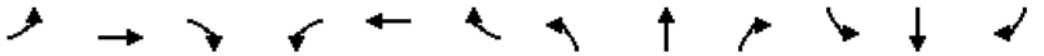
Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	0	205	0	0	0	0	398	7	1	110	0
Future Vol, veh/h	64	0	205	0	0	0	0	398	7	1	110	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	470	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	70	0	223	0	0	0	0	433	8	1	120	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	338	562	-	-	0	0	440	0	0
Stage 1	122	122	-	-	-	-	-	-	-
Stage 2	216	440	-	-	-	-	-	-	-
Critical Hdwy	6.78	6.68	-	-	-	-	4.28	-	-
Critical Hdwy Stg 1	5.58	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.98	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.614	4.114	-	-	-	-	2.314	-	-
Pot Cap-1 Maneuver	621	418	0	0	-	-	1058	-	0
Stage 1	876	774	0	0	-	-	-	-	0
Stage 2	774	556	0	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	621	0	-	-	-	-	1058	-	-
Mov Cap-2 Maneuver	621	0	-	-	-	-	-	-	-
Stage 1	876	0	-	-	-	-	-	-	-
Stage 2	773	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.53	0	0.08
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	621	1058	-
HCM Lane V/C Ratio	-	-	0.112	0.001	-
HCM Ctrl Dly (s/v)	-	-	11.5	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	40	98	32	42	5	104	357	38	6	274	47
Future Volume (veh/h)	19	40	98	32	42	5	104	357	38	6	274	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1455	1752	1752	1752	1455	952	1752	1752	952	1604
Adj Flow Rate, veh/h	21	43	107	35	46	5	113	388	41	7	298	51
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, %	10	10	30	10	10	10	30	64	10	10	64	20
Cap, veh/h	97	258	605	143	307	260	353	848	612	30	386	369
Arrive On Green	0.06	0.15	0.15	0.09	0.18	0.18	0.13	0.33	0.33	0.02	0.21	0.21
Sat Flow, veh/h	1668	1752	2171	1668	1752	1485	2689	2598	1485	1668	1808	1359
Grp Volume(v), veh/h	21	43	107	35	46	5	113	388	41	7	298	51
Grp Sat Flow(s),veh/h/ln	1668	1752	1085	1668	1752	1485	1345	866	1485	1668	904	1359
Q Serve(g_s), s	0.8	1.4	2.5	1.3	1.5	0.2	2.5	7.9	1.1	0.3	10.4	1.9
Cycle Q Clear(g_c), s	0.8	1.4	2.5	1.3	1.5	0.2	2.5	7.9	1.1	0.3	10.4	1.9
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	97	258	605	143	307	260	353	848	612	30	386	369
V/C Ratio(X)	0.22	0.17	0.18	0.24	0.15	0.02	0.32	0.46	0.07	0.23	0.77	0.14
Avail Cap(c_a), veh/h	300	1442	2072	300	1442	1222	475	1548	1012	250	1029	852
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	30.0	24.9	18.3	28.5	23.3	22.8	26.3	17.8	11.9	32.3	24.7	18.4
Incr Delay (d2), s/veh	1.1	0.3	0.1	0.9	0.2	0.0	0.5	0.4	0.0	3.8	3.3	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(50%),veh/ln	0.3	0.5	0.5	0.5	0.6	0.1	0.7	1.3	0.3	0.1	2.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.1	25.2	18.4	29.4	23.6	22.8	26.8	18.2	11.9	36.1	28.1	18.6
LnGrp LOS	C	C	B	C	C	C	C	B	B	D	C	B
Approach Vol, veh/h		171			86			542			356	
Approach Delay, s/veh		21.7			25.9			19.5			26.9	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	18.2	14.5	22.7	9.6	20.1	6.9	30.2
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	12.0	55.0	11.8	38.0	12.0	55.0	10.0	39.8
Max Q Clear Time (g_c+I1), s	3.3	4.5	4.5	12.4	2.8	3.5	2.3	9.9
Green Ext Time (p_c), s	0.0	0.6	0.2	1.9	0.0	0.2	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	22.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	105	0	99	5	391	58	170	254	0
Future Volume (veh/h)	0	0	0	105	0	99	5	391	58	170	254	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				952	0	952	1870	952	952	952	952	0
Adj Flow Rate, veh/h				114	0	108	5	425	63	185	276	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				64	0	64	2	64	64	64	64	0
Cap, veh/h				151	0	134	24	502	74	207	1384	0
Arrive On Green				0.17	0.00	0.17	0.01	0.32	0.32	0.23	0.53	0.00
Sat Flow, veh/h				906	0	806	1781	1581	233	906	2683	0
Grp Volume(v), veh/h				114	0	108	5	242	246	185	276	0
Grp Sat Flow(s),veh/h/ln				906	0	806	1781	904	910	906	866	0
Q Serve(g_s), s				8.4	0.0	9.0	0.2	17.5	17.8	13.9	3.9	0.0
Cycle Q Clear(g_c), s				8.4	0.0	9.0	0.2	17.5	17.8	13.9	3.9	0.0
Prop In Lane				1.00		1.00	1.00		0.26	1.00		0.00
Lane Grp Cap(c), veh/h				151	0	134	24	287	289	207	1384	0
V/C Ratio(X)				0.76	0.00	0.81	0.21	0.84	0.85	0.89	0.20	0.00
Avail Cap(c_a), veh/h				659	0	586	254	522	525	236	1807	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				27.9	0.0	28.2	34.3	22.3	22.4	26.3	8.6	0.0
Incr Delay (d2), s/veh				7.5	0.0	10.7	4.4	6.6	7.0	29.9	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(50%),veh/ln				2.0	0.0	2.0	0.1	3.6	3.7	4.3	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				35.4	0.0	38.9	38.6	28.9	29.4	56.2	8.6	0.0
LnGrp LOS				D		D	D	C	C	E	A	
Approach Vol, veh/h					222			493			461	
Approach Delay, s/veh					37.1			29.2			27.7	
Approach LOS					D			C			C	

Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	21.7	30.7			6.6	45.8		17.8				
Change Period (Y+Rc), s	5.7	8.4			5.7	8.4		6.1				
Max Green Setting (Gmax), s	18.3	40.5			10.0	48.8		51.0				
Max Q Clear Time (g_c+I1), s	15.9	19.8			2.2	5.9		11.0				
Green Ext Time (p_c), s	0.1	2.5			0.0	1.8		0.8				

Intersection Summary		
HCM 7th Control Delay, s/veh		30.1
HCM 7th LOS		C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	124	496	932	913	621	170
Future Volume (veh/h)	124	496	932	913	621	170
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	135	0	1013	992	675	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	117		795	1488	608	
Arrive On Green	0.07	0.00	0.48	0.86	0.35	0.00
Sat Flow, veh/h	1668	1485	1668	1737	1737	1485
Grp Volume(v), veh/h	135	0	1013	992	675	0
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1737	1737	1485
Q Serve(g_s), s	10.5	0.0	71.5	28.6	52.5	0.0
Cycle Q Clear(g_c), s	10.5	0.0	71.5	28.6	52.5	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	117		795	1488	608	
V/C Ratio(X)	1.16		1.27	0.67	1.11	
Avail Cap(c_a), veh/h	117		795	1488	608	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	69.8	0.0	39.3	3.6	48.7	0.0
Incr Delay (d2), s/veh	131.3	0.0	133.0	1.1	70.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	56.4	5.0	33.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	201.0	0.0	172.2	4.7	119.3	0.0
LnGrp LOS	F		F	A	F	
Approach Vol, veh/h	135			2005	675	
Approach Delay, s/veh	201.0			89.4	119.3	
Approach LOS	F			F	F	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		135.0		15.0	76.0	59.0
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		128.5		10.5	71.5	52.5
Max Q Clear Time (g_c+I1), s		30.6		12.5	73.5	54.5
Green Ext Time (p_c), s		8.9		0.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	101.9
HCM 7th LOS	F

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	247	10	153	197	1024	4	955	101	545	948	44
Future Volume (veh/h)	39	247	10	153	197	1024	4	955	101	545	948	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	42	268	11	166	214	1113	4	1038	110	592	1030	48
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	102	237	201	164	438	903	58	946	459	597	1934	939
Arrive On Green	0.00	0.13	0.13	0.07	0.24	0.24	0.03	0.30	0.30	0.34	0.61	0.61
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	42	268	11	166	214	1113	4	1038	110	592	1030	48
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	0.1	19.5	0.9	10.0	15.1	36.0	0.3	44.5	8.1	50.8	28.2	1.9
Cycle Q Clear(g_c), s	0.1	19.5	0.9	10.0	15.1	36.0	0.3	44.5	8.1	50.8	28.2	1.9
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	102	237	201	164	438	903	58	946	459	597	1934	939
V/C Ratio(X)	0.41	1.13	0.05	1.01	0.49	1.23	0.07	1.10	0.24	0.99	0.53	0.05
Avail Cap(c_a), veh/h	158	237	201	164	438	903	58	946	459	597	1934	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	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	63.0	65.3	57.2	56.3	49.1	31.2	70.2	52.8	39.9	49.0	17.1	12.0
Incr Delay (d2), s/veh	2.7	97.6	0.1	73.6	0.8	114.5	0.5	59.7	0.3	34.6	0.3	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(50%),veh/ln	1.5	15.3	0.4	4.7	6.9	58.1	0.2	24.8	3.1	26.7	9.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.7	162.8	57.3	129.9	49.9	145.8	70.7	112.4	40.2	83.6	17.4	12.0
LnGrp LOS	E	F	E	F	D	F	E	F	D	F	B	B
Approach Vol, veh/h		321			1493			1152			1670	
Approach Delay, s/veh		146.5			130.3			105.4			40.7	
Approach LOS		F			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	56.0	51.5	16.5	26.0	9.5	98.0	0.0	42.5
Change Period (Y+Rc), s	4.5	7.0	6.5	6.5	4.5	7.0	4.5	6.5
Max Green Setting (Gmax), s	51.5	44.5	10.0	19.5	5.0	91.0	5.0	26.5
Max Q Clear Time (g_c+I1), s	52.8	46.5	12.0	21.5	2.3	30.2	0.0	38.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	8.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	93.0
HCM 7th LOS	F



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	507	5	1	1276	580	223
Future Volume (veh/h)	507	5	1	1276	580	223
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	556	0	1	1387	630	242
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	523	233	56	1253	1196	1045
Arrive On Green	0.16	0.00	0.03	0.77	0.70	0.70
Sat Flow, veh/h	3337	1485	1668	1633	1699	1485
Grp Volume(v), veh/h	556	0	1	1387	630	242
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1633	1699	1485
Q Serve(g_s), s	23.5	0.0	0.1	115.1	26.2	8.6
Cycle Q Clear(g_c), s	23.5	0.0	0.1	115.1	26.2	8.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	523	233	56	1253	1196	1045
V/C Ratio(X)	1.06	0.00	0.02	1.11	0.53	0.23
Avail Cap(c_a), veh/h	523	233	56	1253	1196	1045
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	0.0	70.1	17.5	10.4	7.9
Incr Delay (d2), s/veh	57.3	0.0	0.1	60.0	0.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	0.0	0.0	51.5	8.5	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	120.6	0.0	70.3	77.4	10.9	8.0
LnGrp LOS	F		E	F	B	A
Approach Vol, veh/h	556			1388	872	
Approach Delay, s/veh	120.6			77.4	10.1	
Approach LOS	F			E	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	122.0		28.0	9.5	112.5
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	115.1		23.5	5.0	105.6
Max Q Clear Time (g_c+I1), s	117.1		25.5	2.1	28.2
Green Ext Time (p_c), s	0.0		0.0	0.0	5.0

Intersection Summary	
HCM 7th Control Delay, s/veh	65.1
HCM 7th 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												
Traffic Volume (veh/h)	150	238	193	30	498	154	439	0	69	347	0	342
Future Volume (veh/h)	150	238	193	30	498	154	439	0	69	347	0	342
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	163	259	210	33	541	167	477	0	75	377	0	372
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, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	127	546	496	275	514	468	400	0	819	662	0	819
Arrive On Green	0.05	0.33	0.33	0.03	0.31	0.31	0.52	0.00	0.52	0.52	0.00	0.52
Sat Flow, veh/h	1668	1633	1485	1668	1633	1485	946	0	1585	1241	0	1585
Grp Volume(v), veh/h	163	259	210	33	541	167	477	0	75	377	0	372
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	1633	1485	946	0	1585	1241	0	1585
Q Serve(g_s), s	6.3	17.6	15.4	1.9	44.1	12.2	51.5	0.0	3.4	31.0	0.0	20.8
Cycle Q Clear(g_c), s	6.3	17.6	15.4	1.9	44.1	12.2	72.3	0.0	3.4	34.4	0.0	20.8
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	127	546	496	275	514	468	400	0	819	662	0	819
V/C Ratio(X)	1.29	0.47	0.42	0.12	1.05	0.36	1.19	0.00	0.09	0.57	0.00	0.45
Avail Cap(c_a), veh/h	127	546	496	293	514	468	400	0	819	662	0	819
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	42.0	36.9	36.1	31.9	48.0	37.0	47.5	0.0	17.2	25.9	0.0	21.4
Incr Delay (d2), s/veh	176.5	0.6	0.6	0.2	53.9	0.5	109.1	0.0	0.0	1.2	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(50%),veh/ln	9.1	6.8	5.4	0.7	24.7	4.3	26.0	0.0	1.2	8.7	0.0	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	218.5	37.5	36.7	32.0	101.9	37.5	156.6	0.0	17.2	27.1	0.0	21.8
LnGrp LOS	F	D	D	C	F	D	F		B	C		C
Approach Vol, veh/h		632			741			552			749	
Approach Delay, s/veh		83.9			84.2			137.7			24.4	
Approach LOS		F			F			F			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	53.7		78.0	11.0	51.0		78.0
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	5.1	45.3		72.3	6.3	44.1		72.3
Max Q Clear Time (g_c+I1), s	3.9	19.6		36.4	8.3	46.1		74.3
Green Ext Time (p_c), s	0.0	2.0		3.8	0.0	0.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	78.4
HCM 7th LOS	E

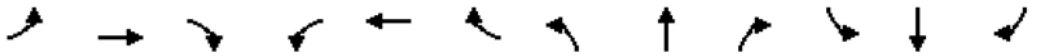
Intersection	
Int Delay, s/veh	4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	75	117	591	36	54	622
Future Vol, veh/h	75	117	591	36	54	622
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	10	10	18	10	10	18
Mvmt Flow	81	126	635	39	58	669

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1441	656	0	0	675	0
Stage 1	656	-	-	-	-	-
Stage 2	785	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	140	452	-	-	880	-
Stage 1	502	-	-	-	-	-
Stage 2	436	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	131	451	-	-	879	-
Mov Cap-2 Maneuver	264	-	-	-	-	-
Stage 1	501	-	-	-	-	-
Stage 2	407	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	28.57	0	0.75
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	353	879	-
HCM Lane V/C Ratio	-	-	0.584	0.066	-
HCM Ctrl Dly (s/v)	-	-	28.6	9.4	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	3.5	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	0	276	0	0	0	193	576	0	0	723	75
Future Volume (veh/h)	170	0	276	0	0	0	193	576	0	0	723	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1633	1752	1752	1633	1752
Adj Flow Rate, veh/h	185	0	300	0	0	0	210	626	0	0	786	82
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, %	10	10	10	10	10	10	10	18	10	10	18	10
Cap, veh/h	403	0	280	89	330	0	264	1072	0	422	851	774
Arrive On Green	0.19	0.00	0.19	0.00	0.00	0.00	0.08	0.66	0.00	0.00	0.52	0.52
Sat Flow, veh/h	1668	0	1485	1011	1752	0	1668	1633	0	1668	1633	1485
Grp Volume(v), veh/h	185	0	300	0	0	0	210	626	0	0	786	82
Grp Sat Flow(s),veh/h/ln	1668	0	1485	1011	1752	0	1668	1633	0	1668	1633	1485
Q Serve(g_s), s	8.2	0.0	15.3	0.0	0.0	0.0	4.4	17.3	0.0	0.0	36.1	2.3
Cycle Q Clear(g_c), s	8.2	0.0	15.3	0.0	0.0	0.0	4.4	17.3	0.0	0.0	36.1	2.3
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	0	280	89	330	0	264	1072	0	422	851	774
V/C Ratio(X)	0.46	0.00	1.07	0.00	0.00	0.00	0.80	0.58	0.00	0.00	0.92	0.11
Avail Cap(c_a), veh/h	403	0	280	89	330	0	264	1072	0	523	1027	934
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	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	33.0	0.0	0.0	0.0	18.0	7.8	0.0	0.0	18.0	9.9
Incr Delay (d2), s/veh	0.8	0.0	74.5	0.0	0.0	0.0	15.4	0.8	0.0	0.0	12.0	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(50%),veh/ln	3.2	0.0	10.9	0.0	0.0	0.0	2.9	4.1	0.0	0.0	13.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.9	0.0	107.5	0.0	0.0	0.0	33.5	8.6	0.0	0.0	29.9	9.9
LnGrp LOS	C		F				C	A			C	A
Approach Vol, veh/h		485			0			836			868	
Approach Delay, s/veh		78.3			0.0			14.8			28.0	
Approach LOS		E						B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	60.2		21.0	11.0	49.2		21.0				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.0	52.4		15.3	6.3	51.1		15.3				
Max Q Clear Time (g_c+I1), s	0.0	19.3		17.3	6.4	38.1		0.0				
Green Ext Time (p_c), s	0.0	3.9		0.0	0.0	4.2		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh		34.1
HCM 7th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	11	700	146	27	42	451	499	134	15	1002	233
Future Volume (veh/h)	185	11	700	146	27	42	451	499	134	15	1002	233
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	193	11	729	152	28	44	470	520	140	16	1044	243
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	469	609	741	307	213	335	491	793	672	30	1062	474
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.15	0.45	0.45	0.02	0.32	0.32
Sat Flow, veh/h	1244	1752	1485	673	614	964	3237	1752	1485	1668	3328	1485
Grp Volume(v), veh/h	193	11	729	152	0	72	470	520	140	16	1044	243
Grp Sat Flow(s),veh/h/ln	1244	1752	1485	673	0	1578	1618	1752	1485	1668	1664	1485
Q Serve(g_s), s	11.9	0.4	33.0	18.2	0.0	3.0	13.7	22.0	5.4	0.9	29.6	12.7
Cycle Q Clear(g_c), s	14.9	0.4	33.0	18.6	0.0	3.0	13.7	22.0	5.4	0.9	29.6	12.7
Prop In Lane	1.00		1.00	1.00		0.61	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	469	609	741	307	0	548	491	793	672	30	1062	474
V/C Ratio(X)	0.41	0.02	0.98	0.50	0.00	0.13	0.96	0.66	0.21	0.53	0.98	0.51
Avail Cap(c_a), veh/h	469	609	741	307	0	548	491	793	672	88	1062	474
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	26.3	20.4	23.4	26.5	0.0	21.2	40.0	20.3	15.7	46.2	32.1	26.3
Incr Delay (d2), s/veh	0.6	0.0	29.0	1.2	0.0	0.1	30.1	2.0	0.2	13.6	23.6	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(50%),veh/ln	8.3	0.1	19.2	2.7	0.0	1.0	7.1	8.2	1.6	0.5	14.1	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.9	20.4	52.5	27.7	0.0	21.3	70.1	22.2	15.9	59.8	55.7	27.3
LnGrp LOS	C	C	D	C		C	E	C	B	E	E	C
Approach Vol, veh/h		933			224			1130			1303	
Approach Delay, s/veh		46.8			25.6			41.4			50.4	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	49.9		38.7	19.1	37.2		38.7				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	39.7		33.0	14.4	30.3		33.0				
Max Q Clear Time (g_c+I1), s	2.9	24.0		35.0	15.7	31.6		20.6				
Green Ext Time (p_c), s	0.0	2.9		0.0	0.0	0.0		1.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	45.1
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	72	369	250	104	104	215	938	162	72	1859	72
Future Volume (veh/h)	104	72	369	250	104	104	215	938	162	72	1859	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	113	78	401	272	113	113	234	1020	176	78	2021	78
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	249	416	505	222	416	352	221	2064	960	314	1846	858
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.10	0.62	0.62	0.03	0.55	0.55
Sat Flow, veh/h	1127	1826	1547	894	1826	1547	1739	3328	1547	1739	3328	1547
Grp Volume(v), veh/h	113	78	401	272	113	113	234	1020	176	78	2021	78
Grp Sat Flow(s),veh/h/ln	1127	1826	1547	894	1826	1547	1739	1664	1547	1739	1664	1547
Q Serve(g_s), s	13.3	5.0	33.0	28.0	7.4	8.8	14.3	24.3	7.1	2.8	80.4	3.4
Cycle Q Clear(g_c), s	20.7	5.0	33.0	33.0	7.4	8.8	14.3	24.3	7.1	2.8	80.4	3.4
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	249	416	505	222	416	352	221	2064	960	314	1846	858
V/C Ratio(X)	0.45	0.19	0.79	1.22	0.27	0.32	1.06	0.49	0.18	0.25	1.10	0.09
Avail Cap(c_a), veh/h	249	416	505	222	416	352	221	2064	960	331	1846	858
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	54.6	45.2	44.4	61.6	46.1	46.7	52.9	15.1	11.8	13.8	32.3	15.2
Incr Delay (d2), s/veh	1.3	0.2	8.5	133.9	0.3	0.5	76.7	0.2	0.1	0.4	52.0	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(50%),veh/ln	3.8	2.3	14.0	16.4	3.4	3.4	12.3	8.3	2.3	1.1	42.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.9	45.4	53.0	195.6	46.5	47.2	129.6	15.3	11.9	14.2	84.3	15.2
LnGrp LOS	E	D	D	F	D	D	F	B	B	B	F	B
Approach Vol, veh/h		592			498			1430			2177	
Approach Delay, s/veh		52.5			128.1			33.6			79.3	
Approach LOS		D			F			C			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	96.8		38.7	19.0	87.3		38.7
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	6.3	88.5		33.0	14.3	80.4		33.0
Max Q Clear Time (g_c+I1), s	4.8	26.3		35.0	16.3	82.4		35.0
Green Ext Time (p_c), s	0.0	8.7		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 7th Control Delay, s/veh	67.2	
HCM 7th LOS	E	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	97	351	118	84	205	195	974	48	288	2029	302
Future Volume (veh/h)	208	97	351	118	84	205	195	974	48	288	2029	302
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	226	105	382	128	91	223	212	1059	52	313	2205	328
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, %	8	8	8	8	8	8	7	7	7	5	5	5
Cap, veh/h	292	404	477	259	404	632	154	1412	677	335	1792	848
Arrive On Green	0.03	0.23	0.23	0.03	0.23	0.23	0.09	0.41	0.41	0.19	0.52	0.52
Sat Flow, veh/h	1697	1781	1504	1697	1781	1504	1711	3413	1515	1739	3469	1541
Grp Volume(v), veh/h	226	105	382	128	91	223	212	1059	52	313	2205	328
Grp Sat Flow(s),veh/h/ln	1697	1781	1504	1697	1781	1504	1711	1706	1515	1739	1735	1541
Q Serve(g_s), s	5.0	7.3	34.0	5.0	6.2	15.2	13.5	39.6	2.9	26.6	77.5	18.3
Cycle Q Clear(g_c), s	5.0	7.3	34.0	5.0	6.2	15.2	13.5	39.6	2.9	26.6	77.5	18.3
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	292	404	477	259	404	632	154	1412	677	335	1792	848
V/C Ratio(X)	0.77	0.26	0.80	0.50	0.23	0.35	1.38	0.75	0.08	0.93	1.23	0.39
Avail Cap(c_a), veh/h	292	404	477	259	404	632	154	1412	677	377	1792	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	54.5	47.7	46.9	48.2	47.3	29.7	68.2	37.4	23.7	59.6	36.3	19.3
Incr Delay (d2), s/veh	12.2	0.3	9.5	1.5	0.3	0.3	205.0	2.3	0.0	28.3	108.7	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(50%),veh/ln	7.1	3.3	14.2	2.0	2.8	5.6	14.6	16.6	1.1	14.2	58.2	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.7	48.0	56.4	49.7	47.5	30.0	273.2	39.6	23.8	87.9	144.9	19.6
LnGrp LOS	E	D	E	D	D	C	F	D	C	F	F	B
Approach Vol, veh/h		713			442			1323			2846	
Approach Delay, s/veh		58.4			39.3			76.4			124.2	
Approach LOS		E			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	67.6	9.5	39.5	18.0	83.0	9.5	39.5
Change Period (Y+Rc), s	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5
Max Green Setting (Gmax), s	32.5	58.5	5.0	34.0	13.5	77.5	5.0	34.0
Max Q Clear Time (g_c+I1), s	28.6	41.6	7.0	36.0	15.5	79.5	7.0	17.2
Green Ext Time (p_c), s	0.4	6.9	0.0	0.0	0.0	0.0	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	96.5
HCM 7th LOS	F

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1	35	0	1	3	23	1041	0	4	870	19
Future Vol, veh/h	10	1	35	0	1	3	23	1041	0	4	870	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	400	-	400	395	-	510
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	35	10	10	35	10
Mvmt Flow	11	1	38	0	1	3	25	1132	0	4	946	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1571	2136	473	1664	2136	566	946	0	0	1132	0	0
Stage 1	954	954	-	1182	1182	-	-	-	-	-	-	-
Stage 2	616	1182	-	482	954	-	-	-	-	-	-	-
Critical Hdwy	7.7	6.7	7.1	7.7	6.7	7.1	4.3	-	-	4.3	-	-
Critical Hdwy Stg 1	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.6	4.1	3.4	3.6	4.1	3.4	2.3	-	-	2.3	-	-
Pot Cap-1 Maneuver	69	44	517	58	44	448	674	-	-	569	-	-
Stage 1	263	318	-	189	246	-	-	-	-	-	-	-
Stage 2	425	246	-	514	318	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	65	42	517	51	42	448	674	-	-	569	-	-
Mov Cap-2 Maneuver	215	180	-	163	177	-	-	-	-	-	-	-
Stage 1	261	315	-	182	237	-	-	-	-	-	-	-
Stage 2	405	237	-	471	315	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	15.78	16.25	0.23	0.05
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	674	-	-	384	324	569	-	-
HCM Lane V/C Ratio	0.037	-	-	0.13	0.013	0.008	-	-
HCM Ctrl Dly (s/v)	10.5	-	-	15.8	16.3	11.4	-	-
HCM Lane LOS	B	-	-	C	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0	0	-	-

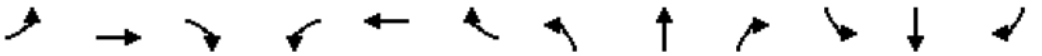
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	62	916	8	0	928	13	3	0	0	16	6	146
Future Vol, veh/h	62	916	8	0	928	13	3	0	0	16	6	146
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	11	35	11	11	35	11	11	11	11	11	11	11
Mvmt Flow	67	996	9	0	1009	14	3	0	0	17	7	159

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1023	0	0	1004	0	0	1638	2153	498	1641	2148	504
Stage 1	-	-	-	-	-	-	1130	1130	-	1009	1009	-
Stage 2	-	-	-	-	-	-	508	1023	-	633	1139	-
Critical Hdwy	4.32	-	-	4.32	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.31	-	-	2.31	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	623	-	-	633	-	-	61	42	495	60	43	490
Stage 1	-	-	-	-	-	-	202	259	-	241	297	-
Stage 2	-	-	-	-	-	-	493	292	-	413	256	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	623	-	-	633	-	-	35	38	495	54	38	490
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	156	-	197	174	-
Stage 1	-	-	-	-	-	-	180	231	-	241	297	-
Stage 2	-	-	-	-	-	-	326	292	-	369	229	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.72	0	30.75	17.26
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	143	-	623	-	-	633	-	-	190	490
HCM Lane V/C Ratio	0.023	-	0.108	-	-	-	-	-	0.126	0.324
HCM Ctrl Dly (s/v)	30.7	0	11.5	-	-	0	-	-	26.7	15.8
HCM Lane LOS	D	A	B	-	-	A	-	-	D	C
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-	0	-	-	0.4	1.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	640	50	24	444	138	75	93	21	313	173	436
Future Volume (veh/h)	198	640	50	24	444	138	75	93	21	313	173	436
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	211	681	53	26	472	147	80	99	22	333	184	464
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	239	865	67	101	529	164	173	262	58	359	528	655
Arrive On Green	0.14	0.35	0.35	0.06	0.27	0.27	0.10	0.19	0.19	0.22	0.30	0.30
Sat Flow, veh/h	1668	2466	192	1668	1970	609	1668	1383	307	1668	1752	1470
Grp Volume(v), veh/h	211	362	372	26	313	306	80	0	121	333	184	464
Grp Sat Flow(s),veh/h/ln	1668	1312	1345	1668	1312	1266	1668	0	1691	1668	1752	1470
Q Serve(g_s), s	13.0	25.9	25.9	1.6	24.0	24.4	4.7	0.0	6.5	20.5	8.6	26.8
Cycle Q Clear(g_c), s	13.0	25.9	25.9	1.6	24.0	24.4	4.7	0.0	6.5	20.5	8.6	26.8
Prop In Lane	1.00		0.14	1.00		0.48	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	239	461	472	101	353	340	173	0	320	359	528	655
V/C Ratio(X)	0.88	0.79	0.79	0.26	0.89	0.90	0.46	0.00	0.38	0.93	0.35	0.71
Avail Cap(c_a), veh/h	244	461	472	191	385	372	204	0	517	364	703	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	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.0	30.4	30.5	46.9	36.8	36.9	44.2	0.0	37.0	40.3	28.5	23.6
Incr Delay (d2), s/veh	29.1	8.8	8.6	1.3	20.5	22.6	1.9	0.0	0.7	29.3	0.4	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(50%),veh/ln	7.2	9.0	9.2	0.7	9.5	9.5	2.1	0.0	2.8	11.3	3.7	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.1	39.2	39.1	48.2	57.2	59.5	46.1	0.0	37.7	69.6	28.9	25.8
LnGrp LOS	E	D	D	D	E	E	D		D	E	C	C
Approach Vol, veh/h		945			645			201			981	
Approach Delay, s/veh		46.7			57.9			41.1			41.3	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	41.8	15.5	36.2	19.7	33.2	27.2	24.5
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.0	34.0	12.8	42.0	15.3	30.7	22.8	32.0
Max Q Clear Time (g_c+I1), s	3.6	27.9	6.7	28.8	15.0	26.4	22.5	8.5
Green Ext Time (p_c), s	0.0	2.3	0.1	2.5	0.0	1.5	0.0	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	47.0
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3	1	3	1	454	3	238	6	695	305	0
Future Volume (veh/h)	0	3	1	3	1	454	3	238	6	695	305	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1381	1752	1381	1381	1752
Adj Flow Rate, veh/h	0	3	1	3	1	0	3	251	6	732	321	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	10	35	10	35	35	10
Cap, veh/h	3	17	6	14	213		14	461	261	867	1330	753
Arrive On Green	0.00	0.01	0.01	0.01	0.12	0.00	0.01	0.18	0.18	0.34	0.51	0.00
Sat Flow, veh/h	1668	1257	419	1668	1752	1485	1668	2624	1485	2552	2624	1485
Grp Volume(v), veh/h	0	0	4	3	1	0	3	251	6	732	321	0
Grp Sat Flow(s),veh/h/ln	1668	0	1676	1668	1752	1485	1668	1312	1485	1276	1312	1485
Q Serve(g_s), s	0.0	0.0	0.1	0.1	0.0	0.0	0.1	5.0	0.2	15.1	3.9	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	0.1	0.0	0.0	0.1	5.0	0.2	15.1	3.9	0.0
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	3	0	22	14	213		14	461	261	867	1330	753
V/C Ratio(X)	0.00	0.00	0.18	0.22	0.00		0.22	0.54	0.02	0.84	0.24	0.00
Avail Cap(c_a), veh/h	293	0	430	293	449		293	599	339	1268	1336	756
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	27.8	28.1	22.0	0.0	28.1	21.4	19.4	17.4	7.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.7	7.9	0.0	0.0	7.9	1.0	0.0	3.6	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(50%),veh/ln	0.0	0.0	0.1	0.1	0.0	0.0	0.1	1.3	0.1	3.7	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	31.5	36.0	22.0	0.0	36.0	22.4	19.5	21.0	8.0	0.0
LnGrp LOS			C	D	C		D	C	B	C	A	
Approach Vol, veh/h		4			4			260			1053	
Approach Delay, s/veh		31.5			32.5			22.5			17.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	35.0	16.6	6.2	9.2	6.2	35.5	0.0	15.3
Change Period (Y+Rc), s	5.7	* 6.6	5.7	8.4	5.7	6.6	5.7	8.4
Max Green Setting (Gmax), s	28.3	* 13	10.0	14.6	10.0	29.0	10.0	14.6
Max Q Clear Time (g_c+I1), s	7.1	7.0	2.1	2.1	2.1	5.9	0.0	2.0
Green Ext Time (p_c), s	2.2	0.6	0.0	0.0	0.0	1.8	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	18.2
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	686	1	26	444	209	1	48	13	479	103	0
Future Volume (veh/h)	1	686	1	26	444	209	1	48	13	479	103	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	1	715	1	27	462	218	1	50	14	499	107	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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	2	805	455	49	878	497	54	729	620	528	93	620
Arrive On Green	0.00	0.31	0.31	0.03	0.33	0.33	0.42	0.42	0.42	0.42	0.42	0.00
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	5	1747	1485	1041	223	1485
Grp Volume(v), veh/h	1	715	1	27	462	218	51	0	14	606	0	0
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1752	0	1485	1264	0	1485
Q Serve(g_s), s	0.0	18.2	0.0	1.1	10.0	8.0	0.0	0.0	0.4	28.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	18.2	0.0	1.1	10.0	8.0	1.2	0.0	0.4	29.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	0.82		1.00
Lane Grp Cap(c), veh/h	2	805	455	49	878	497	784	0	620	621	0	620
V/C Ratio(X)	0.42	0.89	0.00	0.56	0.53	0.44	0.07	0.00	0.02	0.98	0.00	0.00
Avail Cap(c_a), veh/h	119	875	495	119	878	497	784	0	620	621	0	620
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	23.2	16.9	33.6	18.9	18.2	12.3	0.0	12.0	22.9	0.0	0.0
Incr Delay (d2), s/veh	88.6	10.5	0.0	9.5	0.6	0.6	0.0	0.0	0.0	29.8	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(50%),veh/ln	0.1	5.8	0.0	0.5	2.6	2.4	0.4	0.0	0.1	13.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	123.6	33.6	16.9	43.1	19.4	18.8	12.3	0.0	12.0	52.7	0.0	0.0
LnGrp LOS	F	C	B	D	B	B	B		B	D		
Approach Vol, veh/h		717			707			65			606	
Approach Delay, s/veh		33.7			20.2			12.2			52.7	
Approach LOS		C			C			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	28.4		35.0	4.8	30.4		35.0				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.0	23.4		29.3	5.0	23.4		29.3				
Max Q Clear Time (g_c+I1), s	3.1	20.2		31.3	2.0	12.0		3.2				
Green Ext Time (p_c), s	0.0	1.3		0.0	0.0	2.7		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	34.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	467	1	12	14	20	13	101	629	4	7	2329	28
Future Volume (veh/h)	467	1	12	14	20	13	101	629	4	7	2329	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	509	0	13	15	22	14	110	684	4	8	2532	30
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	458	0	204	81	85	72	107	2287	13	33	2121	25
Arrive On Green	0.13	0.00	0.13	0.05	0.05	0.05	0.12	1.00	1.00	0.02	0.61	0.61
Sat Flow, veh/h	3450	0	1535	1725	1811	1535	1725	3507	21	1725	3483	41
Grp Volume(v), veh/h	509	0	13	15	22	14	110	336	352	8	1248	1314
Grp Sat Flow(s),veh/h/ln	1725	0	1535	1725	1811	1535	1725	1721	1807	1725	1721	1804
Q Serve(g_s), s	19.9	0.0	1.1	1.3	1.8	1.3	9.3	0.0	0.0	0.7	91.4	91.4
Cycle Q Clear(g_c), s	19.9	0.0	1.1	1.3	1.8	1.3	9.3	0.0	0.0	0.7	91.4	91.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		0.02
Lane Grp Cap(c), veh/h	458	0	204	81	85	72	107	1122	1179	33	1048	1098
V/C Ratio(X)	1.11	0.00	0.06	0.19	0.26	0.19	1.03	0.30	0.30	0.25	1.19	1.20
Avail Cap(c_a), veh/h	458	0	204	92	97	82	107	1122	1179	115	1048	1098
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	1.00	1.00	0.76	0.76	0.76	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	0.0	56.9	68.7	69.0	68.7	65.7	0.0	0.0	72.5	29.3	29.3
Incr Delay (d2), s/veh	76.3	0.0	0.1	1.1	1.6	1.3	83.7	0.5	0.5	3.8	95.6	97.3
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(50%),veh/ln	18.3	0.0	0.4	0.6	0.8	0.5	6.2	0.2	0.2	0.3	60.8	64.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	141.3	0.0	57.0	69.8	70.5	70.0	149.4	0.5	0.5	76.4	125.0	126.6
LnGrp LOS	F		E	E	E	E	F	A	A	E	F	F
Approach Vol, veh/h		522			51			798			2570	
Approach Delay, s/veh		139.2			70.2			21.0			125.7	
Approach LOS		F			E			C			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	105.3		25.0	14.0	98.9		12.1
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1
Max Green Setting (Gmax), s	10.8	89.7		19.9	9.3	90.4		8.0
Max Q Clear Time (g_c+I1), s	2.7	2.0		21.9	11.3	93.4		3.8
Green Ext Time (p_c), s	0.0	3.9		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 7th Control Delay, s/veh	105.5	
HCM 7th LOS	F	

Notes

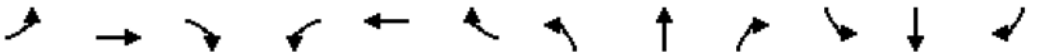
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	2	181	29	5	1	19	709	14	0	1302	1056
Future Volume (veh/h)	22	2	181	29	5	1	19	709	14	0	1302	1056
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	24	2	197	32	5	1	21	771	15	0	1415	1148
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	85	7	82	64	10	65	92	1424	1207	1	1271	1077
Arrive On Green	0.05	0.05	0.05	0.04	0.04	0.04	0.05	0.79	0.79	0.00	1.00	1.00
Sat Flow, veh/h	1598	133	1535	1501	235	1535	1725	1811	1535	1725	1811	1535
Grp Volume(v), veh/h	26	0	197	37	0	1	21	771	15	0	1415	1148
Grp Sat Flow(s),veh/h/ln	1731	0	1535	1736	0	1535	1725	1811	1535	1725	1811	1535
Q Serve(g_s), s	2.2	0.0	8.0	3.1	0.0	0.1	1.8	23.8	0.3	0.0	105.2	0.0
Cycle Q Clear(g_c), s	2.2	0.0	8.0	3.1	0.0	0.1	1.8	23.8	0.3	0.0	105.2	0.0
Prop In Lane	0.92		1.00	0.86		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	92	0	82	74	0	65	92	1424	1207	1	1271	1077
V/C Ratio(X)	0.28	0.00	2.41	0.50	0.00	0.02	0.23	0.54	0.01	0.00	1.11	1.07
Avail Cap(c_a), veh/h	92	0	82	120	0	106	97	1424	1207	92	1271	1077
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	1.00	1.00	1.00	1.00	0.00	0.09	0.09
Uniform Delay (d), s/veh	68.2	0.0	71.0	70.3	0.0	68.8	68.0	6.0	3.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	668.6	5.2	0.0	0.1	1.2	1.5	0.0	0.0	52.3	32.0
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(50%),veh/ln	1.0	0.0	18.3	1.5	0.0	0.0	0.8	7.2	0.1	0.0	18.5	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.9	0.0	739.6	75.5	0.0	68.9	69.3	7.4	3.5	0.0	52.3	32.0
LnGrp LOS	E		F	E		E	E	A	A		F	F
Approach Vol, veh/h		223			38			807			2563	
Approach Delay, s/veh		661.5			75.3			9.0			43.2	
Approach LOS		F			E			A			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	125.4		13.1	12.7	112.7		11.5
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1
Max Green Setting (Gmax), s	8.3	101.2		8.0	8.4	100.8		10.4
Max Q Clear Time (g_c+I1), s	10.0	25.8		10.0	3.8	107.2		5.1
Green Ext Time (p_c), s	0.0	5.5		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	73.9
HCM 7th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	280	9	2	282	239	12	9	2	543	5	51
Future Volume (veh/h)	37	280	9	2	282	239	12	9	2	543	5	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	40	304	10	2	307	260	13	10	2	594	0	55
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	304	659	373	306	554	313	28	22	44	783	0	348
Arrive On Green	0.04	0.25	0.25	0.00	0.21	0.21	0.03	0.03	0.03	0.23	0.00	0.23
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	963	741	1485	3337	0	1485
Grp Volume(v), veh/h	40	304	10	2	307	260	23	0	2	594	0	55
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1704	0	1485	1668	0	1485
Q Serve(g_s), s	0.9	4.8	0.2	0.0	5.1	8.1	0.6	0.0	0.1	8.0	0.0	1.4
Cycle Q Clear(g_c), s	0.9	4.8	0.2	0.0	5.1	8.1	0.6	0.0	0.1	8.0	0.0	1.4
Prop In Lane	1.00		1.00	1.00		1.00	0.57		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	659	373	306	554	313	50	0	44	783	0	348
V/C Ratio(X)	0.13	0.46	0.03	0.01	0.55	0.83	0.46	0.00	0.05	0.76	0.00	0.16
Avail Cap(c_a), veh/h	404	659	373	473	568	321	175	0	153	1106	0	492
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	14.1	15.4	13.7	15.1	17.1	18.3	23.2	0.0	22.9	17.3	0.0	14.8
Incr Delay (d2), s/veh	0.2	0.5	0.0	0.0	1.1	16.2	6.4	0.0	0.4	1.9	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(50%),veh/ln	0.3	1.1	0.1	0.0	1.2	3.5	0.3	0.0	0.0	2.6	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.3	15.9	13.7	15.1	18.2	34.5	29.6	0.0	23.3	19.3	0.0	15.0
LnGrp LOS	B	B	B	B	B	C	C		C	B		B
Approach Vol, veh/h		354			569			25			649	
Approach Delay, s/veh		15.7			25.7			29.1			18.9	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	19.1		17.3	6.8	17.1		7.3				
Change Period (Y+Rc), s	4.7	6.9		5.9	4.7	6.9		5.9				
Max Green Setting (Gmax), s	5.0	10.5		16.1	5.0	10.5		5.0				
Max Q Clear Time (g_c+I1), s	2.0	6.8		10.0	2.9	10.1		2.6				
Green Ext Time (p_c), s	0.0	0.6		1.3	0.0	0.1		0.0				

Intersection Summary		
HCM 7th Control Delay, s/veh	20.7	
HCM 7th 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												
Traffic Volume (veh/h)	45	520	658	844	411	57	386	267	524	49	188	30
Future Volume (veh/h)	45	520	658	844	411	57	386	267	524	49	188	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	48	559	708	908	442	61	415	287	563	53	202	32
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	81	526	646	754	731	101	366	533	797	232	312	49
Arrive On Green	0.05	0.29	0.29	0.22	0.47	0.47	0.13	0.29	0.29	0.05	0.20	0.20
Sat Flow, veh/h	1739	1826	1547	3374	1570	217	1739	1826	1547	1739	1538	244
Grp Volume(v), veh/h	48	559	708	908	0	503	415	287	563	53	0	234
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1687	0	1787	1739	1826	1547	1739	0	1782
Q Serve(g_s), s	4.0	42.9	42.9	33.3	0.0	31.2	19.3	19.7	41.3	3.5	0.0	17.9
Cycle Q Clear(g_c), s	4.0	42.9	42.9	33.3	0.0	31.2	19.3	19.7	41.3	3.5	0.0	17.9
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	81	526	646	754	0	831	366	533	797	232	0	362
V/C Ratio(X)	0.60	1.06	1.10	1.20	0.00	0.61	1.13	0.54	0.71	0.23	0.00	0.65
Avail Cap(c_a), veh/h	116	526	646	754	0	831	366	534	799	243	0	395
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	0.00	1.00
Uniform Delay (d), s/veh	69.7	53.0	43.4	57.8	0.0	29.6	47.1	44.3	27.5	43.3	0.0	54.4
Incr Delay (d2), s/veh	6.9	57.0	64.4	104.2	0.0	1.3	88.4	1.1	2.9	0.5	0.0	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(50%),veh/ln	2.0	28.0	34.6	25.1	0.0	13.8	13.6	9.0	15.4	1.6	0.0	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	76.5	110.1	107.8	162.0	0.0	30.9	135.6	45.4	30.4	43.8	0.0	57.7
LnGrp LOS	E	F	F	F		C	F	D	C	D		E
Approach Vol, veh/h		1315			1411			1265			287	
Approach Delay, s/veh		107.6			115.3			68.3			55.1	
Approach LOS		F			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	38.0	49.3	25.0	36.6	11.6	75.7	11.8	49.8
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	33.3	42.9	19.3	* 33	9.9	* 67	8.0	43.6
Max Q Clear Time (g_c+I1), s	35.3	45.9	21.3	19.9	6.0	33.2	6.5	43.3
Green Ext Time (p_c), s	0.0	0.0	0.0	1.0	0.0	3.7	0.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	95.0
HCM 7th LOS	F

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	37	78	177	50	124	92	77	901	15	139	1830	43
Future Volume (veh/h)	37	78	177	50	124	92	77	901	15	139	1830	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	39	82	186	53	131	97	81	948	16	146	1926	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	119	245	335	137	264	224	278	1241	605	173	1294	631
Arrive On Green	0.07	0.14	0.14	0.08	0.15	0.15	0.09	0.41	0.41	0.10	0.42	0.42
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	3047	1485
Grp Volume(v), veh/h	39	82	186	53	131	97	81	948	16	146	1926	45
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1523	1485
Q Serve(g_s), s	2.3	4.5	11.7	3.2	7.2	6.3	2.5	28.2	0.7	9.1	44.8	1.9
Cycle Q Clear(g_c), s	2.3	4.5	11.7	3.2	7.2	6.3	2.5	28.2	0.7	9.1	44.8	1.9
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	119	245	335	137	264	224	278	1241	605	173	1294	631
V/C Ratio(X)	0.33	0.34	0.56	0.39	0.50	0.43	0.29	0.76	0.03	0.85	1.49	0.07
Avail Cap(c_a), veh/h	174	847	846	174	847	718	307	1257	612	179	1294	631
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	46.6	41.0	36.2	45.9	41.1	40.7	45.2	26.9	18.7	46.4	30.3	18.0
Incr Delay (d2), s/veh	1.6	0.8	1.4	1.8	1.4	1.3	0.6	2.8	0.0	28.7	223.8	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(50%),veh/ln	1.0	1.9	4.2	1.3	3.1	2.3	1.0	9.7	0.2	4.9	54.7	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.2	41.8	37.6	47.6	42.5	42.0	45.8	29.7	18.7	75.1	254.1	18.0
LnGrp LOS	D	D	D	D	D	D	D	C	B	E	F	B
Approach Vol, veh/h		307			281			1045			2117	
Approach Delay, s/veh		40.1			43.3			30.8			236.8	
Approach LOS		D			D			C			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	51.3	14.4	23.1	14.8	53.2	13.2	24.3
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	11.3	43.5	11.0	51.0	10.0	44.8	11.0	51.0
Max Q Clear Time (g_c+I1), s	11.1	30.2	5.2	13.7	4.5	46.8	4.3	9.2
Green Ext Time (p_c), s	0.0	4.9	0.0	1.0	0.1	0.0	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	148.8
HCM 7th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	102	184	70	143	72	141	1226	26	47	1429	121
Future Volume (veh/h)	91	102	184	70	143	72	141	1226	26	47	1429	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	99	111	200	76	155	78	153	1333	28	51	1553	132
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	168	291	247	186	291	247	183	2136	45	67	1758	148
Arrive On Green	0.00	0.16	0.16	0.00	0.16	0.16	0.11	0.61	0.61	0.04	0.54	0.54
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3474	73	1739	3238	273
Grp Volume(v), veh/h	99	111	200	76	155	78	153	665	696	51	826	859
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1735	1813	1739	1735	1777
Q Serve(g_s), s	0.1	5.3	12.1	0.1	7.5	4.3	8.4	23.2	23.2	2.8	40.2	41.4
Cycle Q Clear(g_c), s	0.1	5.3	12.1	0.1	7.5	4.3	8.4	23.2	23.2	2.8	40.2	41.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		0.15
Lane Grp Cap(c), veh/h	168	291	247	186	291	247	183	1066	1115	67	942	965
V/C Ratio(X)	0.59	0.38	0.81	0.41	0.53	0.32	0.84	0.62	0.62	0.76	0.88	0.89
Avail Cap(c_a), veh/h	346	811	688	364	811	688	185	1122	1173	101	1029	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	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	44.5	36.4	39.2	41.5	37.3	36.0	42.5	11.6	11.7	46.1	19.3	19.6
Incr Delay (d2), s/veh	3.3	0.8	6.3	1.4	1.5	0.7	26.8	1.0	1.0	16.7	8.2	9.1
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(50%),veh/ln	2.5	2.4	5.0	1.8	3.5	1.7	4.8	7.6	8.0	1.5	15.9	16.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.8	37.2	45.5	43.0	38.8	36.7	69.3	12.6	12.6	62.8	27.5	28.6
LnGrp LOS	D	D	D	D	D	D	E	B	B	E	C	C
Approach Vol, veh/h		410			309			1514			1736	
Approach Delay, s/veh		43.8			39.3			18.4			29.1	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	66.7	0.0	21.1	15.9	59.7	0.0	21.1
Change Period (Y+Rc), s	5.2	7.2	5.7	5.7	5.7	7.2	5.7	5.7
Max Green Setting (Gmax), s	5.6	62.6	10.0	43.0	10.3	57.4	10.0	43.0
Max Q Clear Time (g_c+I1), s	4.8	25.2	0.0	14.1	10.4	43.4	0.0	9.5
Green Ext Time (p_c), s	0.0	11.0	0.0	1.4	0.0	9.2	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	27.3
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	43	99	16	66	14	87	1235	14	22	2196	105
Future Volume (veh/h)	39	43	99	16	66	14	87	1235	14	22	2196	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	42	47	108	17	72	15	95	1342	0	24	2387	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	57	43	86	43	122	23	131	2196		84	2107	
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.08	0.70	0.00	0.05	0.67	0.00
Sat Flow, veh/h	266	417	829	150	1177	224	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	197	0	0	104	0	0	95	1342	0	24	2387	0
Grp Sat Flow(s),veh/h/ln	1512	0	0	1550	0	0	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	6.2	0.0	0.0	0.0	0.0	0.0	8.3	33.7	0.0	2.1	99.9	0.0
Cycle Q Clear(g_c), s	15.5	0.0	0.0	9.3	0.0	0.0	8.3	33.7	0.0	2.1	99.9	0.0
Prop In Lane	0.21		0.55	0.16		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	186	0	0	188	0	0	131	2196		84	2107	
V/C Ratio(X)	1.06	0.00	0.00	0.55	0.00	0.00	0.72	0.61		0.28	1.13	
Avail Cap(c_a), veh/h	186	0	0	188	0	0	134	2196		134	2107	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	68.3	0.0	0.0	64.2	0.0	0.0	67.4	12.1	0.0	68.5	24.9	0.0
Incr Delay (d2), s/veh	83.2	0.0	0.0	3.4	0.0	0.0	17.3	0.5	0.0	1.8	66.3	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(50%),veh/ln	11.5	0.0	0.0	4.0	0.0	0.0	4.1	10.3	0.0	0.9	50.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	151.5	0.0	0.0	67.6	0.0	0.0	84.7	12.6	0.0	70.3	91.2	0.0
LnGrp LOS	F			E			F	B		E	F	
Approach Vol, veh/h		197			104			1437			2411	
Approach Delay, s/veh		151.5			67.6			17.4			91.0	
Approach LOS		F			E			B			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.3	112.5		24.0	17.5	108.3		24.0
Change Period (Y+Rc), s	5.7	8.4		8.5	5.7	8.4		8.5
Max Green Setting (Gmax), s	12.6	99.9		15.5	12.0	99.9		15.5
Max Q Clear Time (g_c+I1), s	14.1	35.7		17.5	10.3	101.9		11.3
Green Ext Time (p_c), s	0.0	12.3		0.0	0.0	0.0		0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	67.8
HCM 7th LOS	E

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	262	312	88	213	299	157	95	1149	160	161	1292	279
Future Volume (veh/h)	262	312	88	213	299	157	95	1149	160	161	1292	279
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	282	335	95	229	322	169	102	1235	172	173	1389	300
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	239	469	131	267	402	207	125	1452	647	198	1598	843
Arrive On Green	0.08	0.18	0.18	0.09	0.18	0.18	0.07	0.42	0.42	0.11	0.46	0.46
Sat Flow, veh/h	1739	2678	748	1739	2217	1139	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	282	215	215	229	250	241	102	1235	172	173	1389	300
Grp Sat Flow(s),veh/h/ln	1739	1735	1691	1739	1735	1621	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	10.5	14.5	14.9	11.3	17.2	17.7	7.2	40.0	9.0	12.2	44.8	13.6
Cycle Q Clear(g_c), s	10.5	14.5	14.9	11.3	17.2	17.7	7.2	40.0	9.0	12.2	44.8	13.6
Prop In Lane	1.00		0.44	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	304	296	267	315	294	125	1452	647	198	1598	843
V/C Ratio(X)	1.18	0.71	0.73	0.86	0.80	0.82	0.82	0.85	0.27	0.87	0.87	0.36
Avail Cap(c_a), veh/h	239	588	574	267	600	560	127	1452	647	207	1598	843
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	45.3	48.3	48.5	42.5	48.7	48.9	56.9	32.7	23.7	54.2	30.2	16.0
Incr Delay (d2), s/veh	115.6	3.0	3.4	23.0	4.6	5.6	32.1	6.4	1.0	30.4	6.7	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(50%),veh/ln	10.1	6.4	6.5	3.4	7.7	7.5	4.2	17.1	3.4	6.9	19.0	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	160.9	51.4	51.9	65.5	53.3	54.5	89.0	39.1	24.7	84.6	36.9	17.1
LnGrp LOS	F	D	D	E	D	D	F	D	C	F	D	B
Approach Vol, veh/h		712			720			1509			1862	
Approach Delay, s/veh		94.9			57.6			40.8			38.2	
Approach LOS		F			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	59.3	17.0	28.3	14.6	64.5	16.2	29.1
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	4.2	51.6	11.3	42.2	9.1	57.3	10.5	43.0
Max Q Clear Time (g_c+I1), s	4.2	42.0	13.3	16.9	9.2	46.8	12.5	19.7
Green Ext Time (p_c), s	0.0	5.7	0.0	2.4	0.0	7.0	0.0	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	50.3
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	2	324	4	4	1	269	1215	2	1	2143	144
Future Volume (veh/h)	91	2	324	4	4	1	269	1215	2	1	2143	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	99	2	352	4	4	1	292	1321	2	1	2329	157
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	392	8	499	18	18	4	312	1864	3	5	1524	716
Arrive On Green	0.24	0.24	0.24	0.02	0.02	0.02	0.10	0.58	0.58	0.00	0.48	0.48
Sat Flow, veh/h	1637	33	1485	747	747	187	3237	3237	5	1668	3159	1485
Grp Volume(v), veh/h	101	0	352	9	0	0	292	645	678	1	2329	157
Grp Sat Flow(s),veh/h/ln	1670	0	1485	1681	0	0	1618	1580	1662	1668	1580	1485
Q Serve(g_s), s	5.6	0.0	23.5	0.6	0.0	0.0	10.2	33.4	33.4	0.1	55.0	7.0
Cycle Q Clear(g_c), s	5.6	0.0	23.5	0.6	0.0	0.0	10.2	33.4	33.4	0.1	55.0	7.0
Prop In Lane	0.98		1.00	0.44		0.11	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	400	0	499	40	0	0	312	910	957	5	1524	716
V/C Ratio(X)	0.25	0.00	0.71	0.22	0.00	0.00	0.94	0.71	0.71	0.20	1.53	0.22
Avail Cap(c_a), veh/h	732	0	794	162	0	0	312	910	957	161	1524	716
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	0.0	33.0	54.6	0.0	0.0	51.2	17.3	17.3	56.7	29.5	17.1
Incr Delay (d2), s/veh	0.3	0.0	1.8	2.8	0.0	0.0	34.3	2.6	2.4	18.4	241.1	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(50%),veh/ln	2.3	0.0	8.4	0.3	0.0	0.0	5.4	10.9	11.4	0.1	69.3	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.4	0.0	34.8	57.4	0.0	0.0	85.5	19.9	19.8	75.1	270.6	17.2
LnGrp LOS	D		C	E			F	B	B	E	F	B
Approach Vol, veh/h		453			9			1615			2487	
Approach Delay, s/veh		34.9			57.4			31.7			254.6	
Approach LOS		C			E			C			F	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	70.2		31.8	15.5	59.5		7.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	11.3	55.0		50.0	11.0	55.0		11.0				
Max Q Clear Time (g_c+I1), s	2.1	35.4		25.5	12.2	57.0		2.6				
Green Ext Time (p_c), s	0.0	7.9		1.8	0.0	0.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	153.5
HCM 7th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	221	100	105	228	563	100	1067	76	567	1214	149
Future Volume (veh/h)	111	221	100	105	228	563	100	1067	76	567	1214	149
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	114	228	103	108	235	0	103	1100	78	585	1252	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	140	310	136	134	445		129	1252	89	662	1779	
Arrive On Green	0.08	0.13	0.13	0.08	0.13	0.00	0.07	0.38	0.38	0.20	0.51	0.00
Sat Flow, veh/h	1739	2349	1027	1739	3469	1547	1739	3286	233	3374	3469	1547
Grp Volume(v), veh/h	114	166	165	108	235	0	103	580	598	585	1252	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1641	1739	1735	1547	1739	1735	1784	1687	1735	1547
Q Serve(g_s), s	6.7	9.6	10.1	6.4	6.6	0.0	6.1	32.5	32.5	17.6	28.7	0.0
Cycle Q Clear(g_c), s	6.7	9.6	10.1	6.4	6.6	0.0	6.1	32.5	32.5	17.6	28.7	0.0
Prop In Lane	1.00		0.63	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	140	229	217	134	445		129	661	680	662	1779	
V/C Ratio(X)	0.81	0.73	0.76	0.81	0.53		0.80	0.88	0.88	0.88	0.70	
Avail Cap(c_a), veh/h	155	509	481	155	1031		188	740	761	753	1912	
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.2	43.5	43.7	47.4	42.5	0.0	47.5	30.0	30.0	40.8	19.4	0.0
Incr Delay (d2), s/veh	25.0	4.4	5.4	23.3	1.0	0.0	14.0	10.8	10.6	11.1	1.1	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(50%),veh/ln	3.8	4.3	4.3	3.6	2.8	0.0	3.1	14.9	15.3	8.2	11.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	72.2	47.8	49.1	70.6	43.5	0.0	61.5	40.8	40.7	51.9	20.5	0.0
LnGrp LOS	E	D	D	E	D		E	D	D	D	C	
Approach Vol, veh/h		445			343			1281			1837	
Approach Delay, s/veh		54.5			52.0			42.4			30.5	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	59.6	13.1	19.2	26.2	45.9	12.7	19.6
Change Period (Y+Rc), s	4.7	6.1	4.7	* 5.8	5.7	6.1	4.7	5.8
Max Green Setting (Gmax), s	7.7	57.5	9.3	* 31	23.3	44.5	9.3	30.6
Max Q Clear Time (g_c+I1), s	8.1	30.7	8.7	8.6	19.6	34.5	8.4	12.1
Green Ext Time (p_c), s	0.1	10.6	0.0	1.3	0.9	5.2	0.0	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	39.0
HCM 7th LOS	D

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	271	174	111	220	99	122	1262	138	119	2044	294
Future Volume (veh/h)	129	271	174	111	220	99	122	1262	138	119	2044	294
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	140	295	189	121	239	108	133	1372	150	129	2222	320
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	188	371	232	186	423	185	146	1180	555	146	1180	722
Arrive On Green	0.11	0.19	0.19	0.11	0.19	0.19	0.09	0.37	0.37	0.09	0.37	0.37
Sat Flow, veh/h	1668	1968	1227	1668	2252	986	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	140	248	236	121	175	172	133	1372	150	129	2222	320
Grp Sat Flow(s),veh/h/ln	1668	1664	1531	1668	1664	1574	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	9.3	16.3	16.9	7.9	10.9	11.4	9.0	42.7	8.0	8.7	42.7	16.1
Cycle Q Clear(g_c), s	9.3	16.3	16.9	7.9	10.9	11.4	9.0	42.7	8.0	8.7	42.7	16.1
Prop In Lane	1.00		0.80	1.00		0.63	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	314	289	186	312	295	146	1180	555	146	1180	722
V/C Ratio(X)	0.75	0.79	0.82	0.65	0.56	0.58	0.91	1.16	0.27	0.88	1.88	0.44
Avail Cap(c_a), veh/h	328	830	764	190	692	654	146	1180	555	146	1180	722
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	49.1	44.2	44.5	48.7	42.1	42.4	51.7	35.8	24.9	51.6	35.8	19.2
Incr Delay (d2), s/veh	5.8	4.5	5.6	7.5	1.6	1.8	48.9	82.7	0.3	42.4	400.3	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(50%),veh/ln	4.0	6.7	6.5	3.5	4.4	4.4	5.6	28.5	2.7	5.2	80.6	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.0	48.7	50.1	56.1	43.7	44.2	100.6	118.5	25.2	93.9	436.1	19.7
LnGrp LOS	D	D	D	E	D	D	F	F	C	F	F	B
Approach Vol, veh/h		624			468			1655			2671	
Approach Delay, s/veh		50.6			47.1			108.6			369.7	
Approach LOS		D			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	51.1	18.4	29.1	15.7	51.1	18.5	28.9
Change Period (Y+Rc), s	5.7	8.4	5.7	7.5	5.7	8.4	5.7	7.5
Max Green Setting (Gmax), s	10.0	42.7	13.0	57.0	10.0	42.7	22.5	47.5
Max Q Clear Time (g_c+I1), s	10.7	44.7	9.9	18.9	11.0	44.7	11.3	13.4
Green Ext Time (p_c), s	0.0	0.0	0.1	2.7	0.0	0.0	0.2	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	225.3
HCM 7th LOS	F

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	25	0	136	6	221	0	0	269	181
Future Vol, veh/h	0	0	0	25	0	136	6	221	0	0	269	181
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	27	0	148	7	240	0	0	292	197

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	546	742	240	489	0	-	-	-	0
Stage 1	253	253	-	-	-	-	-	-	-
Stage 2	292	489	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	482	332	775	1024	-	0	0	-	-
Stage 1	766	680	-	-	-	0	0	-	-
Stage 2	735	533	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	479	0	775	1024	-	-	-	-	-
Mov Cap-2 Maneuver	479	0	-	-	-	-	-	-	-
Stage 1	761	0	-	-	-	-	-	-	-
Stage 2	735	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.09	0.23	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	48	-	479	775	-	-
HCM Lane V/C Ratio	0.006	-	0.057	0.191	-	-
HCM Ctrl Dly (s/v)	8.5	0	13	10.7	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0.7	-	-

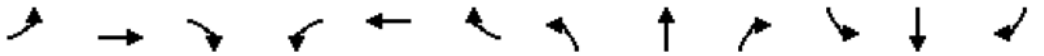
Intersection	
Int Delay, s/veh	10.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	180	0	6	0	0	0	0	36	23	204	80	0
Future Vol, veh/h	180	0	6	0	0	0	0	36	23	204	80	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	188	0	6	0	0	0	0	38	24	213	83	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	546	570	83	-	0	0	61	0	0
Stage 1	508	508	-	-	-	-	-	-	-
Stage 2	38	61	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	-	-	-	4.22	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	-	-	-	2.308	-	-
Pot Cap-1 Maneuver	482	418	949	0	-	-	1480	-	0
Stage 1	584	522	-	0	-	-	-	-	0
Stage 2	960	824	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	409	0	949	-	-	-	1480	-	-
Mov Cap-2 Maneuver	409	0	-	-	-	-	-	-	-
Stage 1	584	0	-	-	-	-	-	-	-
Stage 2	815	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	20.61	0	5.63
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	409	949	1293	-
HCM Lane V/C Ratio	-	-	0.458	0.007	0.144	-
HCM Ctrl Dly (s/v)	-	-	21	8.8	7.8	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	2.3	0	0.5	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	38	0	809	9	311	0	0	1343	150
Future Volume (veh/h)	0	0	0	38	0	809	9	311	0	0	1343	150
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				0	0	914	10	334	0	0	1444	161
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				0	432	1099	29	2232	0	0	1978	882
Arrive On Green				0.00	0.00	0.24	0.02	0.64	0.00	0.00	0.57	0.57
Sat Flow, veh/h				0	1826	4642	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				0	0	914	10	334	0	0	1444	161
Grp Sat Flow(s),veh/h/ln				0	1826	1547	1739	1735	0	0	1735	1547
Q Serve(g_s), s				0.0	0.0	20.6	0.6	4.2	0.0	0.0	33.7	5.5
Cycle Q Clear(g_c), s				0.0	0.0	20.6	0.6	4.2	0.0	0.0	33.7	5.5
Prop In Lane				0.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				0	432	1099	29	2232	0	0	1978	882
V/C Ratio(X)				0.00	0.00	0.83	0.34	0.15	0.00	0.00	0.73	0.18
Avail Cap(c_a), veh/h				0	614	1561	111	2232	0	0	1978	882
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				0.0	0.0	39.9	53.5	7.7	0.0	0.0	17.4	11.3
Incr Delay (d2), s/veh				0.0	0.0	2.7	6.8	0.1	0.0	0.0	2.4	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
%ile BackOfQ(50%),veh/ln				0.0	0.0	7.6	0.3	1.5	0.0	0.0	13.1	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				0.0	0.0	42.6	60.2	7.9	0.0	0.0	19.8	11.8
LnGrp LOS						D	E	A			B	B
Approach Vol, veh/h					914			344			1605	
Approach Delay, s/veh					42.6			9.4			19.0	
Approach LOS					D			A			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.9			8.0	68.8		33.1				
Change Period (Y+Rc), s		6.1			6.2	6.1		7.1				
Max Green Setting (Gmax), s		59.8			7.0	46.6		37.0				
Max Q Clear Time (g_c+I1), s		6.2			2.6	35.7		22.6				
Green Ext Time (p_c), s		2.3			0.0	7.4		3.5				

Intersection Summary		
HCM 7th Control Delay, s/veh	25.4	
HCM 7th 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												
Traffic Volume (veh/h)	128	3	29	0	0	0	0	193	42	0	413	974
Future Volume (veh/h)	128	3	29	0	0	0	0	193	42	0	413	974
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826				0	1826	1826	0	1826	1826
Adj Flow Rate, veh/h	85	74	31				0	205	45	0	439	1036
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	5	5	5				0	5	5	0	5	5
Cap, veh/h	172	121	51				0	2274	489	0	2778	2451
Arrive On Green	0.10	0.10	0.10				0.00	0.80	0.80	0.00	0.80	0.80
Sat Flow, veh/h	1739	1222	512				0	2931	611	0	3561	2723
Grp Volume(v), veh/h	85	0	105				0	124	126	0	439	1036
Grp Sat Flow(s),veh/h/ln	1739	0	1734				0	1735	1716	0	1735	1362
Q Serve(g_s), s	4.2	0.0	5.2				0.0	1.4	1.4	0.0	2.6	5.5
Cycle Q Clear(g_c), s	4.2	0.0	5.2				0.0	1.4	1.4	0.0	2.6	5.5
Prop In Lane	1.00		0.30				0.00		0.36	0.00		1.00
Lane Grp Cap(c), veh/h	172	0	172				0	1389	1374	0	2778	2451
V/C Ratio(X)	0.49	0.00	0.61				0.00	0.09	0.09	0.00	0.16	0.42
Avail Cap(c_a), veh/h	783	0	780				0	1389	1374	0	2778	2451
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	1.00				0.00	1.00	1.00	0.00	0.80	0.80
Uniform Delay (d), s/veh	38.4	0.0	38.9				0.0	1.9	1.9	0.0	2.0	0.7
Incr Delay (d2), s/veh	2.2	0.0	3.5				0.0	0.1	0.1	0.0	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(50%),veh/ln	1.8	0.0	2.2				0.0	0.3	0.3	0.0	0.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.6	0.0	42.4				0.0	2.0	2.1	0.0	2.1	0.8
LnGrp LOS	D		D					A	A		A	A
Approach Vol, veh/h		190						250			1475	
Approach Delay, s/veh		41.6						2.1			1.2	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	76.6	13.4	76.6
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	40.5	40.5
Max Q Clear Time (g_c+I1), s	3.4	7.2	7.5
Green Ext Time (p_c), s	1.5	0.7	9.3

Intersection Summary	
HCM 7th Control Delay, s/veh	5.3
HCM 7th 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												
Traffic Volume (veh/h)	51	67	0	31	54	76	140	1333	39	157	2073	113
Future Volume (veh/h)	51	67	0	31	54	76	140	1333	39	157	2073	113
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	54	71	0	33	57	81	149	1418	41	167	2205	120
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	96	102	204	96	147	204	166	2006	58	194	2005	108
Arrive On Green	0.13	0.13	0.00	0.13	0.13	0.13	0.09	0.58	0.58	0.11	0.59	0.59
Sat Flow, veh/h	405	779	1560	420	1119	1560	1753	3471	100	1753	3375	182
Grp Volume(v), veh/h	125	0	0	90	0	81	149	713	746	167	1133	1192
Grp Sat Flow(s),veh/h/ln	1184	0	1560	1539	0	1560	1753	1749	1823	1753	1749	1808
Q Serve(g_s), s	7.1	0.0	0.0	0.0	0.0	5.7	10.1	34.8	35.0	11.2	71.1	71.1
Cycle Q Clear(g_c), s	13.1	0.0	0.0	6.0	0.0	5.7	10.1	34.8	35.0	11.2	71.1	71.1
Prop In Lane	0.43		1.00	0.37		1.00	1.00		0.05	1.00		0.10
Lane Grp Cap(c), veh/h	198	0	204	243	0	204	166	1011	1053	194	1039	1074
V/C Ratio(X)	0.63	0.00	0.00	0.37	0.00	0.40	0.90	0.71	0.71	0.86	1.09	1.11
Avail Cap(c_a), veh/h	519	0	534	582	0	534	166	1011	1053	227	1039	1074
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	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	0.0	0.0	47.6	0.0	47.7	53.6	18.0	18.0	52.3	24.3	24.3
Incr Delay (d2), s/veh	3.3	0.0	0.0	0.9	0.0	1.2	42.5	4.1	4.0	24.2	55.8	62.8
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(50%),veh/ln	3.8	0.0	0.0	2.5	0.0	2.2	6.2	13.3	13.8	6.0	40.4	43.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.9	0.0	0.0	48.6	0.0	48.9	96.1	22.2	22.1	76.5	80.1	87.1
LnGrp LOS	D			D		D	F	C	C	E	F	F
Approach Vol, veh/h		125			171			1608			2492	
Approach Delay, s/veh		54.9			48.7			29.0			83.2	
Approach LOS		D			D			C			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.9	77.6		23.2	17.0	79.5		23.2
Change Period (Y+Rc), s	5.7	8.4		7.5	5.7	8.4		7.5
Max Green Setting (Gmax), s	15.5	66.9		41.0	11.3	71.1		41.0
Max Q Clear Time (g_c+I1), s	13.2	37.0		15.1	12.1	73.1		8.0
Green Ext Time (p_c), s	0.1	10.7		0.6	0.0	0.0		0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	61.2
HCM 7th LOS	E



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	670	375	451	624	175	299
Future Volume (veh/h)	670	375	451	624	175	299
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	705	395	475	657	184	315
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1186	812	634	2123	318	498
Arrive On Green	0.34	0.34	0.18	0.60	0.18	0.18
Sat Flow, veh/h	3618	1572	3428	3618	1767	2768
Grp Volume(v), veh/h	705	395	475	657	184	315
Grp Sat Flow(s),veh/h/ln	1763	1572	1714	1763	1767	1384
Q Serve(g_s), s	9.2	9.0	7.3	5.1	5.3	5.9
Cycle Q Clear(g_c), s	9.2	9.0	7.3	5.1	5.3	5.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1186	812	634	2123	318	498
V/C Ratio(X)	0.59	0.49	0.75	0.31	0.58	0.63
Avail Cap(c_a), veh/h	2856	1557	957	4081	1228	1923
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	8.7	21.4	5.4	20.8	21.1
Incr Delay (d2), s/veh	0.5	0.5	1.8	0.1	1.7	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	2.5	2.8	1.3	2.2	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.8	9.1	23.2	5.5	22.5	22.4
LnGrp LOS	B	A	C	A	C	C
Approach Vol, veh/h	1100			1132	499	
Approach Delay, s/veh	13.4			12.9	22.4	
Approach LOS	B			B	C	

Timer - Assigned Phs	3	4		6	8
Phs Duration (G+Y+Rc), s	14.8	25.1		15.7	39.9
Change Period (Y+Rc), s	4.5	* 6.4		5.7	6.4
Max Green Setting (Gmax), s	15.5	* 45		38.6	64.3
Max Q Clear Time (g_c+I1), s	9.3	11.2		7.9	7.1
Green Ext Time (p_c), s	1.0	7.5		1.9	5.4

Intersection Summary	
HCM 7th Control Delay, s/veh	14.9
HCM 7th LOS	B

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	286	566	181	184	488	272	232	794	102	444	1038	412
Future Volume (veh/h)	286	566	181	184	488	272	232	794	102	444	1038	412
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	308	609	195	198	525	292	249	854	110	477	1116	443
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	363	938	559	261	798	372	306	971	125	536	1326	591
Arrive On Green	0.11	0.27	0.27	0.08	0.24	0.24	0.09	0.31	0.31	0.16	0.38	0.38
Sat Flow, veh/h	3428	3526	1572	3428	3377	1572	3428	3141	405	3428	3526	1572
Grp Volume(v), veh/h	308	609	195	198	525	292	249	479	485	477	1116	443
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1689	1572	1714	1763	1783	1714	1763	1572
Q Serve(g_s), s	10.0	17.4	10.4	6.4	16.0	19.8	8.1	29.4	29.4	15.5	32.9	27.9
Cycle Q Clear(g_c), s	10.0	17.4	10.4	6.4	16.0	19.8	8.1	29.4	29.4	15.5	32.9	27.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	363	938	559	261	798	372	306	545	551	536	1326	591
V/C Ratio(X)	0.85	0.65	0.35	0.76	0.66	0.79	0.81	0.88	0.88	0.89	0.84	0.75
Avail Cap(c_a), veh/h	367	1130	644	391	1127	525	316	616	623	566	1489	664
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	50.0	37.1	27.0	51.6	39.3	40.8	50.9	37.3	37.3	47.1	32.4	30.9
Incr Delay (d2), s/veh	16.6	1.0	0.4	4.6	0.9	5.1	14.7	12.8	12.6	15.6	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(50%),veh/ln	5.1	7.6	4.0	2.9	6.7	8.2	4.1	14.3	14.4	7.7	14.3	11.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.6	38.0	27.4	56.2	40.2	45.9	65.6	50.1	50.0	62.7	36.6	35.0
LnGrp LOS	E	D	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1112			1015			1213			2036	
Approach Delay, s/veh		44.1			45.0			53.2			42.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	40.8	13.9	36.2	15.4	48.4	17.3	32.8
Change Period (Y+Rc), s	5.2	5.6	5.2	5.9	5.2	5.6	5.2	* 5.9
Max Green Setting (Gmax), s	18.8	39.8	13.0	36.5	10.5	48.1	12.2	* 38
Max Q Clear Time (g_c+I1), s	17.5	31.4	8.4	19.4	10.1	34.9	12.0	21.8
Green Ext Time (p_c), s	0.3	3.8	0.3	4.5	0.0	7.6	0.0	5.1

Intersection Summary	
HCM 7th Control Delay, s/veh	45.7
HCM 7th LOS	D

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	270	1	46	1326	5	16	21	286	564	8	853	332
Future Volume (veh/h)	270	1	46	1326	5	16	21	286	564	8	853	332
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	278	1	47	1367	5	16	22	295	581	8	879	342
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	313	3	147	901	635	538	70	671	966	214	959	706
Arrive On Green	0.18	0.10	0.10	0.42	0.34	0.34	0.04	0.19	0.19	0.12	0.27	0.27
Sat Flow, veh/h	1767	33	1545	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	278	0	48	1367	5	16	22	295	581	8	879	342
Grp Sat Flow(s),veh/h/ln	1767	0	1578	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	17.8	0.0	3.3	49.0	0.2	0.8	1.4	8.5	22.0	0.5	28.0	17.7
Cycle Q Clear(g_c), s	17.8	0.0	3.3	49.0	0.2	0.8	1.4	8.5	22.0	0.5	28.0	17.7
Prop In Lane	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	0	150	901	635	538	70	671	966	214	959	706
V/C Ratio(X)	0.89	0.00	0.32	1.52	0.01	0.03	0.32	0.44	0.60	0.04	0.92	0.48
Avail Cap(c_a), veh/h	535	0	532	901	851	721	159	671	966	235	959	706
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	0.0	48.8	26.2	25.1	25.3	54.0	41.4	13.6	44.9	40.8	22.4
Incr Delay (d2), s/veh	9.5	0.0	1.2	238.3	0.0	0.0	2.6	0.5	1.0	0.1	13.3	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(50%),veh/ln	8.5	0.0	1.3	81.4	0.1	0.3	0.7	3.7	8.8	0.2	13.6	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.0	0.0	50.0	264.5	25.1	25.3	56.6	41.8	14.7	44.9	54.1	22.9
LnGrp LOS	E		D	F	C	C	E	D	B	D	D	C
Approach Vol, veh/h		326			1388			898			1229	
Approach Delay, s/veh		55.1			260.9			24.6			45.4	
Approach LOS		E			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	54.0	16.0	9.2	36.4	25.5	44.5	18.6	27.0
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	49.0	39.0	10.4	27.0	35.0	53.0	15.4	22.0
Max Q Clear Time (g_c+I1), s	51.0	5.3	3.4	30.0	19.8	2.8	2.5	24.0
Green Ext Time (p_c), s	0.0	0.2	0.0	0.0	0.7	0.1	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	119.2
HCM 7th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	495	128	0	6	35	9	15	6	1	17	7	1255
Future Volume (veh/h)	495	128	0	6	35	9	15	6	1	17	7	1255
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	339	418	0	7	38	10	16	7	1	18	0	1369
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	477	501	0	33	174	45	40	1227	171	44	0	1249
Arrive On Green	0.27	0.27	0.00	0.07	0.07	0.07	0.02	0.39	0.39	0.02	0.00	0.40
Sat Flow, veh/h	1767	1856	0	465	2473	635	1767	3107	433	1767	0	3145
Grp Volume(v), veh/h	339	418	0	28	0	27	16	4	4	18	0	1369
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1832	0	1741	1767	1763	1778	1767	0	1572
Q Serve(g_s), s	13.9	17.0	0.0	1.1	0.0	1.2	0.7	0.1	0.1	0.8	0.0	31.8
Cycle Q Clear(g_c), s	13.9	17.0	0.0	1.1	0.0	1.2	0.7	0.1	0.1	0.8	0.0	31.8
Prop In Lane	1.00		0.00	0.25		0.36	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	477	501	0	129	0	123	40	696	702	44	0	1249
V/C Ratio(X)	0.71	0.83	0.00	0.21	0.00	0.22	0.40	0.01	0.01	0.41	0.00	1.10
Avail Cap(c_a), veh/h	640	672	0	664	0	631	132	700	706	132	0	1249
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.4	27.5	0.0	35.1	0.0	35.1	38.6	14.7	14.7	38.5	0.0	24.1
Incr Delay (d2), s/veh	2.4	6.7	0.0	0.8	0.0	0.9	6.5	0.0	0.0	6.1	0.0	56.0
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(50%),veh/ln	5.8	8.0	0.0	0.5	0.0	0.5	0.4	0.0	0.0	0.4	0.0	20.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.8	34.3	0.0	35.9	0.0	36.1	45.1	14.7	14.7	44.6	0.0	80.1
LnGrp LOS	C	C		D		D	D	B	B	D		F
Approach Vol, veh/h		757			55			24			1387	
Approach Delay, s/veh		31.8			36.0			35.0			79.6	
Approach LOS		C			D			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	36.3		26.7	6.5	36.5		10.3				
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7				
Max Green Setting (Gmax), s	6.0	31.8		29.0	6.0	31.8		29.0				
Max Q Clear Time (g_c+I1), s	2.8	2.1		19.0	2.7	33.8		3.2				
Green Ext Time (p_c), s	0.0	0.0		2.6	0.0	0.0		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	61.8
HCM 7th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	21	0	3	12	276	238	0	203	48
Future Vol, veh/h	0	0	0	21	0	3	12	276	238	0	203	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	330
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	22	0	3	13	294	253	0	216	51

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	535	586	294	267	0	-	-	-	0
Stage 1	319	319	-	-	-	-	-	-	-
Stage 2	216	267	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	489	409	723	1241	-	0	0	-	-
Stage 1	715	635	-	-	-	0	0	-	-
Stage 2	797	670	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	483	0	723	1241	-	-	-	-	-
Mov Cap-2 Maneuver	483	0	-	-	-	-	-	-	-
Stage 1	706	0	-	-	-	-	-	-	-
Stage 2	797	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12.52	0.33	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	75	-	504	-	-
HCM Lane V/C Ratio	0.01	-	0.051	-	-
HCM Ctrl Dly (s/v)	7.9	0	12.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

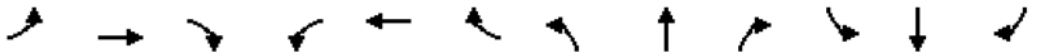
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	147	0	403	0	0	0	0	370	11	0	219	0
Future Vol, veh/h	147	0	403	0	0	0	0	370	11	0	219	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	470	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	156	0	429	0	0	0	0	394	12	0	233	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	430	638	-	-	0	0	-	-	0
Stage 1	233	233	-	-	-	-	-	-	-
Stage 2	197	405	-	-	-	-	-	-	-
Critical Hdwy	6.78	6.68	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.58	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.98	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.614	4.114	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	546	377	0	0	-	-	0	-	0
Stage 1	779	690	0	0	-	-	0	-	0
Stage 2	792	577	0	0	-	-	0	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	546	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	546	0	-	-	-	-	-	-	-
Stage 1	779	0	-	-	-	-	-	-	-
Stage 2	792	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	14.22	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBT
Capacity (veh/h)	-	-	546	-
HCM Lane V/C Ratio	-	-	0.286	-
HCM Ctrl Dly (s/v)	-	-	14.2	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	1.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	60	119	63	100	7	152	358	46	4	507	86
Future Volume (veh/h)	37	60	119	63	100	7	152	358	46	4	507	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1455	1752	1752	1752	1455	952	1752	1752	952	1604
Adj Flow Rate, veh/h	40	65	129	68	109	8	165	389	50	4	551	93
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, %	10	10	30	10	10	10	30	64	10	10	64	20
Cap, veh/h	142	199	489	184	244	206	300	1155	824	18	621	583
Arrive On Green	0.09	0.11	0.11	0.11	0.14	0.14	0.11	0.44	0.44	0.01	0.34	0.34
Sat Flow, veh/h	1668	1752	2171	1668	1752	1485	2689	2598	1485	1668	1808	1359
Grp Volume(v), veh/h	40	65	129	68	109	8	165	389	50	4	551	93
Grp Sat Flow(s),veh/h/ln	1668	1752	1085	1668	1752	1485	1345	866	1485	1668	904	1359
Q Serve(g_s), s	2.0	3.0	4.3	3.3	5.0	0.4	5.1	8.6	1.4	0.2	25.3	3.7
Cycle Q Clear(g_c), s	2.0	3.0	4.3	3.3	5.0	0.4	5.1	8.6	1.4	0.2	25.3	3.7
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	142	199	489	184	244	206	300	1155	824	18	621	583
V/C Ratio(X)	0.28	0.33	0.26	0.37	0.45	0.04	0.55	0.34	0.06	0.23	0.89	0.16
Avail Cap(c_a), veh/h	228	1093	1597	228	1093	926	315	1178	837	190	814	727
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	37.7	35.9	28.1	36.3	34.8	32.8	37.0	16.0	9.0	43.2	27.3	15.4
Incr Delay (d2), s/veh	1.1	0.9	0.3	1.2	1.3	0.1	1.8	0.2	0.0	6.3	9.5	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(50%),veh/ln	0.8	1.2	1.0	1.3	2.1	0.1	1.6	1.5	0.4	0.1	5.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.8	36.8	28.4	37.5	36.1	32.9	38.8	16.1	9.0	49.5	36.7	15.5
LnGrp LOS	D	D	C	D	D	C	D	B	A	D	D	B
Approach Vol, veh/h		234			185			604			648	
Approach Delay, s/veh		32.5			36.4			21.7			33.8	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	18.4	15.5	38.6	13.2	20.6	6.6	47.5
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	12.0	54.9	10.3	39.6	12.0	54.9	10.0	39.9
Max Q Clear Time (g_c+I1), s	5.3	6.3	7.1	27.3	4.0	7.0	2.2	10.6
Green Ext Time (p_c), s	0.1	0.8	0.1	2.9	0.0	0.5	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	29.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	163	0	186	6	334	60	115	665	0
Future Volume (veh/h)	0	0	0	163	0	186	6	334	60	115	665	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				952	0	952	1870	952	952	952	952	0
Adj Flow Rate, veh/h				172	0	196	6	352	63	121	700	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, %				64	0	64	2	64	64	64	64	0
Cap, veh/h				252	0	224	28	425	75	145	1094	0
Arrive On Green				0.28	0.00	0.28	0.02	0.28	0.28	0.16	0.42	0.00
Sat Flow, veh/h				906	0	806	1781	1535	272	906	2683	0
Grp Volume(v), veh/h				172	0	196	6	206	209	121	700	0
Grp Sat Flow(s),veh/h/ln				906	0	806	1781	904	903	906	866	0
Q Serve(g_s), s				12.0	0.0	16.4	0.2	15.1	15.5	9.2	15.1	0.0
Cycle Q Clear(g_c), s				12.0	0.0	16.4	0.2	15.1	15.5	9.2	15.1	0.0
Prop In Lane				1.00		1.00	1.00		0.30	1.00		0.00
Lane Grp Cap(c), veh/h				252	0	224	28	250	250	145	1094	0
V/C Ratio(X)				0.68	0.00	0.87	0.21	0.82	0.84	0.84	0.64	0.00
Avail Cap(c_a), veh/h				652	0	580	251	516	516	234	1788	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				22.8	0.0	24.4	34.5	24.0	24.1	28.9	16.3	0.0
Incr Delay (d2), s/veh				3.2	0.0	10.1	3.7	6.7	7.3	13.1	0.6	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(50%),veh/ln				2.6	0.0	3.5	0.1	3.2	3.3	2.3	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				26.0	0.0	34.5	38.2	30.7	31.4	41.9	16.9	0.0
LnGrp LOS				C		C	D	C	C	D	B	
Approach Vol, veh/h					368			421			821	
Approach Delay, s/veh					30.5			31.1			20.6	
Approach LOS					C			C			C	

Timer - Assigned Phs	1	2		5	6		8					
Phs Duration (G+Y+Rc), s	17.0	28.0		6.8	38.2		25.8					
Change Period (Y+Rc), s	5.7	8.4		5.7	8.4		6.1					
Max Green Setting (Gmax), s	18.3	40.5		10.0	48.8		51.0					
Max Q Clear Time (g_c+I1), s	11.2	17.5		2.2	17.1		18.4					
Green Ext Time (p_c), s	0.2	2.2		0.0	4.8		1.3					

Intersection Summary		
HCM 7th Control Delay, s/veh	25.6	
HCM 7th LOS	C	

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	92	234	209	320	357	89
Future Volume (veh/h)	92	234	209	320	357	89
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	100	0	227	348	388	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	146		298	1061	536	
Arrive On Green	0.09	0.00	0.18	0.61	0.31	0.00
Sat Flow, veh/h	1668	1485	1668	1737	1737	1485
Grp Volume(v), veh/h	100	0	227	348	388	0
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1737	1737	1485
Q Serve(g_s), s	2.1	0.0	4.7	3.6	7.2	0.0
Cycle Q Clear(g_c), s	2.1	0.0	4.7	3.6	7.2	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	146		298	1061	536	
V/C Ratio(X)	0.69		0.76	0.33	0.72	
Avail Cap(c_a), veh/h	815		1031	2919	1631	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.1	0.0	14.2	3.5	11.2	0.0
Incr Delay (d2), s/veh	5.6	0.0	4.0	0.2	1.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.5	0.1	1.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.7	0.0	18.3	3.6	13.1	0.0
LnGrp LOS	C		B	A	B	
Approach Vol, veh/h	100			575	388	
Approach Delay, s/veh	21.7			9.4	13.1	
Approach LOS	C			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		28.7		7.7	11.0	17.7
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		61.2		17.8	22.5	34.2
Max Q Clear Time (g_c+I1), s		5.6		4.1	6.7	9.2
Green Ext Time (p_c), s		1.9		0.2	0.5	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.9
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	172	6	93	174	306	9	709	110	270	664	47
Future Volume (veh/h)	41	172	6	93	174	306	9	709	110	270	664	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	45	187	7	101	189	333	10	771	120	293	722	51
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	46	191	203	99	186	246	22	749	364	293	1247	605
Arrive On Green	0.13	0.13	0.13	0.16	0.16	0.16	0.01	0.23	0.23	0.17	0.39	0.39
Sat Flow, veh/h	351	1458	1547	625	1170	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	232	0	7	290	0	333	10	771	120	293	722	51
Grp Sat Flow(s),veh/h/ln	1808	0	1547	1795	0	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	10.2	0.0	0.3	12.7	0.0	12.7	0.5	18.8	5.1	13.5	14.3	1.7
Cycle Q Clear(g_c), s	10.2	0.0	0.3	12.7	0.0	12.7	0.5	18.8	5.1	13.5	14.3	1.7
Prop In Lane	0.19		1.00	0.35		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	0	203	285	0	246	22	749	364	293	1247	605
V/C Ratio(X)	0.98	0.00	0.03	1.02	0.00	1.36	0.46	1.03	0.33	1.00	0.58	0.08
Avail Cap(c_a), veh/h	237	0	203	285	0	246	109	749	364	293	1247	605
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	0.0	30.3	33.7	0.0	33.7	39.2	30.6	25.4	33.2	19.2	15.3
Incr Delay (d2), s/veh	51.9	0.0	0.1	58.0	0.0	184.3	14.5	40.6	0.5	52.1	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(50%),veh/ln	7.6	0.0	0.1	9.6	0.0	16.9	0.3	10.6	1.7	9.3	4.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	86.5	0.0	30.4	91.6	0.0	217.9	53.8	71.2	25.9	85.3	19.8	15.4
LnGrp LOS	F		C	F		F	D	F	C	F	B	B
Approach Vol, veh/h		239			623			901			1066	
Approach Delay, s/veh		84.9			159.1			65.0			37.6	
Approach LOS		F			F			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	18.0	25.8		17.0	5.5	38.3		19.2				
Change Period (Y+Rc), s	4.5	7.0		6.5	4.5	7.0		6.5				
Max Green Setting (Gmax), s	13.5	18.8		10.5	5.0	27.3		12.7				
Max Q Clear Time (g_c+I1), s	15.5	20.8		12.2	2.5	16.3		14.7				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.4		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	77.1
HCM 7th LOS	E

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	42	2	1	123	391	136
Future Vol, veh/h	42	2	1	123	391	136
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	385	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	18	18	10
Mvmt Flow	46	2	1	134	425	148

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	635	499	573	0	-	0
Stage 1	499	-	-	-	-	-
Stage 2	136	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	430	556	962	-	-	-
Stage 1	594	-	-	-	-	-
Stage 2	871	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	430	556	962	-	-	-
Mov Cap-2 Maneuver	501	-	-	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	871	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	12.9	0.07	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	962	-	503	-	-
HCM Lane V/C Ratio	0.001	-	0.095	-	-
HCM Ctrl Dly (s/v)	8.7	-	12.9	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	90	188	109	17	72	88	33	0	5	32	0	27
Future Vol, veh/h	90	188	109	17	72	88	33	0	5	32	0	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	82	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	18	10	10	18	10	10	2	10	10	2	10
Mvmt Flow	98	204	133	18	78	96	36	0	5	35	0	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	174	0	0	337	0	0	582	677	271	563	696	126
Stage 1	-	-	-	-	-	-	466	466	-	163	163	-
Stage 2	-	-	-	-	-	-	115	211	-	400	533	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.52	6.3	7.2	6.52	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.018	3.39	3.59	4.018	3.39
Pot Cap-1 Maneuver	1356	-	-	1179	-	-	413	374	749	425	365	903
Stage 1	-	-	-	-	-	-	562	562	-	821	763	-
Stage 2	-	-	-	-	-	-	870	728	-	611	525	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1356	-	-	1179	-	-	357	335	749	377	326	903
Mov Cap-2 Maneuver	-	-	-	-	-	-	357	335	-	377	326	-
Stage 1	-	-	-	-	-	-	511	511	-	806	750	-
Stage 2	-	-	-	-	-	-	827	715	-	551	478	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.77	0.78	15.52	13
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	383	375	-	-	156	-	-	514
HCM Lane V/C Ratio	0.108	0.072	-	-	0.016	-	-	0.125
HCM Ctrl Dly (s/v)	15.5	7.9	0	-	8.1	0	-	13
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-	-	0.4

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	10	173	19	29	204
Future Vol, veh/h	12	10	173	19	29	204
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	18	10	10	18
Mvmt Flow	13	11	188	21	32	222

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	484	199	0	0	210	0
Stage 1	199	-	-	-	-	-
Stage 2	285	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	527	822	-	-	1315	-
Stage 1	815	-	-	-	-	-
Stage 2	746	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	514	821	-	-	1314	-
Mov Cap-2 Maneuver	583	-	-	-	-	-
Stage 1	815	-	-	-	-	-
Stage 2	728	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.56	0	0.97
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	672	1314	-
HCM Lane V/C Ratio	-	-	0.036	0.024	-
HCM Ctrl Dly (s/v)	-	-	10.6	7.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	0	46	0	0	0	63	240	0	0	247	42
Future Vol, veh/h	13	0	46	0	0	0	63	240	0	0	247	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	18	10	10	18	10
Mvmt Flow	14	0	50	0	0	0	68	261	0	0	268	46

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	689	689	291	666	712	261	314	0	0	261	0	0
Stage 1	291	291	-	398	398	-	-	-	-	-	-	-
Stage 2	398	398	-	268	314	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	349	359	729	362	348	759	1202	-	-	1258	-	-
Stage 1	700	657	-	612	589	-	-	-	-	-	-	-
Stage 2	612	589	-	720	642	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	326	335	729	315	325	759	1202	-	-	1258	-	-
Mov Cap-2 Maneuver	326	335	-	315	325	-	-	-	-	-	-	-
Stage 1	700	657	-	572	550	-	-	-	-	-	-	-
Stage 2	572	550	-	670	642	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	12.07	0	1.7	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	374	-	-	573	-	1258	-	-
HCM Lane V/C Ratio	0.057	-	-	0.112	-	-	-	-
HCM Ctrl Dly (s/v)	8.2	0	-	12.1	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.4	-	0	-	-

Intersection	
Int Delay, s/veh	10.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	13	107	38	2	3	169	316	34	24	184	46
Future Vol, veh/h	74	13	107	38	2	3	169	316	34	24	184	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	240	-	-	290	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	80	14	116	41	2	3	184	343	37	26	200	50

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	989	1025	225	989	1032	362	250	0	0	380	0	0
Stage 1	277	277	-	729	729	-	-	-	-	-	-	-
Stage 2	712	748	-	259	302	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	218	228	795	218	226	665	1270	-	-	1136	-	-
Stage 1	712	667	-	402	416	-	-	-	-	-	-	-
Stage 2	411	408	-	728	650	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	180	190	795	146	188	665	1270	-	-	1136	-	-
Mov Cap-2 Maneuver	180	190	-	146	188	-	-	-	-	-	-	-
Stage 1	696	651	-	344	356	-	-	-	-	-	-	-
Stage 2	348	349	-	594	635	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	36.65	37.62	2.71	0.78
HCM LOS	E	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1270	-	-	316	156	1136	-	-
HCM Lane V/C Ratio	0.145	-	-	0.668	0.299	0.023	-	-
HCM Ctrl Dly (s/v)	8.3	-	-	36.6	37.6	8.2	-	-
HCM Lane LOS	A	-	-	E	E	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	4.5	1.2	0.1	-	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	12	30	38	29	12	12	102	534	73	30	277	30
Future Vol, veh/h	12	30	38	29	12	12	102	534	73	30	277	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	10	5	5	10	5
Mvmt Flow	13	33	41	32	13	13	111	580	79	33	301	33

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1191	1264	317	1224	1241	620	334	0	0	660	0	0
Stage 1	383	383	-	842	842	-	-	-	-	-	-	-
Stage 2	809	882	-	383	399	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	162	167	716	154	173	482	1209	-	-	914	-	-
Stage 1	634	607	-	355	376	-	-	-	-	-	-	-
Stage 2	370	360	-	634	597	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	119	136	716	94	141	482	1209	-	-	914	-	-
Mov Cap-2 Maneuver	119	136	-	94	141	-	-	-	-	-	-	-
Stage 1	606	580	-	303	321	-	-	-	-	-	-	-
Stage 2	295	307	-	539	571	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	32.94	55.27	1.19	0.81
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	253	-	-	214	127	157	-	-
HCM Lane V/C Ratio	0.092	-	-	0.407	0.455	0.036	-	-
HCM Ctrl Dly (s/v)	8.3	0	-	32.9	55.3	9.1	0	-
HCM Lane LOS	A	A	-	D	F	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	1.8	2	0.1	-	-

Intersection	
Intersection Delay, s/veh	54.3
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	124	119	64	63	129	103	124	615	129	59	253	64
Future Vol, veh/h	124	119	64	63	129	103	124	615	129	59	253	64
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
Heavy Vehicles, %	8	8	8	8	8	8	7	7	7	5	5	5
Mvmt Flow	135	129	70	68	140	112	135	668	140	64	275	70
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	19.7	18.1	93.8	20
HCM LOS	C	C	F	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	29%	0%	68%	0%	49%	0%	32%	0%
Vol Thru, %	71%	70%	32%	48%	51%	39%	68%	66%
Vol Right, %	0%	30%	0%	52%	0%	61%	0%	34%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	432	437	184	124	128	168	186	191
LT Vol	124	0	124	0	63	0	59	0
Through Vol	308	308	60	60	65	65	127	127
RT Vol	0	129	0	64	0	103	0	64
Lane Flow Rate	469	474	199	134	139	182	202	207
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	1.095	1.059	0.522	0.324	0.361	0.439	0.498	0.488
Departure Headway (Hd)	8.401	8.038	9.651	8.922	9.616	8.91	9.148	8.739
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	436	455	377	405	377	406	397	414
Service Time	6.101	5.738	7.351	6.622	7.316	6.61	6.848	6.439
HCM Lane V/C Ratio	1.076	1.042	0.528	0.331	0.369	0.448	0.509	0.5
HCM Control Delay, s/veh	100.3	87.3	22.4	15.8	17.6	18.4	20.6	19.5
HCM Lane LOS	F	F	C	C	C	C	C	C
HCM 95th-tile Q	16.1	15.1	2.9	1.4	1.6	2.2	2.7	2.6

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	29	1	0	4	28	407	3	0	643	9
Future Vol, veh/h	10	0	29	1	0	4	28	407	3	0	643	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	400	-	400	395	-	510
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	35	10	10	35	10
Mvmt Flow	11	0	32	1	0	4	30	442	3	0	699	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	981	1205	349	853	1202	221	699	0	0	446	0	0
Stage 1	699	699	-	503	503	-	-	-	-	-	-	-
Stage 2	282	507	-	349	699	-	-	-	-	-	-	-
Critical Hdwy	7.7	6.7	7.1	7.7	6.7	7.1	4.3	-	-	4.3	-	-
Critical Hdwy Stg 1	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.6	4.1	3.4	3.6	4.1	3.4	2.3	-	-	2.3	-	-
Pot Cap-1 Maneuver	193	171	624	240	172	758	842	-	-	1056	-	-
Stage 1	378	421	-	499	520	-	-	-	-	-	-	-
Stage 2	679	518	-	618	421	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	185	165	624	220	166	758	842	-	-	1056	-	-
Mov Cap-2 Maneuver	339	339	-	394	326	-	-	-	-	-	-	-
Stage 1	378	421	-	481	501	-	-	-	-	-	-	-
Stage 2	651	499	-	587	421	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	12.64	10.67	0.6	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	842	-	-	513	640	1056	-	-
HCM Lane V/C Ratio	0.036	-	-	0.083	0.008	-	-	-
HCM Ctrl Dly (s/v)	9.4	-	-	12.6	10.7	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0	0	-	-

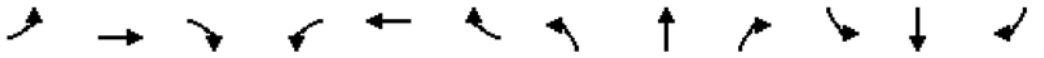
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	32	644	6	3	435	28	14	5	2	17	3	17
Future Vol, veh/h	32	644	6	3	435	28	14	5	2	17	3	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	11	35	11	11	35	11	11	11	11	11	11	11
Mvmt Flow	33	671	6	3	453	29	15	5	2	18	3	18

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	482	0	0	677	0	0	972	1226	335	864	1203	227
Stage 1	-	-	-	-	-	-	738	738	-	459	459	-
Stage 2	-	-	-	-	-	-	234	489	-	405	744	-
Critical Hdwy	4.32	-	-	4.32	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.31	-	-	2.31	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	1016	-	-	853	-	-	194	165	635	234	171	749
Stage 1	-	-	-	-	-	-	356	401	-	528	542	-
Stage 2	-	-	-	-	-	-	722	526	-	570	399	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1016	-	-	853	-	-	181	159	635	221	164	749
Mov Cap-2 Maneuver	-	-	-	-	-	-	315	321	-	407	327	-
Stage 1	-	-	-	-	-	-	344	388	-	526	540	-
Stage 2	-	-	-	-	-	-	699	524	-	542	386	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.41	0.06	16.53	12.5
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	316	635	1016	-	-	853	-	-	392	749
HCM Lane V/C Ratio	0.063	0.003	0.033	-	-	0.004	-	-	0.053	0.024
HCM Ctrl Dly (s/v)	17.1	10.7	8.7	-	-	9.2	-	-	14.7	9.9
HCM Lane LOS	C	B	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.2	0	0.1	-	-	0	-	-	0.2	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	494	59	13	353	104	71	102	18	87	91	53
Future Volume (veh/h)	119	494	59	13	353	104	71	102	18	87	91	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	127	526	63	14	376	111	76	109	19	93	97	56
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	247	846	101	67	502	146	211	304	53	228	228	131
Arrive On Green	0.15	0.36	0.36	0.04	0.25	0.25	0.13	0.21	0.21	0.14	0.22	0.22
Sat Flow, veh/h	1668	2359	282	1668	2000	583	1668	1449	253	1668	1036	598
Grp Volume(v), veh/h	127	292	297	14	245	242	76	0	128	93	0	153
Grp Sat Flow(s),veh/h/ln	1668	1312	1329	1668	1312	1271	1668	0	1702	1668	0	1634
Q Serve(g_s), s	5.3	13.8	13.9	0.6	13.0	13.3	3.1	0.0	4.8	3.8	0.0	6.1
Cycle Q Clear(g_c), s	5.3	13.8	13.9	0.6	13.0	13.3	3.1	0.0	4.8	3.8	0.0	6.1
Prop In Lane	1.00		0.21	1.00		0.46	1.00		0.15	1.00		0.37
Lane Grp Cap(c), veh/h	247	471	476	67	329	319	211	0	357	228	0	359
V/C Ratio(X)	0.51	0.62	0.62	0.21	0.74	0.76	0.36	0.00	0.36	0.41	0.00	0.43
Avail Cap(c_a), veh/h	338	600	608	265	543	526	265	0	722	272	0	700
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	29.6	20.0	20.0	35.0	26.0	26.1	30.1	0.0	25.4	29.8	0.0	25.3
Incr Delay (d2), s/veh	1.7	1.3	1.3	1.5	3.3	3.7	1.0	0.0	0.6	1.2	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(50%),veh/ln	2.1	4.0	4.1	0.3	4.1	4.1	1.3	0.0	2.0	1.6	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.3	21.3	21.3	36.5	29.3	29.8	31.2	0.0	26.1	31.0	0.0	26.1
LnGrp LOS	C	C	C	D	C	C	C		C	C		C
Approach Vol, veh/h		716			501			204			246	
Approach Delay, s/veh		23.1			29.8			28.0			28.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	32.1	14.3	21.3	15.9	24.0	15.0	20.5
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.0	34.5	12.0	32.3	15.3	31.2	12.3	32.0
Max Q Clear Time (g_c+I1), s	2.6	15.9	5.1	8.1	7.3	15.3	5.8	6.8
Green Ext Time (p_c), s	0.0	3.5	0.1	0.9	0.2	2.7	0.1	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	26.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	0	3	3	388	6	158	3	493	202	1
Future Volume (veh/h)	1	0	0	3	3	388	6	158	3	493	202	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1381	1752	1381	1381	1752
Adj Flow Rate, veh/h	1	0	0	3	3	0	6	170	3	530	217	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, %	10	10	10	10	10	10	10	35	10	35	35	10
Cap, veh/h	5	19	0	14	28		27	527	298	640	1143	647
Arrive On Green	0.00	0.00	0.00	0.01	0.02	0.00	0.02	0.20	0.20	0.25	0.44	0.44
Sat Flow, veh/h	1668	1752	0	1668	1752	1485	1668	2624	1485	2552	2624	1485
Grp Volume(v), veh/h	1	0	0	3	3	0	6	170	3	530	217	1
Grp Sat Flow(s),veh/h/ln	1668	1752	0	1668	1752	1485	1668	1312	1485	1276	1312	1485
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.1	0.0	0.2	2.8	0.1	9.8	2.5	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.1	0.1	0.0	0.2	2.8	0.1	9.8	2.5	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	19	0	14	28		27	527	298	640	1143	647
V/C Ratio(X)	0.22	0.00	0.00	0.22	0.11		0.22	0.32	0.01	0.83	0.19	0.00
Avail Cap(c_a), veh/h	335	351	0	335	351		335	558	316	783	1143	647
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	0.0	0.0	24.6	24.2	0.0	24.2	17.0	16.0	17.6	8.7	7.9
Incr Delay (d2), s/veh	22.1	0.0	0.0	7.9	1.7	0.0	4.2	0.4	0.0	6.2	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(50%),veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.7	0.0	2.7	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.9	0.0	0.0	32.4	25.8	0.0	28.4	17.4	16.0	23.8	8.7	7.9
LnGrp LOS	D			C	C		C	B	B	C	A	A
Approach Vol, veh/h		1			6			179			748	
Approach Delay, s/veh		46.9			29.1			17.7			19.4	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	16.6	6.1	8.9	6.5	28.3	5.8	9.2
Change Period (Y+Rc), s	5.7	* 6.6	5.7	8.4	5.7	6.6	5.7	8.4
Max Green Setting (Gmax), s	5.3	* 11	10.0	10.0	10.0	13.6	10.0	10.0
Max Q Clear Time (g_c+I1), s	1.8	4.8	2.1	0.0	2.2	4.5	2.0	2.1
Green Ext Time (p_c), s	0.7	0.4	0.0	0.0	0.0	0.7	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	19.2
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

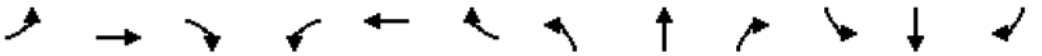
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	468	0	24	355	131	1	53	36	44	21	1
Future Vol, veh/h	0	468	0	24	355	131	1	53	36	44	21	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	570	-	570	650	-	650	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	0	509	0	26	386	142	1	58	39	48	23	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	528	0	0	509	0	0	765	1089	254	721	947	193
Stage 1	-	-	-	-	-	-	509	509	-	438	438	-
Stage 2	-	-	-	-	-	-	257	580	-	283	509	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	981	-	-	999	-	-	278	202	721	300	246	792
Stage 1	-	-	-	-	-	-	495	517	-	547	557	-
Stage 2	-	-	-	-	-	-	703	479	-	678	517	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	981	-	-	999	-	-	256	197	721	235	240	792
Mov Cap-2 Maneuver	-	-	-	-	-	-	428	371	-	414	401	-
Stage 1	-	-	-	-	-	-	495	517	-	532	543	-
Stage 2	-	-	-	-	-	-	655	466	-	570	517	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0	0.41	13.99	15.51
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	372	721	981	-	-	999	-	-	410	792
HCM Lane V/C Ratio	0.158	0.054	-	-	-	0.026	-	-	0.172	0.001
HCM Ctrl Dly (s/v)	16.5	10.3	0	-	-	8.7	-	-	15.6	9.6
HCM Lane LOS	C	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.6	0.2	0	-	-	0.1	-	-	0.6	0



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	308	1	35	1	17	12	68	485	5	6	380	20
Future Volume (veh/h)	308	1	35	1	17	12	68	485	5	6	380	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	335	1	38	1	18	13	74	527	5	7	413	22
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	366	497	421	4	117	99	126	916	776	30	1495	79
Arrive On Green	0.21	0.27	0.27	0.00	0.06	0.06	0.15	1.00	1.00	0.02	0.45	0.45
Sat Flow, veh/h	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	3323	177
Grp Volume(v), veh/h	335	1	38	1	18	13	74	527	5	7	213	222
Grp Sat Flow(s),veh/h/ln	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	1721	1779
Q Serve(g_s), s	20.9	0.0	2.0	0.1	1.0	0.9	4.4	0.0	0.0	0.4	8.6	8.6
Cycle Q Clear(g_c), s	20.9	0.0	2.0	0.1	1.0	0.9	4.4	0.0	0.0	0.4	8.6	8.6
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	366	497	421	4	117	99	126	916	776	30	774	801
V/C Ratio(X)	0.91	0.00	0.09	0.24	0.15	0.13	0.59	0.58	0.01	0.23	0.28	0.28
Avail Cap(c_a), veh/h	444	497	421	141	132	112	165	916	776	157	774	801
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	1.00	1.00	1.00	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.3	29.0	29.7	54.8	48.6	48.6	45.4	0.0	0.0	53.3	19.0	19.0
Incr Delay (d2), s/veh	21.0	0.0	0.1	26.2	0.6	0.6	3.7	2.3	0.0	3.8	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(50%),veh/ln	10.5	0.0	0.7	0.1	0.5	0.3	1.9	0.6	0.0	0.2	3.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.3	29.0	29.8	81.0	49.2	49.1	49.1	2.3	0.0	57.2	19.9	19.9
LnGrp LOS	E	C	C	F	D	D	D	A	A	E	B	B
Approach Vol, veh/h		374			32			606			442	
Approach Delay, s/veh		59.8			50.2			8.0			20.5	
Approach LOS		E			D			A			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	63.1	5.0	35.3	12.8	57.0	28.1	12.2
Change Period (Y+Rc), s	4.7	7.5	4.7	5.1	4.7	7.5	4.7	5.1
Max Green Setting (Gmax), s	10.0	41.7	9.0	27.3	10.5	41.2	28.3	8.0
Max Q Clear Time (g_c+I1), s	2.4	2.0	2.1	4.0	6.4	10.6	22.9	3.0
Green Ext Time (p_c), s	0.0	3.1	0.0	0.1	0.0	2.2	0.5	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	26.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	6	42	14	1	1	29	539	25	2	242	170
Future Volume (veh/h)	12	6	42	14	1	1	29	539	25	2	242	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	13	7	46	15	1	1	32	586	27	2	263	185
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	72	39	97	48	3	45	125	1143	969	125	1143	969
Arrive On Green	0.06	0.06	0.06	0.03	0.03	0.03	0.07	0.63	0.63	0.15	1.00	1.00
Sat Flow, veh/h	1140	614	1535	1622	108	1535	1725	1811	1535	1725	1811	1535
Grp Volume(v), veh/h	20	0	46	16	0	1	32	586	27	2	263	185
Grp Sat Flow(s),veh/h/ln	1754	0	1535	1730	0	1535	1725	1811	1535	1725	1811	1535
Q Serve(g_s), s	1.2	0.0	3.2	1.0	0.0	0.1	1.9	19.4	0.7	0.1	0.0	0.0
Cycle Q Clear(g_c), s	1.2	0.0	3.2	1.0	0.0	0.1	1.9	19.4	0.7	0.1	0.0	0.0
Prop In Lane	0.65		1.00	0.94		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	0	97	51	0	45	125	1143	969	125	1143	969
V/C Ratio(X)	0.18	0.00	0.48	0.31	0.00	0.02	0.26	0.51	0.03	0.02	0.23	0.19
Avail Cap(c_a), veh/h	142	0	124	140	0	124	146	1143	969	130	1143	969
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	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	48.8	0.0	49.8	52.3	0.0	51.8	48.2	11.1	7.6	43.6	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	3.6	3.5	0.0	0.2	1.1	1.6	0.1	0.0	0.5	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(50%),veh/ln	0.5	0.0	1.3	0.5	0.0	0.0	0.8	6.8	0.2	0.0	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.6	0.0	53.4	55.7	0.0	52.0	49.2	12.7	7.7	43.7	0.5	0.4
LnGrp LOS	D		D	E		D	D	B	A	D	A	A
Approach Vol, veh/h		66			17			645			450	
Approach Delay, s/veh		52.2			55.5			14.3			0.6	
Approach LOS		D			E			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.7	76.9		12.0	12.7	76.9		8.3
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1
Max Green Setting (Gmax), s	8.3	61.5		8.9	9.3	60.5		8.9
Max Q Clear Time (g_c+I1), s	2.1	21.4		5.2	3.9	2.0		3.0
Green Ext Time (p_c), s	0.0	3.6		0.0	0.0	2.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.8
HCM 7th LOS	B

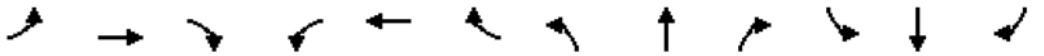
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	31	163	20	0	211	141	5	2	2	42	9	68
Future Vol, veh/h	31	163	20	0	211	141	5	2	2	42	9	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	650	620	-	600	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	34	177	22	0	229	153	5	2	2	46	10	74

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	383	0	0	199	0	0	364	627	89	386	496	115
Stage 1	-	-	-	-	-	-	245	245	-	229	229	-
Stage 2	-	-	-	-	-	-	120	383	-	157	266	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	1117	-	-	1314	-	-	548	382	927	528	457	891
Stage 1	-	-	-	-	-	-	715	683	-	730	694	-
Stage 2	-	-	-	-	-	-	849	591	-	807	668	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1117	-	-	1314	-	-	478	370	927	507	442	891
Mov Cap-2 Maneuver	-	-	-	-	-	-	601	493	-	635	562	-
Stage 1	-	-	-	-	-	-	692	661	-	730	694	-
Stage 2	-	-	-	-	-	-	768	591	-	777	646	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.35	0	10.88	10.24
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	566	927	575	-	-	1314	-	-	621	891
HCM Lane V/C Ratio	0.013	0.002	0.03	-	-	-	-	-	0.089	0.083
HCM Ctrl Dly (s/v)	11.5	8.9	8.3	0.2	-	0	-	-	11.4	9.4
HCM Lane LOS	B	A	A	A	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0	0.1	-	-	0	-	-	0.3	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	346	135	291	349	57	232	235	464	64	256	22
Future Volume (veh/h)	32	346	135	291	349	57	232	235	464	64	256	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	35	376	147	316	379	62	252	255	504	70	278	24
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	87	490	189	349	1049	170	284	551	778	121	328	28
Arrive On Green	0.05	0.20	0.20	0.20	0.35	0.35	0.16	0.30	0.30	0.07	0.20	0.20
Sat Flow, veh/h	1739	2447	943	1739	2988	485	1739	1826	1547	1739	1657	143
Grp Volume(v), veh/h	35	265	258	316	219	222	252	255	504	70	0	302
Grp Sat Flow(s),veh/h/ln	1739	1735	1656	1739	1735	1739	1739	1826	1547	1739	0	1800
Q Serve(g_s), s	1.9	14.1	14.4	17.3	9.1	9.3	13.8	11.1	23.5	3.8	0.0	15.8
Cycle Q Clear(g_c), s	1.9	14.1	14.4	17.3	9.1	9.3	13.8	11.1	23.5	3.8	0.0	15.8
Prop In Lane	1.00		0.57	1.00		0.28	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	87	348	332	349	609	610	284	551	778	121	0	356
V/C Ratio(X)	0.40	0.76	0.78	0.90	0.36	0.36	0.89	0.46	0.65	0.58	0.00	0.85
Avail Cap(c_a), veh/h	142	638	609	397	904	906	308	703	907	214	0	608
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	0.00	1.00
Uniform Delay (d), s/veh	45.0	36.9	37.0	38.1	23.5	23.6	40.0	27.7	17.9	44.0	0.0	37.8
Incr Delay (d2), s/veh	2.9	3.5	3.9	21.9	0.4	0.4	24.2	0.6	1.3	4.3	0.0	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(50%),veh/ln	0.9	6.2	6.1	9.4	3.7	3.8	7.6	4.7	7.9	1.8	0.0	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.9	40.3	40.9	60.0	23.9	23.9	64.2	28.3	19.2	48.3	0.0	43.4
LnGrp LOS	D	D	D	E	C	C	E	C	B	D		D
Approach Vol, veh/h		558			757			1011			372	
Approach Delay, s/veh		41.1			39.0			32.7			44.3	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.3	26.0	21.6	25.7	9.6	40.7	11.5	35.9
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	22.3	35.9	17.3	* 33	8.0	* 51	12.0	37.6
Max Q Clear Time (g_c+I1), s	19.3	16.4	15.8	17.8	3.9	11.3	5.8	25.5
Green Ext Time (p_c), s	0.3	3.1	0.1	1.5	0.0	2.9	0.1	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	37.8
HCM 7th LOS	D

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	67	96	130	28	119	66	96	714	48	98	513	26
Future Volume (veh/h)	67	96	130	28	119	66	96	714	48	98	513	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	68	98	133	29	121	67	98	729	49	100	523	27
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, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	178	289	409	109	217	184	356	911	444	203	946	461
Arrive On Green	0.11	0.17	0.17	0.07	0.12	0.12	0.11	0.30	0.30	0.12	0.31	0.31
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	3047	1485
Grp Volume(v), veh/h	68	98	133	29	121	67	98	729	49	100	523	27
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1523	1485
Q Serve(g_s), s	3.1	4.0	5.8	1.3	5.3	3.3	2.2	17.8	1.9	4.5	11.5	1.0
Cycle Q Clear(g_c), s	3.1	4.0	5.8	1.3	5.3	3.3	2.2	17.8	1.9	4.5	11.5	1.0
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	178	289	409	109	217	184	356	911	444	203	946	461
V/C Ratio(X)	0.38	0.34	0.33	0.27	0.56	0.36	0.28	0.80	0.11	0.49	0.55	0.06
Avail Cap(c_a), veh/h	264	1106	1101	227	1067	904	413	1452	707	233	1490	726
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	33.6	29.8	23.3	35.9	33.3	32.5	33.0	26.1	20.5	33.1	23.2	19.6
Incr Delay (d2), s/veh	1.3	0.7	0.5	1.3	2.2	1.2	0.4	1.7	0.1	1.8	0.5	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(50%),veh/ln	1.2	1.6	1.9	0.6	2.2	1.2	0.8	5.8	0.6	1.8	3.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.0	30.5	23.8	37.2	35.6	33.7	33.4	27.8	20.6	35.0	23.7	19.6
LnGrp LOS	C	C	C	D	D	C	C	C	C	C	C	B
Approach Vol, veh/h		299			217			876			650	
Approach Delay, s/veh		28.5			35.2			28.0			25.3	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	32.5	11.0	21.7	14.6	33.5	14.3	18.4
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	11.3	38.5	11.0	51.0	10.3	39.5	12.8	49.2
Max Q Clear Time (g_c+I1), s	6.5	19.8	3.3	7.8	4.2	13.5	5.1	7.3
Green Ext Time (p_c), s	0.1	4.3	0.0	0.9	0.1	3.2	0.1	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	28.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	152	251	59	164	108	125	778	53	86	967	52
Future Volume (veh/h)	112	152	251	59	164	108	125	778	53	86	967	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	122	165	273	64	178	117	136	846	58	93	1051	57
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	164	221	333	80	222	259	89	1115	76	84	1107	60
Arrive On Green	0.22	0.22	0.22	0.17	0.17	0.17	0.05	0.34	0.34	0.05	0.33	0.33
Sat Flow, veh/h	760	1028	1547	477	1325	1547	1739	3294	226	1739	3346	181
Grp Volume(v), veh/h	287	0	273	242	0	117	136	445	459	93	545	563
Grp Sat Flow(s),veh/h/ln	1788	0	1547	1802	0	1547	1739	1735	1785	1739	1735	1793
Q Serve(g_s), s	15.5	0.0	17.4	13.3	0.0	7.0	5.3	23.6	23.6	5.0	31.6	31.7
Cycle Q Clear(g_c), s	15.5	0.0	17.4	13.3	0.0	7.0	5.3	23.6	23.6	5.0	31.6	31.7
Prop In Lane	0.43		1.00	0.26		1.00	1.00		0.13	1.00		0.10
Lane Grp Cap(c), veh/h	385	0	333	302	0	259	89	587	604	84	574	593
V/C Ratio(X)	0.75	0.00	0.82	0.80	0.00	0.45	1.52	0.76	0.76	1.10	0.95	0.95
Avail Cap(c_a), veh/h	745	0	644	750	0	644	89	591	609	84	578	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)	1.00	0.00	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	37.9	0.0	38.6	41.3	0.0	38.7	49.0	30.4	30.4	49.1	33.7	33.7
Incr Delay (d2), s/veh	2.9	0.0	5.0	4.9	0.0	1.2	284.3	5.6	5.5	129.2	25.4	24.9
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(50%),veh/ln	7.1	0.0	7.0	6.3	0.0	2.8	9.3	10.2	10.4	5.1	16.5	17.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.8	0.0	43.6	46.3	0.0	39.9	333.2	36.0	35.9	178.3	59.1	58.6
LnGrp LOS	D		D	D		D	F	D	D	F	E	E
Approach Vol, veh/h		560			359			1040			1201	
Approach Delay, s/veh		42.2			44.2			74.8			68.1	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.2	42.1		27.9	11.0	41.3		23.0
Change Period (Y+Rc), s	5.2	7.2		5.7	5.7	7.2		5.7
Max Green Setting (Gmax), s	5.0	35.2		43.0	5.3	34.4		43.0
Max Q Clear Time (g_c+I1), s	7.0	25.6		19.4	7.3	33.7		15.3
Green Ext Time (p_c), s	0.0	3.6		2.9	0.0	0.5		2.0

Intersection Summary		
HCM 7th Control Delay, s/veh	63.0	
HCM 7th LOS	E	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	81	112	12	91	14	111	1091	16	15	841	41
Future Volume (veh/h)	36	81	112	12	91	14	111	1091	16	15	841	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	39	88	122	13	99	15	121	1186	0	16	914	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	86	117	141	68	265	37	248	1464		76	1138	
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.15	0.46	0.00	0.05	0.36	0.00
Sat Flow, veh/h	160	629	758	79	1424	201	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	249	0	0	127	0	0	121	1186	0	16	914	0
Grp Sat Flow(s),veh/h/ln	1547	0	0	1704	0	0	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	6.7	0.0	0.0	0.0	0.0	0.0	4.9	23.9	0.0	0.7	19.3	0.0
Cycle Q Clear(g_c), s	11.5	0.0	0.0	4.8	0.0	0.0	4.9	23.9	0.0	0.7	19.3	0.0
Prop In Lane	0.16		0.49	0.10		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	0	0	370	0	0	248	1464		76	1138	
V/C Ratio(X)	0.72	0.00	0.00	0.34	0.00	0.00	0.49	0.81		0.21	0.80	
Avail Cap(c_a), veh/h	379	0	0	408	0	0	277	1703		270	1690	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.1	0.0	0.0	26.5	0.0	0.0	28.9	17.1	0.0	34.1	21.3	0.0
Incr Delay (d2), s/veh	6.0	0.0	0.0	0.5	0.0	0.0	1.5	2.7	0.0	1.4	1.8	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(50%),veh/ln	4.7	0.0	0.0	2.0	0.0	0.0	1.9	7.2	0.0	0.3	6.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.2	0.0	0.0	27.0	0.0	0.0	30.4	19.7	0.0	35.4	23.1	0.0
LnGrp LOS	D			C			C	B		D	C	
Approach Vol, veh/h		249			127			1307			930	
Approach Delay, s/veh		35.2			27.0			20.7			23.3	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	42.7		22.3	16.7	35.1		22.3				
Change Period (Y+Rc), s	5.7	8.4		8.5	5.7	8.4		8.5				
Max Green Setting (Gmax), s	12.6	39.9		15.5	12.3	39.6		15.5				
Max Q Clear Time (g_c+I1), s	12.7	25.9		13.5	6.9	21.3		6.8				
Green Ext Time (p_c), s	0.0	6.4		0.3	0.1	5.4		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	23.3
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	323	57	183	356	167	74	627	119	166	934	407
Future Volume (veh/h)	273	323	57	183	356	167	74	627	119	166	934	407
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	297	351	62	199	387	182	80	682	129	180	1015	442
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	288	723	126	228	485	225	100	1051	469	184	1218	543
Arrive On Green	0.17	0.24	0.24	0.13	0.21	0.21	0.06	0.30	0.30	0.11	0.35	0.35
Sat Flow, veh/h	1739	2951	516	1739	2301	1067	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	297	205	208	199	290	279	80	682	129	180	1015	442
Grp Sat Flow(s),veh/h/ln	1739	1735	1733	1739	1735	1634	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	19.3	11.8	12.0	13.1	18.5	18.9	5.3	19.9	7.4	12.0	31.3	30.2
Cycle Q Clear(g_c), s	19.3	11.8	12.0	13.1	18.5	18.9	5.3	19.9	7.4	12.0	31.3	30.2
Prop In Lane	1.00		0.30	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	425	425	228	365	344	100	1051	469	184	1218	543
V/C Ratio(X)	1.03	0.48	0.49	0.87	0.80	0.81	0.80	0.65	0.28	0.98	0.83	0.81
Avail Cap(c_a), veh/h	288	631	630	297	640	603	100	1051	469	184	1218	543
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	48.6	37.7	37.8	49.7	43.6	43.8	54.3	35.2	30.9	52.0	34.7	34.4
Incr Delay (d2), s/veh	61.4	0.8	0.9	19.4	4.0	4.6	35.5	3.1	1.5	60.6	6.8	12.6
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(50%),veh/ln	18.2	5.1	5.2	6.9	8.3	8.1	3.3	8.8	3.0	8.3	14.2	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	110.0	38.5	38.6	69.1	47.6	48.3	89.8	38.4	32.3	112.6	41.5	47.0
LnGrp LOS	F	D	D	E	D	D	F	D	C	F	D	D
Approach Vol, veh/h		710			768			891			1637	
Approach Delay, s/veh		68.4			53.4			42.1			50.8	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	42.5	21.0	35.1	12.4	48.1	25.0	31.0
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	12.3	35.3	19.9	42.4	6.7	40.9	19.3	43.0
Max Q Clear Time (g_c+I1), s	14.0	21.9	15.1	14.0	7.3	33.3	21.3	20.9
Green Ext Time (p_c), s	0.0	4.3	0.2	2.6	0.0	4.9	0.0	3.6

Intersection Summary	
HCM 7th Control Delay, s/veh	52.5
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1	254	6	2	2	382	1109	2	1	882	62
Future Volume (veh/h)	93	1	254	6	2	2	382	1109	2	1	882	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	101	1	276	7	2	2	415	1205	2	1	959	67
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	320	3	526	31	9	9	521	1745	3	5	1204	566
Arrive On Green	0.19	0.19	0.19	0.03	0.03	0.03	0.16	0.54	0.54	0.00	0.38	0.38
Sat Flow, veh/h	1653	16	1485	1047	299	299	3237	3236	5	1668	3159	1485
Grp Volume(v), veh/h	102	0	276	11	0	0	415	588	619	1	959	67
Grp Sat Flow(s),veh/h/ln	1669	0	1485	1646	0	0	1618	1580	1662	1668	1580	1485
Q Serve(g_s), s	4.0	0.0	11.3	0.5	0.0	0.0	9.5	21.0	21.0	0.0	20.7	2.2
Cycle Q Clear(g_c), s	4.0	0.0	11.3	0.5	0.0	0.0	9.5	21.0	21.0	0.0	20.7	2.2
Prop In Lane	0.99		1.00	0.64		0.18	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	323	0	526	49	0	0	521	852	896	5	1204	566
V/C Ratio(X)	0.32	0.00	0.52	0.22	0.00	0.00	0.80	0.69	0.69	0.20	0.80	0.12
Avail Cap(c_a), veh/h	1087	0	1206	236	0	0	801	1132	1191	239	1934	909
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	0.0	19.7	36.4	0.0	0.0	31.0	13.0	13.0	38.2	21.1	15.4
Incr Delay (d2), s/veh	0.6	0.0	0.8	2.3	0.0	0.0	3.2	1.2	1.1	18.2	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(50%),veh/ln	1.6	0.0	3.7	0.2	0.0	0.0	3.5	5.7	6.0	0.0	6.5	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.2	0.0	20.5	38.6	0.0	0.0	34.2	14.1	14.1	56.3	22.4	15.5
LnGrp LOS	C		C	D			C	B	B	E	C	B
Approach Vol, veh/h		378			11			1622			1027	
Approach Delay, s/veh		22.3			38.6			19.3			21.9	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	45.9		19.3	16.9	33.8		6.8
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	1.6	55.0		50.0	19.0	47.0		11.0
Max Q Clear Time (g_c+I1), s	2.0	23.0		13.3	11.5	22.7		2.5
Green Ext Time (p_c), s	0.0	8.2		1.5	0.9	6.6		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	20.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	283	126	143	304	402	61	728	100	303	798	60
Future Volume (veh/h)	76	283	126	143	304	402	61	728	100	303	798	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	83	308	137	155	330	0	66	791	109	329	867	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	106	426	185	181	778		84	948	131	423	1385	
Arrive On Green	0.06	0.18	0.18	0.10	0.22	0.00	0.05	0.31	0.31	0.13	0.40	0.00
Sat Flow, veh/h	1739	2353	1024	1739	3469	1547	1739	3063	422	3374	3469	1547
Grp Volume(v), veh/h	83	225	220	155	330	0	66	448	452	329	867	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1642	1739	1735	1547	1739	1735	1750	1687	1735	1547
Q Serve(g_s), s	3.7	9.7	10.1	7.0	6.5	0.0	3.0	19.2	19.2	7.5	15.9	0.0
Cycle Q Clear(g_c), s	3.7	9.7	10.1	7.0	6.5	0.0	3.0	19.2	19.2	7.5	15.9	0.0
Prop In Lane	1.00		0.62	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	106	314	297	181	778		84	537	542	423	1385	
V/C Ratio(X)	0.78	0.72	0.74	0.86	0.42		0.79	0.83	0.83	0.78	0.63	
Avail Cap(c_a), veh/h	166	653	618	181	1354		144	640	646	423	1472	
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.9	30.7	30.9	35.1	26.5	0.0	37.5	25.6	25.6	33.8	19.2	0.0
Incr Delay (d2), s/veh	11.9	3.1	3.6	30.9	0.4	0.0	14.8	8.1	8.0	8.9	0.8	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(50%),veh/ln	1.9	4.1	4.0	4.4	2.6	0.0	1.6	8.6	8.6	3.5	6.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.7	33.8	34.5	66.0	26.9	0.0	52.3	33.7	33.6	42.6	19.9	0.0
LnGrp LOS	D	C	C	E	C		D	C	C	D	B	
Approach Vol, veh/h		528			485			966			1196	
Approach Delay, s/veh		36.4			39.4			34.9			26.2	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	37.9	9.6	23.7	15.7	30.8	13.0	20.2
Change Period (Y+Rc), s	4.7	6.1	4.7	* 5.8	5.7	6.1	4.7	5.8
Max Green Setting (Gmax), s	5.6	33.8	7.6	* 31	10.0	29.4	8.3	30.0
Max Q Clear Time (g_c+I1), s	5.0	17.9	5.7	8.5	9.5	21.2	9.0	12.1
Green Ext Time (p_c), s	0.0	5.4	0.0	1.9	0.1	3.5	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	32.6
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	178	78	93	340	128	156	1226	103	112	882	119
Future Volume (veh/h)	106	178	78	93	340	128	156	1226	103	112	882	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	115	193	85	101	370	139	170	1333	112	122	959	129
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	184	443	188	181	458	170	145	1175	552	145	1175	552
Arrive On Green	0.11	0.19	0.19	0.11	0.19	0.19	0.09	0.37	0.37	0.09	0.37	0.37
Sat Flow, veh/h	1668	2277	966	1668	2377	880	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	115	139	139	101	257	252	170	1333	112	122	959	129
Grp Sat Flow(s),veh/h/ln	1668	1664	1578	1668	1664	1593	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	7.6	8.4	8.9	6.6	17.0	17.4	10.0	42.7	5.9	8.3	31.4	6.9
Cycle Q Clear(g_c), s	7.6	8.4	8.9	6.6	17.0	17.4	10.0	42.7	5.9	8.3	31.4	6.9
Prop In Lane	1.00		0.61	1.00		0.55	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	323	307	181	321	307	145	1175	552	145	1175	552
V/C Ratio(X)	0.62	0.43	0.45	0.56	0.80	0.82	1.17	1.13	0.20	0.84	0.82	0.23
Avail Cap(c_a), veh/h	279	826	784	189	736	705	145	1175	552	145	1175	552
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	48.8	40.7	40.8	48.5	44.2	44.4	52.4	36.0	24.5	51.6	32.5	24.8
Incr Delay (d2), s/veh	3.4	0.9	1.0	3.3	4.7	5.4	127.5	71.4	0.2	33.2	4.6	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(50%),veh/ln	3.2	3.4	3.4	2.8	7.0	7.0	9.1	26.6	2.0	4.6	11.8	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.2	41.6	41.9	51.8	48.9	49.8	179.9	107.4	24.7	84.8	37.1	25.0
LnGrp LOS	D	D	D	D	D	D	F	F	C	F	D	C
Approach Vol, veh/h		393			610			1615			1210	
Approach Delay, s/veh		44.8			49.8			109.3			40.6	
Approach LOS		D			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	51.1	18.2	29.8	15.7	51.1	18.4	29.6
Change Period (Y+Rc), s	5.7	8.4	5.7	7.5	5.7	8.4	5.7	7.5
Max Green Setting (Gmax), s	10.0	42.7	13.0	57.0	10.0	42.7	19.2	50.8
Max Q Clear Time (g_c+I1), s	10.3	44.7	8.6	10.9	12.0	33.4	9.6	19.4
Green Ext Time (p_c), s	0.0	0.0	0.1	1.5	0.0	4.2	0.2	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	71.5
HCM 7th LOS	E

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	68	2	190	19	149	0	0	0	100
Future Vol, veh/h	0	0	0	68	2	190	19	149	0	0	0	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	74	2	207	21	162	0	0	0	109

Major/Minor	Minor1		Major1			Major2			
Conflicting Flow All	203	312	162	109	0	-	-	-	0
Stage 1	203	203	-	-	-	-	-	-	-
Stage 2	0	109	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	763	587	857	1422	-	0	0	-	-
Stage 1	808	715	-	-	-	0	0	-	-
Stage 2	-	786	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	751	0	857	1422	-	-	-	-	-
Mov Cap-2 Maneuver	751	0	-	-	-	-	-	-	-
Stage 1	795	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.47	0.86	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	204	-	751	857	-	-
HCM Lane V/C Ratio	0.015	-	0.101	0.241	-	-
HCM Ctrl Dly (s/v)	7.6	0	10.3	10.5	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.9	-	-

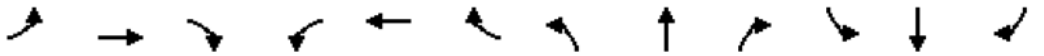
Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	97	1	6	0	0	0	0	71	34	122	141	0
Future Vol, veh/h	97	1	6	0	0	0	0	71	34	122	141	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	105	1	7	0	0	0	0	77	37	133	153	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	496	533	153	-	0	0	114	0	0
Stage 1	418	418	-	-	-	-	-	-	-
Stage 2	77	114	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	-	-	-	4.22	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	-	-	-	2.308	-	-
Pot Cap-1 Maneuver	516	439	867	0	-	-	1415	-	0
Stage 1	643	573	-	0	-	-	-	-	0
Stage 2	921	782	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	463	0	867	-	-	-	1415	-	-
Mov Cap-2 Maneuver	463	0	-	-	-	-	-	-	-
Stage 1	643	0	-	-	-	-	-	-	-
Stage 2	827	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	14.74	0	3.62
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	463	867	835	-
HCM Lane V/C Ratio	-	-	0.23	0.008	0.094	-
HCM Ctrl Dly (s/v)	-	-	15.1	9.2	7.8	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0	0.3	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	25	0	1040	37	352	0	0	871	112
Future Volume (veh/h)	0	0	0	25	0	1040	37	352	0	0	871	112
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				27	0	1130	40	383	0	0	947	122
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				715	0	1120	85	1534	0	0	1125	502
Arrive On Green				0.41	0.00	0.41	0.10	0.88	0.00	0.00	0.32	0.32
Sat Flow, veh/h				1739	0	2723	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				27	0	1130	40	383	0	0	947	122
Grp Sat Flow(s),veh/h/ln				1739	0	1362	1739	1735	0	0	1735	1547
Q Serve(g_s), s				0.8	0.0	37.0	2.0	1.5	0.0	0.0	22.8	5.2
Cycle Q Clear(g_c), s				0.8	0.0	37.0	2.0	1.5	0.0	0.0	22.8	5.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				715	0	1120	85	1534	0	0	1125	502
V/C Ratio(X)				0.04	0.00	1.01	0.47	0.25	0.00	0.00	0.84	0.24
Avail Cap(c_a), veh/h				715	0	1120	135	1534	0	0	1125	502
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.9	0.0	26.5	39.5	3.0	0.0	0.0	28.3	22.3
Incr Delay (d2), s/veh				0.0	0.0	29.2	3.9	0.4	0.0	0.0	7.7	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
%ile BackOfQ(50%),veh/ln				0.3	0.0	14.7	0.9	0.5	0.0	0.0	10.2	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				15.9	0.0	55.7	43.4	3.4	0.0	0.0	36.0	23.5
LnGrp LOS				B		F	D	A			D	C
Approach Vol, veh/h					1157			423			1069	
Approach Delay, s/veh					54.8			7.2			34.5	
Approach LOS					D			A			C	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	45.9		10.6	35.3		44.1						
Change Period (Y+Rc), s	6.1		6.2	6.1		7.1						
Max Green Setting (Gmax), s	39.8		7.0	26.6		37.0						
Max Q Clear Time (g_c+I1), s	3.5		4.0	24.8		39.0						
Green Ext Time (p_c), s	2.6		0.0	1.1		0.0						

Intersection Summary	
HCM 7th Control Delay, s/veh	39.0
HCM 7th 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												
Traffic Volume (veh/h)	107	3	21	0	0	0	0	291	40	0	270	637
Future Volume (veh/h)	107	3	21	0	0	0	0	291	40	0	270	637
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826				0	1826	1826	0	1826	1826
Adj Flow Rate, veh/h	140	0	0				0	316	43	0	293	692
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5				0	5	5	0	5	5
Cap, veh/h	337	177	0				0	2467	333	0	2786	2451
Arrive On Green	0.10	0.00	0.00				0.00	0.80	0.80	0.00	0.26	0.26
Sat Flow, veh/h	3478	1826	0				0	3163	414	0	3561	2723
Grp Volume(v), veh/h	140	0	0				0	177	182	0	293	692
Grp Sat Flow(s),veh/h/ln	1739	1826	0				0	1735	1751	0	1735	1362
Q Serve(g_s), s	3.4	0.0	0.0				0.0	2.0	2.1	0.0	5.7	9.3
Cycle Q Clear(g_c), s	3.4	0.0	0.0				0.0	2.0	2.1	0.0	5.7	9.3
Prop In Lane	1.00		0.00				0.00		0.24	0.00		1.00
Lane Grp Cap(c), veh/h	337	177	0				0	1393	1406	0	2786	2451
V/C Ratio(X)	0.42	0.00	0.00				0.00	0.13	0.13	0.00	0.11	0.28
Avail Cap(c_a), veh/h	1565	822	0				0	1393	1406	0	2786	2451
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	1.00	0.00	0.74	0.74
Uniform Delay (d), s/veh	38.2	0.0	0.0				0.0	1.9	1.9	0.0	8.6	3.4
Incr Delay (d2), s/veh	0.8	0.0	0.0				0.0	0.2	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
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0				0.0	0.4	0.4	0.0	1.5	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.0	0.0	0.0				0.0	2.1	2.1	0.0	8.6	3.5
LnGrp LOS	D							A	A		A	A
Approach Vol, veh/h		140						359			985	
Approach Delay, s/veh		39.0						2.1			5.0	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	76.8	13.2	76.8
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	40.5	40.5
Max Q Clear Time (g_c+I1), s	4.1	5.4	11.3
Green Ext Time (p_c), s	2.2	0.4	5.3

Intersection Summary	
HCM 7th Control Delay, s/veh	7.5
HCM 7th 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												
Traffic Volume (veh/h)	60	42	3	12	87	67	106	1431	16	42	1040	65
Future Volume (veh/h)	60	42	3	12	87	67	106	1431	16	42	1040	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	65	46	3	13	95	73	115	1555	17	46	1130	71
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	39	18	437	27	170	437	137	1832	20	100	1657	104
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.08	0.52	0.52	0.06	0.50	0.50
Sat Flow, veh/h	1	64	1560	0	606	1560	1753	3544	39	1753	3342	210
Grp Volume(v), veh/h	111	0	3	108	0	73	115	767	805	46	591	610
Grp Sat Flow(s),veh/h/ln	65	0	1560	606	0	1560	1753	1749	1834	1753	1749	1803
Q Serve(g_s), s	0.1	0.0	0.2	0.1	0.0	5.2	9.6	55.9	56.0	3.8	38.1	38.2
Cycle Q Clear(g_c), s	41.5	0.0	0.2	41.5	0.0	5.2	9.6	55.9	56.0	3.8	38.1	38.2
Prop In Lane	0.59		1.00	0.12		1.00	1.00		0.02	1.00		0.12
Lane Grp Cap(c), veh/h	57	0	437	197	0	437	137	904	948	100	867	894
V/C Ratio(X)	1.95	0.00	0.01	0.55	0.00	0.17	0.84	0.85	0.85	0.46	0.68	0.68
Avail Cap(c_a), veh/h	57	0	437	197	0	437	221	904	948	122	867	894
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.5	0.0	38.5	43.4	0.0	40.3	67.4	30.8	30.8	67.6	28.4	28.4
Incr Delay (d2), s/veh	486.4	0.0	0.0	3.2	0.0	0.2	14.0	9.7	9.4	3.2	4.3	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(50%),veh/ln	9.8	0.0	0.1	3.2	0.0	2.0	4.7	24.1	25.2	1.7	16.0	16.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	547.8	0.0	38.5	46.6	0.0	40.5	81.4	40.5	40.2	70.8	32.7	32.6
LnGrp LOS	F		D	D		D	F	D	D	E	C	C
Approach Vol, veh/h		114			181			1687			1247	
Approach Delay, s/veh		534.4			44.1			43.2			34.1	
Approach LOS		F			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.2	85.0		49.0	17.3	81.9		49.0				
Change Period (Y+Rc), s	5.7	8.4		7.5	5.7	8.4		7.5				
Max Green Setting (Gmax), s	10.3	76.6		41.5	18.7	68.2		41.5				
Max Q Clear Time (g_c+I1), s	15.8	58.0		43.5	11.6	40.2		43.5				
Green Ext Time (p_c), s	0.0	9.5		0.0	0.1	7.8		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	57.1
HCM 7th LOS	E



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	748	185	221	677	260	243
Future Volume (veh/h)	748	185	221	677	260	243
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	813	201	240	736	283	264
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1294	927	349	1949	393	615
Arrive On Green	0.37	0.37	0.10	0.55	0.22	0.22
Sat Flow, veh/h	3618	1572	3428	3618	1767	2768
Grp Volume(v), veh/h	813	201	240	736	283	264
Grp Sat Flow(s),veh/h/ln	1763	1572	1714	1763	1767	1384
Q Serve(g_s), s	10.2	3.2	3.6	6.3	8.0	4.4
Cycle Q Clear(g_c), s	10.2	3.2	3.6	6.3	8.0	4.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1294	927	349	1949	393	615
V/C Ratio(X)	0.63	0.22	0.69	0.38	0.72	0.43
Avail Cap(c_a), veh/h	2952	1666	351	3562	1269	1987
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	14.0	5.2	23.3	6.8	19.4	18.0
Incr Delay (d2), s/veh	0.5	0.1	5.5	0.1	2.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.8	1.6	1.8	3.2	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.5	5.3	28.8	6.9	21.9	18.5
LnGrp LOS	B	A	C	A	C	B
Approach Vol, veh/h	1014			976	547	
Approach Delay, s/veh	12.7			12.3	20.2	
Approach LOS	B			B	C	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		10.0	26.1		17.6	36.1
Change Period (Y+Rc), s		4.5	* 6.4		5.7	6.4
Max Green Setting (Gmax), s		5.5	* 45		38.6	54.3
Max Q Clear Time (g_c+I1), s		5.6	12.2		10.0	8.3
Green Ext Time (p_c), s		0.0	7.5		2.0	6.1

Intersection Summary	
HCM 7th Control Delay, s/veh	14.2
HCM 7th LOS	B

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	189	548	191	217	593	303	209	612	85	258	602	163
Future Volume (veh/h)	189	548	191	217	593	303	209	612	85	258	602	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	205	596	208	236	645	329	227	665	92	280	654	177
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	219	1023	557	254	1014	472	219	877	121	254	1030	459
Arrive On Green	0.06	0.29	0.29	0.07	0.30	0.30	0.06	0.28	0.28	0.07	0.29	0.29
Sat Flow, veh/h	3428	3526	1572	3428	3377	1572	3428	3111	430	3428	3526	1572
Grp Volume(v), veh/h	205	596	208	236	645	329	227	376	381	280	654	177
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1689	1572	1714	1763	1778	1714	1763	1572
Q Serve(g_s), s	4.7	11.3	7.7	5.4	12.9	14.5	5.0	15.3	15.3	5.8	12.6	7.0
Cycle Q Clear(g_c), s	4.7	11.3	7.7	5.4	12.9	14.5	5.0	15.3	15.3	5.8	12.6	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	219	1023	557	254	1014	472	219	497	501	254	1030	459
V/C Ratio(X)	0.94	0.58	0.37	0.93	0.64	0.70	1.04	0.76	0.76	1.10	0.64	0.39
Avail Cap(c_a), veh/h	219	1644	834	254	1640	763	219	901	909	254	1838	820
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	36.5	23.7	18.8	36.0	23.7	24.2	36.6	25.7	25.7	36.2	24.1	22.1
Incr Delay (d2), s/veh	43.3	0.5	0.4	37.8	0.7	1.9	70.7	2.4	2.4	86.6	0.7	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(50%),veh/ln	8.2	4.6	2.7	3.5	5.0	5.4	4.2	6.3	6.4	5.4	5.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	79.7	24.3	19.2	73.8	24.3	26.1	107.3	28.1	28.1	122.8	24.7	22.6
LnGrp LOS	E	C	B	E	C	C	F	C	C	F	C	C
Approach Vol, veh/h		1009			1210			984			1111	
Approach Delay, s/veh		34.5			34.5			46.3			49.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	27.7	11.0	28.6	10.2	28.5	10.2	29.4
Change Period (Y+Rc), s	5.2	5.6	5.2	5.9	5.2	5.6	5.2	* 5.9
Max Green Setting (Gmax), s	5.8	40.0	5.8	36.5	5.0	40.8	5.0	* 38
Max Q Clear Time (g_c+I1), s	7.7	17.3	7.4	13.3	7.0	14.6	6.7	16.5
Green Ext Time (p_c), s	0.0	4.8	0.0	5.0	0.0	5.3	0.0	7.0

Intersection Summary	
HCM 7th Control Delay, s/veh	41.0
HCM 7th LOS	D

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	30	34	4	581	24	56	12	460	656	35	281	68
Future Volume (veh/h)	30	34	4	581	24	56	12	460	656	35	281	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	33	37	4	632	26	61	13	500	713	38	305	74
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	251	233	25	531	287	243	50	954	426	319	1490	888
Arrive On Green	0.14	0.14	0.14	0.15	0.15	0.15	0.03	0.27	0.27	0.18	0.42	0.42
Sat Flow, veh/h	1767	1646	178	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	33	0	41	632	26	61	13	500	713	38	305	74
Grp Sat Flow(s),veh/h/ln	1767	0	1824	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	1.3	0.0	1.5	12.0	0.9	2.6	0.6	9.4	21.0	1.4	4.2	1.7
Cycle Q Clear(g_c), s	1.3	0.0	1.5	12.0	0.9	2.6	0.6	9.4	21.0	1.4	4.2	1.7
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	0	258	531	287	243	50	954	426	319	1490	888
V/C Ratio(X)	0.13	0.00	0.16	1.19	0.09	0.25	0.26	0.52	1.68	0.12	0.20	0.08
Avail Cap(c_a), veh/h	251	0	902	531	942	798	205	954	426	319	1490	888
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	0.0	29.2	28.6	28.1	28.8	36.9	24.1	28.3	26.6	14.2	7.7
Incr Delay (d2), s/veh	0.2	0.0	0.3	102.8	0.1	0.5	2.7	0.5	314.1	0.2	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(50%),veh/ln	0.5	0.0	0.7	19.1	0.4	1.0	0.3	3.7	44.5	0.6	1.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.4	0.0	29.5	131.4	28.3	29.4	39.6	24.6	342.4	26.8	14.2	7.8
LnGrp LOS	C		C	F	C	C	D	C	F	C	B	A
Approach Vol, veh/h		74			719			1226			417	
Approach Delay, s/veh		29.4			119.0			209.6			14.2	
Approach LOS		C			F			F			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	16.0	6.8	37.8	16.0	17.0	18.6	26.0
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	12.0	38.4	9.0	26.0	11.0	39.4	14.0	21.0
Max Q Clear Time (g_c+I1), s	14.0	3.5	2.6	6.2	3.3	4.6	3.4	23.0
Green Ext Time (p_c), s	0.0	0.2	0.0	2.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	143.9
HCM 7th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	507	194	1	2	144	92	1	2	1	69	2	484
Future Volume (veh/h)	507	194	1	2	144	92	1	2	1	69	2	484
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	378	444	1	2	155	99	1	2	1	74	0	521
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	554	580	1	4	289	174	3	358	165	127	0	701
Arrive On Green	0.31	0.31	0.31	0.13	0.13	0.13	0.00	0.15	0.15	0.07	0.00	0.22
Sat Flow, veh/h	1767	1851	4	28	2153	1296	1767	2344	1080	1767	0	3145
Grp Volume(v), veh/h	378	0	445	132	0	124	1	1	2	74	0	521
Grp Sat Flow(s),veh/h/ln	1767	0	1855	1854	0	1622	1767	1763	1661	1767	0	1572
Q Serve(g_s), s	10.9	0.0	12.7	3.9	0.0	4.2	0.0	0.0	0.0	2.4	0.0	9.0
Cycle Q Clear(g_c), s	10.9	0.0	12.7	3.9	0.0	4.2	0.0	0.0	0.0	2.4	0.0	9.0
Prop In Lane	1.00		0.00	0.02		0.80	1.00		0.65	1.00		1.00
Lane Grp Cap(c), veh/h	554	0	581	249	0	218	3	269	254	127	0	701
V/C Ratio(X)	0.68	0.00	0.77	0.53	0.00	0.57	0.33	0.01	0.01	0.58	0.00	0.74
Avail Cap(c_a), veh/h	962	0	1010	918	0	803	181	821	774	229	0	1551
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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.6	0.0	18.2	23.6	0.0	23.8	29.2	21.0	21.0	26.3	0.0	21.2
Incr Delay (d2), s/veh	1.5	0.0	2.1	1.7	0.0	2.3	54.2	0.0	0.0	4.2	0.0	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(50%),veh/ln	4.1	0.0	5.1	1.7	0.0	1.6	0.1	0.0	0.0	1.1	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.1	0.0	20.3	25.4	0.0	26.1	83.4	21.1	21.1	30.6	0.0	22.8
LnGrp LOS	B		C	C		C	F	C	C	C		C
Approach Vol, veh/h		823			256			4			595	
Approach Delay, s/veh		19.7			25.7			36.6			23.8	
Approach LOS		B			C			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	13.6		23.5	4.8	17.8		12.6
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7
Max Green Setting (Gmax), s	7.6	27.3		31.9	6.0	28.9		29.0
Max Q Clear Time (g_c+I1), s	4.4	2.0		14.7	2.0	11.0		6.2
Green Ext Time (p_c), s	0.0	0.0		3.7	0.0	2.0		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	22.1
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	8	0	6	17	187	252	0	92	101
Future Vol, veh/h	0	0	0	8	0	6	17	187	252	0	92	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	330
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	9	0	7	18	203	274	0	100	110

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	340	450	203	210	0	-	-	-	0
Stage 1	240	240	-	-	-	-	-	-	-
Stage 2	100	210	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	636	490	813	1304	-	0	0	-	-
Stage 1	777	689	-	-	-	0	0	-	-
Stage 2	900	710	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	626	0	813	1304	-	-	-	-	-
Mov Cap-2 Maneuver	626	0	-	-	-	-	-	-	-
Stage 1	764	0	-	-	-	-	-	-	-
Stage 2	900	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.3	0.65	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	150	-	694	-	-
HCM Lane V/C Ratio	0.014	-	0.022	-	-
HCM Ctrl Dly (s/v)	7.8	0	10.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

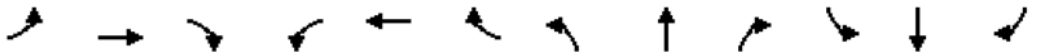
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	0	205	0	0	0	0	353	7	1	96	0
Future Vol, veh/h	64	0	205	0	0	0	0	353	7	1	96	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	470	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	70	0	223	0	0	0	0	384	8	1	104	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	298	498	-	-	0	0	391	0	0
Stage 1	107	107	-	-	-	-	-	-	-
Stage 2	192	391	-	-	-	-	-	-	-
Critical Hdwy	6.78	6.68	-	-	-	-	4.28	-	-
Critical Hdwy Stg 1	5.58	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.98	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.614	4.114	-	-	-	-	2.314	-	-
Pot Cap-1 Maneuver	657	456	0	0	-	-	1105	-	0
Stage 1	890	786	0	0	-	-	-	-	0
Stage 2	796	585	0	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	657	0	-	-	-	-	1105	-	-
Mov Cap-2 Maneuver	657	0	-	-	-	-	-	-	-
Stage 1	890	0	-	-	-	-	-	-	-
Stage 2	795	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.13	0	0.09
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT
Capacity (veh/h)	-	-	657	1105	-
HCM Lane V/C Ratio	-	-	0.106	0.001	-
HCM Ctrl Dly (s/v)	-	-	11.1	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	40	98	32	42	5	104	312	38	6	260	47
Future Volume (veh/h)	19	40	98	32	42	5	104	312	38	6	260	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1455	1752	1752	1752	1455	952	1752	1752	952	1604
Adj Flow Rate, veh/h	21	43	107	35	46	5	113	339	41	7	283	51
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, %	10	10	30	10	10	10	30	64	10	10	64	20
Cap, veh/h	97	261	611	144	310	263	356	829	602	30	371	358
Arrive On Green	0.06	0.15	0.15	0.09	0.18	0.18	0.13	0.32	0.32	0.02	0.21	0.21
Sat Flow, veh/h	1668	1752	2171	1668	1752	1485	2689	2598	1485	1668	1808	1359
Grp Volume(v), veh/h	21	43	107	35	46	5	113	339	41	7	283	51
Grp Sat Flow(s),veh/h/ln	1668	1752	1085	1668	1752	1485	1345	866	1485	1668	904	1359
Q Serve(g_s), s	0.8	1.4	2.5	1.3	1.5	0.2	2.5	6.7	1.1	0.3	9.7	1.9
Cycle Q Clear(g_c), s	0.8	1.4	2.5	1.3	1.5	0.2	2.5	6.7	1.1	0.3	9.7	1.9
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	97	261	611	144	310	263	356	829	602	30	371	358
V/C Ratio(X)	0.22	0.16	0.18	0.24	0.15	0.02	0.32	0.41	0.07	0.23	0.76	0.14
Avail Cap(c_a), veh/h	303	1460	2097	303	1460	1237	481	1567	1023	253	1041	862
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	24.5	17.9	28.1	22.9	22.4	25.9	17.6	12.0	31.9	24.7	18.6
Incr Delay (d2), s/veh	1.1	0.3	0.1	0.9	0.2	0.0	0.5	0.3	0.0	3.8	3.3	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(50%),veh/ln	0.3	0.5	0.5	0.5	0.5	0.1	0.7	1.1	0.3	0.1	1.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.7	24.8	18.1	29.0	23.2	22.5	26.4	17.9	12.0	35.7	28.0	18.8
LnGrp LOS	C	C	B	C	C	C	C	B	B	D	C	B
Approach Vol, veh/h		171			86			493			341	
Approach Delay, s/veh		21.3			25.5			19.4			26.8	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	18.2	14.4	21.9	9.5	20.1	6.9	29.5
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	12.0	55.0	11.8	38.0	12.0	55.0	10.0	39.8
Max Q Clear Time (g_c+I1), s	3.3	4.5	4.5	11.7	2.8	3.5	2.3	8.7
Green Ext Time (p_c), s	0.0	0.6	0.2	1.8	0.0	0.2	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	22.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	105	0	99	5	346	58	170	240	0
Future Volume (veh/h)	0	0	0	105	0	99	5	346	58	170	240	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				952	0	952	1870	952	952	952	952	0
Adj Flow Rate, veh/h				114	0	108	5	376	63	185	261	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				64	0	64	2	64	64	64	64	0
Cap, veh/h				152	0	135	24	456	76	209	1328	0
Arrive On Green				0.17	0.00	0.17	0.01	0.29	0.29	0.23	0.51	0.00
Sat Flow, veh/h				906	0	806	1781	1551	258	906	2683	0
Grp Volume(v), veh/h				114	0	108	5	218	221	185	261	0
Grp Sat Flow(s),veh/h/ln				906	0	806	1781	904	905	906	866	0
Q Serve(g_s), s				7.9	0.0	8.5	0.2	14.7	15.0	13.0	3.6	0.0
Cycle Q Clear(g_c), s				7.9	0.0	8.5	0.2	14.7	15.0	13.0	3.6	0.0
Prop In Lane				1.00		1.00	1.00		0.28	1.00		0.00
Lane Grp Cap(c), veh/h				152	0	135	24	266	266	209	1328	0
V/C Ratio(X)				0.75	0.00	0.80	0.21	0.82	0.83	0.89	0.20	0.00
Avail Cap(c_a), veh/h				704	0	626	271	552	553	258	1930	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				26.0	0.0	26.3	32.1	21.6	21.7	24.4	8.7	0.0
Incr Delay (d2), s/veh				7.2	0.0	10.2	4.4	6.2	6.6	25.0	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(50%),veh/ln				1.9	0.0	1.9	0.1	3.0	3.1	3.8	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				33.2	0.0	36.4	36.4	27.7	28.3	49.5	8.8	0.0
LnGrp LOS				C		D	D	C	C	D	A	
Approach Vol, veh/h					222			444			446	
Approach Delay, s/veh					34.8			28.1			25.7	
Approach LOS					C			C			C	

Timer - Assigned Phs	1	2		5	6		8					
Phs Duration (G+Y+Rc), s	10.8	27.7		6.6	42.0		17.1					
Change Period (Y+Rc), s	5.7	8.4		5.7	8.4		6.1					
Max Green Setting (Gmax), s	18.3	40.1		10.0	48.8		51.0					
Max Q Clear Time (g_c+I1), s	15.0	17.0		2.2	5.6		10.5					
Green Ext Time (p_c), s	0.2	2.3		0.0	1.7		0.8					

Intersection Summary		
HCM 7th Control Delay, s/veh	28.5	
HCM 7th LOS	C	



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	124	198	257	490	436	170
Future Volume (veh/h)	124	198	257	490	436	170
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	135	0	279	533	474	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	173		351	1137	600	
Arrive On Green	0.10	0.00	0.21	0.65	0.35	0.00
Sat Flow, veh/h	1668	1485	1668	1737	1737	1485
Grp Volume(v), veh/h	135	0	279	533	474	0
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1737	1737	1485
Q Serve(g_s), s	3.6	0.0	7.2	7.0	11.2	0.0
Cycle Q Clear(g_c), s	3.6	0.0	7.2	7.0	11.2	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	173		351	1137	600	
V/C Ratio(X)	0.78		0.80	0.47	0.79	
Avail Cap(c_a), veh/h	495		861	2498	1430	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.9	0.0	17.1	3.9	13.4	0.0
Incr Delay (d2), s/veh	7.3	0.0	4.1	0.3	2.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	2.4	0.4	3.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	27.2	0.0	21.2	4.2	15.8	0.0
LnGrp LOS	C		C	A	B	
Approach Vol, veh/h	135			812	474	
Approach Delay, s/veh	27.2			10.0	15.8	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		36.3		9.2	14.1	22.2
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		65.5		13.5	23.5	37.5
Max Q Clear Time (g_c+I1), s		9.0		5.6	9.2	13.2
Green Ext Time (p_c), s		3.2		0.2	0.6	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	13.6
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	247	10	153	197	349	4	662	101	247	819	44
Future Volume (veh/h)	39	247	10	153	197	349	4	662	101	247	819	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	42	268	11	166	214	379	4	720	110	268	890	48
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	40	253	249	152	196	301	97	744	361	242	1009	490
Arrive On Green	0.16	0.16	0.16	0.19	0.19	0.19	0.06	0.23	0.23	0.14	0.32	0.32
Sat Flow, veh/h	246	1568	1547	781	1006	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	310	0	11	380	0	379	4	720	110	268	890	48
Grp Sat Flow(s),veh/h/ln	1814	0	1547	1787	0	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	14.5	0.0	0.5	17.5	0.0	17.5	0.2	20.1	5.3	12.5	23.8	2.0
Cycle Q Clear(g_c), s	14.5	0.0	0.5	17.5	0.0	17.5	0.2	20.1	5.3	12.5	23.8	2.0
Prop In Lane	0.14		1.00	0.44		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	292	0	249	347	0	301	97	744	361	242	1009	490
V/C Ratio(X)	1.06	0.00	0.04	1.09	0.00	1.26	0.04	0.97	0.30	1.11	0.88	0.10
Avail Cap(c_a), veh/h	292	0	249	347	0	301	97	744	361	242	1009	490
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	0.0	31.9	36.3	0.0	36.2	40.2	34.2	28.5	38.8	29.2	21.7
Incr Delay (d2), s/veh	69.6	0.0	0.1	75.8	0.0	140.9	0.2	25.3	0.5	90.5	9.2	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(50%),veh/ln	11.6	0.0	0.2	14.4	0.0	17.9	0.1	9.7	1.8	11.0	9.4	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	107.4	0.0	32.0	112.0	0.0	177.2	40.4	59.4	28.9	129.2	38.4	21.8
LnGrp LOS	F		C	F		F	D	E	C	F	D	C
Approach Vol, veh/h		321			759			834			1206	
Approach Delay, s/veh		104.8			144.6			55.3			57.9	
Approach LOS		F			F			E			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.0	28.0		21.0	9.5	35.5		24.0
Change Period (Y+Rc), s	4.5	7.0		6.5	4.5	7.0		6.5
Max Green Setting (Gmax), s	12.5	21.0		14.5	5.0	28.5		17.5
Max Q Clear Time (g_c+I1), s	14.5	22.1		16.5	2.2	25.8		19.5
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	1.4		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	83.1
HCM 7th LOS	F

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	165	5	1	450	218	73
Future Vol, veh/h	165	5	1	450	218	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	385	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	18	18	10
Mvmt Flow	179	5	1	489	237	79

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	768	277	316	0	-	0
Stage 1	277	-	-	-	-	-
Stage 2	491	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	359	743	1200	-	-	-
Stage 1	752	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	358	743	1200	-	-	-
Mov Cap-2 Maneuver	463	-	-	-	-	-
Stage 1	751	-	-	-	-	-
Stage 2	599	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	17.6	0.02	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1200	-	468	-	-
HCM Lane V/C Ratio	0.001	-	0.394	-	-
HCM Ctrl Dly (s/v)	8	-	17.6	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	1.9	-	-

Intersection	
Int Delay, s/veh	8.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	46	114	59	9	214	50	133	0	22	110	0	105
Future Vol, veh/h	46	114	59	9	214	50	133	0	22	110	0	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	18	10	10	18	10	10	2	10	10	2	10
Mvmt Flow	50	124	64	10	233	54	145	0	24	120	0	114

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	287	0	0	188	0	0	508	563	156	503	567	260
Stage 1	-	-	-	-	-	-	256	256	-	279	279	-
Stage 2	-	-	-	-	-	-	252	307	-	224	288	-
Critical Hdwy	4.2	-	-	4.2	-	-	7.2	6.52	6.3	7.2	6.52	6.3
Critical Hdwy Stg 1	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.2	5.52	-	6.2	5.52	-
Follow-up Hdwy	2.29	-	-	2.29	-	-	3.59	4.018	3.39	3.59	4.018	3.39
Pot Cap-1 Maneuver	1231	-	-	1339	-	-	463	436	869	466	433	760
Stage 1	-	-	-	-	-	-	731	696	-	710	680	-
Stage 2	-	-	-	-	-	-	735	661	-	761	674	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1231	-	-	1339	-	-	372	412	869	429	409	760
Mov Cap-2 Maneuver	-	-	-	-	-	-	372	412	-	429	409	-
Stage 1	-	-	-	-	-	-	698	664	-	704	674	-
Stage 2	-	-	-	-	-	-	619	655	-	706	643	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.69	0.25	20.09	16.48
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	405	354	-	-	57	-	-	545
HCM Lane V/C Ratio	0.416	0.041	-	-	0.007	-	-	0.429
HCM Ctrl Dly (s/v)	20.1	8	0	-	7.7	0	-	16.5
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	2	0.1	-	-	0	-	-	2.1

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	46	254	15	23	245
Future Vol, veh/h	28	46	254	15	23	245
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	10	10	18	10	10	18
Mvmt Flow	30	49	273	16	25	263

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	595	282	0	0	290	0
Stage 1	282	-	-	-	-	-
Stage 2	313	-	-	-	-	-
Critical Hdwy	6.5	6.3	-	-	4.2	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	-	-	2.29	-
Pot Cap-1 Maneuver	454	738	-	-	1227	-
Stage 1	748	-	-	-	-	-
Stage 2	724	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	444	737	-	-	1226	-
Mov Cap-2 Maneuver	535	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	709	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.37	0	0.69
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	645	1226	-
HCM Lane V/C Ratio	-	-	0.123	0.02	-
HCM Ctrl Dly (s/v)	-	-	11.4	8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	52	0	91	0	0	0	68	273	0	0	308	23
Future Vol, veh/h	52	0	91	0	0	0	68	273	0	0	308	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	18	10	10	18	10
Mvmt Flow	57	0	99	0	0	0	74	297	0	0	335	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	792	792	347	779	804	297	360	0	0	297	0	0
Stage 1	347	347	-	445	445	-	-	-	-	-	-	-
Stage 2	445	445	-	335	360	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	298	313	678	304	307	724	1156	-	-	1220	-	-
Stage 1	652	621	-	577	561	-	-	-	-	-	-	-
Stage 2	577	561	-	663	613	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	275	289	678	239	284	724	1156	-	-	1220	-	-
Mov Cap-2 Maneuver	275	289	-	239	284	-	-	-	-	-	-	-
Stage 1	652	621	-	533	518	-	-	-	-	-	-	-
Stage 2	533	518	-	566	613	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	17.49	0	1.66	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	359	-	-	442	-	1220	-	-
HCM Lane V/C Ratio	0.064	-	-	0.352	-	-	-	-
HCM Ctrl Dly (s/v)	8.3	0	-	17.5	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.6	-	0	-	-

Intersection	
Int Delay, s/veh	21.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	80	2	227	61	8	19	156	225	52	5	381	99
Future Vol, veh/h	80	2	227	61	8	19	156	225	52	5	381	99
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	240	-	-	290	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	10	10	10	10	10	10	10	10	10	10	10	10
Mvmt Flow	83	2	236	64	8	20	163	234	54	5	397	103

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1022	1072	448	995	1097	261	500	0	0	289	0	0
Stage 1	459	459	-	586	586	-	-	-	-	-	-	-
Stage 2	564	614	-	408	510	-	-	-	-	-	-	-
Critical Hdwy	7.2	6.6	6.3	7.2	6.6	6.3	4.2	-	-	4.2	-	-
Critical Hdwy Stg 1	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.2	5.6	-	6.2	5.6	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	4.09	3.39	3.59	4.09	3.39	2.29	-	-	2.29	-	-
Pot Cap-1 Maneuver	207	213	594	216	206	758	1024	-	-	1229	-	-
Stage 1	567	553	-	482	484	-	-	-	-	-	-	-
Stage 2	497	471	-	604	524	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	162	179	594	108	173	758	1024	-	-	1229	-	-
Mov Cap-2 Maneuver	162	179	-	108	173	-	-	-	-	-	-	-
Stage 1	565	551	-	406	407	-	-	-	-	-	-	-
Stage 2	399	396	-	361	522	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	66.03	71.46	3.31	0.08
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1024	-	-	348	138	1229	-	-
HCM Lane V/C Ratio	0.159	-	-	0.924	0.663	0.004	-	-
HCM Ctrl Dly (s/v)	9.2	-	-	66	71.5	7.9	-	-
HCM Lane LOS	A	-	-	F	F	A	-	-
HCM 95th %tile Q(veh)	0.6	-	-	9.5	3.6	0	-	-

Intersection	
Int Delay, s/veh	136.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	41	29	132	96	41	41	80	367	64	29	659	29
Future Vol, veh/h	41	29	132	96	41	41	80	367	64	29	659	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5	5	10	5	5	10	5
Mvmt Flow	45	32	143	104	45	45	87	399	70	32	716	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1390	1438	732	1403	1418	434	748	0	0	468	0	0
Stage 1	795	795	-	608	608	-	-	-	-	-	-	-
Stage 2	595	642	-	795	811	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	118	131	416	116	135	616	847	-	-	1078	-	-
Stage 1	376	395	-	478	481	-	-	-	-	-	-	-
Stage 2	486	464	-	376	389	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	57	107	416	~ 46	110	616	847	-	-	1078	-	-
Mov Cap-2 Maneuver	57	107	-	~ 46	110	-	-	-	-	-	-	-
Stage 1	358	375	-	411	414	-	-	-	-	-	-	-
Stage 2	346	399	-	215	369	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	275.06	$ 912.34	1.52	0.34
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	274	-	-	155	71	72	-	-
HCM Lane V/C Ratio	0.103	-	-	1.415	2.74	0.029	-	-
HCM Ctrl Dly (s/v)	9.7	0	-	275.1	$ 912.3	8.4	0	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th %tile Q(veh)	0.3	-	-	14	19.1	0.1	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Intersection Delay, s/veh	103.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	106	97	125	118	84	102	96	381	48	121	749	140
Future Vol, veh/h	106	97	125	118	84	102	96	381	48	121	749	140
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
Heavy Vehicles, %	8	8	8	8	8	8	7	7	7	5	5	5
Mvmt Flow	115	105	136	128	91	111	104	414	52	132	814	152
Number of Lanes	0	2	0	0	2	0	0	2	0	0	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	21.1	20.6	34.2	190.5
HCM LOS	C	C	D	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	34%	0%	69%	0%	74%	0%	24%	0%
Vol Thru, %	66%	80%	31%	28%	26%	29%	76%	73%
Vol Right, %	0%	20%	0%	72%	0%	71%	0%	27%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	287	239	155	174	160	144	496	515
LT Vol	96	0	106	0	118	0	121	0
Through Vol	191	191	49	49	42	42	375	375
RT Vol	0	48	0	125	0	102	0	140
Lane Flow Rate	311	259	168	189	174	157	539	559
Geometry Grp	5	5	5	5	5	5	5	5
Degree of Util (X)	0.793	0.638	0.462	0.475	0.483	0.397	1.332	1.333
Departure Headway (Hd)	9.523	9.203	10.378	9.493	10.477	9.574	8.903	8.578
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	383	394	349	383	346	379	409	425
Service Time	7.223	6.903	8.078	7.193	8.177	7.274	6.641	6.316
HCM Lane V/C Ratio	0.812	0.657	0.481	0.493	0.503	0.414	1.318	1.315
HCM Control Delay, s/veh	40.3	26.8	21.7	20.5	22.6	18.4	190.9	190.1
HCM Lane LOS	E	D	C	C	C	C	F	F
HCM 95th-tile Q	6.8	4.3	2.3	2.5	2.5	1.9	24.8	25.6

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1	35	0	1	3	23	644	0	4	695	19
Future Vol, veh/h	10	1	35	0	1	3	23	644	0	4	695	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	400	-	400	395	-	510
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	10	10	10	10	10	10	35	10	10	35	10
Mvmt Flow	11	1	38	0	1	3	25	700	0	4	755	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1165	1514	378	1137	1514	350	755	0	0	700	0	0
Stage 1	764	764	-	750	750	-	-	-	-	-	-	-
Stage 2	401	750	-	387	764	-	-	-	-	-	-	-
Critical Hdwy	7.7	6.7	7.1	7.7	6.7	7.1	4.3	-	-	4.3	-	-
Critical Hdwy Stg 1	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.7	5.7	-	6.7	5.7	-	-	-	-	-	-	-
Follow-up Hdwy	3.6	4.1	3.4	3.6	4.1	3.4	2.3	-	-	2.3	-	-
Pot Cap-1 Maneuver	140	110	598	147	110	624	800	-	-	841	-	-
Stage 1	345	392	-	352	398	-	-	-	-	-	-	-
Stage 2	576	398	-	587	392	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	134	106	598	132	106	624	800	-	-	841	-	-
Mov Cap-2 Maneuver	297	278	-	292	271	-	-	-	-	-	-	-
Stage 1	343	390	-	341	386	-	-	-	-	-	-	-
Stage 2	553	386	-	545	390	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	13.37	12.73	0.33	0.05
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	800	-	-	480	470	841	-	-
HCM Lane V/C Ratio	0.031	-	-	0.104	0.009	0.005	-	-
HCM Ctrl Dly (s/v)	9.6	-	-	13.4	12.7	9.3	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0	0	-	-

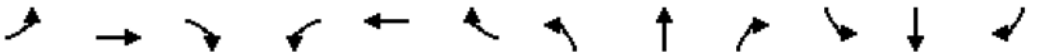
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	786	8	0	633	13	3	0	0	16	6	43
Future Vol, veh/h	17	786	8	0	633	13	3	0	0	16	6	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	665	-	590	665	-	575	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	11	35	11	11	35	11	11	11	11	11	11	11
Mvmt Flow	18	854	9	0	688	14	3	0	0	17	7	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	702	0	0	863	0	0	1239	1593	427	1152	1588	344
Stage 1	-	-	-	-	-	-	891	891	-	688	688	-
Stage 2	-	-	-	-	-	-	347	702	-	464	900	-
Critical Hdwy	4.32	-	-	4.32	-	-	7.72	6.72	7.12	7.72	6.72	7.12
Critical Hdwy Stg 1	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.72	5.72	-	6.72	5.72	-
Follow-up Hdwy	2.31	-	-	2.31	-	-	3.61	4.11	3.41	3.61	4.11	3.41
Pot Cap-1 Maneuver	834	-	-	720	-	-	122	97	551	142	98	626
Stage 1	-	-	-	-	-	-	286	339	-	382	424	-
Stage 2	-	-	-	-	-	-	618	417	-	524	335	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	834	-	-	720	-	-	108	95	551	139	96	626
Mov Cap-2 Maneuver	-	-	-	-	-	-	249	257	-	316	261	-
Stage 1	-	-	-	-	-	-	279	331	-	382	424	-
Stage 2	-	-	-	-	-	-	563	417	-	513	328	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.2	0	19.65	13.54
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	249	-	834	-	-	720	-	-	299	626
HCM Lane V/C Ratio	0.013	-	0.022	-	-	-	-	-	0.08	0.075
HCM Ctrl Dly (s/v)	19.7	0	9.4	-	-	0	-	-	18.1	11.2
HCM Lane LOS	C	A	A	-	-	A	-	-	C	B
HCM 95th %tile Q(veh)	0	-	0.1	-	-	0	-	-	0.3	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	640	50	24	444	62	75	63	21	138	104	141
Future Volume (veh/h)	68	640	50	24	444	62	75	63	21	138	104	141
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	72	681	53	26	472	66	80	67	22	147	111	150
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	200	816	63	110	640	89	208	274	90	241	159	215
Arrive On Green	0.12	0.33	0.33	0.07	0.28	0.28	0.12	0.22	0.22	0.14	0.24	0.24
Sat Flow, veh/h	1668	2466	192	1668	2311	322	1668	1258	413	1668	670	905
Grp Volume(v), veh/h	72	362	372	26	267	271	80	0	89	147	0	261
Grp Sat Flow(s),veh/h/ln	1668	1312	1345	1668	1312	1321	1668	0	1671	1668	0	1575
Q Serve(g_s), s	3.2	20.3	20.4	1.2	14.7	14.9	3.5	0.0	3.5	6.6	0.0	12.1
Cycle Q Clear(g_c), s	3.2	20.3	20.4	1.2	14.7	14.9	3.5	0.0	3.5	6.6	0.0	12.1
Prop In Lane	1.00		0.14	1.00		0.24	1.00		0.25	1.00		0.57
Lane Grp Cap(c), veh/h	200	434	445	110	363	366	208	0	364	241	0	374
V/C Ratio(X)	0.36	0.83	0.84	0.24	0.73	0.74	0.38	0.00	0.24	0.61	0.00	0.70
Avail Cap(c_a), veh/h	251	568	582	251	568	571	251	0	670	257	0	638
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	32.3	24.7	24.7	35.3	26.2	26.2	32.1	0.0	25.8	32.0	0.0	27.8
Incr Delay (d2), s/veh	1.1	8.1	8.0	1.1	2.9	3.0	1.2	0.0	0.3	3.7	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(50%),veh/ln	1.3	6.8	7.0	0.5	4.6	4.7	1.5	0.0	1.4	2.9	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.4	32.8	32.7	36.4	29.1	29.2	33.2	0.0	26.1	35.7	0.0	30.1
LnGrp LOS	C	C	C	D	C	C	C		C	D		C
Approach Vol, veh/h		806			564			169			408	
Approach Delay, s/veh		32.8			29.5			29.5			32.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	31.5	14.7	23.7	14.3	27.2	16.2	22.1
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.0	34.5	12.0	32.3	12.0	34.5	12.3	32.0
Max Q Clear Time (g_c+I1), s	3.2	22.4	5.5	14.1	5.2	16.9	8.6	5.5
Green Ext Time (p_c), s	0.0	3.7	0.1	1.6	0.1	3.1	0.1	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	31.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	3	1	3	1	396	3	219	6	563	261	0
Future Volume (veh/h)	0	3	1	3	1	396	3	219	6	563	261	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1381	1752	1381	1381	1752
Adj Flow Rate, veh/h	0	3	1	3	1	0	3	231	6	593	275	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	10	35	10	35	35	10
Cap, veh/h	3	17	6	14	228		14	500	283	726	1225	693
Arrive On Green	0.00	0.01	0.01	0.01	0.13	0.00	0.01	0.19	0.19	0.28	0.47	0.00
Sat Flow, veh/h	1668	1257	419	1668	1752	1485	1668	2624	1485	2552	2624	1485
Grp Volume(v), veh/h	0	0	4	3	1	0	3	231	6	593	275	0
Grp Sat Flow(s),veh/h/ln	1668	0	1676	1668	1752	1485	1668	1312	1485	1276	1312	1485
Q Serve(g_s), s	0.0	0.0	0.1	0.1	0.0	0.0	0.1	4.1	0.2	11.4	3.3	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.1	0.1	0.0	0.0	0.1	4.1	0.2	11.4	3.3	0.0
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	3	0	22	14	228		14	500	283	726	1225	693
V/C Ratio(X)	0.00	0.00	0.18	0.22	0.00		0.22	0.46	0.02	0.82	0.22	0.00
Avail Cap(c_a), veh/h	318	0	428	318	448		318	510	289	1085	1225	693
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	25.6	25.8	19.8	0.0	25.8	18.8	17.2	17.5	8.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.7	7.9	0.0	0.0	7.9	0.7	0.0	3.1	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(50%),veh/ln	0.0	0.0	0.1	0.1	0.0	0.0	0.1	1.0	0.0	2.8	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	29.3	33.8	19.9	0.0	33.8	19.5	17.3	20.6	8.4	0.0
LnGrp LOS			C	C	B		C	B	B	C	A	
Approach Vol, veh/h		4			4			240			868	
Approach Delay, s/veh		29.3			30.3			19.6			16.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.6	16.6	6.1	9.1	6.1	31.1	0.0	15.2
Change Period (Y+Rc), s	5.7	* 6.6	5.7	8.4	5.7	6.6	5.7	8.4
Max Green Setting (Gmax), s	22.3	* 10	10.0	13.4	10.0	20.2	10.0	13.4
Max Q Clear Time (g_c+I1), s	13.4	6.1	2.1	2.1	2.1	5.3	0.0	2.0
Green Ext Time (p_c), s	1.6	0.4	0.0	0.0	0.0	1.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	17.4
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

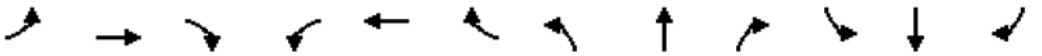
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	554	1	26	386	72	1	27	13	166	56	0
Future Vol, veh/h	1	554	1	26	386	72	1	27	13	166	56	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	570	-	570	650	-	650	-	-	30	-	-	30
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	1	577	1	27	402	75	1	28	14	173	58	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	477	0	0	578	0	0	864	1110	289	761	1036	201
Stage 1	-	-	-	-	-	-	579	579	-	456	456	-
Stage 2	-	-	-	-	-	-	284	531	-	305	580	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	1027	-	-	938	-	-	235	196	685	281	217	782
Stage 1	-	-	-	-	-	-	448	479	-	533	547	-
Stage 2	-	-	-	-	-	-	677	505	-	658	479	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1027	-	-	938	-	-	194	190	685	247	211	782
Mov Cap-2 Maneuver	-	-	-	-	-	-	376	366	-	422	373	-
Stage 1	-	-	-	-	-	-	448	479	-	517	531	-
Stage 2	-	-	-	-	-	-	585	490	-	606	478	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	0.02	0.48	13.99	24.69
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	367	685	1027	-	-	938	-	-	409	-
HCM Lane V/C Ratio	0.08	0.02	0.001	-	-	0.029	-	-	0.566	-
HCM Ctrl Dly (s/v)	15.7	10.4	8.5	-	-	9	-	-	24.7	0
HCM Lane LOS	C	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0.3	0.1	0	-	-	0.1	-	-	3.4	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	183	1	12	14	20	13	53	316	4	7	970	28
Future Volume (veh/h)	183	1	12	14	20	13	53	316	4	7	970	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	199	1	13	15	22	14	58	343	4	8	1054	30
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	233	310	262	53	121	103	124	1011	857	34	1730	49
Arrive On Green	0.13	0.17	0.17	0.03	0.07	0.07	0.14	1.00	1.00	0.02	0.51	0.51
Sat Flow, veh/h	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	3417	97
Grp Volume(v), veh/h	199	1	13	15	22	14	58	343	4	8	531	553
Grp Sat Flow(s),veh/h/ln	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	1721	1794
Q Serve(g_s), s	11.3	0.0	0.7	0.9	1.1	0.9	3.1	0.0	0.0	0.5	22.0	22.0
Cycle Q Clear(g_c), s	11.3	0.0	0.7	0.9	1.1	0.9	3.1	0.0	0.0	0.5	22.0	22.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	233	310	262	53	121	103	124	1011	857	34	871	908
V/C Ratio(X)	0.86	0.00	0.05	0.28	0.18	0.14	0.47	0.34	0.00	0.23	0.61	0.61
Avail Cap(c_a), veh/h	333	331	281	157	147	124	157	1011	857	174	871	908
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	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.3	34.4	34.7	47.4	44.1	43.9	41.0	0.0	0.0	48.3	17.6	17.6
Incr Delay (d2), s/veh	14.0	0.0	0.1	2.9	0.7	0.6	2.6	0.9	0.0	3.4	3.2	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(50%),veh/ln	5.4	0.0	0.3	0.4	0.5	0.3	1.3	0.2	0.0	0.2	8.2	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.3	34.4	34.7	50.3	44.8	44.5	43.6	0.9	0.0	51.7	20.8	20.7
LnGrp LOS	E	C	C	D	D	D	D	A	A	D	C	C
Approach Vol, veh/h		213			51			405			1092	
Approach Delay, s/veh		54.9			46.3			7.0			20.9	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	63.3	7.8	22.2	11.9	58.1	18.2	11.8
Change Period (Y+Rc), s	4.7	7.5	4.7	5.1	4.7	7.5	4.7	5.1
Max Green Setting (Gmax), s	10.1	40.5	9.1	18.3	9.1	41.5	19.3	8.1
Max Q Clear Time (g_c+I1), s	2.5	2.0	2.9	2.7	5.1	24.0	13.3	3.1
Green Ext Time (p_c), s	0.0	1.8	0.0	0.0	0.0	5.8	0.2	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	22.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	2	72	29	5	1	19	348	14	0	589	409
Future Volume (veh/h)	22	2	72	29	5	1	19	348	14	0	589	409
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	24	2	78	32	5	1	21	378	15	0	640	445
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	121	10	116	78	12	80	138	1259	1067	2	1029	872
Arrive On Green	0.08	0.08	0.08	0.05	0.05	0.05	0.08	0.70	0.70	0.00	1.00	1.00
Sat Flow, veh/h	1598	133	1535	1501	235	1535	1725	1811	1535	1725	1811	1535
Grp Volume(v), veh/h	26	0	78	37	0	1	21	378	15	0	640	445
Grp Sat Flow(s),veh/h/ln	1731	0	1535	1736	0	1535	1725	1811	1535	1725	1811	1535
Q Serve(g_s), s	1.4	0.0	4.9	2.1	0.0	0.1	1.1	8.0	0.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.4	0.0	4.9	2.1	0.0	0.1	1.1	8.0	0.3	0.0	0.0	0.0
Prop In Lane	0.92		1.00	0.86		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	131	0	116	91	0	80	138	1259	1067	2	1029	872
V/C Ratio(X)	0.20	0.00	0.67	0.41	0.00	0.01	0.15	0.30	0.01	0.00	0.62	0.51
Avail Cap(c_a), veh/h	138	0	123	139	0	123	140	1259	1067	138	1029	872
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	1.00	1.00	1.00	1.00	0.00	0.78	0.78
Uniform Delay (d), s/veh	43.4	0.0	45.0	45.9	0.0	44.9	42.8	5.9	4.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	12.6	2.9	0.0	0.1	0.5	0.6	0.0	0.0	2.2	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(50%),veh/ln	0.6	0.0	2.2	0.9	0.0	0.0	0.5	2.3	0.1	0.0	0.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.1	0.0	57.6	48.8	0.0	45.0	43.3	6.5	4.7	0.0	2.2	1.7
LnGrp LOS	D		E	D		D	D	A	A		A	A
Approach Vol, veh/h		104			38			414			1085	
Approach Delay, s/veh		54.2			48.7			8.3			2.0	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	77.0		12.7	12.7	64.3		10.3
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1
Max Green Setting (Gmax), s	5.3	53.6		8.0	8.1	53.5		8.0
Max Q Clear Time (g_c+I1), s	10.0	10.0		6.9	3.1	2.0		4.1
Green Ext Time (p_c), s	0.0	2.1		0.0	0.0	6.0		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	8.0
HCM 7th LOS	A

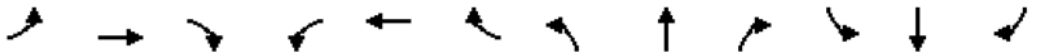
Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	236	9	2	263	74	12	9	2	167	5	51
Future Vol, veh/h	37	236	9	2	263	74	12	9	2	167	5	51
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	650	620	-	600	-	-	50	-	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	10	35	10	10	35	10	10	10	10	10	10	10
Mvmt Flow	40	257	10	2	286	80	13	10	2	182	5	55

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	366	0	0	266	0	0	487	708	128	504	637	143
Stage 1	-	-	-	-	-	-	337	337	-	290	290	-
Stage 2	-	-	-	-	-	-	150	371	-	214	347	-
Critical Hdwy	4.3	-	-	4.3	-	-	7.7	6.7	7.1	7.7	6.7	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.7	-	6.7	5.7	-
Follow-up Hdwy	2.3	-	-	2.3	-	-	3.6	4.1	3.4	3.6	4.1	3.4
Pot Cap-1 Maneuver	1133	-	-	1238	-	-	446	343	873	433	377	854
Stage 1	-	-	-	-	-	-	629	620	-	671	651	-
Stage 2	-	-	-	-	-	-	815	599	-	746	614	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1133	-	-	1238	-	-	396	329	873	407	362	854
Mov Cap-2 Maneuver	-	-	-	-	-	-	533	468	-	562	503	-
Stage 1	-	-	-	-	-	-	605	596	-	670	650	-
Stage 2	-	-	-	-	-	-	754	597	-	704	590	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	1.29	0.05	12.2	13.45
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	503	873	488	-	-	1238	-	-	560	854
HCM Lane V/C Ratio	0.045	0.002	0.035	-	-	0.002	-	-	0.334	0.065
HCM Ctrl Dly (s/v)	12.5	9.1	8.3	0.2	-	7.9	-	-	14.6	9.5
HCM Lane LOS	B	A	A	A	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0.1	0	0.1	-	-	0	-	-	1.5	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	429	282	443	371	57	221	267	348	49	188	30
Future Volume (veh/h)	45	429	282	443	371	57	221	267	348	49	188	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	48	461	303	476	399	61	238	287	374	53	202	32
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	85	501	328	495	1464	222	256	465	834	88	232	37
Arrive On Green	0.05	0.25	0.25	0.28	0.48	0.48	0.15	0.25	0.25	0.05	0.15	0.15
Sat Flow, veh/h	1739	2010	1314	1739	3020	458	1739	1826	1547	1739	1538	244
Grp Volume(v), veh/h	48	398	366	476	228	232	238	287	374	53	0	234
Grp Sat Flow(s),veh/h/ln	1739	1735	1589	1739	1735	1743	1739	1826	1547	1739	0	1782
Q Serve(g_s), s	3.7	30.8	31.0	37.2	10.7	10.9	18.6	19.2	20.2	4.1	0.0	17.7
Cycle Q Clear(g_c), s	3.7	30.8	31.0	37.2	10.7	10.9	18.6	19.2	20.2	4.1	0.0	17.7
Prop In Lane	1.00		0.83	1.00		0.26	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	85	433	396	495	841	846	256	465	834	88	0	268
V/C Ratio(X)	0.57	0.92	0.92	0.96	0.27	0.27	0.93	0.62	0.45	0.60	0.00	0.87
Avail Cap(c_a), veh/h	125	452	414	496	841	846	256	560	915	130	0	427
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	0.00	1.00
Uniform Delay (d), s/veh	64.1	50.4	50.5	48.6	21.0	21.1	58.0	45.4	19.3	64.1	0.0	57.2
Incr Delay (d2), s/veh	5.8	23.4	25.9	30.9	0.2	0.2	37.6	1.5	0.4	6.5	0.0	11.2
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(50%),veh/ln	1.8	16.1	15.2	20.3	4.5	4.5	10.8	8.8	7.1	2.0	0.0	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.9	73.7	76.3	79.5	21.2	21.3	95.6	46.9	19.7	70.6	0.0	68.4
LnGrp LOS	E	E	E	E	C	C	F	D	B	E		E
Approach Vol, veh/h		812			936			899			287	
Approach Delay, s/veh		74.7			50.9			48.5			68.8	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	43.9	40.8	26.0	27.1	11.4	73.2	11.6	41.5
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	39.3	35.9	20.3	* 33	9.9	* 66	10.3	42.3
Max Q Clear Time (g_c+I1), s	39.2	33.0	20.6	19.7	5.7	12.9	6.1	22.2
Green Ext Time (p_c), s	0.0	1.4	0.0	1.1	0.0	3.1	0.0	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	58.5
HCM 7th LOS	E

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	37	78	177	50	124	72	77	494	15	82	906	43
Future Volume (veh/h)	37	78	177	50	124	72	77	494	15	82	906	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	39	82	186	53	131	76	81	520	16	86	954	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	126	249	352	148	272	231	307	1091	531	177	1125	548
Arrive On Green	0.08	0.14	0.14	0.09	0.16	0.16	0.09	0.36	0.36	0.11	0.37	0.37
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	3047	1485
Grp Volume(v), veh/h	39	82	186	53	131	76	81	520	16	86	954	45
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1523	1485
Q Serve(g_s), s	2.0	3.9	10.1	2.8	6.3	4.2	2.1	12.2	0.6	4.5	26.6	1.8
Cycle Q Clear(g_c), s	2.0	3.9	10.1	2.8	6.3	4.2	2.1	12.2	0.6	4.5	26.6	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	126	249	352	148	272	231	307	1091	531	177	1125	548
V/C Ratio(X)	0.31	0.33	0.53	0.36	0.48	0.33	0.26	0.48	0.03	0.49	0.85	0.08
Avail Cap(c_a), veh/h	199	968	961	199	968	820	351	1326	646	264	1478	720
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	40.4	35.6	30.7	39.6	35.6	34.7	38.8	23.0	19.2	38.9	26.7	18.9
Incr Delay (d2), s/veh	1.4	0.8	1.2	1.5	1.3	0.8	0.5	0.3	0.0	2.1	3.8	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(50%),veh/ln	0.9	1.6	3.5	1.1	2.7	1.5	0.8	3.9	0.2	1.8	9.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.8	36.4	32.0	41.1	36.9	35.5	39.3	23.3	19.3	41.0	30.5	19.0
LnGrp LOS	D	D	C	D	D	D	D	C	B	D	C	B
Approach Vol, veh/h		307			260			617			1085	
Approach Delay, s/veh		34.4			37.4			25.3			30.9	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	41.4	13.9	21.5	14.4	42.5	12.7	22.7
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	14.6	40.2	11.0	51.0	10.0	44.8	11.0	51.0
Max Q Clear Time (g_c+I1), s	6.3	14.2	4.8	12.1	4.1	28.6	4.0	8.3
Green Ext Time (p_c), s	0.1	3.1	0.0	1.0	0.1	5.5	0.0	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	30.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	102	184	70	143	72	141	1008	26	47	933	75
Future Volume (veh/h)	71	102	184	70	143	72	141	1008	26	47	933	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	77	111	200	76	155	78	153	1096	28	51	1014	82
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	121	174	255	96	196	252	115	1325	34	68	1140	92
Arrive On Green	0.17	0.17	0.17	0.16	0.16	0.16	0.07	0.38	0.38	0.04	0.35	0.35
Sat Flow, veh/h	733	1056	1547	591	1205	1547	1739	3456	88	1739	3250	263
Grp Volume(v), veh/h	188	0	200	231	0	78	153	550	574	51	541	555
Grp Sat Flow(s),veh/h/ln	1789	0	1547	1796	0	1547	1739	1735	1810	1739	1735	1779
Q Serve(g_s), s	9.3	0.0	11.8	11.8	0.0	4.2	6.3	27.3	27.3	2.8	28.0	28.0
Cycle Q Clear(g_c), s	9.3	0.0	11.8	11.8	0.0	4.2	6.3	27.3	27.3	2.8	28.0	28.0
Prop In Lane	0.41		1.00	0.33		1.00	1.00		0.05	1.00		0.15
Lane Grp Cap(c), veh/h	295	0	255	293	0	252	115	665	694	68	608	624
V/C Ratio(X)	0.64	0.00	0.78	0.79	0.00	0.31	1.33	0.83	0.83	0.75	0.89	0.89
Avail Cap(c_a), veh/h	808	0	699	811	0	699	115	665	694	91	608	624
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.1	0.0	38.1	38.3	0.0	35.1	44.5	26.5	26.5	45.3	29.2	29.2
Incr Delay (d2), s/veh	2.3	0.0	5.2	4.7	0.0	0.7	196.2	11.3	10.9	21.1	17.6	17.3
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(50%),veh/ln	4.3	0.0	4.8	5.6	0.0	1.6	8.9	12.4	12.8	1.5	13.7	14.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.4	0.0	43.3	43.0	0.0	35.8	240.6	37.8	37.4	66.4	46.7	46.4
LnGrp LOS	D		D	D		D	F	D	D	E	D	D
Approach Vol, veh/h		388			309			1277			1147	
Approach Delay, s/veh		41.4			41.2			62.0			47.5	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	43.7		21.4	12.0	40.6		21.2				
Change Period (Y+Rc), s	5.2	7.2		5.7	5.7	7.2		5.7				
Max Green Setting (Gmax), s	5.6	35.2		43.0	6.3	33.4		43.0				
Max Q Clear Time (g_c+I1), s	4.8	29.3		13.8	8.3	30.0		13.8				
Green Ext Time (p_c), s	0.0	3.2		1.9	0.0	2.0		1.8				

Intersection Summary	
HCM 7th Control Delay, s/veh	52.0
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	43	99	16	66	14	87	852	14	22	1322	54
Future Volume (veh/h)	17	43	99	16	66	14	87	852	14	22	1322	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	18	47	108	17	72	15	95	926	0	24	1437	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	57	57	113	67	146	28	208	1774		101	1573	
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.56	0.00	0.06	0.50	0.00
Sat Flow, veh/h	96	490	974	156	1265	239	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	173	0	0	104	0	0	95	926	0	24	1437	0
Grp Sat Flow(s),veh/h/ln	1561	0	0	1660	0	0	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	4.5	0.0	0.0	0.0	0.0	0.0	4.6	15.7	0.0	1.2	36.2	0.0
Cycle Q Clear(g_c), s	9.5	0.0	0.0	5.0	0.0	0.0	4.6	15.7	0.0	1.2	36.2	0.0
Prop In Lane	0.10		0.62	0.16		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	0	0	241	0	0	208	1774		101	1573	
V/C Ratio(X)	0.76	0.00	0.00	0.43	0.00	0.00	0.46	0.52		0.24	0.91	
Avail Cap(c_a), veh/h	227	0	0	241	0	0	232	1774		232	1661	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.9	0.0	0.0	35.9	0.0	0.0	35.1	11.7	0.0	38.6	20.0	0.0
Incr Delay (d2), s/veh	14.2	0.0	0.0	1.2	0.0	0.0	1.6	0.3	0.0	1.2	7.9	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(50%),veh/ln	4.5	0.0	0.0	2.1	0.0	0.0	1.8	4.3	0.0	0.5	12.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.1	0.0	0.0	37.2	0.0	0.0	36.6	12.0	0.0	39.8	27.9	0.0
LnGrp LOS	D			D			D	B		D	C	
Approach Vol, veh/h		173			104			1021			1461	
Approach Delay, s/veh		52.1			37.2			14.3			28.1	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	56.9		18.5	16.5	51.4		18.5
Change Period (Y+Rc), s	5.7	8.4		8.5	5.7	8.4		8.5
Max Green Setting (Gmax), s	12.6	45.4		10.0	12.0	45.4		10.0
Max Q Clear Time (g_c+I1), s	13.2	17.7		11.5	6.6	38.2		7.0
Green Ext Time (p_c), s	0.0	6.2		0.0	0.1	4.8		0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	24.8
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	244	312	88	213	299	157	95	971	160	161	887	239
Future Volume (veh/h)	244	312	88	213	299	157	95	971	160	161	887	239
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	262	335	95	229	322	169	102	1044	172	173	954	257
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	286	535	149	255	403	207	125	1169	521	198	1315	586
Arrive On Green	0.16	0.20	0.20	0.15	0.18	0.18	0.07	0.34	0.34	0.11	0.38	0.38
Sat Flow, veh/h	1739	2678	748	1739	2217	1139	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	262	215	215	229	250	241	102	1044	172	173	954	257
Grp Sat Flow(s),veh/h/ln	1739	1735	1691	1739	1735	1621	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	18.3	14.0	14.4	16.0	17.1	17.7	7.2	35.3	10.3	12.1	29.2	15.3
Cycle Q Clear(g_c), s	18.3	14.0	14.4	16.0	17.1	17.7	7.2	35.3	10.3	12.1	29.2	15.3
Prop In Lane	1.00		0.44	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	346	338	255	315	295	125	1169	521	198	1315	586
V/C Ratio(X)	0.91	0.62	0.64	0.90	0.79	0.82	0.82	0.89	0.33	0.87	0.73	0.44
Avail Cap(c_a), veh/h	294	611	596	285	603	563	135	1169	521	201	1315	586
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	50.8	45.2	45.4	51.9	48.4	48.7	56.6	38.9	30.6	54.0	32.9	28.6
Incr Delay (d2), s/veh	31.0	1.8	2.0	27.0	4.5	5.5	29.2	10.6	1.7	31.7	3.5	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(50%),veh/ln	10.3	6.1	6.1	8.8	7.6	7.4	4.1	16.1	4.0	6.9	12.3	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	81.8	47.1	47.4	78.9	53.0	54.2	85.9	49.5	32.3	85.6	36.4	31.0
LnGrp LOS	F	D	D	E	D	D	F	D	C	F	D	C
Approach Vol, veh/h		692			720			1318			1384	
Approach Delay, s/veh		60.3			61.6			50.0			41.6	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.8	48.9	23.9	31.2	14.6	54.1	26.1	29.0
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	14.1	41.7	20.3	43.6	9.6	46.4	20.9	43.0
Max Q Clear Time (g_c+I1), s	14.1	37.3	18.0	16.4	9.2	31.2	20.3	19.7
Green Ext Time (p_c), s	0.0	2.7	0.1	2.5	0.0	6.3	0.0	2.8

Intersection Summary	
HCM 7th Control Delay, s/veh	50.9
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	2	324	4	4	1	269	855	2	1	1320	93
Future Volume (veh/h)	69	2	324	4	4	1	269	855	2	1	1320	93
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	75	2	352	4	4	1	292	929	2	1	1435	101
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	386	10	504	18	18	4	331	1862	4	5	1505	707
Arrive On Green	0.24	0.24	0.24	0.02	0.02	0.02	0.10	0.58	0.58	0.00	0.48	0.48
Sat Flow, veh/h	1627	43	1485	747	747	187	3237	3234	7	1668	3159	1485
Grp Volume(v), veh/h	77	0	352	9	0	0	292	454	477	1	1435	101
Grp Sat Flow(s),veh/h/ln	1670	0	1485	1681	0	0	1618	1580	1662	1668	1580	1485
Q Serve(g_s), s	4.1	0.0	23.1	0.6	0.0	0.0	10.0	19.3	19.3	0.1	49.0	4.3
Cycle Q Clear(g_c), s	4.1	0.0	23.1	0.6	0.0	0.0	10.0	19.3	19.3	0.1	49.0	4.3
Prop In Lane	0.97		1.00	0.44		0.11	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	397	0	504	40	0	0	331	909	956	5	1505	707
V/C Ratio(X)	0.19	0.00	0.70	0.22	0.00	0.00	0.88	0.50	0.50	0.20	0.95	0.14
Avail Cap(c_a), veh/h	742	0	811	164	0	0	331	909	956	163	1530	719
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	0.0	32.2	53.9	0.0	0.0	49.9	14.2	14.2	56.0	28.3	16.6
Incr Delay (d2), s/veh	0.2	0.0	1.8	2.8	0.0	0.0	23.3	0.4	0.4	18.3	13.4	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(50%),veh/ln	1.7	0.0	8.2	0.3	0.0	0.0	4.9	6.0	6.3	0.1	19.1	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.5	0.0	33.9	56.7	0.0	0.0	73.2	14.6	14.6	74.3	41.7	16.6
LnGrp LOS	C		C	E			E	B	B	E	D	B
Approach Vol, veh/h		429			9			1223			1537	
Approach Delay, s/veh		34.0			56.7			28.6			40.1	
Approach LOS		C			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	69.3		31.2	16.0	58.1		7.2
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	1.3	55.0		50.0	11.5	54.5		11.0
Max Q Clear Time (g_c+I1), s	2.1	21.3		25.1	12.0	51.0		2.6
Green Ext Time (p_c), s	0.0	5.7		1.6	0.0	2.6		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	34.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	221	100	105	228	521	100	991	76	470	1041	92
Future Volume (veh/h)	87	221	100	105	228	521	100	991	76	470	1041	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	90	228	103	108	235	0	103	1022	78	485	1073	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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	114	326	142	135	524		130	1176	90	562	1607	
Arrive On Green	0.07	0.14	0.14	0.08	0.15	0.00	0.08	0.36	0.36	0.17	0.46	0.00
Sat Flow, veh/h	1739	2349	1027	1739	3469	1547	1739	3266	249	3374	3469	1547
Grp Volume(v), veh/h	90	166	165	108	235	0	103	543	557	485	1073	0
Grp Sat Flow(s),veh/h/ln	1739	1735	1641	1739	1735	1547	1739	1735	1781	1687	1735	1547
Q Serve(g_s), s	4.4	7.9	8.3	5.3	5.4	0.0	5.1	25.3	25.3	12.2	20.9	0.0
Cycle Q Clear(g_c), s	4.4	7.9	8.3	5.3	5.4	0.0	5.1	25.3	25.3	12.2	20.9	0.0
Prop In Lane	1.00		0.63	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	114	241	228	135	524		130	624	641	562	1607	
V/C Ratio(X)	0.79	0.69	0.72	0.80	0.45		0.79	0.87	0.87	0.86	0.67	
Avail Cap(c_a), veh/h	134	599	567	146	1238		194	693	712	610	1666	
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.0	35.6	35.8	39.4	33.6	0.0	39.5	25.9	25.9	35.2	18.1	0.0
Incr Delay (d2), s/veh	22.9	3.5	4.3	24.4	0.6	0.0	12.1	10.7	10.5	11.5	1.0	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(50%),veh/ln	2.5	3.4	3.5	3.1	2.2	0.0	2.5	11.6	11.9	5.7	7.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.9	39.2	40.1	63.8	34.2	0.0	51.6	36.6	36.4	46.7	19.1	0.0
LnGrp LOS	E	D	D	E	C		D	D	D	D	B	
Approach Vol, veh/h		421			343			1203			1558	
Approach Delay, s/veh		44.6			43.5			37.8			27.7	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	46.3	10.4	18.9	20.2	37.4	11.5	17.8
Change Period (Y+Rc), s	4.7	6.1	4.7	* 5.8	5.7	6.1	4.7	5.8
Max Green Setting (Gmax), s	6.5	41.7	6.7	* 31	15.7	34.7	7.3	30.0
Max Q Clear Time (g_c+I1), s	7.4	22.9	6.4	7.4	14.2	27.3	7.3	10.3
Green Ext Time (p_c), s	0.0	7.4	0.0	1.3	0.3	3.9	0.0	1.7

Intersection Summary	
HCM 7th Control Delay, s/veh	34.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	271	174	111	220	99	122	969	138	119	1374	140
Future Volume (veh/h)	62	271	174	111	220	99	122	969	138	119	1374	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	67	295	189	121	239	108	133	1053	150	129	1493	152
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	167	371	232	186	450	197	146	1180	555	146	1180	555
Arrive On Green	0.10	0.19	0.19	0.11	0.20	0.20	0.09	0.37	0.37	0.09	0.37	0.37
Sat Flow, veh/h	1668	1968	1227	1668	2252	986	1668	3159	1485	1668	3159	1485
Grp Volume(v), veh/h	67	248	236	121	175	172	133	1053	150	129	1493	152
Grp Sat Flow(s),veh/h/ln	1668	1664	1531	1668	1664	1574	1668	1580	1485	1668	1580	1485
Q Serve(g_s), s	4.3	16.3	16.9	7.9	10.7	11.2	9.0	35.8	8.0	8.7	42.7	8.2
Cycle Q Clear(g_c), s	4.3	16.3	16.9	7.9	10.7	11.2	9.0	35.8	8.0	8.7	42.7	8.2
Prop In Lane	1.00		0.80	1.00		0.63	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	167	314	289	186	333	315	146	1180	555	146	1180	555
V/C Ratio(X)	0.40	0.79	0.82	0.65	0.52	0.55	0.91	0.89	0.27	0.88	1.26	0.27
Avail Cap(c_a), veh/h	191	830	764	190	829	784	146	1180	555	146	1180	555
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	48.2	44.2	44.5	48.7	40.9	41.1	51.7	33.6	24.9	51.6	35.8	25.0
Incr Delay (d2), s/veh	1.5	4.5	5.6	7.5	1.3	1.5	48.9	8.9	0.3	42.4	126.1	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(50%),veh/ln	1.8	6.7	6.5	3.5	4.3	4.3	5.6	14.0	2.7	5.2	35.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.8	48.7	50.1	56.1	42.2	42.6	100.6	42.5	25.2	93.9	161.9	25.2
LnGrp LOS	D	D	D	E	D	D	F	D	C	F	F	C
Approach Vol, veh/h		551			468			1336			1774	
Approach Delay, s/veh		49.4			45.9			46.3			145.2	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	51.1	18.4	29.1	15.7	51.1	17.2	30.3
Change Period (Y+Rc), s	5.7	8.4	5.7	7.5	5.7	8.4	5.7	7.5
Max Green Setting (Gmax), s	10.0	42.7	13.0	57.0	10.0	42.7	13.1	56.9
Max Q Clear Time (g_c+I1), s	10.7	37.8	9.9	18.9	11.0	44.7	6.3	13.2
Green Ext Time (p_c), s	0.0	2.9	0.1	2.7	0.0	0.0	0.1	1.8

Intersection Summary	
HCM 7th Control Delay, s/veh	89.2
HCM 7th LOS	F

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	25	0	136	6	191	0	0	269	112
Future Vol, veh/h	0	0	0	25	0	136	6	191	0	0	269	112
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	50	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	27	0	148	7	208	0	0	292	122

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	513	635	208	414	0	-	-	-	0
Stage 1	221	221	-	-	-	-	-	-	-
Stage 2	292	414	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	504	383	808	1093	-	0	0	-	-
Stage 1	793	702	-	-	-	0	0	-	-
Stage 2	735	576	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	501	0	808	1093	-	-	-	-	-
Mov Cap-2 Maneuver	501	0	-	-	-	-	-	-	-
Stage 1	788	0	-	-	-	-	-	-	-
Stage 2	735	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	10.78	0.25	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	55	-	501	808	-	-
HCM Lane V/C Ratio	0.006	-	0.054	0.183	-	-
HCM Ctrl Dly (s/v)	8.3	0	12.6	10.4	-	-
HCM Lane LOS	A	A	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	0.7	-	-

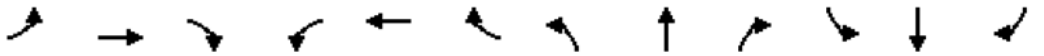
Intersection	
Int Delay, s/veh	9.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	150	0	6	0	0	0	0	36	23	204	80	0
Future Vol, veh/h	150	0	6	0	0	0	0	36	23	204	80	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	156	0	6	0	0	0	0	38	24	213	83	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	546	570	83	-	0	0	61	0	0
Stage 1	508	508	-	-	-	-	-	-	-
Stage 2	38	61	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	-	-	-	4.22	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	-	-	-	2.308	-	-
Pot Cap-1 Maneuver	482	418	949	0	-	-	1480	-	0
Stage 1	584	522	-	0	-	-	-	-	0
Stage 2	960	824	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	409	0	949	-	-	-	1480	-	-
Mov Cap-2 Maneuver	409	0	-	-	-	-	-	-	-
Stage 1	584	0	-	-	-	-	-	-	-
Stage 2	815	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	18.72	0	5.63
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	409	949	1293	-
HCM Lane V/C Ratio	-	-	0.382	0.007	0.144	-
HCM Ctrl Dly (s/v)	-	-	19.1	8.8	7.8	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	1.8	0	0.5	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	38	0	809	9	276	0	0	1310	103
Future Volume (veh/h)	0	0	0	38	0	809	9	276	0	0	1310	103
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				41	0	870	10	297	0	0	1409	111
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				615	0	963	30	1734	0	0	1436	640
Arrive On Green				0.35	0.00	0.35	0.03	1.00	0.00	0.00	0.41	0.41
Sat Flow, veh/h				1739	0	2723	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				41	0	870	10	297	0	0	1409	111
Grp Sat Flow(s),veh/h/ln				1739	0	1362	1739	1735	0	0	1735	1547
Q Serve(g_s), s				1.4	0.0	27.3	0.5	0.0	0.0	0.0	36.1	4.1
Cycle Q Clear(g_c), s				1.4	0.0	27.3	0.5	0.0	0.0	0.0	36.1	4.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				615	0	963	30	1734	0	0	1436	640
V/C Ratio(X)				0.07	0.00	0.90	0.33	0.17	0.00	0.00	0.98	0.17
Avail Cap(c_a), veh/h				715	0	1120	135	1734	0	0	1436	640
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.3	0.0	27.6	42.9	0.0	0.0	0.0	26.0	16.7
Incr Delay (d2), s/veh				0.0	0.0	9.4	6.3	0.2	0.0	0.0	19.7	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
%ile BackOfQ(50%),veh/ln				0.5	0.0	9.0	0.3	0.1	0.0	0.0	17.6	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				19.3	0.0	37.0	49.3	0.2	0.0	0.0	45.8	17.2
LnGrp LOS				B		D	D	A			D	B
Approach Vol, veh/h					911			307			1520	
Approach Delay, s/veh					36.2			1.8			43.7	
Approach LOS					D			A			D	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	51.1		7.7	43.3		38.9						
Change Period (Y+Rc), s	6.1		6.2	6.1		7.1						
Max Green Setting (Gmax), s	39.8		7.0	26.6		37.0						
Max Q Clear Time (g_c+I1), s	2.0		2.5	38.1		29.3						
Green Ext Time (p_c), s	2.0		0.0	0.0		2.5						

Intersection Summary	
HCM 7th Control Delay, s/veh	36.5
HCM 7th 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												
Traffic Volume (veh/h)	107	3	29	0	0	0	0	179	42	0	380	974
Future Volume (veh/h)	107	3	29	0	0	0	0	179	42	0	380	974
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826				0	1826	1826	0	1826	1826
Adj Flow Rate, veh/h	74	59	31				0	190	45	0	404	1036
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	5	5	5				0	5	5	0	5	5
Cap, veh/h	171	111	58				0	2242	519	0	2781	2451
Arrive On Green	0.10	0.10	0.10				0.00	0.80	0.80	0.00	0.26	0.26
Sat Flow, veh/h	1739	1127	592				0	2888	647	0	3561	2723
Grp Volume(v), veh/h	74	0	90				0	116	119	0	404	1036
Grp Sat Flow(s),veh/h/ln	1739	0	1719				0	1735	1709	0	1735	1362
Q Serve(g_s), s	3.6	0.0	4.5				0.0	1.3	1.3	0.0	8.0	14.5
Cycle Q Clear(g_c), s	3.6	0.0	4.5				0.0	1.3	1.3	0.0	8.0	14.5
Prop In Lane	1.00		0.34				0.00		0.38	0.00		1.00
Lane Grp Cap(c), veh/h	171	0	169				0	1391	1370	0	2781	2451
V/C Ratio(X)	0.43	0.00	0.53				0.00	0.08	0.09	0.00	0.15	0.42
Avail Cap(c_a), veh/h	783	0	774				0	1391	1370	0	2781	2451
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.77	0.77
Uniform Delay (d), s/veh	38.2	0.0	38.6				0.0	1.9	1.9	0.0	9.5	4.4
Incr Delay (d2), s/veh	1.7	0.0	2.6				0.0	0.1	0.1	0.0	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(50%),veh/ln	1.5	0.0	1.9				0.0	0.3	0.3	0.0	2.4	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.9	0.0	41.2				0.0	2.0	2.0	0.0	9.5	4.4
LnGrp LOS	D		D					A	A		A	A
Approach Vol, veh/h		164						235			1440	
Approach Delay, s/veh		40.6						2.0			5.9	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	76.6	13.4	76.6
Change Period (Y+Rc), s	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	40.5	40.5
Max Q Clear Time (g_c+I1), s	3.3	6.5	16.5
Green Ext Time (p_c), s	1.4	0.6	8.1

Intersection Summary	
HCM 7th Control Delay, s/veh	8.5
HCM 7th 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												
Traffic Volume (veh/h)	33	67	0	31	54	76	140	1182	39	157	1728	73
Future Volume (veh/h)	33	67	0	31	54	76	140	1182	39	157	1728	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	35	71	0	33	57	81	149	1257	41	167	1838	78
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	72	107	171	88	128	171	170	2053	67	196	2082	88
Arrive On Green	0.11	0.11	0.00	0.11	0.11	0.11	0.10	0.59	0.59	0.11	0.61	0.61
Sat Flow, veh/h	279	978	1560	421	1167	1560	1753	3456	113	1753	3419	144
Grp Volume(v), veh/h	106	0	0	90	0	81	149	636	662	167	934	982
Grp Sat Flow(s),veh/h/ln	1257	0	1560	1588	0	1560	1753	1749	1820	1753	1749	1815
Q Serve(g_s), s	4.3	0.0	0.0	0.0	0.0	5.7	9.8	27.1	27.1	10.9	52.3	53.9
Cycle Q Clear(g_c), s	10.3	0.0	0.0	5.9	0.0	5.7	9.8	27.1	27.1	10.9	52.3	53.9
Prop In Lane	0.33		1.00	0.37		1.00	1.00		0.06	1.00		0.08
Lane Grp Cap(c), veh/h	178	0	171	216	0	171	170	1039	1081	196	1065	1105
V/C Ratio(X)	0.59	0.00	0.00	0.42	0.00	0.47	0.88	0.61	0.61	0.85	0.88	0.89
Avail Cap(c_a), veh/h	561	0	548	603	0	548	170	1039	1081	281	1065	1105
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	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	0.0	0.0	48.8	0.0	48.9	52.1	15.1	15.1	50.9	19.2	19.5
Incr Delay (d2), s/veh	3.1	0.0	0.0	1.3	0.0	2.0	37.0	2.7	2.6	15.7	10.2	10.7
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(50%),veh/ln	3.1	0.0	0.0	2.5	0.0	2.3	5.9	9.9	10.3	5.4	20.4	21.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	54.1	0.0	0.0	50.1	0.0	50.9	89.0	17.8	17.7	66.6	29.3	30.2
LnGrp LOS	D			D		D	F	B	B	E	C	C
Approach Vol, veh/h		106			171			1447			2083	
Approach Delay, s/veh		54.1			50.5			25.1			32.7	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.8	77.7		20.3	17.0	79.5		20.3
Change Period (Y+Rc), s	5.7	8.4		7.5	5.7	8.4		7.5
Max Green Setting (Gmax), s	13.1	63.7		41.0	11.3	71.1		41.0
Max Q Clear Time (g_c+I1), s	12.9	29.1		12.3	11.8	55.9		7.9
Green Ext Time (p_c), s	0.2	9.2		0.5	0.0	10.7		0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	31.2
HCM 7th LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	655	375	377	589	175	266
Future Volume (veh/h)	655	375	377	589	175	266
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	689	395	397	620	184	280
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1228	867	383	1944	358	561
Arrive On Green	0.35	0.35	0.11	0.55	0.20	0.20
Sat Flow, veh/h	3618	1572	3428	3618	1767	2768
Grp Volume(v), veh/h	689	395	397	620	184	280
Grp Sat Flow(s),veh/h/ln	1763	1572	1714	1763	1767	1384
Q Serve(g_s), s	7.8	7.4	5.5	4.7	4.6	4.4
Cycle Q Clear(g_c), s	7.8	7.4	5.5	4.7	4.6	4.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1228	867	383	1944	358	561
V/C Ratio(X)	0.56	0.46	1.04	0.32	0.51	0.50
Avail Cap(c_a), veh/h	3223	1756	383	3889	1386	2170
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	13.0	6.6	21.9	6.0	17.5	17.4
Incr Delay (d2), s/veh	0.4	0.4	55.7	0.1	1.1	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	1.8	5.0	1.2	1.8	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	13.4	7.0	77.6	6.1	18.6	18.1
LnGrp LOS	B	A	F	A	B	B
Approach Vol, veh/h	1084			1017	464	
Approach Delay, s/veh	11.1			34.0	18.3	
Approach LOS	B			C	B	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		10.0	23.5		15.7	33.5
Change Period (Y+Rc), s		4.5	* 6.4		5.7	6.4
Max Green Setting (Gmax), s		5.5	* 45		38.6	54.3
Max Q Clear Time (g_c+I1), s		7.5	9.8		6.6	6.7
Green Ext Time (p_c), s		0.0	7.4		1.7	5.0

Intersection Summary	
HCM 7th Control Delay, s/veh	21.5
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	238	566	181	184	488	237	232	742	102	364	917	303
Future Volume (veh/h)	238	566	181	184	488	237	232	742	102	364	917	303
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	256	609	195	198	525	255	249	798	110	391	986	326
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	321	858	531	270	772	360	324	971	134	457	1236	551
Arrive On Green	0.09	0.24	0.24	0.08	0.23	0.23	0.09	0.31	0.31	0.13	0.35	0.35
Sat Flow, veh/h	3428	3526	1572	3428	3377	1572	3428	3112	429	3428	3526	1572
Grp Volume(v), veh/h	256	609	195	198	525	255	249	452	456	391	986	326
Grp Sat Flow(s),veh/h/ln	1714	1763	1572	1714	1689	1572	1714	1763	1778	1714	1763	1572
Q Serve(g_s), s	6.9	14.9	8.8	5.3	13.4	14.1	6.7	22.3	22.3	10.5	23.7	16.0
Cycle Q Clear(g_c), s	6.9	14.9	8.8	5.3	13.4	14.1	6.7	22.3	22.3	10.5	23.7	16.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	321	858	531	270	772	360	324	550	555	457	1236	551
V/C Ratio(X)	0.80	0.71	0.37	0.73	0.68	0.71	0.77	0.82	0.82	0.86	0.80	0.59
Avail Cap(c_a), veh/h	321	1367	758	350	1363	635	422	734	741	466	1513	675
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	41.8	32.6	23.6	42.4	33.2	33.4	41.6	30.0	30.0	39.9	27.5	25.0
Incr Delay (d2), s/veh	13.3	1.1	0.4	5.6	1.1	2.6	6.2	5.6	5.6	14.3	2.5	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(50%),veh/ln	8.5	6.4	3.3	2.4	5.5	5.5	3.0	9.9	10.0	5.2	9.9	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	55.1	33.7	24.0	48.0	34.2	36.0	47.8	35.6	35.6	54.2	30.1	26.0
LnGrp LOS	E	C	C	D	C	D	D	D	D	D	C	C
Approach Vol, veh/h		1060			978			1157			1703	
Approach Delay, s/veh		37.1			37.5			38.2			34.8	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	35.0	12.6	28.8	14.1	38.6	14.0	27.4
Change Period (Y+Rc), s	5.2	5.6	5.2	5.9	5.2	5.6	5.2	* 5.9
Max Green Setting (Gmax), s	12.6	39.2	9.6	36.5	11.6	40.4	8.8	* 38
Max Q Clear Time (g_c+I1), s	12.5	24.3	7.3	16.9	8.7	25.7	8.9	16.1
Green Ext Time (p_c), s	0.1	5.0	0.1	4.8	0.2	7.0	0.0	5.5

Intersection Summary	
HCM 7th Control Delay, s/veh	36.6
HCM 7th LOS	D

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	270	1	46	1211	5	16	21	253	514	8	779	332
Future Volume (veh/h)	270	1	46	1211	5	16	21	253	514	8	779	332
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	278	1	47	1248	5	16	22	261	530	8	803	342
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	313	3	148	894	627	531	70	677	302	216	968	710
Arrive On Green	0.18	0.10	0.10	0.42	0.34	0.34	0.04	0.19	0.19	0.12	0.27	0.27
Sat Flow, veh/h	1767	33	1545	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	278	0	48	1248	5	16	22	261	530	8	803	342
Grp Sat Flow(s),veh/h/ln	1767	0	1578	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	17.6	0.0	3.3	48.0	0.2	0.8	1.4	7.4	22.0	0.5	24.5	17.5
Cycle Q Clear(g_c), s	17.6	0.0	3.3	48.0	0.2	0.8	1.4	7.4	22.0	0.5	24.5	17.5
Prop In Lane	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	0	151	894	627	531	70	677	302	216	968	710
V/C Ratio(X)	0.89	0.00	0.32	1.40	0.01	0.03	0.31	0.39	1.76	0.04	0.83	0.48
Avail Cap(c_a), veh/h	524	0	570	894	897	760	139	677	302	216	968	710
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	0.0	48.3	26.3	25.2	25.4	53.5	40.4	46.3	44.4	39.0	22.0
Incr Delay (d2), s/veh	10.1	0.0	1.2	185.0	0.0	0.0	2.5	0.4	353.4	0.1	6.1	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(50%),veh/ln	8.5	0.0	1.3	67.2	0.1	0.3	0.7	3.2	38.1	0.2	11.2	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	56.1	0.0	49.5	211.3	25.2	25.4	56.1	40.8	399.7	44.4	45.2	22.5
LnGrp LOS	E		D	F	C	C	E	D	F	D	D	C
Approach Vol, veh/h		326			1269			813			1153	
Approach Delay, s/veh		55.1			208.2			275.2			38.5	
Approach LOS		E			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	53.0	16.0	9.1	36.5	25.3	43.7	18.6	27.0
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	48.0	41.4	9.0	27.0	34.0	55.4	14.0	22.0
Max Q Clear Time (g_c+I1), s	50.0	5.3	3.4	26.5	19.6	2.8	2.5	24.0
Green Ext Time (p_c), s	0.0	0.2	0.0	0.3	0.7	0.1	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	154.5
HCM 7th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	445	128	0	6	35	9	15	6	1	17	7	1140
Future Volume (veh/h)	445	128	0	6	35	9	15	6	1	17	7	1140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	312	381	0	7	38	10	16	7	1	18	0	1244
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	446	468	0	33	177	45	40	1260	176	44	0	1282
Arrive On Green	0.25	0.25	0.00	0.07	0.07	0.07	0.02	0.41	0.41	0.02	0.00	0.41
Sat Flow, veh/h	1767	1856	0	465	2473	635	1767	3107	433	1767	0	3145
Grp Volume(v), veh/h	312	381	0	28	0	27	16	4	4	18	0	1244
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1832	0	1741	1767	1763	1778	1767	0	1572
Q Serve(g_s), s	12.5	15.1	0.0	1.1	0.0	1.2	0.7	0.1	0.1	0.8	0.0	30.2
Cycle Q Clear(g_c), s	12.5	15.1	0.0	1.1	0.0	1.2	0.7	0.1	0.1	0.8	0.0	30.2
Prop In Lane	1.00		0.00	0.25		0.36	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	446	468	0	131	0	124	40	715	721	44	0	1282
V/C Ratio(X)	0.70	0.81	0.00	0.21	0.00	0.22	0.40	0.01	0.01	0.41	0.00	0.97
Avail Cap(c_a), veh/h	657	690	0	681	0	647	136	719	725	136	0	1282
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.5	27.4	0.0	34.1	0.0	34.2	37.6	13.8	13.8	37.5	0.0	22.6
Incr Delay (d2), s/veh	2.0	4.8	0.0	0.8	0.0	0.9	6.4	0.0	0.0	6.0	0.0	18.4
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(50%),veh/ln	5.2	6.9	0.0	0.5	0.0	0.5	0.4	0.0	0.0	0.4	0.0	13.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	32.2	0.0	34.9	0.0	35.0	44.0	13.8	13.8	43.5	0.0	41.0
LnGrp LOS	C	C		C		D	D	B	B	D		D
Approach Vol, veh/h		693			55			24			1262	
Approach Delay, s/veh		30.5			35.0			33.9			41.0	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	36.3		24.8	6.5	36.5		10.3
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7
Max Green Setting (Gmax), s	6.6	31.8		29.0	6.0	31.8		29.0
Max Q Clear Time (g_c+I1), s	2.8	2.1		17.1	2.7	32.2		3.2
Green Ext Time (p_c), s	0.0	0.0		2.6	0.0	0.0		0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	37.2
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	21	0	3	12	252	238	0	146	48
Future Vol, veh/h	0	0	0	21	0	3	12	252	238	0	146	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	330
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	0	0	22	0	3	13	268	253	0	155	51

Major/Minor	Minor1		Major1		Major2				
Conflicting Flow All	449	500	268	206	0	-	-	-	0
Stage 1	294	294	-	-	-	-	-	-	-
Stage 2	155	206	-	-	-	-	-	-	-
Critical Hdwy	6.52	6.62	6.32	4.22	-	-	-	-	-
Critical Hdwy Stg 1	5.52	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.52	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.608	4.108	3.408	2.308	-	-	-	-	-
Pot Cap-1 Maneuver	549	459	747	1307	-	0	0	-	-
Stage 1	734	652	-	-	-	0	0	-	-
Stage 2	849	713	-	-	-	0	0	-	-
Platoon blocked, %					-			-	-
Mov Cap-1 Maneuver	543	0	747	1307	-	-	-	-	-
Mov Cap-2 Maneuver	543	0	-	-	-	-	-	-	-
Stage 1	726	0	-	-	-	-	-	-	-
Stage 2	849	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.71	0.35	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	WBLn1	SBT	SBR
Capacity (veh/h)	82	-	562	-	-
HCM Lane V/C Ratio	0.01	-	0.045	-	-
HCM Ctrl Dly (s/v)	7.8	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

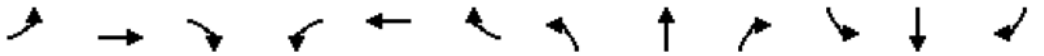
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	147	0	403	0	0	0	0	346	11	0	162	0
Future Vol, veh/h	147	0	403	0	0	0	0	346	11	0	162	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	470	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	156	0	429	0	0	0	0	368	12	0	172	0

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	356	552	-	-	0	0	-	-	0
Stage 1	172	172	-	-	-	-	-	-	-
Stage 2	184	380	-	-	-	-	-	-	-
Critical Hdwy	6.78	6.68	-	-	-	-	-	-	-
Critical Hdwy Stg 1	5.58	5.68	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.98	5.68	-	-	-	-	-	-	-
Follow-up Hdwy	3.614	4.114	-	-	-	-	-	-	-
Pot Cap-1 Maneuver	606	424	0	0	-	-	0	-	0
Stage 1	830	735	0	0	-	-	0	-	0
Stage 2	804	592	0	0	-	-	0	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	606	0	-	-	-	-	-	-	-
Mov Cap-2 Maneuver	606	0	-	-	-	-	-	-	-
Stage 1	830	0	-	-	-	-	-	-	-
Stage 2	804	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBT
Capacity (veh/h)	-	-	606	-
HCM Lane V/C Ratio	-	-	0.258	-
HCM Ctrl Dly (s/v)	-	-	13	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	60	119	63	100	7	152	334	46	4	450	86
Future Volume (veh/h)	37	60	119	63	100	7	152	334	46	4	450	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1455	1752	1752	1752	1455	952	1752	1752	952	1604
Adj Flow Rate, veh/h	40	65	129	68	109	8	165	363	50	4	489	93
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, %	10	10	30	10	10	10	30	64	10	10	64	20
Cap, veh/h	145	209	513	190	257	218	315	1088	791	18	565	542
Arrive On Green	0.09	0.12	0.12	0.11	0.15	0.15	0.12	0.42	0.42	0.01	0.31	0.31
Sat Flow, veh/h	1668	1752	2171	1668	1752	1485	2689	2598	1485	1668	1808	1359
Grp Volume(v), veh/h	40	65	129	68	109	8	165	363	50	4	489	93
Grp Sat Flow(s),veh/h/ln	1668	1752	1085	1668	1752	1485	1345	866	1485	1668	904	1359
Q Serve(g_s), s	1.9	2.8	4.0	3.1	4.7	0.4	4.8	7.9	1.4	0.2	21.3	3.7
Cycle Q Clear(g_c), s	1.9	2.8	4.0	3.1	4.7	0.4	4.8	7.9	1.4	0.2	21.3	3.7
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	145	209	513	190	257	218	315	1088	791	18	565	542
V/C Ratio(X)	0.28	0.31	0.25	0.36	0.42	0.04	0.52	0.33	0.06	0.23	0.87	0.17
Avail Cap(c_a), veh/h	239	1148	1676	239	1148	973	386	1242	879	199	821	735
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	35.7	33.7	25.9	34.2	32.5	30.6	34.7	16.4	9.5	41.0	27.1	16.2
Incr Delay (d2), s/veh	1.0	0.8	0.3	1.1	1.1	0.1	1.4	0.2	0.0	6.3	6.8	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(50%),veh/ln	0.7	1.2	1.0	1.2	1.9	0.1	1.5	1.4	0.4	0.1	4.5	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.7	34.5	26.2	35.4	33.6	30.7	36.1	16.6	9.5	47.3	33.9	16.4
LnGrp LOS	D	C	C	D	C	C	D	B	A	D	C	B
Approach Vol, veh/h		234			185			578			586	
Approach Delay, s/veh		30.3			34.1			21.5			31.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	18.4	15.5	34.5	13.0	20.7	6.6	43.4
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	12.0	54.8	12.0	38.0	12.0	54.8	10.0	40.0
Max Q Clear Time (g_c+I1), s	5.1	6.0	6.8	23.3	3.9	6.7	2.2	9.9
Green Ext Time (p_c), s	0.1	0.8	0.2	2.8	0.0	0.5	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	27.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	163	0	186	6	310	60	115	608	0
Future Volume (veh/h)	0	0	0	163	0	186	6	310	60	115	608	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				952	0	952	1870	952	952	952	952	0
Adj Flow Rate, veh/h				172	0	196	6	326	63	121	640	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, %				64	0	64	2	64	64	64	64	0
Cap, veh/h				253	0	226	28	400	76	146	1063	0
Arrive On Green				0.28	0.00	0.28	0.02	0.26	0.26	0.16	0.41	0.00
Sat Flow, veh/h				906	0	806	1781	1514	289	906	2683	0
Grp Volume(v), veh/h				172	0	196	6	193	196	121	640	0
Grp Sat Flow(s),veh/h/ln				906	0	806	1781	904	899	906	866	0
Q Serve(g_s), s				11.5	0.0	15.8	0.2	13.7	14.0	8.8	13.2	0.0
Cycle Q Clear(g_c), s				11.5	0.0	15.8	0.2	13.7	14.0	8.8	13.2	0.0
Prop In Lane				1.00		1.00	1.00		0.32	1.00		0.00
Lane Grp Cap(c), veh/h				253	0	226	28	239	238	146	1063	0
V/C Ratio(X)				0.68	0.00	0.87	0.21	0.81	0.82	0.83	0.60	0.00
Avail Cap(c_a), veh/h				676	0	601	260	535	533	242	1853	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	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh				21.9	0.0	23.4	33.2	23.5	23.7	27.8	15.8	0.0
Incr Delay (d2), s/veh				3.2	0.0	9.8	3.7	6.4	7.1	11.4	0.6	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(50%),veh/ln				2.5	0.0	3.4	0.1	2.9	3.0	2.1	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				25.1	0.0	33.3	37.0	29.9	30.7	39.1	16.4	0.0
LnGrp LOS				C		C	D	C	C	D	B	
Approach Vol, veh/h					368			395			761	
Approach Delay, s/veh					29.4			30.5			20.0	
Approach LOS					C			C			C	

Timer - Assigned Phs	1	2			5	6		8				
Phs Duration (G+Y+Rc), s	16.7	26.5			6.8	36.4		25.2				
Change Period (Y+Rc), s	5.7	8.4			5.7	8.4		6.1				
Max Green Setting (Gmax), s	18.3	40.5			10.0	48.8		51.0				
Max Q Clear Time (g_c+I1), s	10.8	16.0			2.2	15.2		17.8				
Green Ext Time (p_c), s	0.2	2.0			0.0	4.4		1.3				

Intersection Summary		
HCM 7th Control Delay, s/veh		25.0
HCM 7th LOS		C

APPENDIX C-4

ITE 11TH EDITION TRIP RATE SHEETS AND INTERNAL CAPTURE CALCULATION WORKSHEETS

Land Use: 140
Manufacturing

Description

A manufacturing facility is an area where the primary activity is the conversion of raw materials or parts into finished products. Size and type of activity may vary substantially from one facility to another. In addition to the actual production of goods, a manufacturing facility typically has an office and may provide space for warehouse, research, and associated functions. General light industrial (Land Use 110) and industrial park (Land Use 130) are related uses.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Minnesota, Missouri, New Jersey, New York, Oregon, Pennsylvania, South Dakota, Texas, Vermont, Washington, and West Virginia.

Source Numbers

177, 179, 184, 241, 357, 384, 418, 443, 583, 598, 611, 728, 747, 875, 879, 940, 969, 1067, 1068, 1082

Manufacturing
(140)

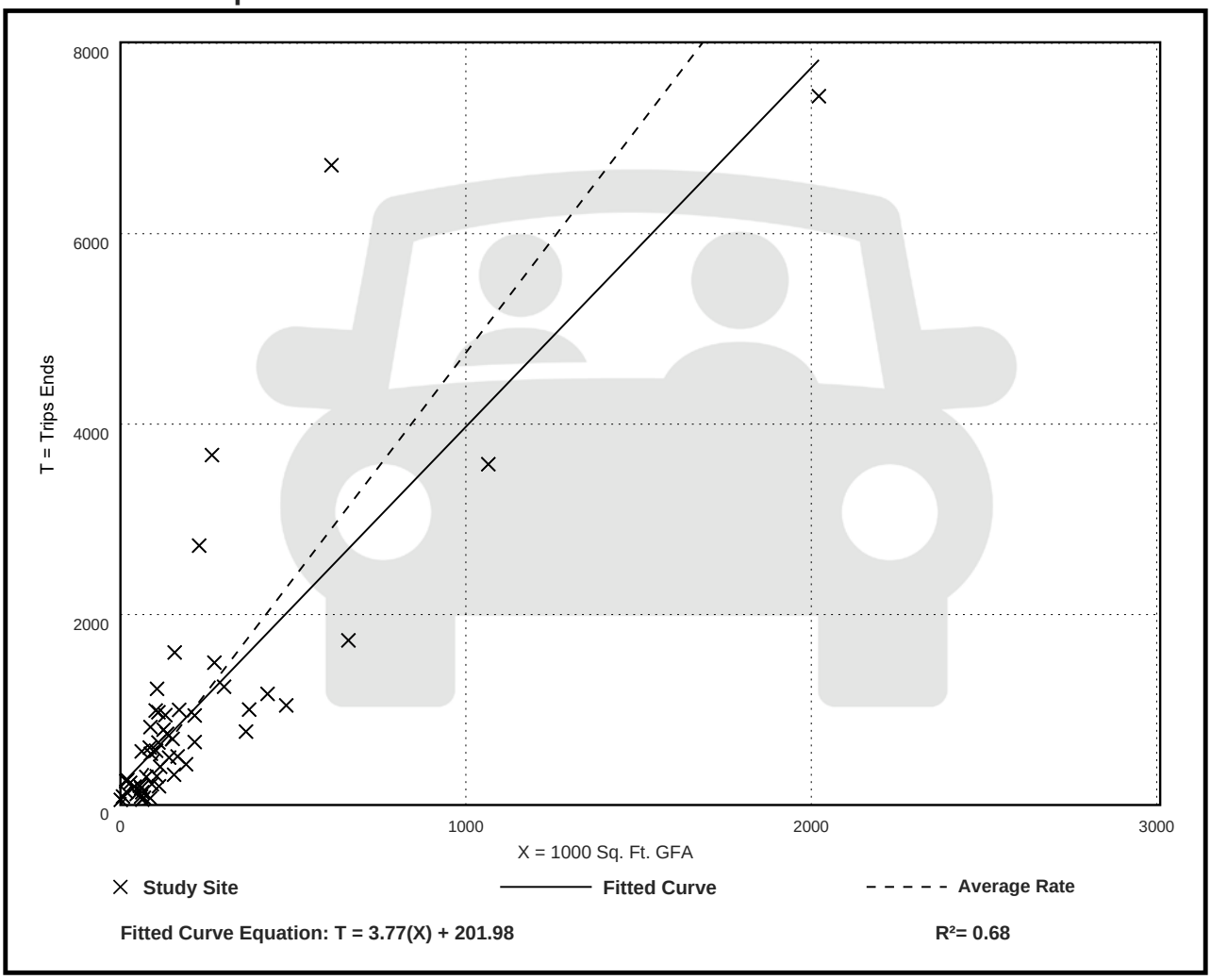
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 53
Avg. 1000 Sq. Ft. GFA: 208
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.75	0.83 - 49.50	3.20

Data Plot and Equation



Fitted Curve Equation: T = 3.77(X) + 201.98

R^2= 0.68

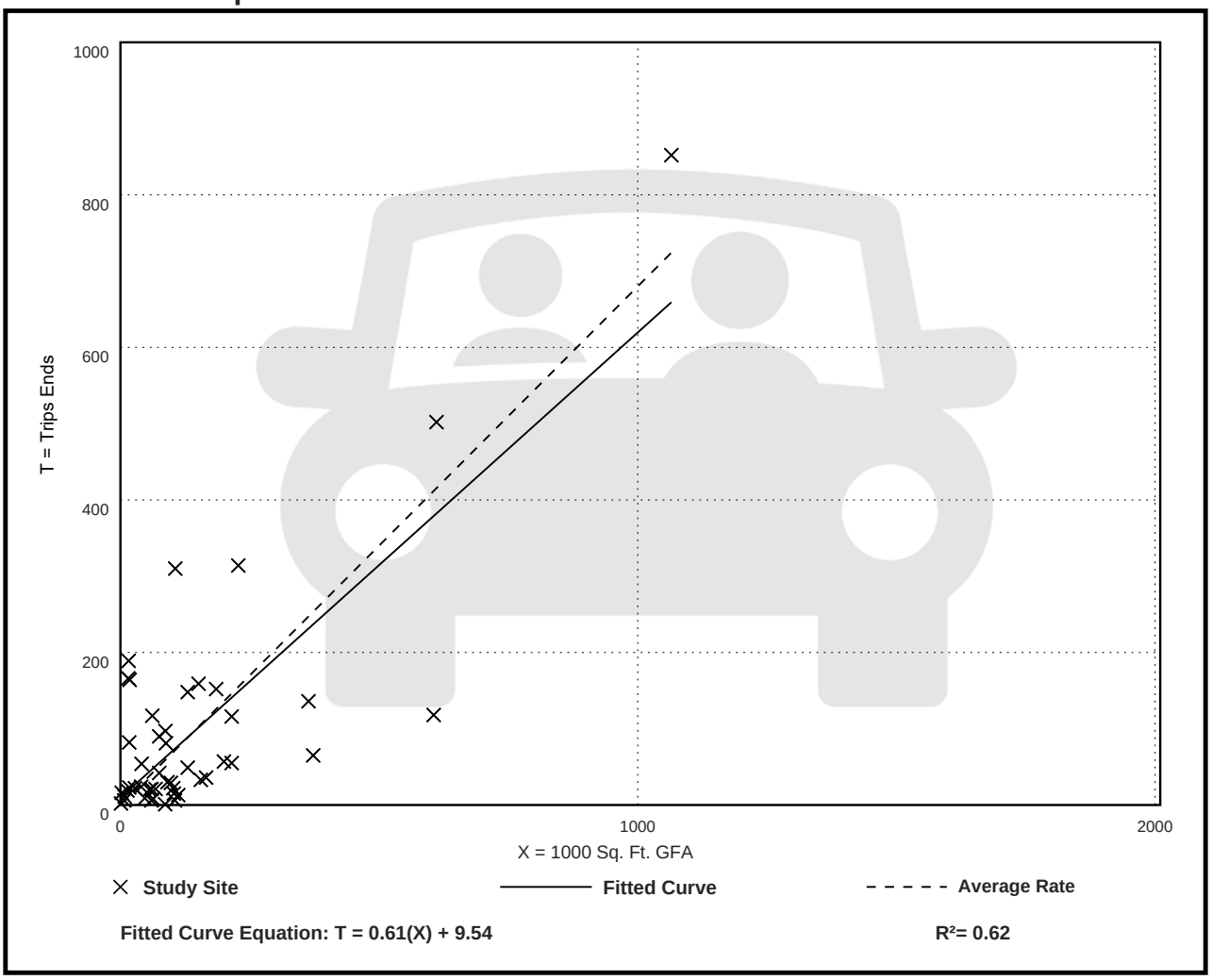
Manufacturing
(140)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 48
Avg. 1000 Sq. Ft. GFA: 138
Directional Distribution: 76% entering, 24% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.68	0.01 - 11.93	1.03

Data Plot and Equation



Fitted Curve Equation: T = 0.61(X) + 9.54

R^2= 0.62

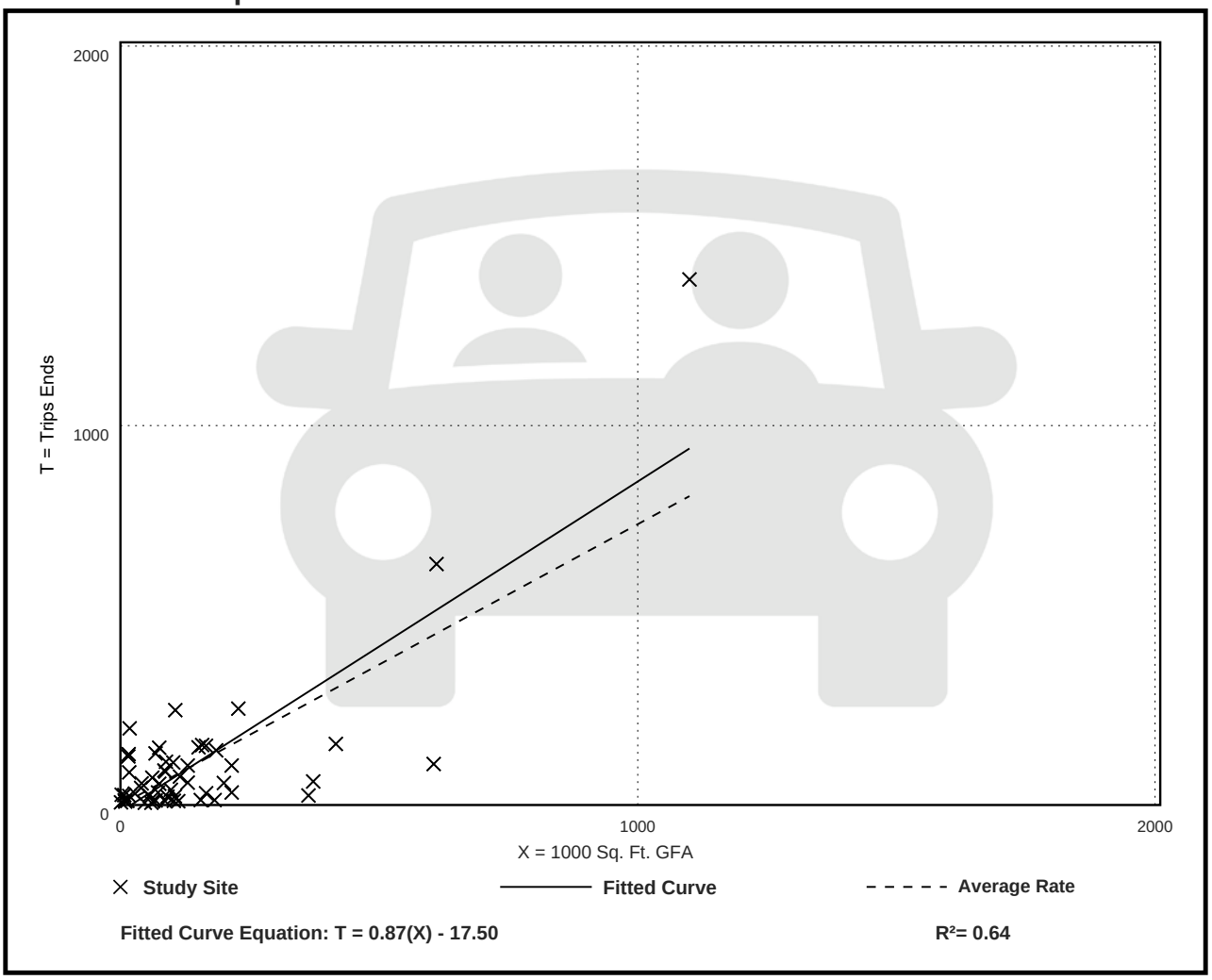
Manufacturing
(140)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 55
Avg. 1000 Sq. Ft. GFA: 142
Directional Distribution: 31% entering, 69% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.74	0.07 - 11.37	0.93

Data Plot and Equation



Fitted Curve Equation: T = 0.87(X) - 17.50

R^2= 0.64

Land Use: 154
High-Cube Transload and Short-Term Storage Warehouse

Description

A high-cube warehouse (HCW) is a building that typically has at least 200,000 gross square feet of floor area, has a ceiling height of 24 feet or more, and is used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. A typical HCW has a high level of on-site automation and logistics management. The automation and logistics enable highly-efficient processing of goods through the HCW. A high-cube warehouse can be free-standing or located in an industrial park.

The HCWs included in this land use include transload and short-term storage facilities. A transload facility has the primary function of consolidation and distribution of pallet loads (or larger) for manufacturers, wholesalers, or retailers. A transload facility typically has little storage duration, high throughput, and its operations are high efficiency. A short-term HCW is a distribution facility often with custom/special features built into the structure for the movement of large volumes of freight with only short-term storage of products.

Some limited assembly and repackaging may occur within the facility.

A high-cube warehouse may contain a mezzanine. In a HCW setting, a mezzanine is a free-standing, semi-permanent structure that is commonly supported by structural steel columns and that is lined with racks or shelves. The gross floor area (GFA) values for the study sites in the database for this land use do NOT include the floor area of the mezzanine. The GFA values represent only the permanent ground-floor square footage.

The amount of office/employee welfare space that is provided within a HCW can be highly variable but is typically an insignificant portion of the overall building square footage. Within the trip generation database, common values are between 3,000 and 5,000 square feet for a Cold Storage HCW and between 5,000 and 10,000 square feet for Transload, Fulfillment Center, and Parcel Hub HCW (all of which are less than one percent of total GFA for a site). Therefore, for the trip generation data plots, any office space that is part of the normal operation of the warehouse is included in the total GFA.

Warehousing (Land Use 150), high-cube fulfillment center warehouse (Land Use 155), high-cube parcel hub warehouse (Land Use 156), and high-cube cold storage warehouse (Land Use 157) are related land uses.

The number of dock doors at a HCW is a potential independent variable. Future data submissions should include that information.

Additional Data

The High-Cube Warehouse/Distribution Center-related land uses underwent specialized consideration through a commissioned study titled “High-Cube Warehouse Vehicle Trip Generation Analysis,” published in October 2016. The results of this study are posted on the ITE website at http://library.ite.org/pub/a3e6679a-e3a8-bf38-7f29-2961becdd498.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Michigan, New Jersey, Texas, and Washington.

Source Numbers

331, 605, 619, 642, 645, 649, 739, 750, 752, 903, 904, 941, 942, 943, 969

High-Cube Transload and Short-Term Storage Warehouse (154)

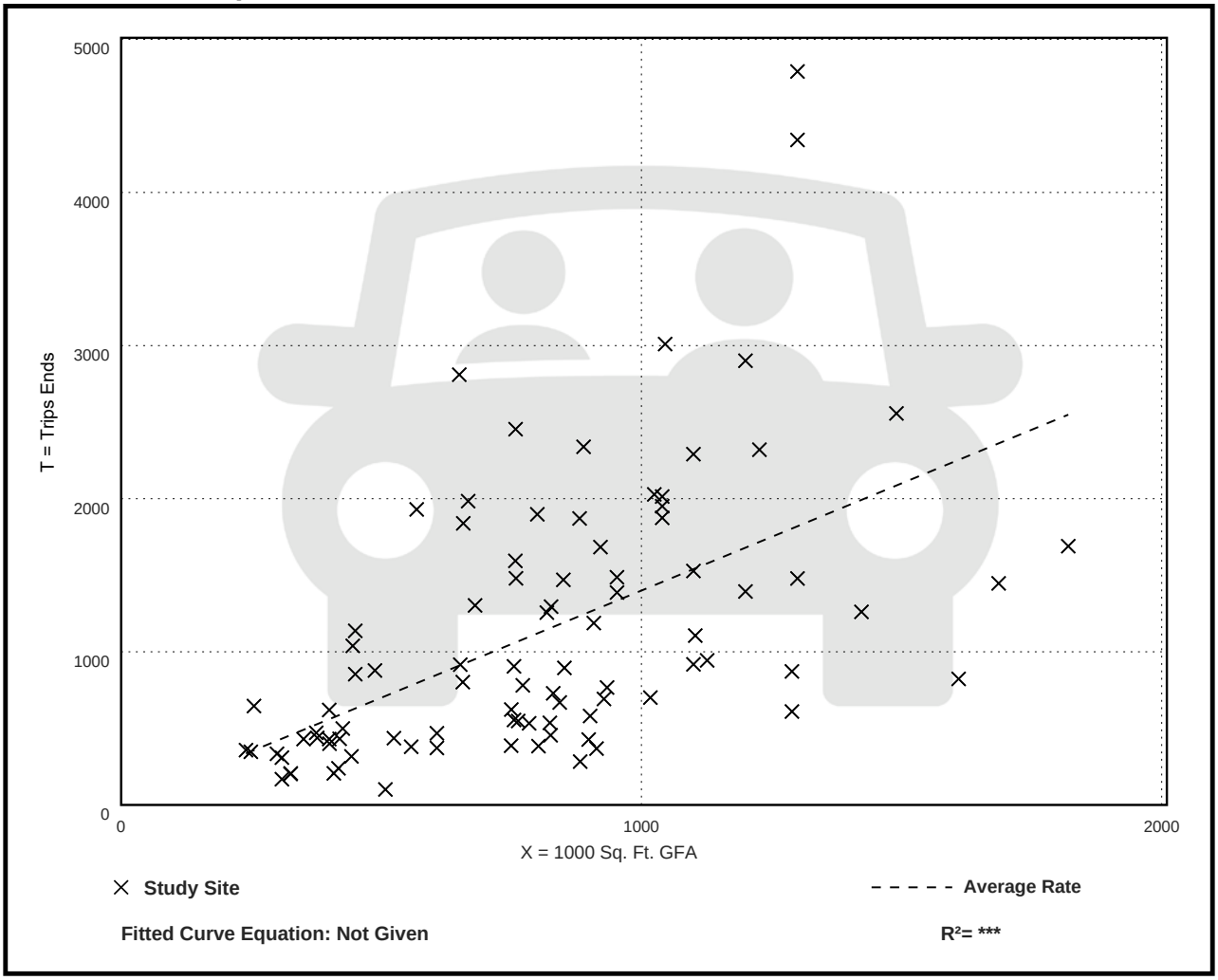
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 91
Avg. 1000 Sq. Ft. GFA: 798
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.40	0.20 - 4.32	0.86

Data Plot and Equation



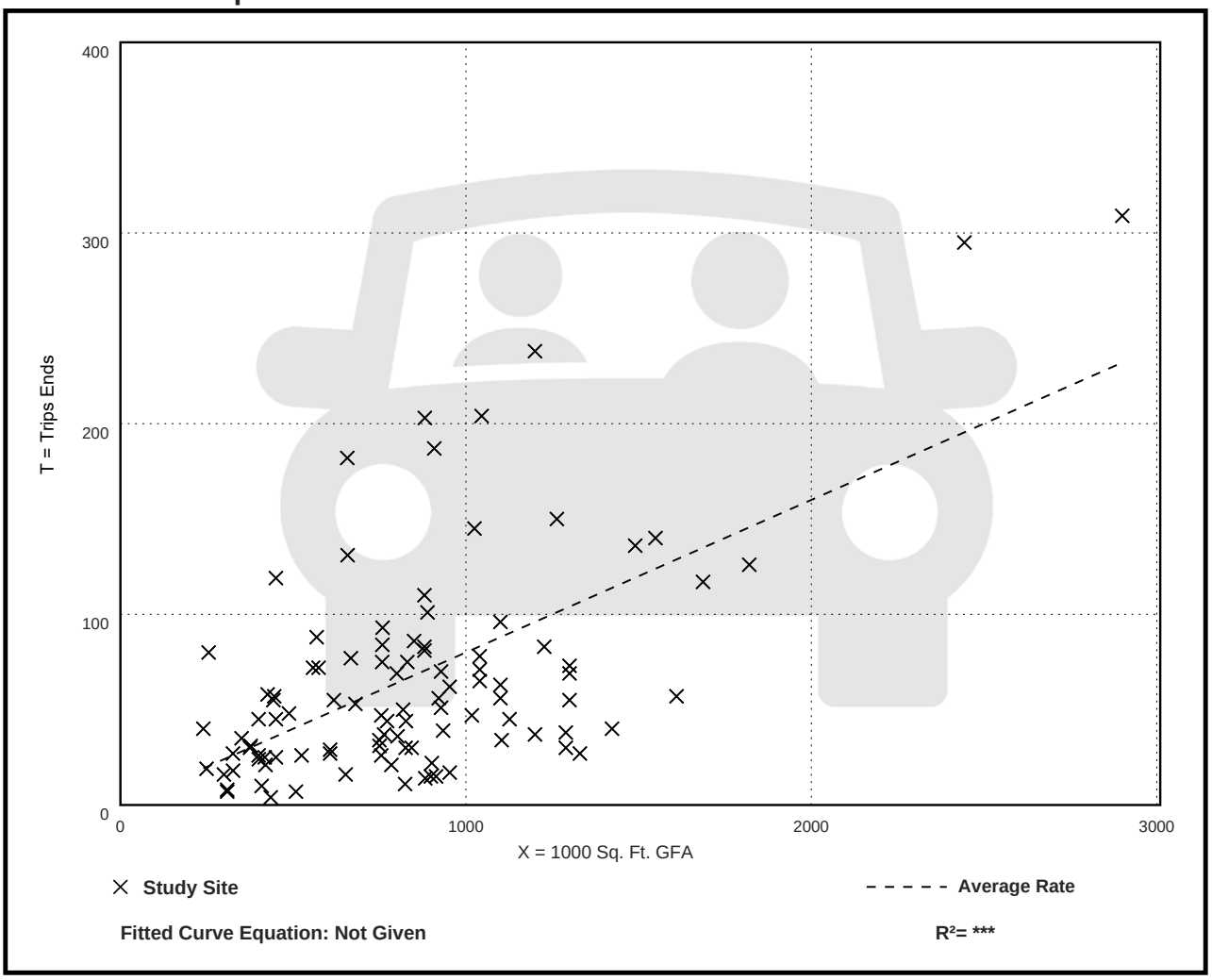
High-Cube Transload and Short-Term Storage Warehouse (154)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 102
Avg. 1000 Sq. Ft. GFA: 846
Directional Distribution: 77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.08	0.01 - 0.31	0.05

Data Plot and Equation



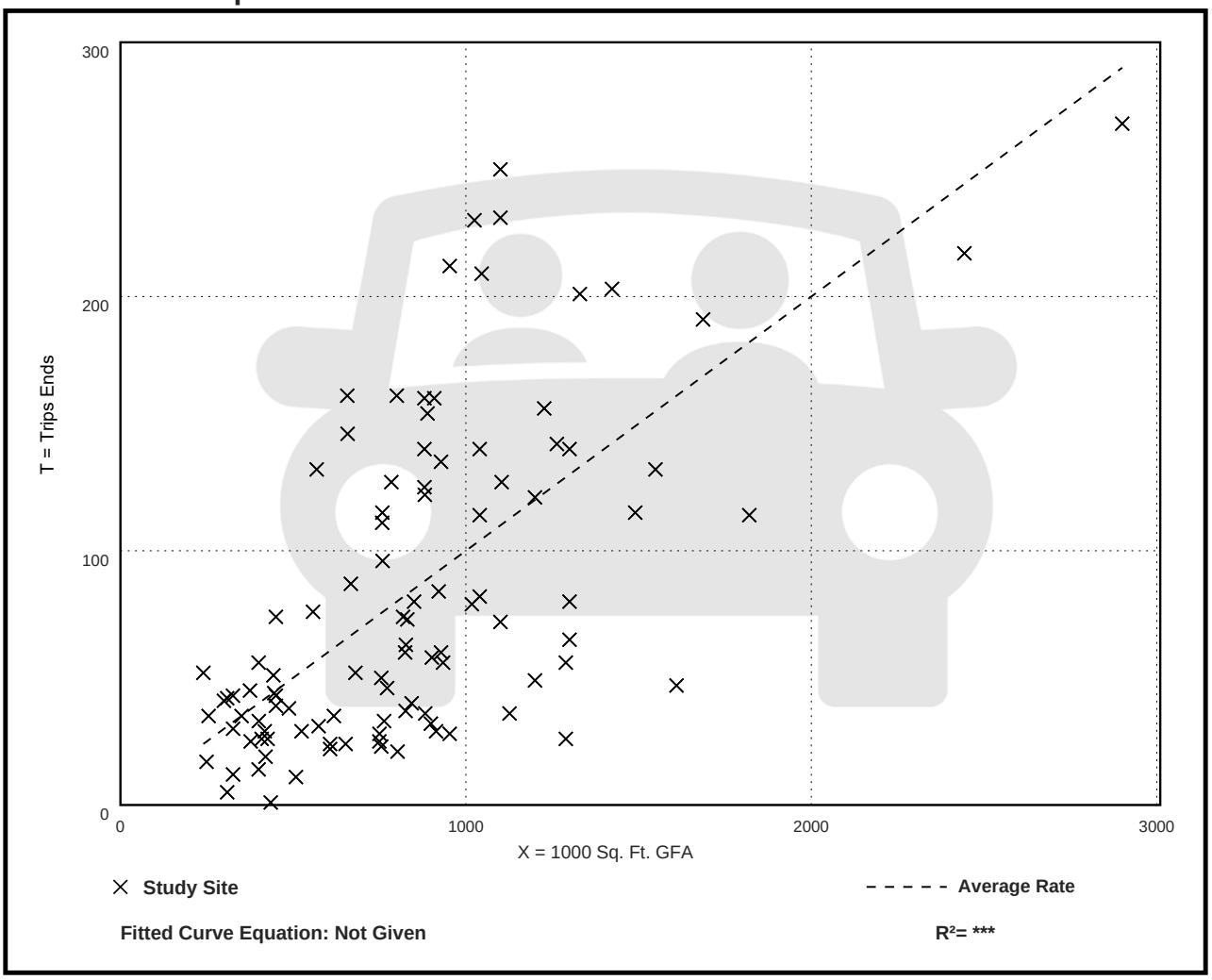
High-Cube Transload and Short-Term Storage Warehouse (154)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 103
Avg. 1000 Sq. Ft. GFA: 840
Directional Distribution: 28% entering, 72% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.10	0.00 - 0.25	0.06

Data Plot and Equation



NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Lithium Valley Comm.Opp. Areas	**Organization:**	
Project Location:		**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:	Phase 1	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				356	302	54
Retail				696	432	264
Restaurant				0		
Cinema/Entertainment				0		
Residential				59	12	47
Hotel				0		
All Other Land Uses[2]				0		
Total				1111	746	365

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office	1.00			1.00		
Retail	1.00			1.00		
Restaurant	1.00			1.00		
Cinema/Entertainment	1.00			1.00		
Residential	1.00			1.00		
Hotel	1.00			1.00		
All Other Land Uses[2]	1.00			1.00		

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		15	0	0	0	0
Retail	12		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,111	746	365
Internal Capture Percentage	5%	4%	8%
External Vehicle-Trips[3]	1,055	718	337
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	4%	28%
Retail	3%	5%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	0%	2%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Lithium Valley Comm.Opp. Areas
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	302	302	1.00	54	54
Retail	1.00	432	432	1.00	264	264
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	12	12	1.00	47	47
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		15	34	0	1	0
Retail	77		34	0	37	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	9	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		138	0	0	0	0
Retail	12		0	0	0	0
Restaurant	42	35		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	9	73	0	0		0
Hotel	9	17	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	13	289	302	289	0	0
Retail	15	417	432	417	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	12	12	12	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	15	39	54	39	0	0
Retail	12	252	264	252	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	46	47	46	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Lithium Valley Comm.Opp. Areas	**Organization:**	
Project Location:		**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:	Phase 1	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				375	84	291
Retail				1631	783	848
Restaurant				0		
Cinema/Entertainment				0		
Residential				85	53	32
Hotel				0		
All Other Land Uses[2]				0		
Total				2091	920	1171

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office	1.00			1.00		
Retail	1.00			1.00		
Restaurant	1.00			1.00		
Cinema/Entertainment	1.00			1.00		
Residential	1.00			1.00		
Hotel	1.00			1.00		
All Other Land Uses[2]	1.00			1.00		

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		58	0	0	2	0
Retail	17		0	0	24	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	13	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	2,091	920	1,171
Internal Capture Percentage	11%	13%	10%
External Vehicle-Trips[3]	1,861	805	1,056
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	21%	21%
Retail	9%	5%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	49%	44%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Lithium Valley Comm.Opp. Areas
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	84	84	1.00	291	291
Retail	1.00	783	783	1.00	848	848
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	53	53	1.00	32	32
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		58	12	0	6	0
Retail	17		246	34	220	42
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	13	7	0		1
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		63	0	0	2	0
Retail	26		0	0	24	0
Restaurant	25	392		0	8	0
Cinema/Entertainment	5	31	0		2	0
Residential	48	78	0	0		0
Hotel	0	16	0	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	18	66	84	66	0	0
Retail	71	712	783	712	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	26	27	53	27	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	60	231	291	231	0	0
Retail	41	807	848	807	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	14	18	32	18	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Lithium Valley Comm.Opp. Areas	**Organization:**	
Project Location:		**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:	Buildout	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				968	823	145
Retail				1865	1156	709
Restaurant				0		
Cinema/Entertainment				0		
Residential				111	27	84
Hotel				0		
All Other Land Uses[2]				0		
Total				2944	2006	938

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office	1.00			1.00		
Retail	1.00			1.00		
Restaurant	1.00			1.00		
Cinema/Entertainment	1.00			1.00		
Residential	1.00			1.00		
Hotel	1.00			1.00		
All Other Land Uses[2]	1.00			1.00		

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		41	0	0	0	0
Retail	33		0	0	1	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	2	1	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	2,944	2,006	938
Internal Capture Percentage	5%	4%	8%
External Vehicle-Trips[3]	2,788	1,928	860
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	4%	28%
Retail	4%	5%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	4%	4%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Lithium Valley Comm.Opp. Areas
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	823	823	1.00	145	145
Retail	1.00	1156	1156	1.00	709	709
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	27	27	1.00	84	84
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		41	91	0	1	0
Retail	206		92	0	99	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	2	1	17	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		370	0	0	0	0
Retail	33		0	0	1	0
Restaurant	115	92		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	25	197	0	0		0
Hotel	25	46	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	35	788	823	788	0	0
Retail	42	1114	1156	1114	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	26	27	26	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	41	104	145	104	0	0
Retail	34	675	709	675	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	3	81	84	81	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Lithium Valley Comm.Opp. Areas	**Organization:**	
Project Location:		**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:	Buildout	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				1020	225	795
Retail				4170	2002	2168
Restaurant				0		
Cinema/Entertainment				0		
Residential				142	89	53
Hotel				0		
All Other Land Uses[2]				0		
Total				5332	2316	3016

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office	1.00			1.00		
Retail	1.00			1.00		
Restaurant	1.00			1.00		
Cinema/Entertainment	1.00			1.00		
Residential	1.00			1.00		
Hotel	1.00			1.00		
All Other Land Uses[2]	1.00			1.00		

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		159	0	0	4	0
Retail	43		0	0	41	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	2	22	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	5,332	2,316	3,016
Internal Capture Percentage	10%	12%	9%
External Vehicle-Trips[3]	4,790	2,045	2,745
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	20%	21%
Retail	9%	4%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	51%	45%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Lithium Valley Comm.Opp. Areas
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	225	225	1.00	795	795
Retail	1.00	2002	2002	1.00	2168	2168
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	89	89	1.00	53	53
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		159	32	0	16	0
Retail	43		629	87	564	108
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	2	22	11	0		2
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		160	0	0	4	0
Retail	70		0	0	41	0
Restaurant	68	1001		0	14	0
Cinema/Entertainment	14	80	0		4	0
Residential	128	200	0	0		0
Hotel	0	40	0	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	45	180	225	180	0	0
Retail	181	1821	2002	1821	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	45	44	89	44	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	163	632	795	632	0	0
Retail	84	2084	2168	2084	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	24	29	53	29	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Lithium Valley Comm.Opp. Areas	**Organization:**	
Project Location:		**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:	Reduced Alt Buildout	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				371	315	56
Retail				713	442	271
Restaurant				0		
Cinema/Entertainment				0		
Residential				42	10	32
Hotel				0		
All Other Land Uses[2]				0		
Total				1126	767	359

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office	1.00			1.00		
Retail	1.00			1.00		
Restaurant	1.00			1.00		
Cinema/Entertainment	1.00			1.00		
Residential	1.00			1.00		
Hotel	1.00			1.00		
All Other Land Uses[2]	1.00			1.00		

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		16	0	0	0	0
Retail	13		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	1,126	767	359
Internal Capture Percentage	5%	4%	8%
External Vehicle-Trips[3]	1,066	737	329
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	4%	29%
Retail	4%	5%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	0%	3%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report* , published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Lithium Valley Comm.Opp. Areas
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	315	315	1.00	56	56
Retail	1.00	442	442	1.00	271	271
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	10	10	1.00	32	32
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		16	35	0	1	0
Retail	79		35	0	38	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	0	6	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		141	0	0	0	0
Retail	13		0	0	0	0
Restaurant	44	35		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	9	75	0	0		0
Hotel	9	18	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	14	301	315	301	0	0
Retail	16	426	442	426	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	10	10	10	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	16	40	56	40	0	0
Retail	13	258	271	258	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	31	32	31	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Lithium Valley Comm.Opp. Areas	**Organization:**	
Project Location:		**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:	Reduced Alt Buildout	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				389	86	303
Retail				1668	801	867
Restaurant				0		
Cinema/Entertainment				0		
Residential				54	34	20
Hotel				0		
All Other Land Uses[2]				0		
Total				2111	921	1190

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office	1.00			1.00		
Retail	1.00			1.00		
Restaurant	1.00			1.00		
Cinema/Entertainment	1.00			1.00		
Residential	1.00			1.00		
Hotel	1.00			1.00		
All Other Land Uses[2]	1.00			1.00		

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		61	0	0	1	0
Retail	17		0	0	16	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	8	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	2,111	921	1,190
Internal Capture Percentage	10%	11%	9%
External Vehicle-Trips[3]	1,903	817	1,086
External Transit-Trips[4]	0	0	0
External Non-Motorized Trips[4]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	21%	20%
Retail	9%	4%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	50%	45%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

[3]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[4]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas Transportation Institute

Project Name:	Lithium Valley Comm.Opp. Areas
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	86	86	1.00	303	303
Retail	1.00	801	801	1.00	867	867
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	34	34	1.00	20	20
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		61	12	0	6	0
Retail	17		251	35	225	43
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	8	4	0		1
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		64	0	0	1	0
Retail	27		0	0	16	0
Restaurant	26	401		0	5	0
Cinema/Entertainment	5	32	0		1	0
Residential	49	80	0	0		0
Hotel	0	16	0	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	18	68	86	68	0	0
Retail	69	732	801	732	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	17	17	34	17	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	62	241	303	241	0	0
Retail	33	834	867	834	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	9	11	20	11	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

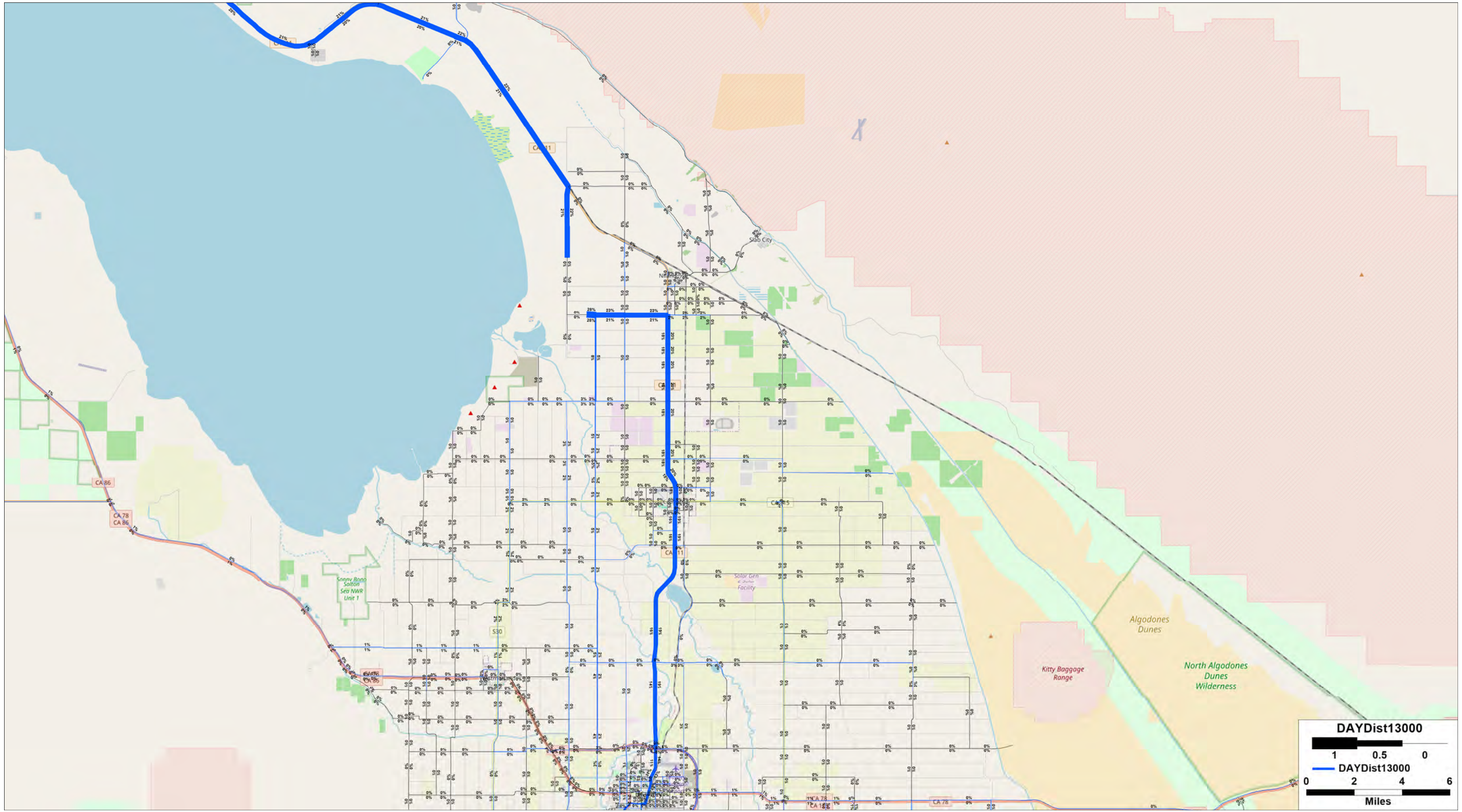
[3]Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

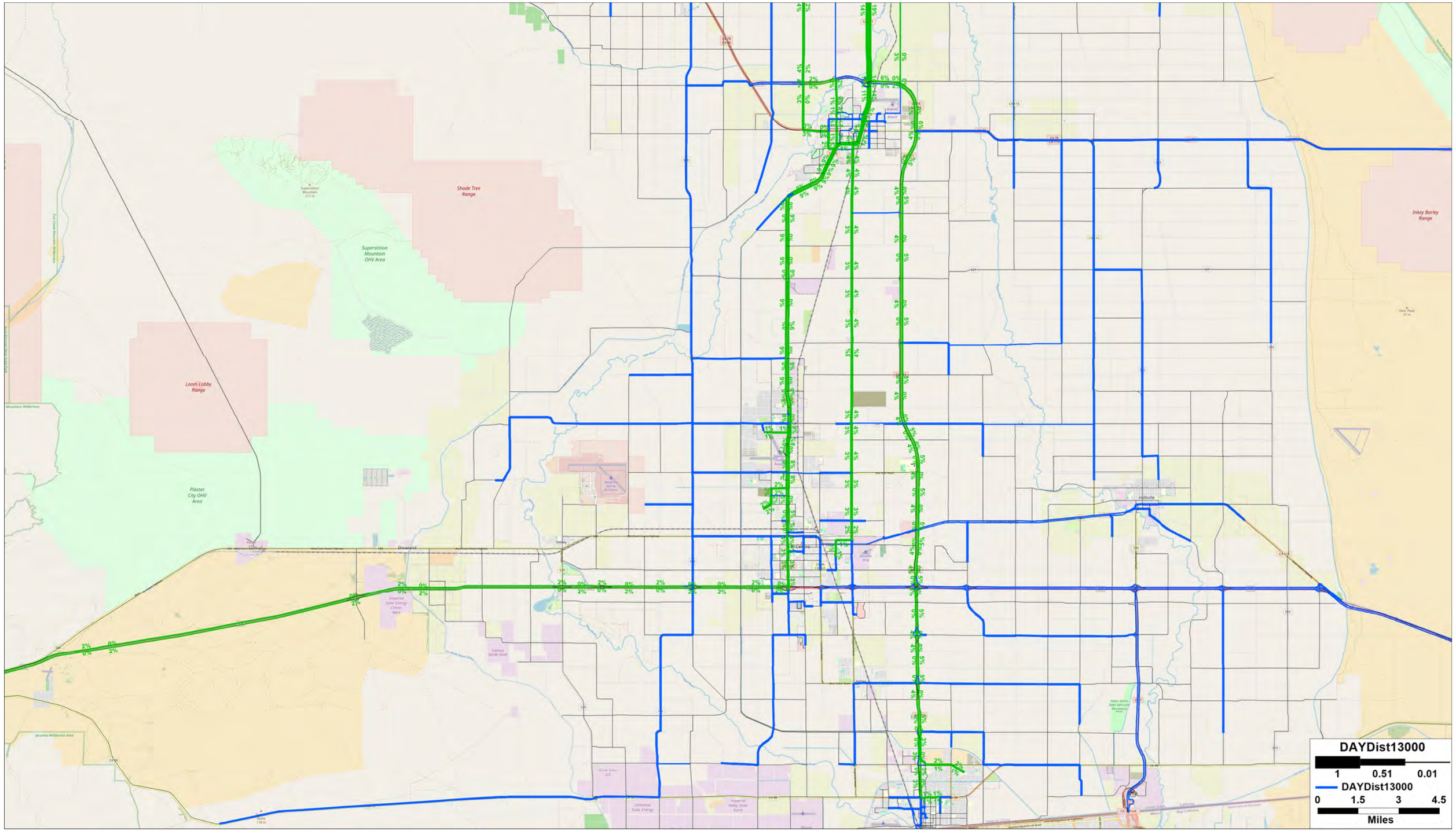
*Indicates computation that has been rounded to the nearest whole number.

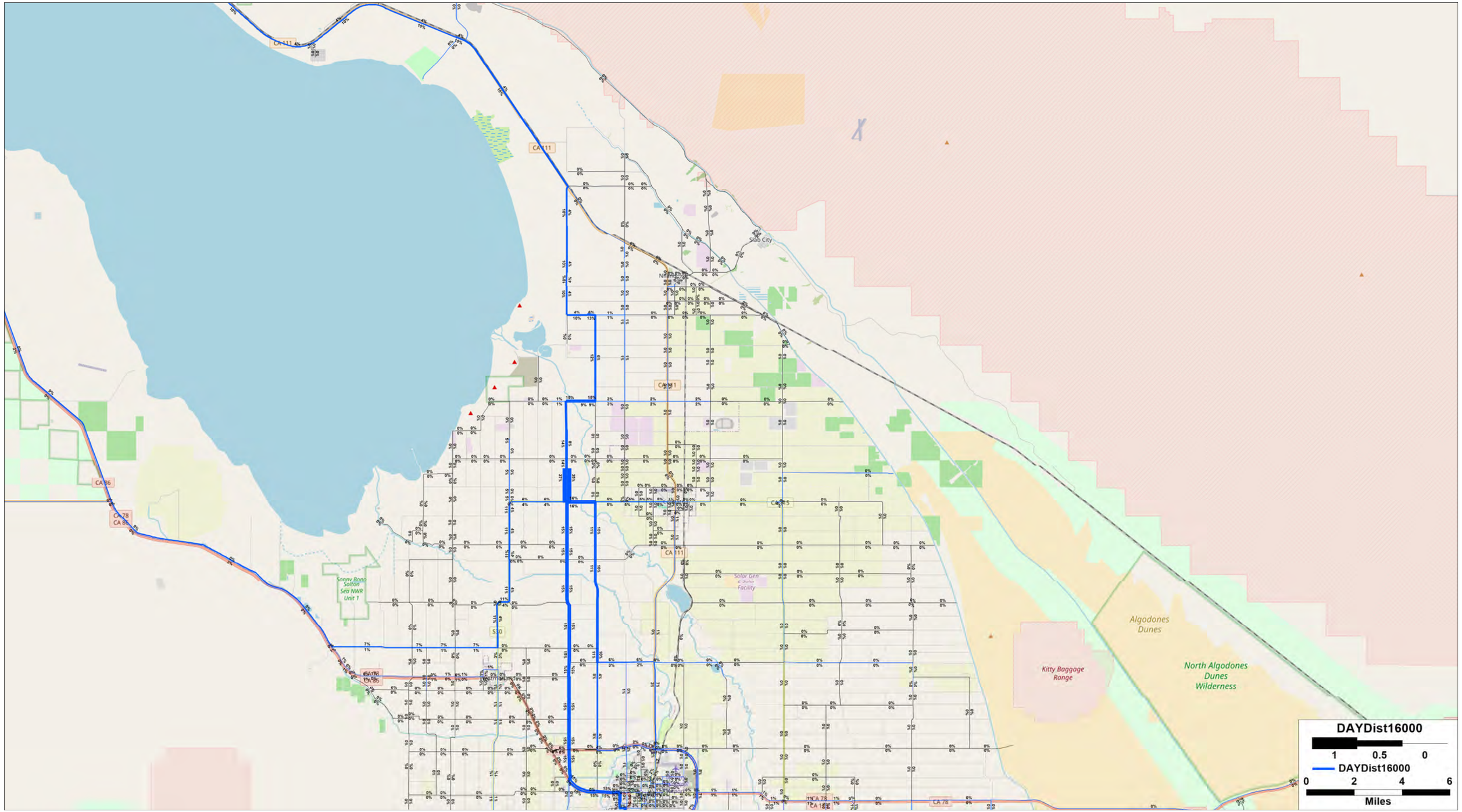
APPENDIX C-5

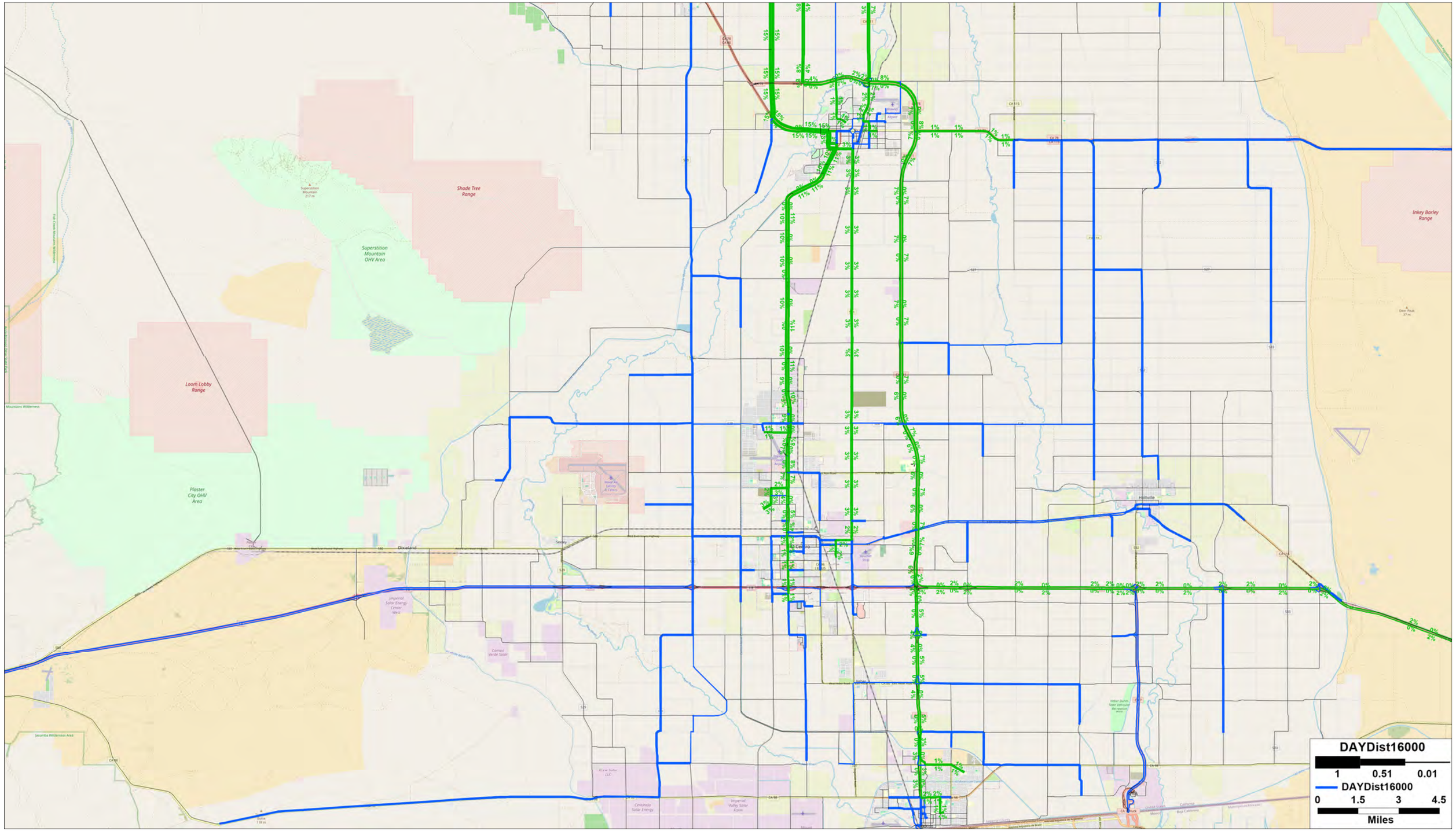
SCAG MODEL TRIP DISTRIBUTION PERCENTAGE PLOTS

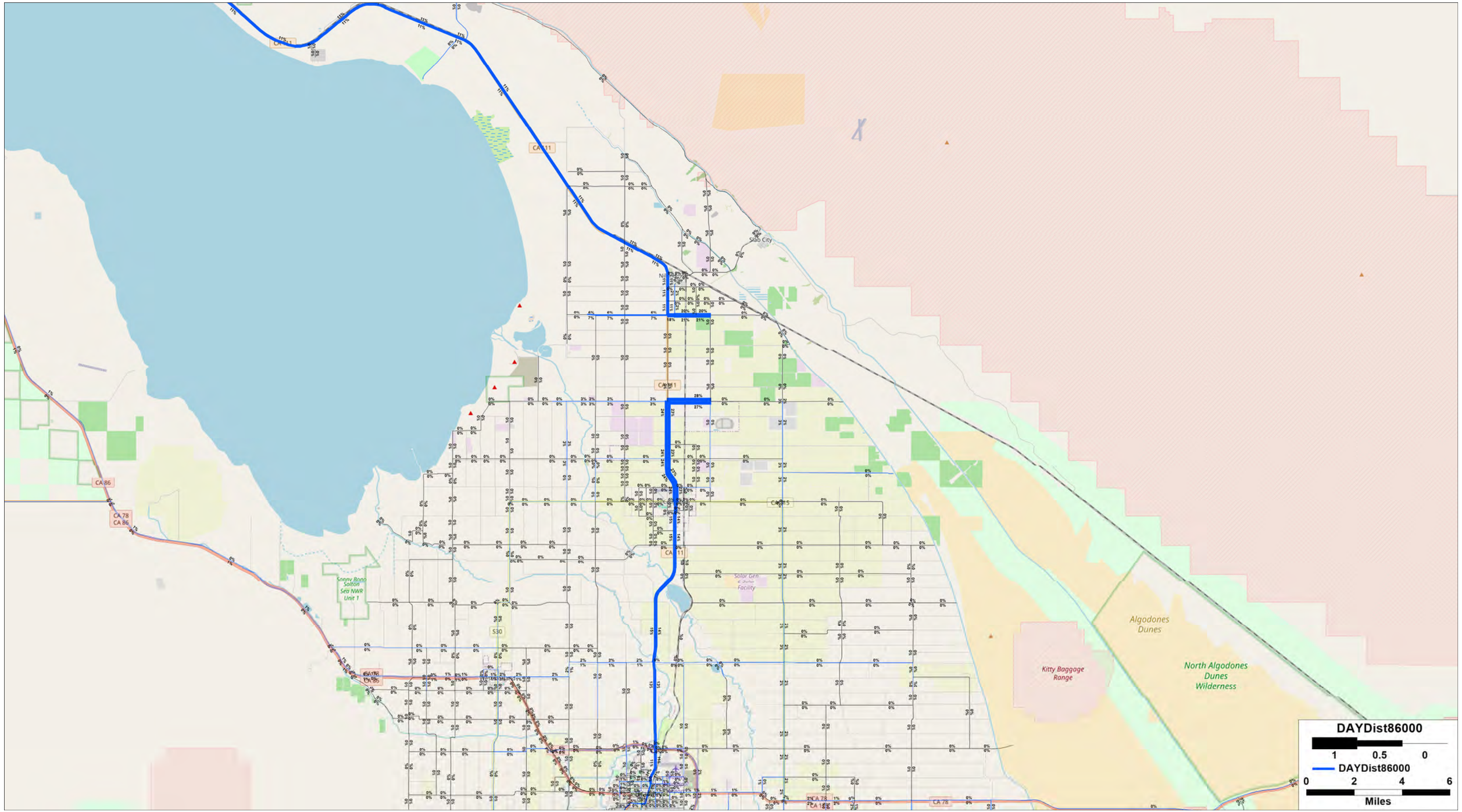
FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE

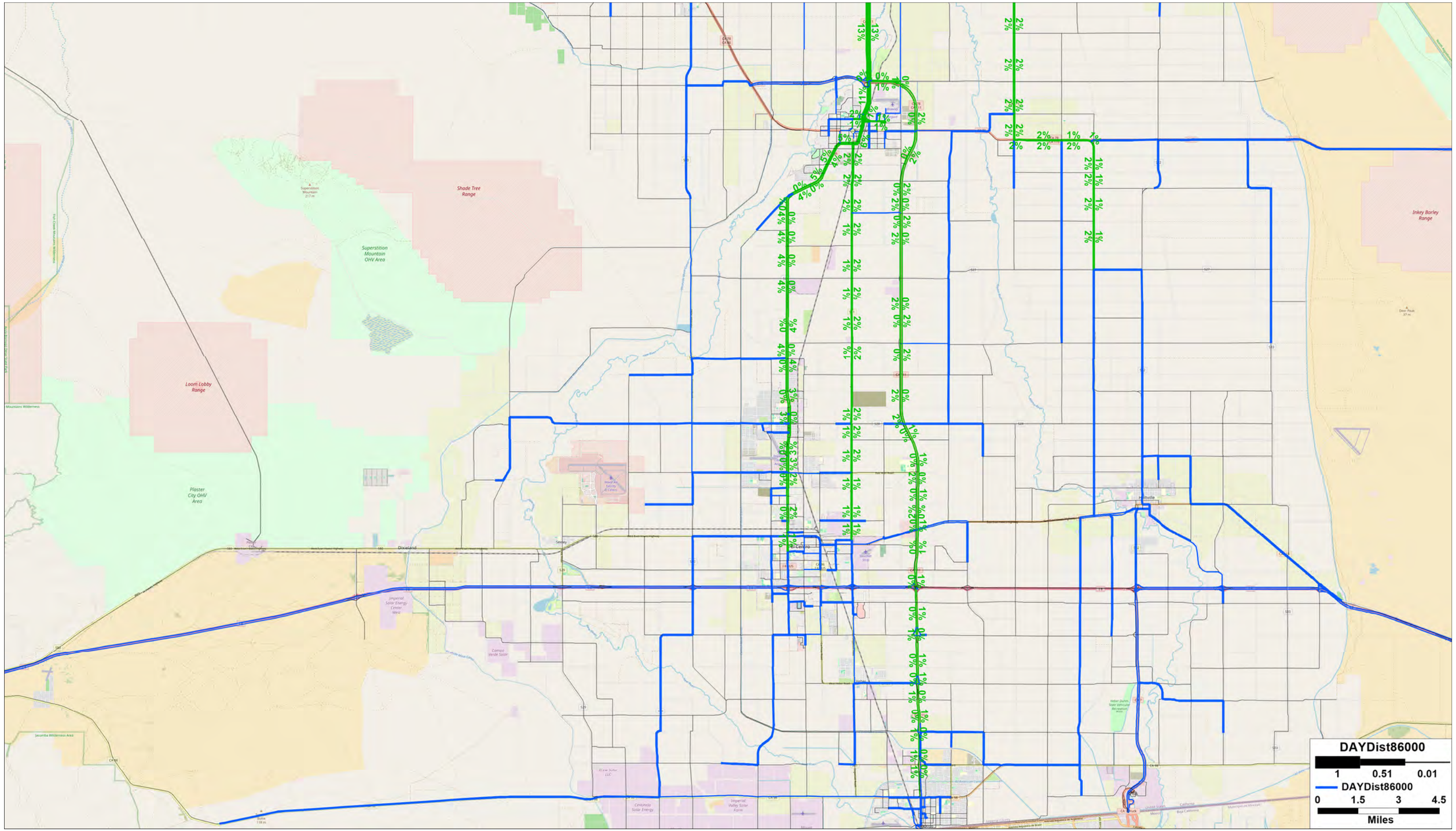

Slab City
Sonny Bono Salton Sea NWR Unit 1
Solar Gen Facility
Algodones Dunes
Kitty Baggage Range
North Algodones Dunes Wilderness
CA 86
CA 78
CA 111
S30
DAYDist13000
1 0.5 0
DAYDist13000
0 2 4 6
Miles


Shade Tree Range
Superstition Mountain OHV Area
Loam Lobby Range
Plaster City OHV Area
Inkey Barley Range
Dixieland
Holtville
DAYDist13000
1
0.51
0.01
DAYDist13000
0
1.5
3
4.5
Miles

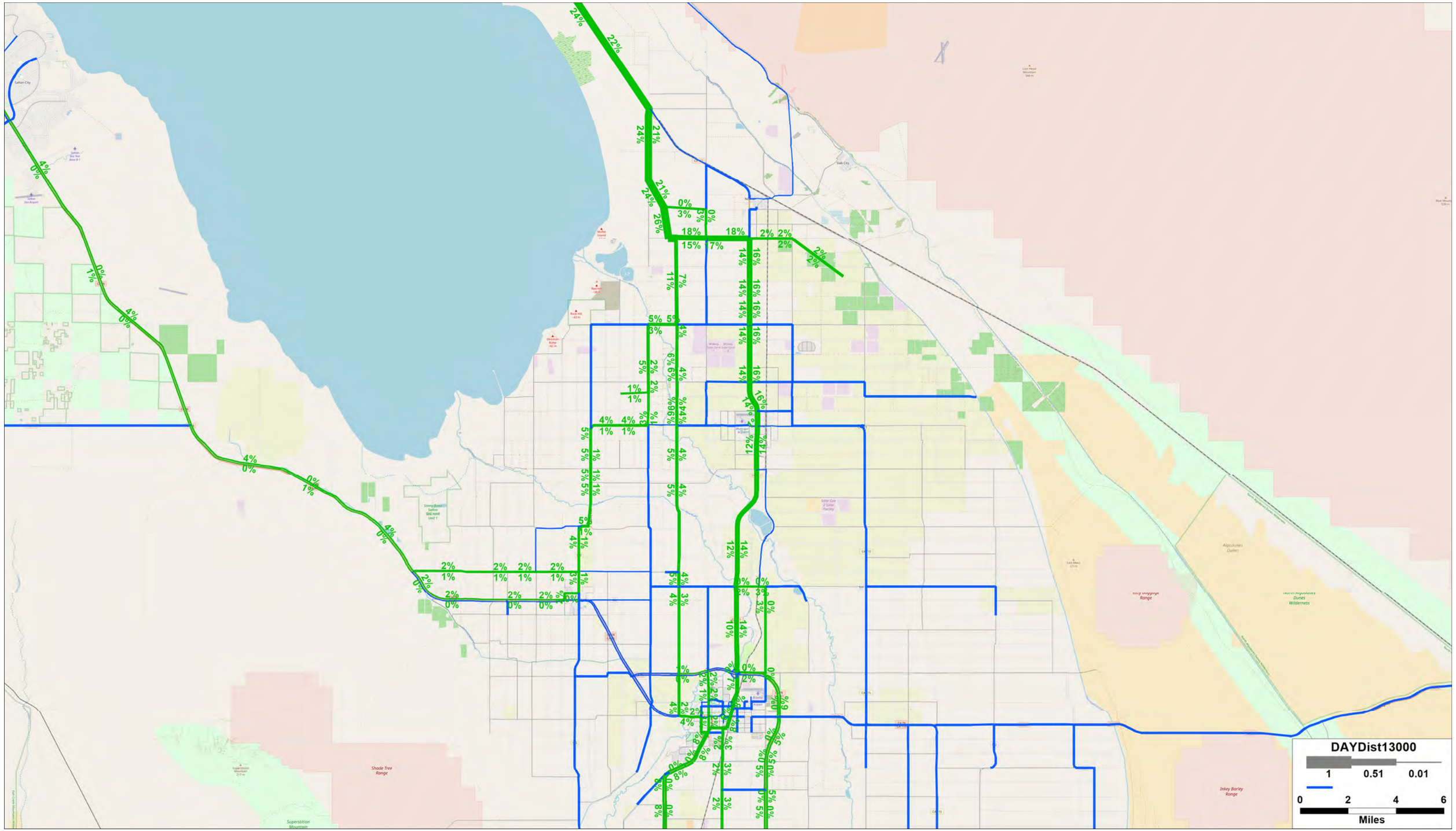

CA 111
Slab City
Sonny Bono Salton Sea NWR Unit 1
Solar Gen 2 Salton Facility
Algodones Dunes
Kitty Baggage Range
North Algodones Dunes Wilderness
CA 78
CA 86
DAYDist16000
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DAYDist16000
0 2 4 6
Miles

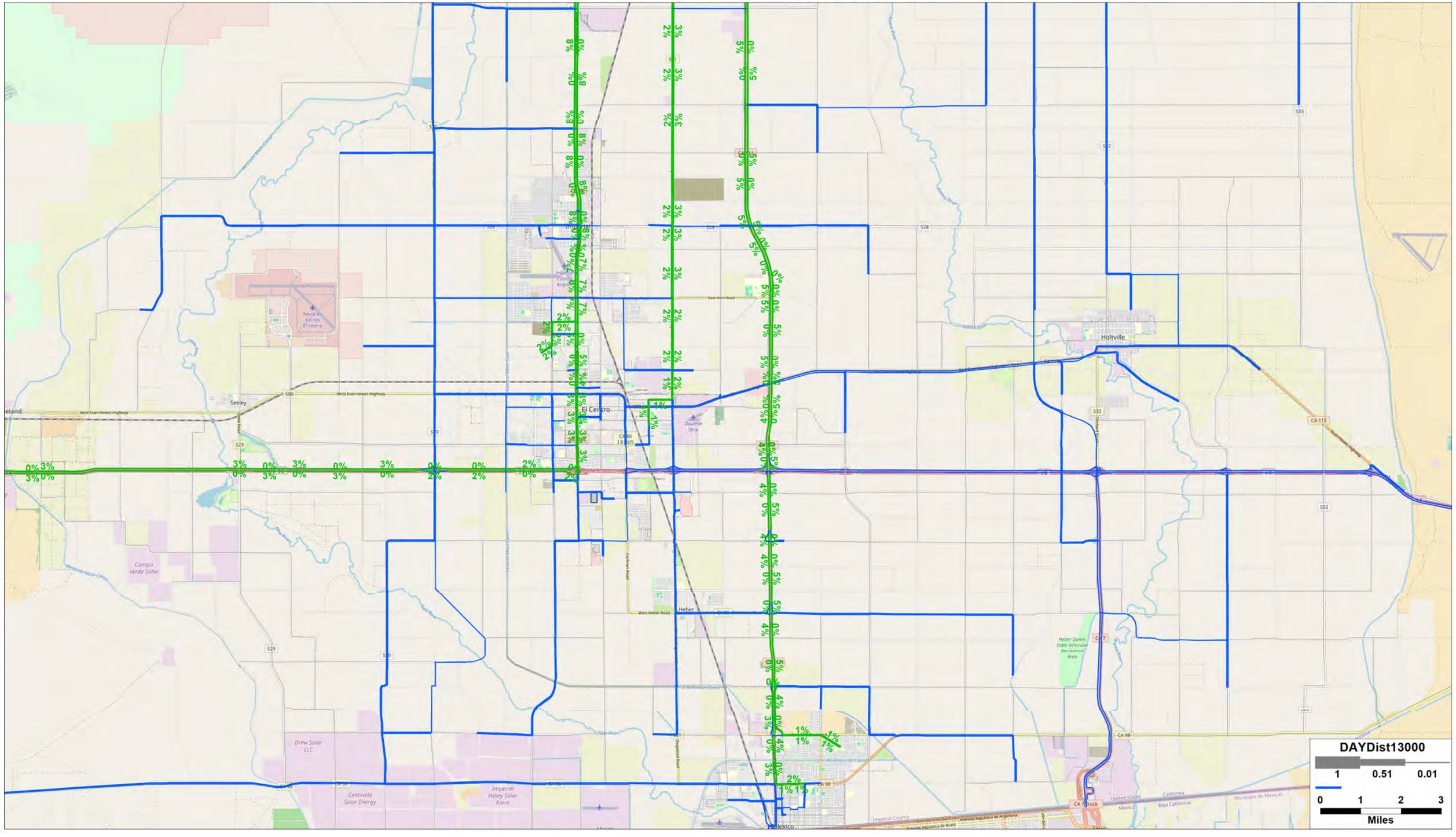

Shade Tree Range
Superstition Mountain OHV Area
Loam Lobby Range
Plaster City OHV Area
Inkey Barley Range
Holtville
Seeley
Heber
Dixieland
DAYDist16000
1
0.51
0.01
DAYDist16000
0
1.5
3
4.5
Miles

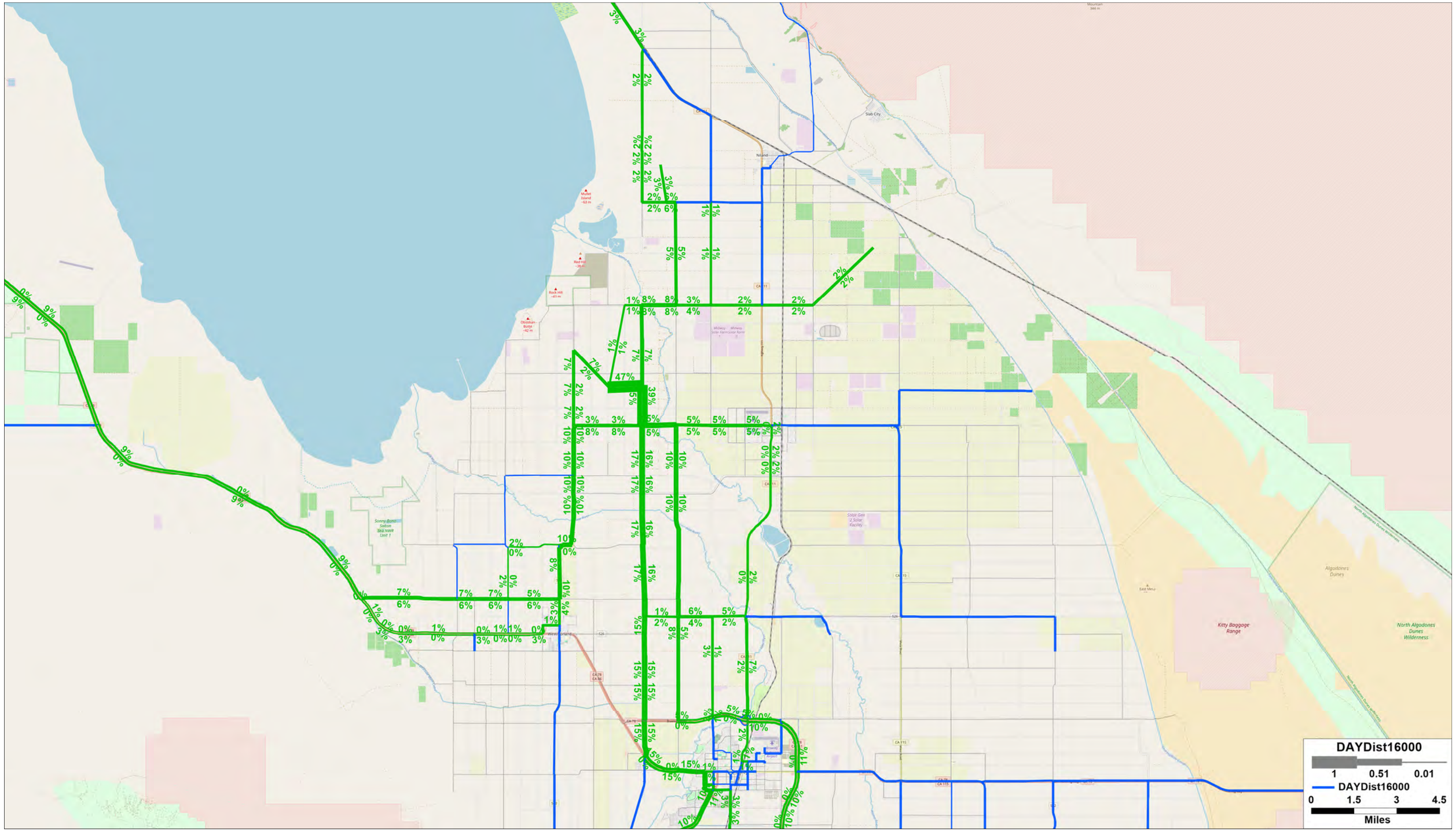

Slab City
Sonny Bono Salton Sea NWR Unit 1
Algodones Dunes
Kitty Baggage Range
North Algodones Dunes Wilderness
DAYDist86000
1 0.5 0
DAYDist86000
0 2 4 6
Miles

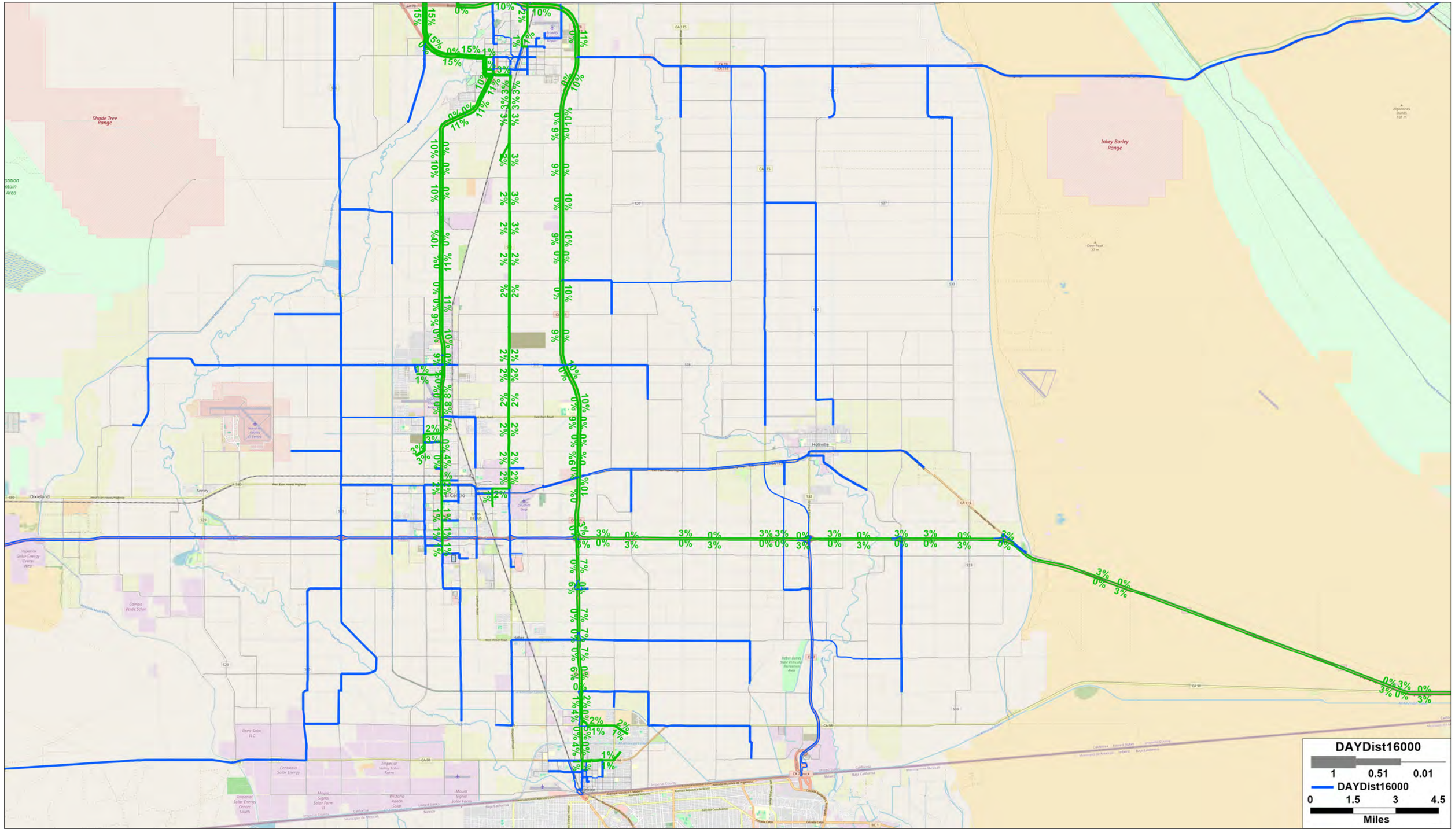

Shade Tree Range
Superstition Mountain OHV Area
Loam Lobby Range
Plaster City OHV Area
Inkey Barley Range
Dixieland
Holtville
DAYDist86000
1
0.51
0.01
DAYDist86000
0
1.5
3
4.5
Miles

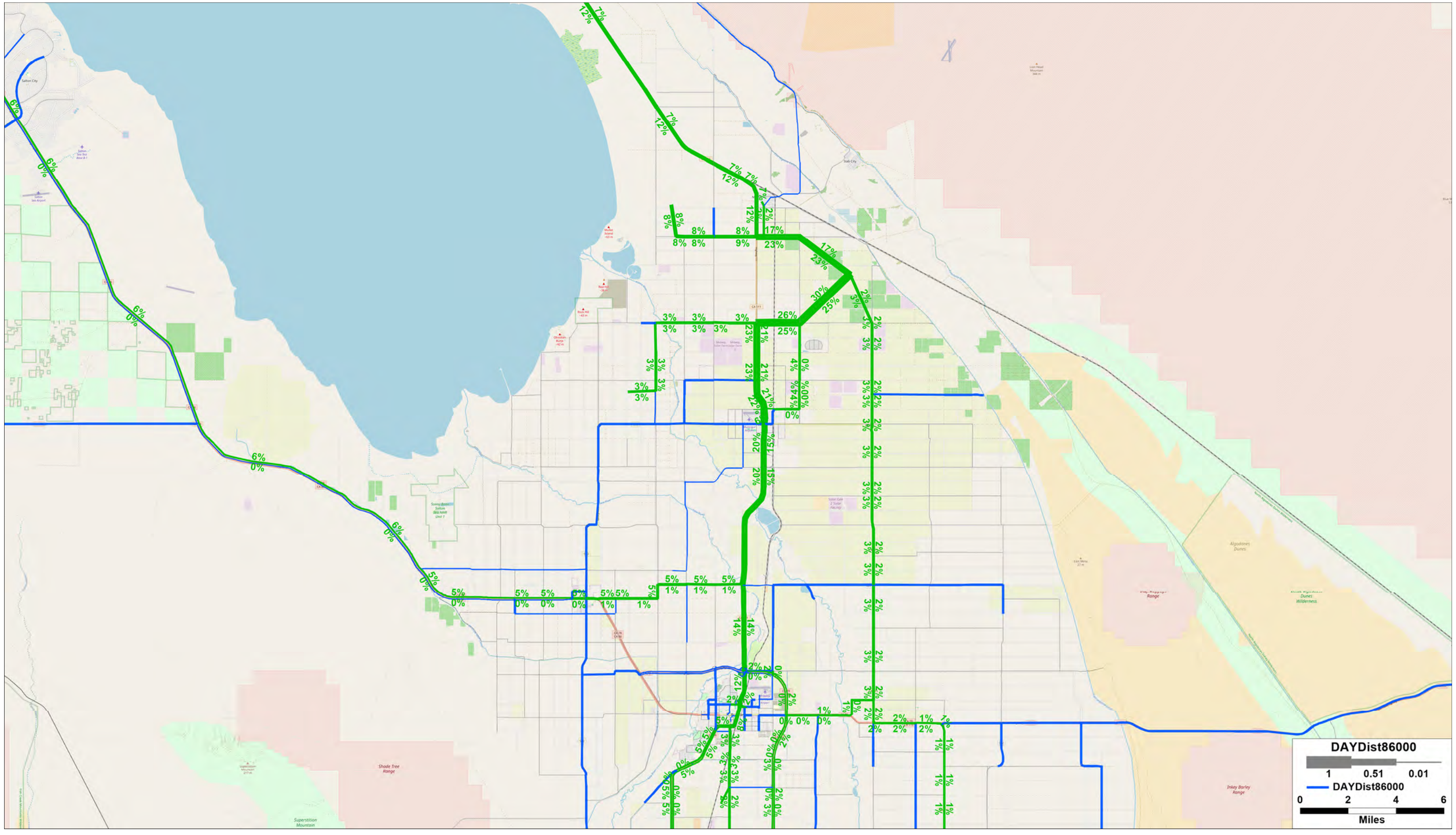
FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO

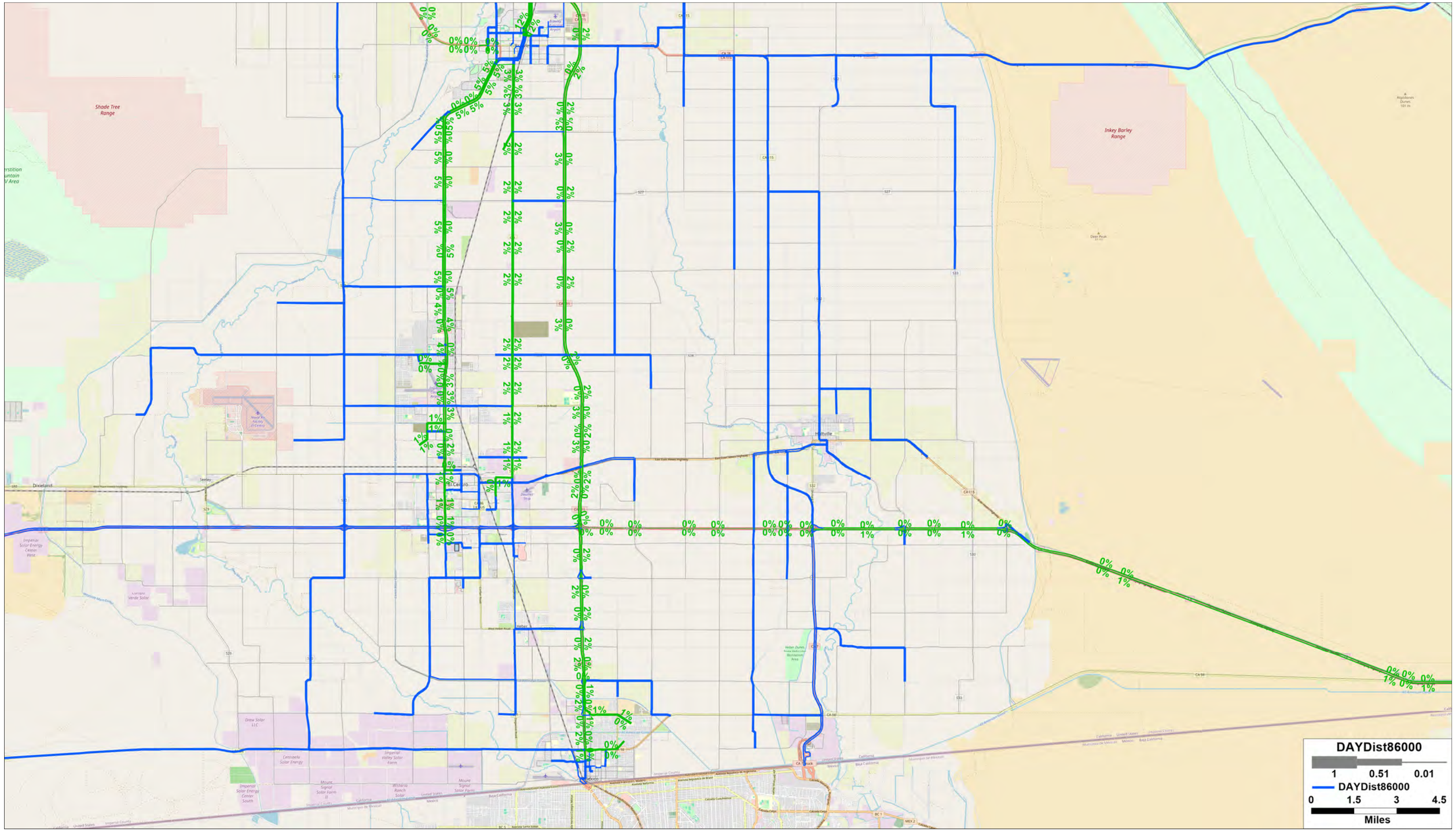

DAYDist13000
1
0.51
0.01
0
2
4
6
Miles


DAYDist13000
1
0.51
0.01
0
1
2
3
Miles
Holtville
El Centro
Seeley
Heber
Naval Air Facility El Centro
Imperial County Airport
Campo Verde Solar
Drew Solar LLC
Centinela Solar Energy
Imperial Valley Solar Farm
Heber Dunes State Vehicular Recreation Area
Mexicali
Municipio de Mexicali
United States
Mexico
California
Baja California
West Evan Hewes Highway
East Main Road
West Heber Road
Dogwood Road
Cortese Road
Central Main Canal
New River
Alamo River
Westside Main Canal
All American Canal
Imperial County
CA 98
CA 115
CA 7 Truck
S29
S30
S31
S32
S33
S80

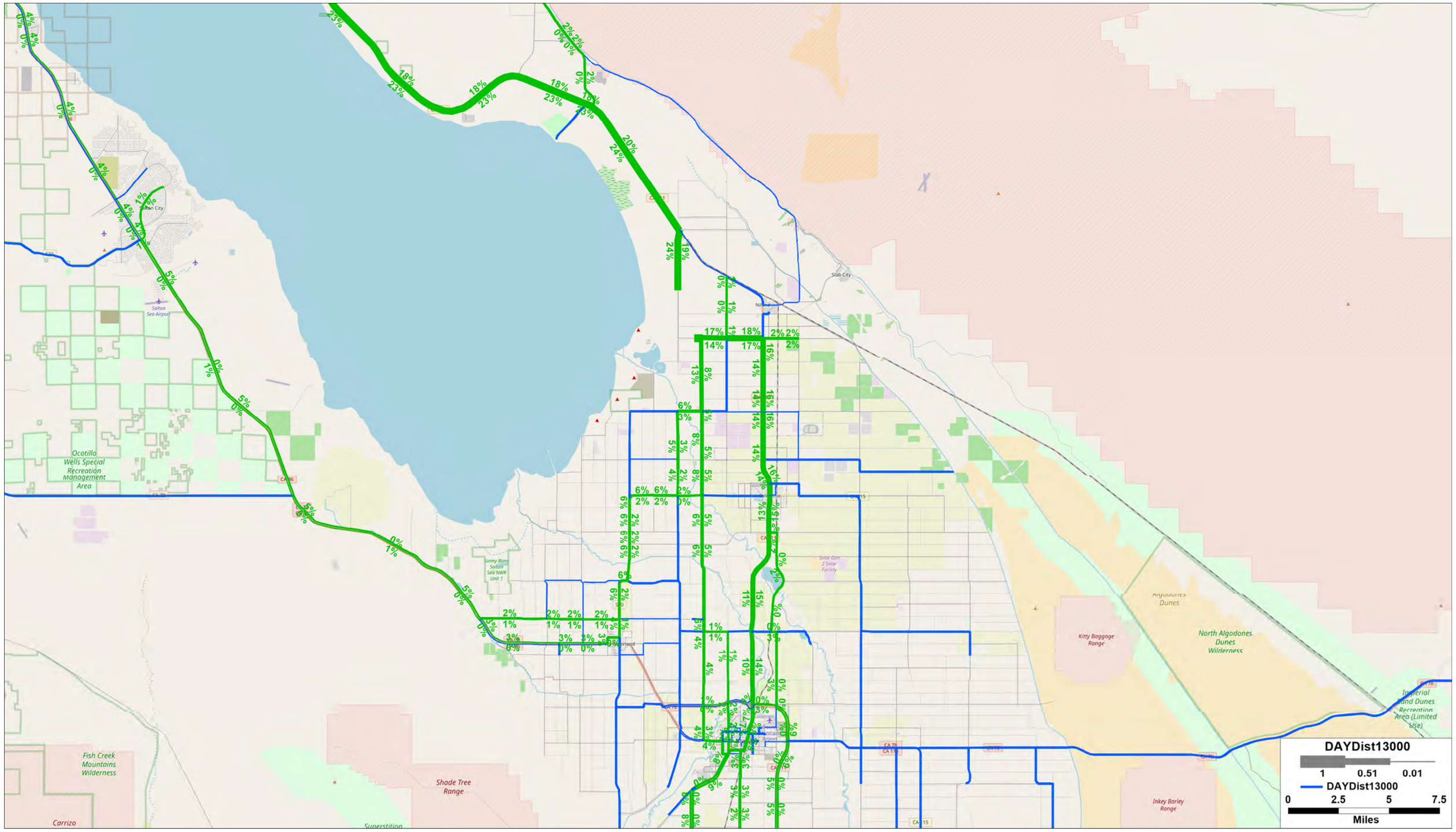

DAYDist16000
1
0.51
0.01
DAYDist16000
0
1.5
3
4.5
Miles
Slab City
Niland
Mullet Island -63 m
Red Hill -26 m
Rock Hill -43 m
Obsidian Butte -42 m
Mountain 344 m
Sonny Bono Salton Sea NWR Unit 1
Mikawy Solar Farm
Mikawy Solar Farm
Solar Gen 2 Solar Facility
Algodones Dunes
East Mesa
Kitty Baggage Range
North Algodones Dunes Wilderness
North Algodones Dunes Wilderness
CA 111
CA 78
CA 86
CA 115
S26

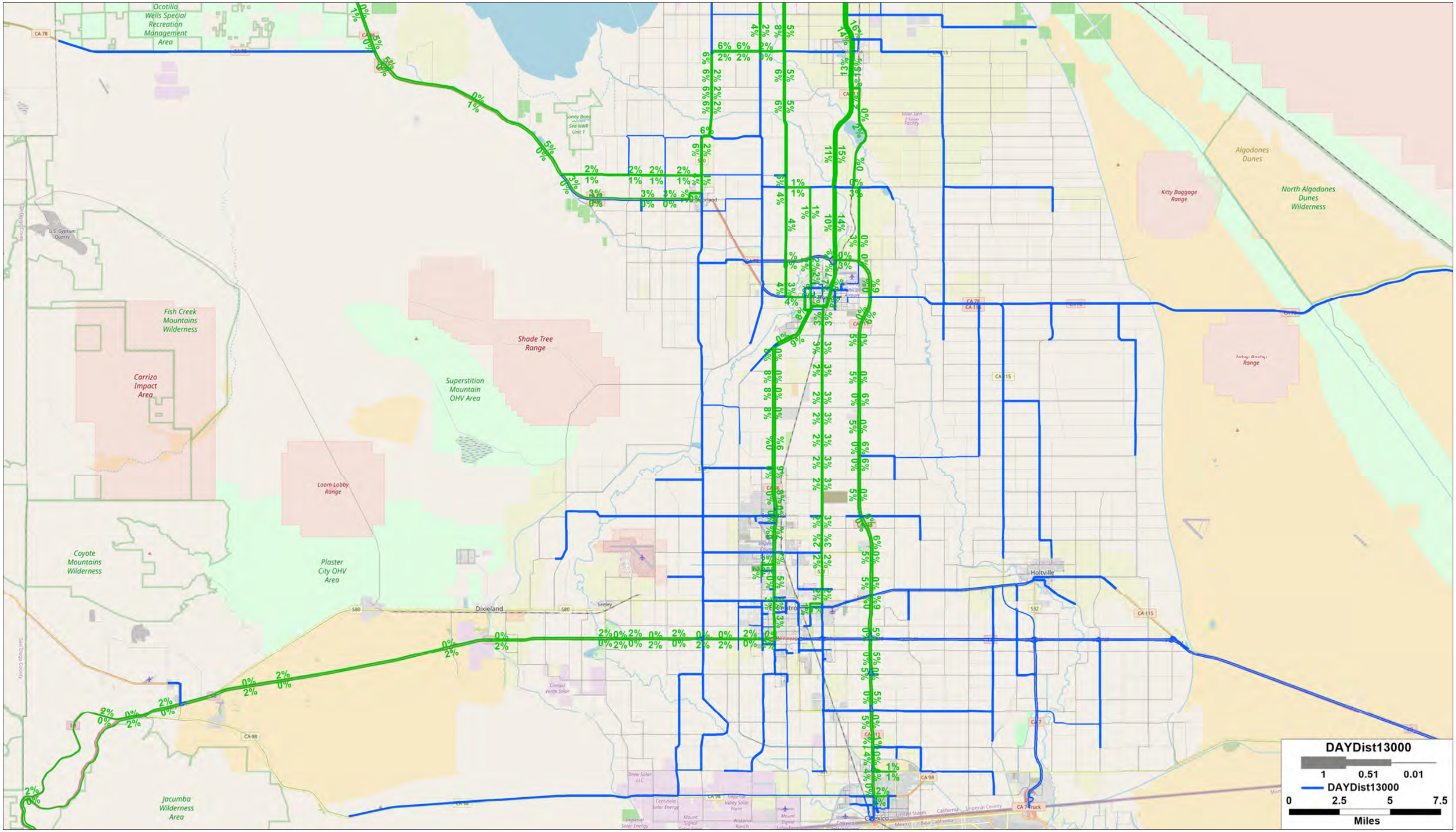

Shade Tree Range
Inkey Barley Range
Holtville
Seeley
Heber
Dixieland
DAYDist16000
1
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0.01
DAYDist16000
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1.5
3
4.5
Miles

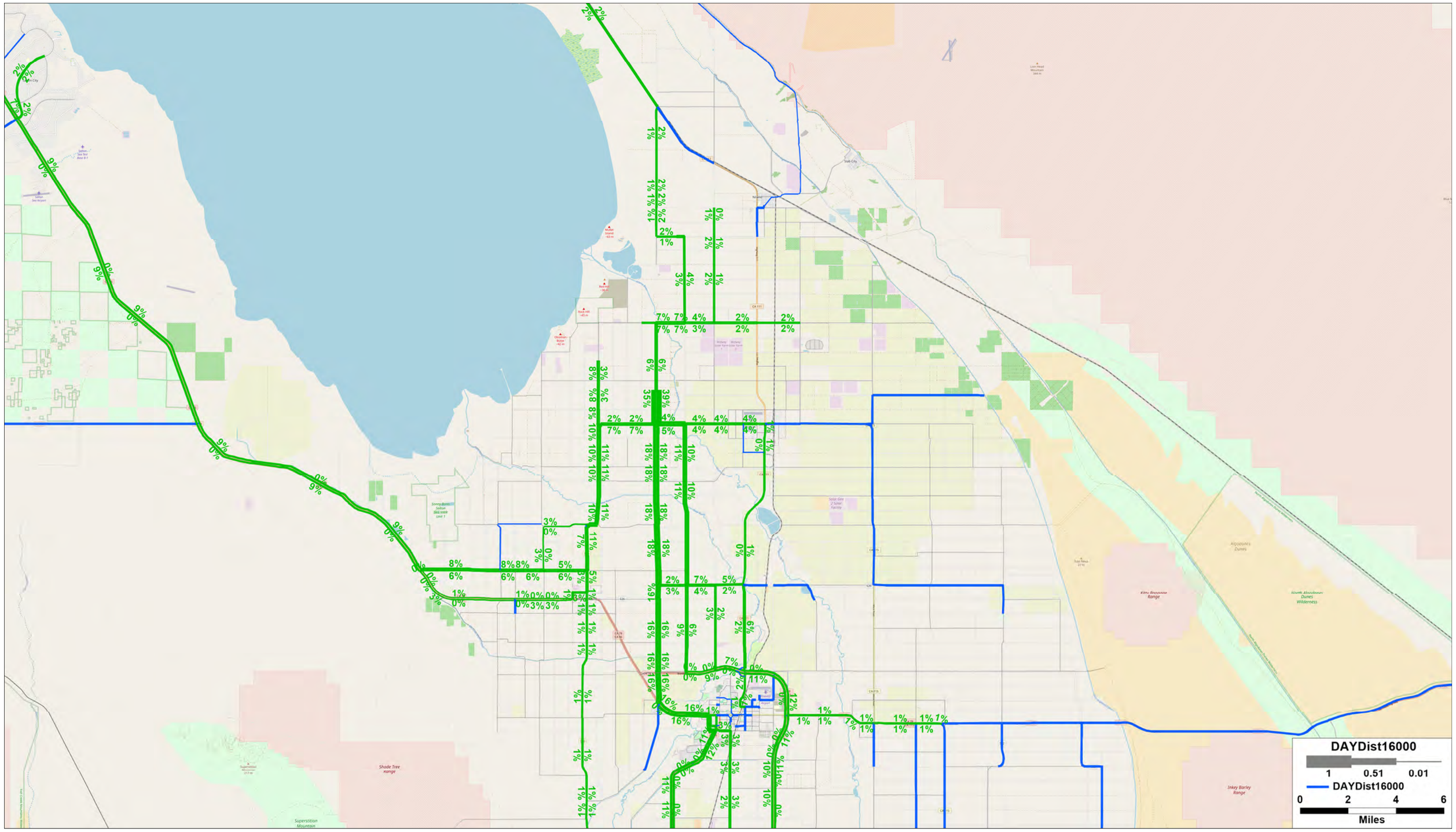

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0.01
DAYDist86000
0
2
4
6
Miles

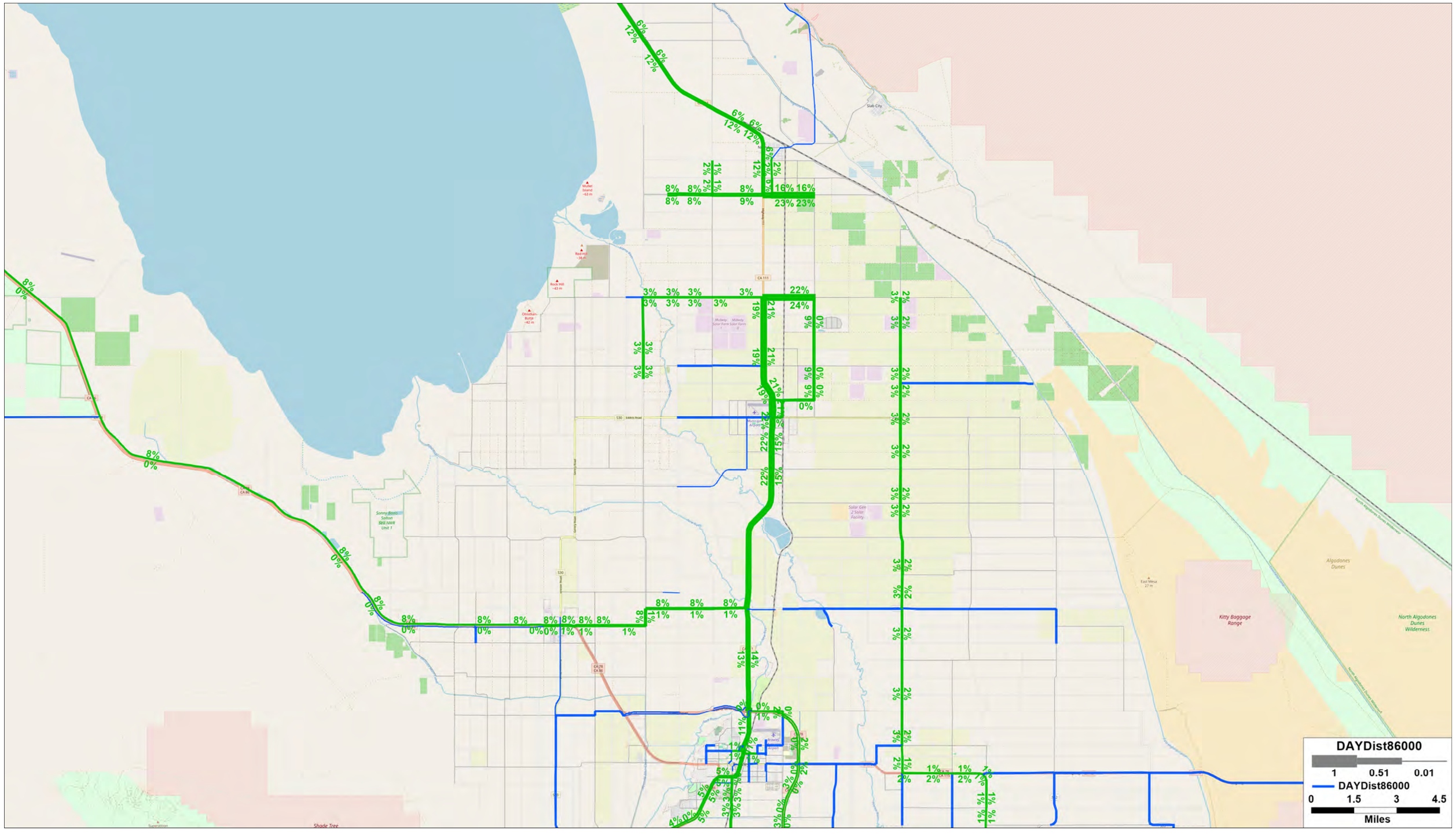

DAYDist86000
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0.51
0.01
DAYDist86000
0
1.5
3
4.5
Miles

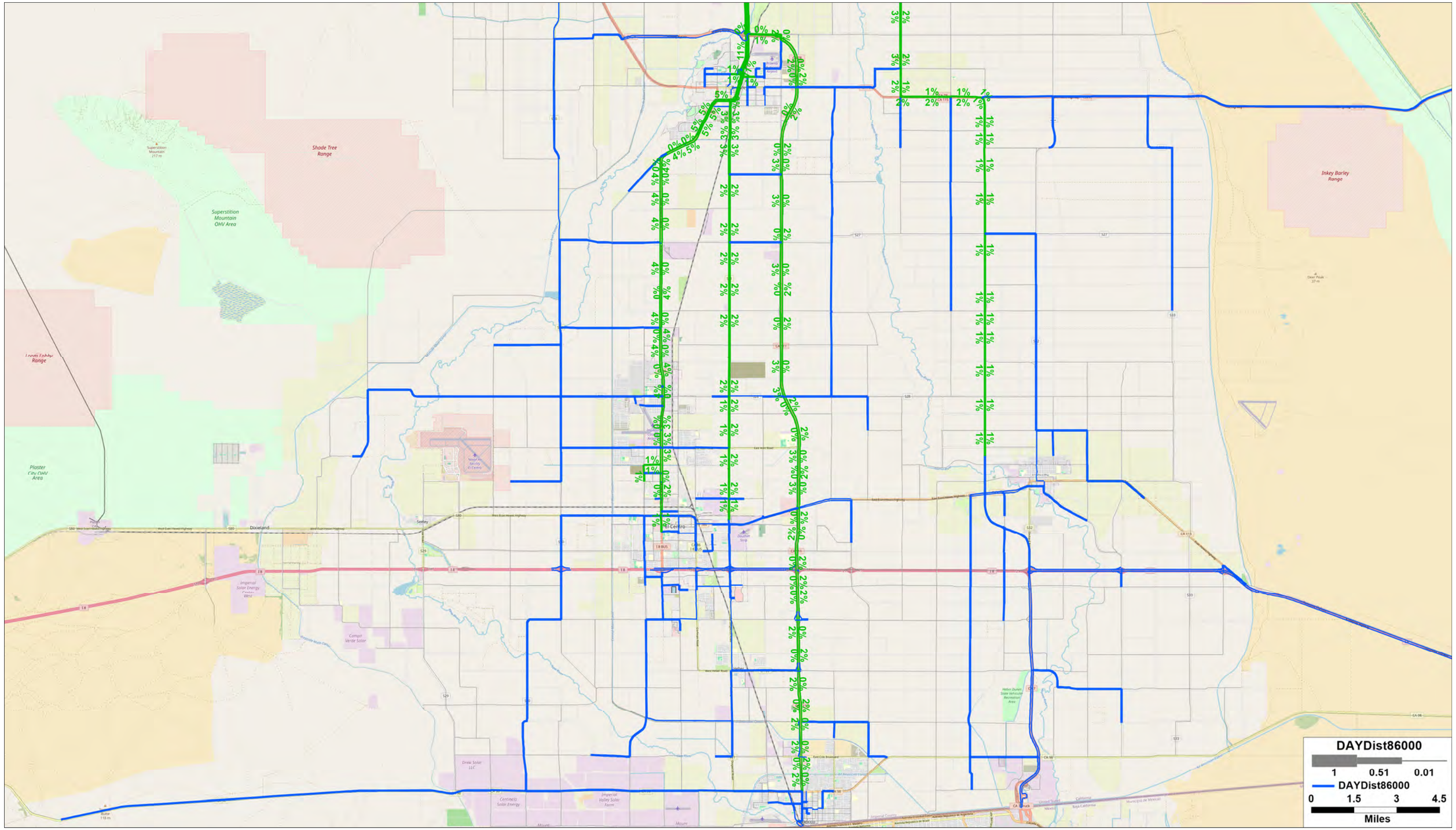
FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE


DAYDist13000
1
0.51
0.01
DAYDist13000
0
2.5
5
7.5
Miles
Ocotillo Wells Special Recreation Management Area
Fish Creek Mountains Wilderness
Shade Tree Range
Carrizo
Superstition
Kitty Baggage Range
North Algodones Dunes Wilderness
Inkey Barley Range
Slab City
Salton Sea Airport
Solar Gen 2 Solar Facility
Sonny Bono Salton Sea NWR Unit 1

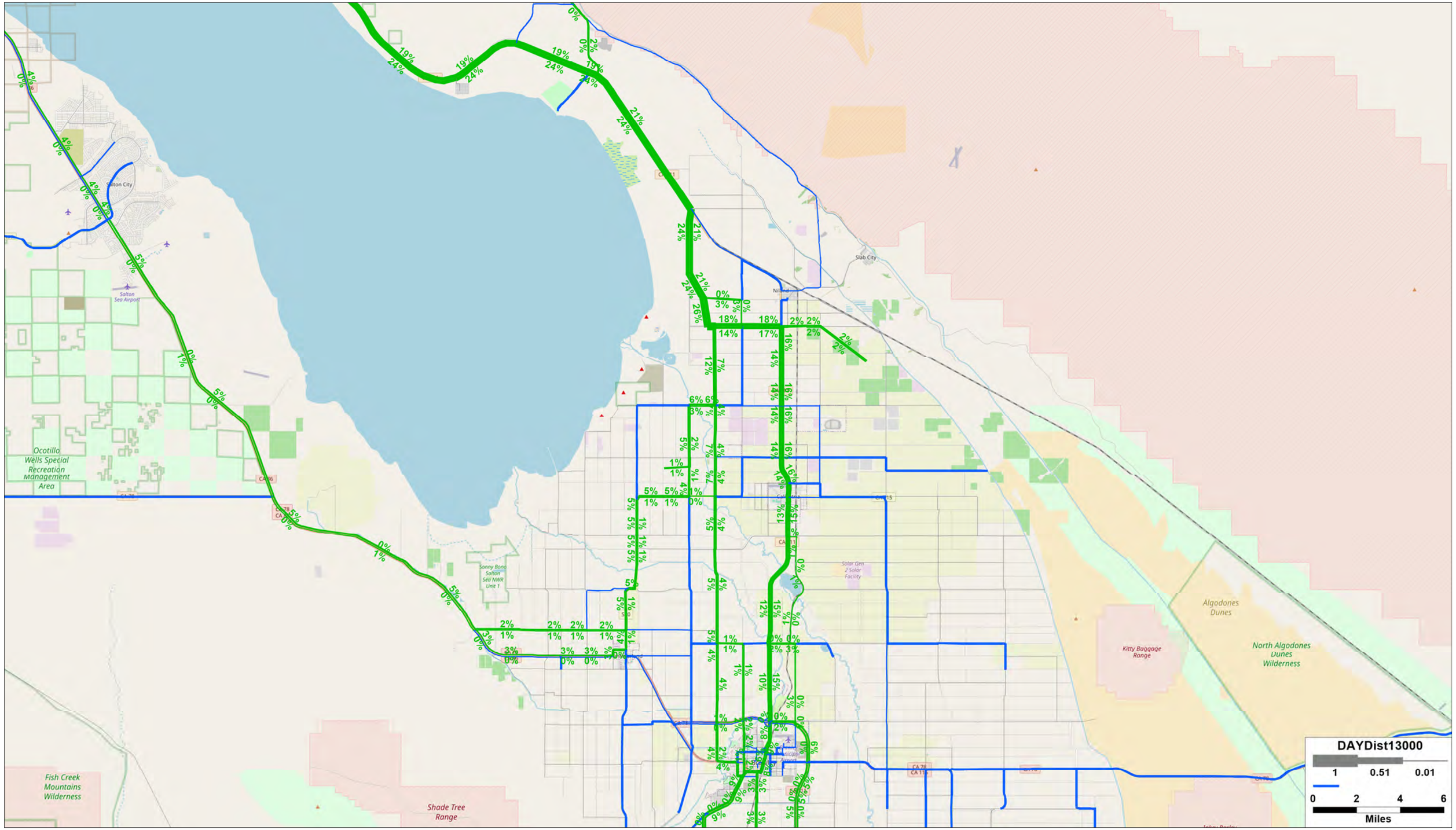

Ocotillo Wells Special Recreation Management Area
Sonny Bono Salton Sea NWR Unit 1
Solar Gen 2 Solar Facility
Algodones Dunes
Kitty Baggage Range
North Algodones Dunes Wilderness
U.S. Gypsum Quarry
Fish Creek Mountains Wilderness
Carrizo Impact Area
Shade Tree Range
Superstition Mountain OHV Area
Loom Lobby Range
Coyote Mountains Wilderness
Plaster City OHV Area
Dixieland
Seeley
Holtville
Compa Verde Solar
Drew Solar LLC
Centinela Solar Energy
Imperial Valley Solar Farm
Mount Signal Solar Farm
Westside Ranch
Jacumba Wilderness Area
CA 78
CA 98
CA 115
CA 7
S80
S32
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DAYDist13000
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2.5
5
7.5
Miles

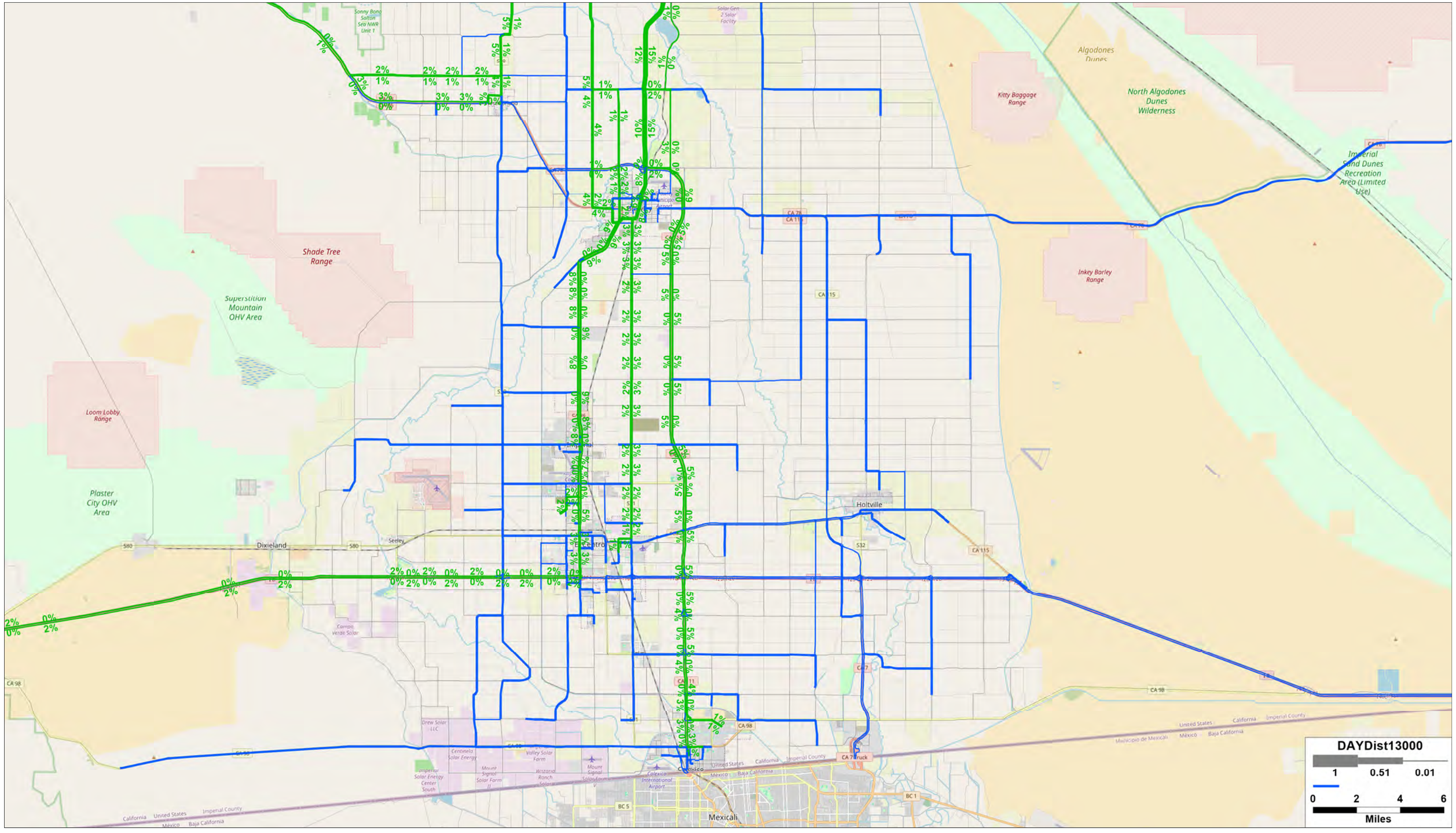

DAYDist16000
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0.01
DAYDist16000
0
2
4
6
Miles

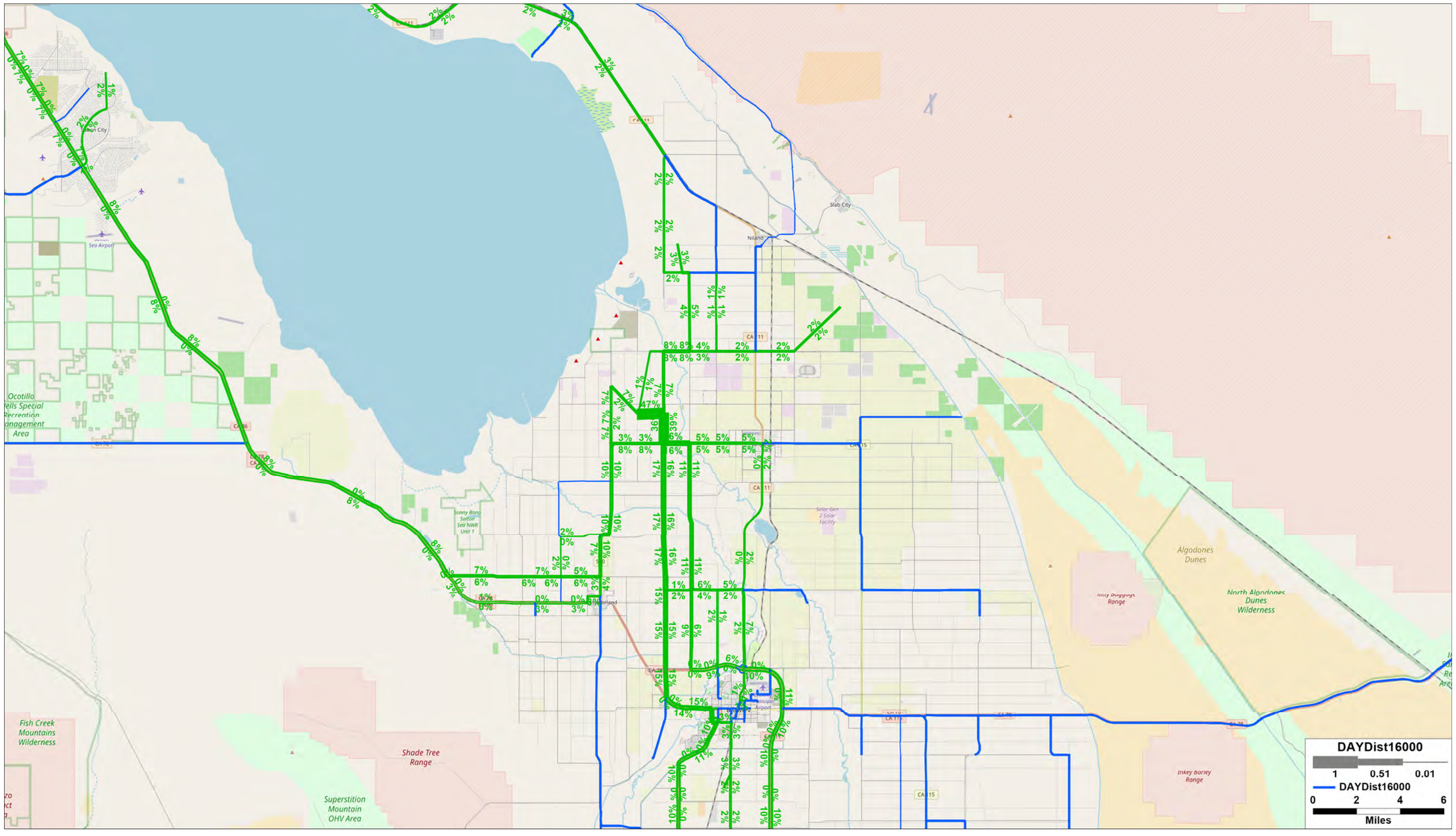

DAYDist86000
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0.51
0.01
DAYDist86000
0
1.5
3
4.5
Miles

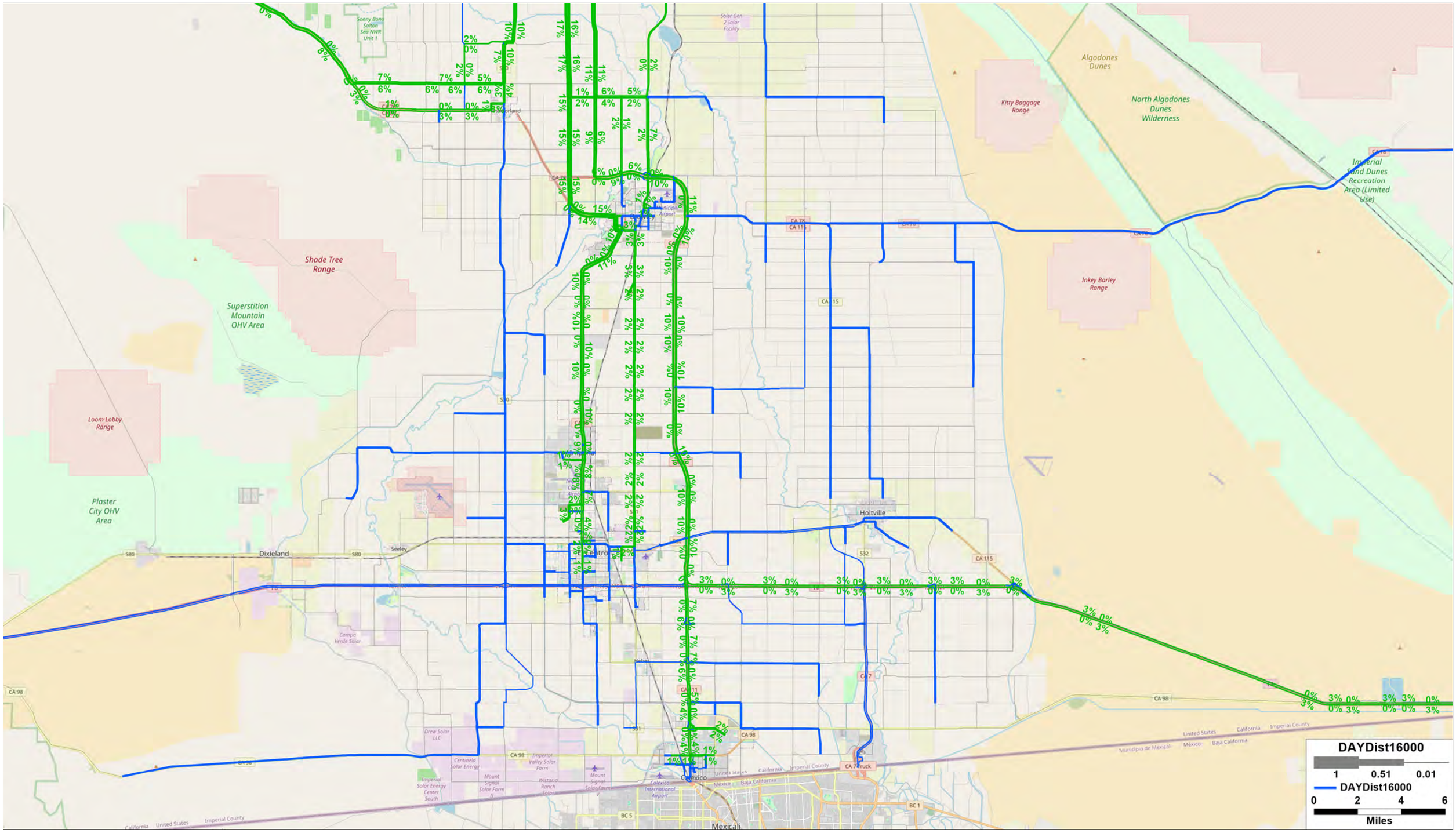

Shade Tree Range
Superstition Mountain OHV Area
Inkey Barley Range
Plaster City OHV Area
Dixieland
Sidney
El Centro
DAYDist86000
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0.01
DAYDist86000
0
1.5
3
4.5
Miles

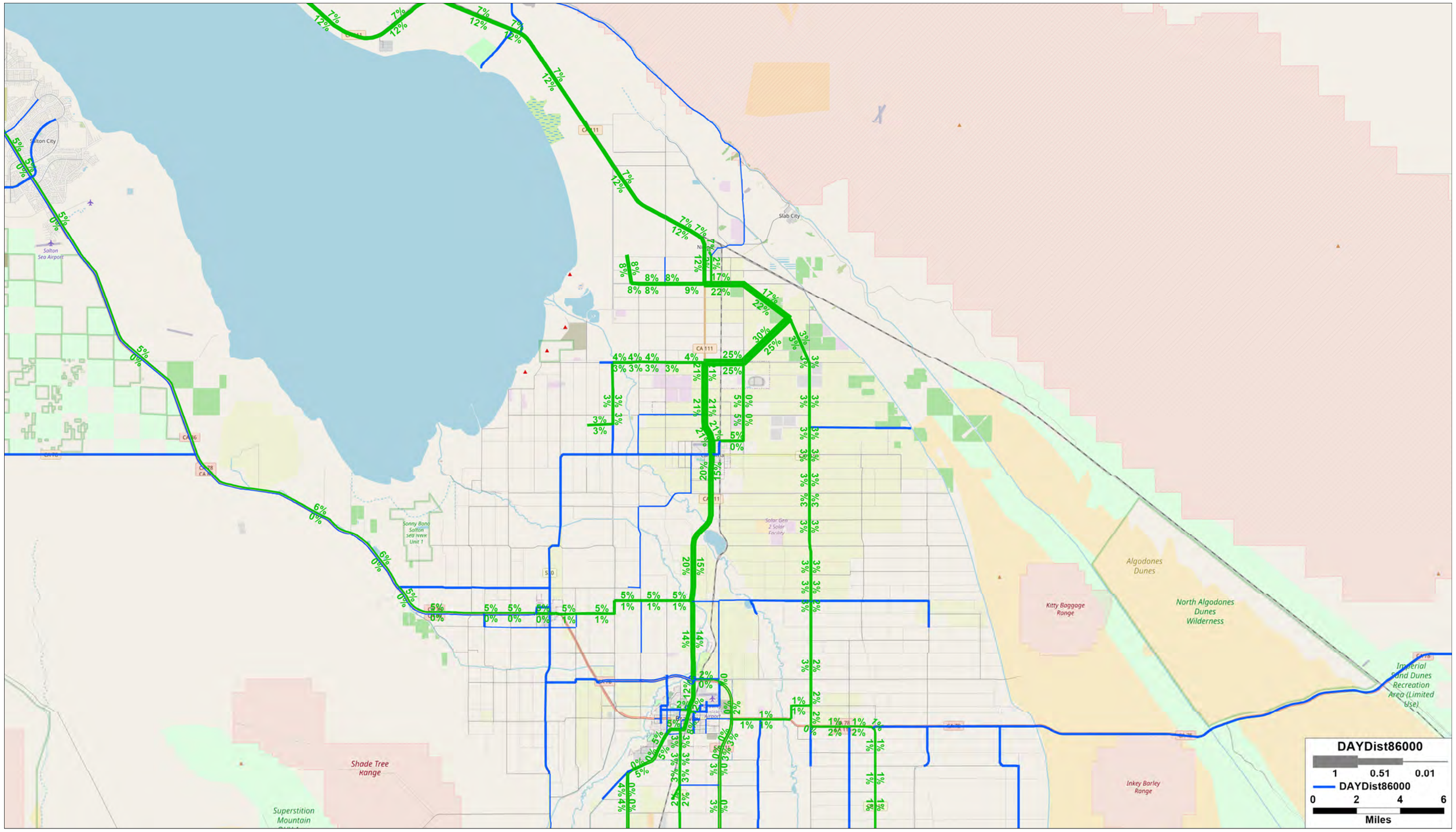
FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE

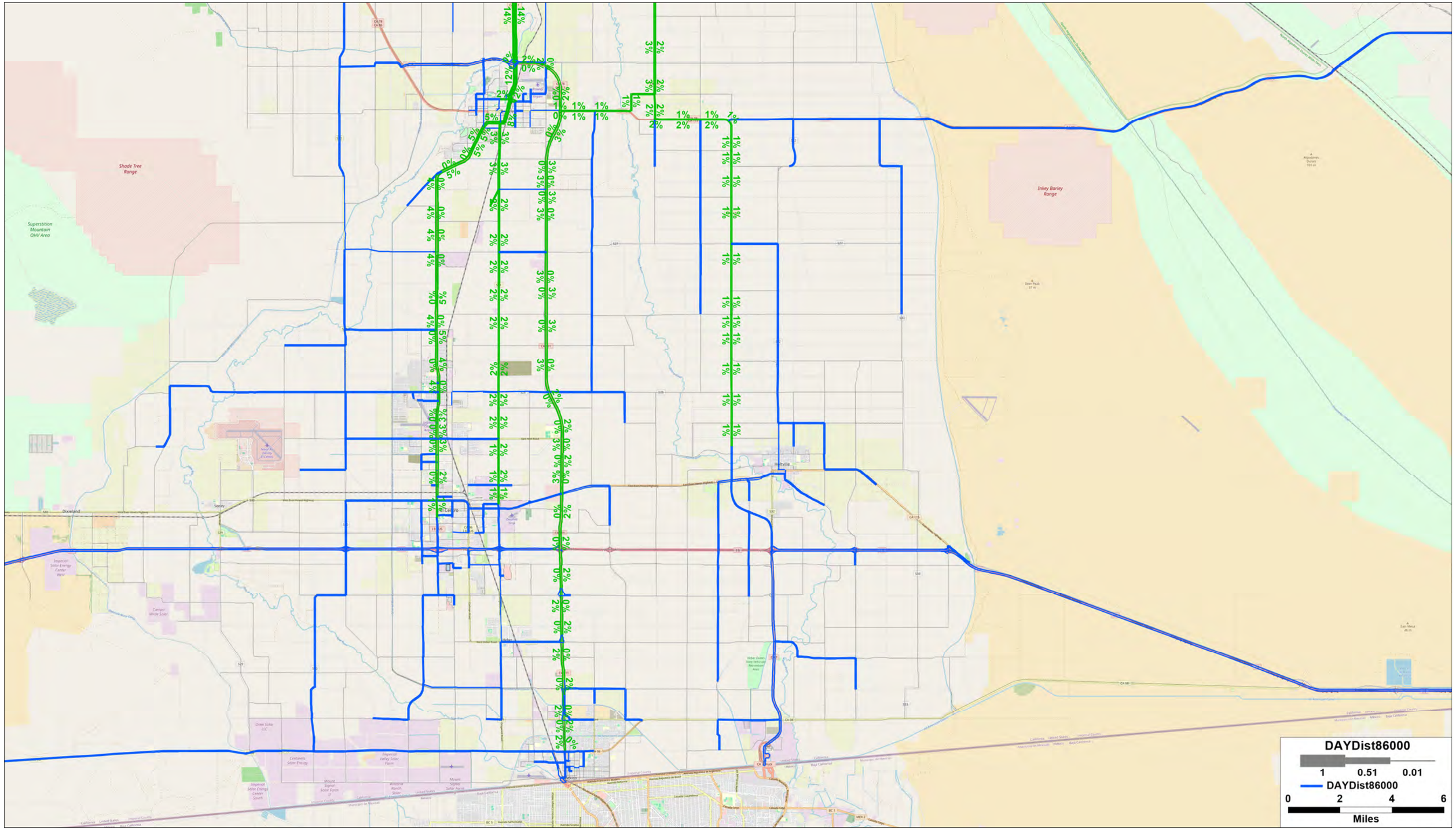

Salton City
Salton Sea Airport
Ocotillo Wells Special Recreation Management Area
Sonny Bono Salton Sea NWR Unit 1
Fish Creek Mountains Wilderness
Shade Tree Range
Slab City
Niland
Solar Gen 2 Solar Facility
Algodones Dunes
Kitty Baggage Range
North Algodones Dunes Wilderness
DAYDist13000
1
0.51
0.01
0
2
4
6
Miles


Sonny Bono Salton Sea NWR Unit 1
Solar Gen 2 Solar Facility
Algodones Dunes
Kitty Baggage Range
North Algodones Dunes Wilderness
Imperial Sand Dunes Recreation Area (Limited Use)
Shade Tree Range
Superstition Mountain OHV Area
Inkey Barley Range
Loom Lobby Range
Plaster City OHV Area
Dixieland
Seeley
Holtville
Campo Verde Solar
Drew Solar LLC
Centinela Solar Energy
Valley Solar Farm
Mount Signal Solar Farm II
Wistaria Ranch Solar
Mount Signal Solar Farm
Imperial Solar Energy Center South
Calexico International Airport
Mexicali
Municipio de Mexicali
United States
México
California
Baja California
Imperial County
CA 98
CA 115
CA 78
CA 111
CA 7
CA 7 Truck
BC 5
BC 1
580
532
DAYDist13000
1
0.51
0.01
0
2
4
6
Miles


Slab City
Niland
Ocotillo Wells Special Recreation Management Area
Sonny Bono Salton Sea NWR Unit 1
Solar Gen 2 Solar Facility
Algodones Dunes
North Algodones Dunes Wilderness
Fish Creek Mountains Wilderness
Shade Tree Range
Superstition Mountain OHV Area
Inkey Barley Range
DAYDist16000
1
0.51
0.01
DAYDist16000
0
2
4
6
Miles


Sonny Bono Salton Sea NWR Unit 1
Solar Gen 2 Solar Facility
Algodones Dunes
Kitty Baggage Range
North Algodones Dunes Wilderness
Imperial Sand Dunes Recreation Area (Limited Use)
Shade Tree Range
Superstition Mountain OHV Area
Inkey Barley Range
Loom Lobby Range
Plaster City OHV Area
Dixieland
Seeley
Holtville
Campo Verde Solar
Drew Solar LLC
Centinela Solar Energy
Imperial Valley Solar Farm
Mount Signal Solar Farm II
Mount Signal Solar Farm V
Imperial Solar Energy Center South
Wistaria Ranch Solar
Calexico International Airport
Calexico
Mexicali
United States
California
Imperial County
México
Baja California
Municipio de Mexicali
CA 98
CA 115
CA 78
CA 7
CA 86
CA 111
CA 186
CA 7 Truck
BC 5
BC 1
DAYDist16000
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DAYDist16000
0
2
4
6
Miles

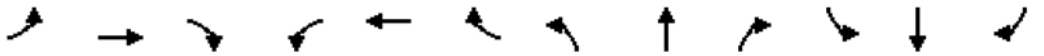

Salton City
Salton Sea Airport
Slab City
Sonny Bono Salton Sea NWR Unit 1
Solar Gen 2 Solar Facility
Algodones Dunes
Kitty Baggage Range
North Algodones Dunes Wilderness
Imperial Sand Dunes Recreation Area (Limited Use)
Shade Tree Range
Superstition Mountain
Inkey Barley Range
CA 111
DAYDist86000
1
0.51
0.01
DAYDist86000
0
2
4
6
Miles


DAYDist86000
1
0.51
0.01
DAYDist86000
0
2
4
6
Miles

APPENDIX C-6

INTERSECTION LOS ANALYSIS WORKSHEETS WITH RECOMMENDED IMPROVEMENTS

FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	139	5	75	140	237	7	566	88	169	507	38
Future Volume (veh/h)	33	139	5	75	140	237	7	566	88	169	507	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	36	151	5	82	152	258	8	615	96	184	551	41
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	46	191	202	110	204	471	18	761	369	224	1139	553
Arrive On Green	0.13	0.13	0.13	0.18	0.18	0.18	0.01	0.24	0.24	0.13	0.36	0.36
Sat Flow, veh/h	348	1460	1547	629	1166	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	187	0	5	234	0	258	8	615	96	184	551	41
Grp Sat Flow(s),veh/h/ln	1808	0	1547	1794	0	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	7.5	0.0	0.2	9.3	0.0	10.5	0.3	13.7	3.8	7.7	10.1	1.3
Cycle Q Clear(g_c), s	7.5	0.0	0.2	9.3	0.0	10.5	0.3	13.7	3.8	7.7	10.1	1.3
Prop In Lane	0.19		1.00	0.35		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	0	202	315	0	471	18	761	369	224	1139	553
V/C Ratio(X)	0.79	0.00	0.02	0.74	0.00	0.55	0.45	0.81	0.26	0.82	0.48	0.07
Avail Cap(c_a), veh/h	325	0	278	378	0	525	116	964	468	313	1325	643
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	0.0	28.4	29.4	0.0	21.8	36.9	27.0	23.2	31.8	18.7	15.9
Incr Delay (d2), s/veh	8.8	0.0	0.0	6.4	0.0	1.0	16.7	4.1	0.4	11.4	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(50%),veh/ln	3.6	0.0	0.1	4.2	0.0	3.4	0.2	5.0	1.3	3.6	3.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.4	0.0	28.5	35.7	0.0	22.8	53.7	31.1	23.6	43.3	19.1	16.0
LnGrp LOS	D		C	D		C	D	C	C	D	B	B
Approach Vol, veh/h		192			492			719			776	
Approach Delay, s/veh		40.1			28.9			30.3			24.6	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.2	24.9		16.3	5.3	33.8		19.7				
Change Period (Y+Rc), s	4.5	7.0		6.5	4.5	7.0		6.5				
Max Green Setting (Gmax), s	13.5	22.7		13.5	5.0	31.2		15.8				
Max Q Clear Time (g_c+I1), s	9.7	15.7		9.5	2.3	12.1		12.5				
Green Ext Time (p_c), s	0.2	2.2		0.3	0.0	3.2		0.7				

Intersection Summary			
HCM 7th Control Delay, s/veh		28.9	
HCM 7th LOS		C	



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	83	2	1	176	483	227
Future Volume (veh/h)	83	2	1	176	483	227
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	90	2	1	191	525	247
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	191	4	177	998	676	591
Arrive On Green	0.12	0.12	0.11	0.61	0.40	0.40
Sat Flow, veh/h	1611	36	1668	1633	1699	1485
Grp Volume(v), veh/h	93	0	1	191	525	247
Grp Sat Flow(s),veh/h/ln	1665	0	1668	1633	1699	1485
Q Serve(g_s), s	2.2	0.0	0.0	2.2	11.4	5.1
Cycle Q Clear(g_c), s	2.2	0.0	0.0	2.2	11.4	5.1
Prop In Lane	0.97	0.02	1.00			1.00
Lane Grp Cap(c), veh/h	198	0	177	998	676	591
V/C Ratio(X)	0.47	0.00	0.01	0.19	0.78	0.42
Avail Cap(c_a), veh/h	359	0	202	1531	1205	1053
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.3	0.0	16.8	3.6	11.1	9.2
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.1	2.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.1	2.7	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	19.1	0.0	16.9	3.7	13.0	9.6
LnGrp LOS	B		B	A	B	A
Approach Vol, veh/h	93			192	772	
Approach Delay, s/veh	19.1			3.8	11.9	
Approach LOS	B			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	32.6		9.5	9.0	23.7
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	39.5		9.1	5.1	29.9
Max Q Clear Time (g_c+I1), s	4.2		4.2	2.0	13.4
Green Ext Time (p_c), s	0.9		0.1	0.0	3.4

Intersection Summary	
HCM 7th Control Delay, s/veh	11.1
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	279	197	0	112	3	71	0	0	6	0	1
Future Volume (veh/h)	4	279	197	0	112	3	71	0	0	6	0	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	4	303	240	0	122	3	77	0	0	7	0	1
Peak Hour Factor	0.92	0.92	0.82	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	578	809	736	515	529	13	361	0	0	337	11	18
Arrive On Green	0.01	0.50	0.50	0.00	0.33	0.33	0.08	0.00	0.00	0.08	0.00	0.08
Sat Flow, veh/h	1668	1633	1485	1668	1587	39	1434	0	0	1324	125	207
Grp Volume(v), veh/h	4	303	240	0	0	125	77	0	0	8	0	0
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	0	1626	1434	0	0	1656	0	0
Q Serve(g_s), s	0.0	3.4	2.9	0.0	0.0	1.7	1.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.4	2.9	0.0	0.0	1.7	1.5	0.0	0.0	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.02	1.00		0.00	0.87		0.12
Lane Grp Cap(c), veh/h	578	809	736	515	0	542	361	0	0	365	0	0
V/C Ratio(X)	0.01	0.37	0.33	0.00	0.00	0.23	0.21	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	864	1492	1356	787	0	1469	728	0	0	737	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	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.5	4.7	4.6	0.0	0.0	7.2	13.3	0.0	0.0	12.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.0	0.0	0.2	0.3	0.0	0.0	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(50%),veh/ln	0.0	0.1	0.1	0.0	0.0	0.2	0.3	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.5	5.0	4.8	0.0	0.0	7.4	13.6	0.0	0.0	12.6	0.0	0.0
LnGrp LOS	A	A	A			A	B			B		
Approach Vol, veh/h		547			125			77			8	
Approach Delay, s/veh		4.9			7.4			13.6			12.6	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	21.8		8.2	4.9	16.9		8.2				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.3	27.4		10.3	5.3	27.1		10.3				
Max Q Clear Time (g_c+I1), s	0.0	5.4		2.1	2.0	3.7		3.5				
Green Ext Time (p_c), s	0.0	2.3		0.0	0.0	0.5		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	6.3
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	77	0	0	0	126	143	0	0	263	109
Future Volume (veh/h)	40	0	77	0	0	0	126	143	0	0	263	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1633	1752	1752	1633	1752
Adj Flow Rate, veh/h	43	0	84	0	0	0	137	155	0	0	286	118
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, %	10	10	10	10	10	10	10	18	10	10	18	10
Cap, veh/h	379	0	152	209	179	0	514	870	0	548	474	431
Arrive On Green	0.10	0.00	0.10	0.00	0.00	0.00	0.11	0.53	0.00	0.00	0.29	0.29
Sat Flow, veh/h	1668	0	1485	1231	1752	0	1668	1633	0	1668	1633	1485
Grp Volume(v), veh/h	43	0	84	0	0	0	137	155	0	0	286	118
Grp Sat Flow(s),veh/h/ln	1668	0	1485	1231	1752	0	1668	1633	0	1668	1633	1485
Q Serve(g_s), s	0.8	0.0	1.9	0.0	0.0	0.0	1.7	1.7	0.0	0.0	5.2	2.1
Cycle Q Clear(g_c), s	0.8	0.0	1.9	0.0	0.0	0.0	1.7	1.7	0.0	0.0	5.2	2.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	379	0	152	209	179	0	514	870	0	548	474	431
V/C Ratio(X)	0.11	0.00	0.55	0.00	0.00	0.00	0.27	0.18	0.00	0.00	0.60	0.27
Avail Cap(c_a), veh/h	611	0	357	380	422	0	690	1393	0	786	1284	1167
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	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	14.7	0.0	0.0	0.0	6.5	4.2	0.0	0.0	10.5	9.4
Incr Delay (d2), s/veh	0.1	0.0	3.1	0.0	0.0	0.0	0.3	0.1	0.0	0.0	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(50%),veh/ln	0.2	0.0	0.6	0.0	0.0	0.0	0.2	0.1	0.0	0.0	1.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.4	0.0	17.9	0.0	0.0	0.0	6.8	4.3	0.0	0.0	11.8	9.8
LnGrp LOS	B		B				A	A			B	A
Approach Vol, veh/h		127			0			292			404	
Approach Delay, s/veh		16.7			0.0			5.4			11.2	
Approach LOS		B						A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	25.3		9.2	8.4	16.9		9.2
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	5.3	29.4		8.3	7.3	27.1		8.3
Max Q Clear Time (g_c+I1), s	10.0	3.7		3.9	3.7	7.2		0.0
Green Ext Time (p_c), s	0.0	0.7		0.2	0.1	1.7		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.0
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	7	192	57	1	8	353	300	69	37	184	83
Future Volume (veh/h)	96	7	192	57	1	8	353	300	69	37	184	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	104	8	209	62	1	9	384	326	75	40	200	90
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	375	292	567	341	25	226	651	697	590	445	397	336
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.22	0.40	0.40	0.04	0.23	0.23
Sat Flow, veh/h	1316	1752	1485	1090	151	1357	1668	1752	1485	1668	1752	1485
Grp Volume(v), veh/h	104	8	209	62	0	10	384	326	75	40	200	90
Grp Sat Flow(s),veh/h/ln	1316	1752	1485	1090	0	1508	1668	1752	1485	1668	1752	1485
Q Serve(g_s), s	3.2	0.2	4.5	2.2	0.0	0.2	6.8	6.1	1.4	0.8	4.4	2.2
Cycle Q Clear(g_c), s	3.4	0.2	4.5	2.4	0.0	0.2	6.8	6.1	1.4	0.8	4.4	2.2
Prop In Lane	1.00		1.00	1.00		0.90	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	375	292	567	341	0	251	651	697	590	445	397	336
V/C Ratio(X)	0.28	0.03	0.37	0.18	0.00	0.04	0.59	0.47	0.13	0.09	0.50	0.27
Avail Cap(c_a), veh/h	960	1071	1227	826	0	922	984	1611	1365	565	1087	921
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	16.9	15.4	9.8	16.4	0.0	15.4	8.3	9.8	8.4	12.0	14.9	14.1
Incr Delay (d2), s/veh	0.4	0.0	0.4	0.3	0.0	0.1	0.9	0.5	0.1	0.1	1.0	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(50%),veh/ln	0.7	0.1	0.9	0.4	0.0	0.1	1.3	1.4	0.3	0.2	1.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.3	15.4	10.2	16.7	0.0	15.5	9.1	10.3	8.5	12.1	15.9	14.5
LnGrp LOS	B	B	B	B		B	A	B	A	B	B	B
Approach Vol, veh/h		321			72			785			330	
Approach Delay, s/veh		12.6			16.5			9.6			15.1	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	24.5		13.1	14.2	16.9		13.1				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.1	40.6		27.0	18.3	27.4		27.0				
Max Q Clear Time (g_c+I1), s	2.8	8.1		6.5	8.8	6.4		4.4				
Green Ext Time (p_c), s	0.0	1.9		0.9	0.8	1.1		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	11.8
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	37	71	34	17	17	174	760	73	37	386	37
Future Volume (veh/h)	17	37	71	34	17	17	174	760	73	37	386	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	18	40	77	37	18	18	189	826	79	40	420	40
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	229	164	139	222	75	75	596	950	839	289	868	767
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.54	0.54	0.04	0.50	0.50
Sat Flow, veh/h	1340	1826	1547	1245	838	838	1739	1752	1547	1739	1752	1547
Grp Volume(v), veh/h	18	40	77	37	0	36	189	826	79	40	420	40
Grp Sat Flow(s),veh/h/ln	1340	1826	1547	1245	0	1675	1739	1752	1547	1739	1752	1547
Q Serve(g_s), s	0.7	1.1	2.5	1.5	0.0	1.1	2.7	21.7	1.3	0.6	8.4	0.7
Cycle Q Clear(g_c), s	1.7	1.1	2.5	2.6	0.0	1.1	2.7	21.7	1.3	0.6	8.4	0.7
Prop In Lane	1.00		1.00	1.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	229	164	139	222	0	150	596	950	839	289	868	767
V/C Ratio(X)	0.08	0.24	0.55	0.17	0.00	0.24	0.32	0.87	0.09	0.14	0.48	0.05
Avail Cap(c_a), veh/h	791	929	787	744	0	852	757	1344	1187	380	1192	1053
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	23.3	22.5	23.1	23.7	0.0	22.5	6.0	10.5	5.9	9.5	8.9	6.9
Incr Delay (d2), s/veh	0.1	0.8	3.4	0.3	0.0	0.8	0.3	4.6	0.0	0.2	0.4	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(50%),veh/ln	0.2	0.4	0.9	0.4	0.0	0.4	0.5	5.5	0.2	0.1	2.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.4	23.2	26.5	24.0	0.0	23.3	6.3	15.2	5.9	9.7	9.3	7.0
LnGrp LOS	C	C	C	C		C	A	B	A	A	A	A
Approach Vol, veh/h		135			73			1094			500	
Approach Delay, s/veh		25.1			23.7			13.0			9.1	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	35.7		10.5	9.4	33.2		10.5
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	5.3	40.7		27.0	9.6	36.1		27.0
Max Q Clear Time (g_c+I1), s	2.6	23.7		4.5	4.7	10.4		4.6
Green Ext Time (p_c), s	0.0	5.1		0.4	0.2	2.3		0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	13.2
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	113	81	60	123	112	164	854	122	66	369	73
Future Volume (veh/h)	135	113	81	60	123	112	164	854	122	66	369	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	147	123	88	65	134	122	178	928	133	72	401	79
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, %	8	8	8	8	8	8	7	7	7	5	5	5
Cap, veh/h	325	303	255	323	259	218	173	1225	176	98	1053	206
Arrive On Green	0.08	0.17	0.17	0.05	0.15	0.15	0.10	0.41	0.41	0.06	0.36	0.36
Sat Flow, veh/h	1697	1781	1502	1697	1781	1500	1711	2994	429	1739	2891	564
Grp Volume(v), veh/h	147	123	88	65	134	122	178	529	532	72	239	241
Grp Sat Flow(s),veh/h/ln	1697	1781	1502	1697	1781	1500	1711	1706	1716	1739	1735	1720
Q Serve(g_s), s	4.7	4.0	3.3	2.1	4.5	4.9	6.5	17.1	17.1	2.6	6.5	6.6
Cycle Q Clear(g_c), s	4.7	4.0	3.3	2.1	4.5	4.9	6.5	17.1	17.1	2.6	6.5	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.33
Lane Grp Cap(c), veh/h	325	303	255	323	259	218	173	698	702	98	632	627
V/C Ratio(X)	0.45	0.41	0.34	0.20	0.52	0.56	1.03	0.76	0.76	0.74	0.38	0.38
Avail Cap(c_a), veh/h	325	942	794	364	942	794	173	951	956	141	931	924
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	21.4	23.8	23.5	21.5	25.4	25.5	28.9	16.3	16.3	29.9	15.1	15.1
Incr Delay (d2), s/veh	1.0	0.9	0.8	0.3	1.6	2.2	76.2	2.4	2.4	11.0	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(50%),veh/ln	1.9	1.7	1.1	0.8	1.9	1.7	6.1	6.0	6.0	1.3	2.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.4	24.7	24.3	21.8	27.0	27.8	105.1	18.7	18.7	40.8	15.4	15.5
LnGrp LOS	C	C	C	C	C	C	F	B	B	D	B	B
Approach Vol, veh/h		358			321			1239			552	
Approach Delay, s/veh		23.6			26.2			31.1			18.8	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	31.8	7.9	16.4	11.0	28.9	9.5	14.9
Change Period (Y+Rc), s	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5
Max Green Setting (Gmax), s	5.3	35.8	5.0	34.0	6.5	34.5	5.0	34.0
Max Q Clear Time (g_c+I1), s	4.6	19.1	4.1	6.0	8.5	8.6	6.7	6.9
Green Ext Time (p_c), s	0.0	6.2	0.0	1.0	0.0	2.8	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	26.6
HCM 7th 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												
Traffic Volume (veh/h)	0	422	0	21	361	179	1	53	31	68	22	1
Future Volume (veh/h)	0	422	0	21	361	179	1	53	31	68	22	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	0	459	0	23	392	195	1	58	34	74	24	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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	4	680	385	46	1054	596	90	415	431	163	31	431
Arrive On Green	0.00	0.26	0.00	0.03	0.40	0.40	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	1	1428	1485	31	106	1485
Grp Volume(v), veh/h	0	459	0	23	392	195	59	0	34	98	0	1
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1428	0	1485	137	0	1485
Q Serve(g_s), s	0.0	6.4	0.0	0.6	4.3	3.7	0.1	0.0	0.7	0.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.4	0.0	0.6	4.3	3.7	11.7	0.0	0.7	11.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	0.76		1.00
Lane Grp Cap(c), veh/h	4	680	385	46	1054	596	504	0	431	194	0	431
V/C Ratio(X)	0.00	0.67	0.00	0.50	0.37	0.33	0.12	0.00	0.08	0.50	0.00	0.00
Avail Cap(c_a), veh/h	204	1481	838	257	1565	885	564	0	482	240	0	482
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	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	13.6	0.0	19.6	8.6	8.4	10.7	0.0	10.5	17.2	0.0	10.3
Incr Delay (d2), s/veh	0.0	1.2	0.0	8.0	0.2	0.3	0.1	0.0	0.1	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(50%),veh/ln	0.0	1.3	0.0	0.3	0.7	0.7	0.3	0.0	0.1	0.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	14.8	0.0	27.6	8.8	8.7	10.8	0.0	10.6	19.2	0.0	10.3
LnGrp LOS		B		C	A	A	B		B	B		B
Approach Vol, veh/h		459			610			93			99	
Approach Delay, s/veh		14.8			9.5			10.8			19.1	
Approach LOS		B			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	17.6		17.8	0.0	23.4		17.8				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	6.3	23.1		13.3	5.0	24.4		13.3				
Max Q Clear Time (g_c+I1), s	2.6	8.4		13.9	0.0	6.3		13.7				
Green Ext Time (p_c), s	0.0	2.3		0.0	0.0	2.7		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	473	1	33	1	16	11	98	560	4	6	488	19
Future Volume (veh/h)	473	1	33	1	16	11	98	560	4	6	488	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	514	1	36	1	17	12	107	609	4	7	530	21
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	582	576	488	154	115	97	136	837	709	30	1352	53
Arrive On Green	0.26	0.32	0.32	0.00	0.06	0.06	0.16	0.92	0.92	0.02	0.40	0.40
Sat Flow, veh/h	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	3374	134
Grp Volume(v), veh/h	514	1	36	1	17	12	107	609	4	7	270	281
Grp Sat Flow(s),veh/h/ln	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	1721	1787
Q Serve(g_s), s	28.3	0.0	1.8	0.1	1.0	0.8	6.6	8.6	0.0	0.4	12.3	12.3
Cycle Q Clear(g_c), s	28.3	0.0	1.8	0.1	1.0	0.8	6.6	8.6	0.0	0.4	12.3	12.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	582	576	488	154	115	97	136	837	709	30	689	716
V/C Ratio(X)	0.88	0.00	0.07	0.01	0.15	0.12	0.79	0.73	0.01	0.23	0.39	0.39
Avail Cap(c_a), veh/h	582	576	488	291	132	112	215	837	709	157	689	716
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	1.00	1.00	1.00	1.00	1.00	0.68	0.68	0.68	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	25.6	26.2	48.0	48.7	48.6	45.5	2.6	2.3	53.3	23.4	23.4
Incr Delay (d2), s/veh	14.9	0.0	0.1	0.0	0.6	0.6	6.8	3.8	0.0	3.8	1.7	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(50%),veh/ln	14.2	0.0	0.6	0.0	0.4	0.3	2.8	2.0	0.0	0.2	4.9	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	49.5	25.6	26.2	48.0	49.3	49.2	52.2	6.4	2.3	57.2	25.1	25.1
LnGrp LOS	D	C	C	D	D	D	D	A	A	E	C	C
Approach Vol, veh/h		551			30			720			558	
Approach Delay, s/veh		47.9			49.2			13.2			25.5	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	58.3	5.0	40.1	13.4	51.6	33.0	12.1
Change Period (Y+Rc), s	4.7	7.5	4.7	5.1	4.7	7.5	4.7	5.1
Max Green Setting (Gmax), s	10.6	41.7	9.0	27.3	13.7	38.0	28.3	8.0
Max Q Clear Time (g_c+I1), s	2.4	10.6	2.1	3.8	8.6	14.3	30.3	3.0
Green Ext Time (p_c), s	0.0	3.7	0.0	0.1	0.1	2.8	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	27.8
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	305	145	285	321	48	262	201	479	55	219	19
Future Volume (veh/h)	27	305	145	285	321	48	262	201	479	55	219	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	29	332	158	310	349	52	285	218	521	60	238	21
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	82	391	482	392	440	65	446	602	690	380	484	43
Arrive On Green	0.05	0.21	0.21	0.12	0.28	0.28	0.10	0.33	0.33	0.07	0.29	0.29
Sat Flow, veh/h	1739	1826	1547	3374	1553	231	1739	1826	1547	1739	1654	146
Grp Volume(v), veh/h	29	332	158	310	0	401	285	218	521	60	0	259
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1687	0	1784	1739	1826	1547	1739	0	1800
Q Serve(g_s), s	1.3	14.5	6.5	7.4	0.0	17.2	8.1	7.5	23.3	1.9	0.0	9.9
Cycle Q Clear(g_c), s	1.3	14.5	6.5	7.4	0.0	17.2	8.1	7.5	23.3	1.9	0.0	9.9
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	82	391	482	392	0	505	446	602	690	380	0	526
V/C Ratio(X)	0.35	0.85	0.33	0.79	0.00	0.79	0.64	0.36	0.75	0.16	0.00	0.49
Avail Cap(c_a), veh/h	168	782	814	460	0	850	446	727	795	423	0	729
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	0.00	1.00
Uniform Delay (d), s/veh	38.3	31.3	21.9	35.7	0.0	27.5	20.8	21.1	19.2	17.5	0.0	24.2
Incr Delay (d2), s/veh	2.6	5.2	0.4	7.9	0.0	2.9	3.0	0.4	3.6	0.2	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(50%),veh/ln	0.6	6.7	2.3	3.4	0.0	7.5	4.0	3.1	8.1	0.7	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.9	36.5	22.3	43.5	0.0	30.4	23.8	21.5	22.7	17.7	0.0	25.0
LnGrp LOS	D	D	C	D		C	C	C	C	B		C
Approach Vol, veh/h		519			711			1024			319	
Approach Delay, s/veh		32.4			36.1			22.8			23.6	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	24.1	13.8	30.7	8.6	29.9	10.7	33.8
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	11.3	35.5	8.1	* 34	8.0	* 40	8.0	33.0
Max Q Clear Time (g_c+I1), s	9.4	16.5	10.1	11.9	3.3	19.2	3.9	25.3
Green Ext Time (p_c), s	0.2	1.3	0.0	1.5	0.0	2.5	0.0	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	28.5
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	112	140	232	55	151	100	115	802	49	79	934	52
Future Volume (veh/h)	112	140	232	55	151	100	115	802	49	79	934	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	122	152	252	60	164	109	125	872	53	86	1015	57
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	266	392	332	255	392	332	160	1439	87	110	1325	74
Arrive On Green	0.00	0.21	0.21	0.00	0.21	0.21	0.09	0.43	0.43	0.06	0.40	0.40
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3322	202	1739	3339	188
Grp Volume(v), veh/h	122	152	252	60	164	109	125	455	470	86	527	545
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1735	1790	1739	1735	1792
Q Serve(g_s), s	0.1	4.5	9.6	0.1	4.9	3.7	4.4	12.6	12.6	3.1	16.5	16.5
Cycle Q Clear(g_c), s	0.1	4.5	9.6	0.1	4.9	3.7	4.4	12.6	12.6	3.1	16.5	16.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.10
Lane Grp Cap(c), veh/h	266	392	332	255	392	332	160	751	775	110	688	711
V/C Ratio(X)	0.46	0.39	0.76	0.24	0.42	0.33	0.78	0.61	0.61	0.78	0.77	0.77
Avail Cap(c_a), veh/h	541	1253	1062	530	1253	1062	275	1074	1108	261	1046	1081
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	26.1	21.1	23.1	24.2	21.2	20.8	27.8	13.6	13.6	28.9	16.4	16.4
Incr Delay (d2), s/veh	1.2	0.6	3.6	0.5	0.7	0.6	8.1	0.8	0.8	11.3	1.9	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(50%),veh/ln	1.7	1.9	3.6	0.8	2.1	1.3	2.0	4.1	4.2	1.5	5.6	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.3	21.7	26.6	24.7	21.9	21.4	35.9	14.4	14.4	40.2	18.3	18.2
LnGrp LOS	C	C	C	C	C	C	D	B	B	D	B	B
Approach Vol, veh/h		526			333			1050			1158	
Approach Delay, s/veh		25.4			22.2			17.0			19.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	34.3	0.0	19.1	11.5	32.1	0.0	19.1
Change Period (Y+Rc), s	5.2	7.2	5.7	5.7	5.7	7.2	5.7	5.7
Max Green Setting (Gmax), s	4.0	38.8	10.0	43.0	9.9	37.8	10.0	43.0
Max Q Clear Time (g_c+I1), s	5.1	14.6	0.0	11.6	6.4	18.5	0.0	6.9
Green Ext Time (p_c), s	0.1	5.7	0.0	1.9	0.1	6.3	0.0	1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	20.1
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	304	54	173	335	157	70	641	112	156	906	386
Future Volume (veh/h)	266	304	54	173	335	157	70	641	112	156	906	386
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	289	330	59	188	364	171	76	697	122	170	985	420
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	322	660	117	362	462	214	96	1177	525	198	1381	810
Arrive On Green	0.13	0.22	0.22	0.10	0.20	0.20	0.06	0.34	0.34	0.11	0.40	0.40
Sat Flow, veh/h	1739	2946	521	1739	2304	1065	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	289	193	196	188	273	262	76	697	122	170	985	420
Grp Sat Flow(s),veh/h/ln	1739	1735	1732	1739	1735	1634	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	14.3	11.0	11.3	9.6	17.0	17.4	4.9	18.9	6.4	10.9	27.2	20.2
Cycle Q Clear(g_c), s	14.3	11.0	11.3	9.6	17.0	17.4	4.9	18.9	6.4	10.9	27.2	20.2
Prop In Lane	1.00		0.30	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	322	389	388	362	348	328	96	1177	525	198	1381	810
V/C Ratio(X)	0.90	0.50	0.51	0.52	0.78	0.80	0.79	0.59	0.23	0.86	0.71	0.52
Avail Cap(c_a), veh/h	322	684	683	374	655	617	112	1177	525	234	1381	810
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	33.9	38.5	38.6	31.4	43.1	43.3	53.1	31.1	27.0	49.5	28.8	17.7
Incr Delay (d2), s/veh	26.1	1.0	1.0	1.2	3.9	4.5	27.4	2.2	1.0	23.1	3.2	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(50%),veh/ln	8.7	4.8	4.9	4.1	7.6	7.4	2.9	8.2	2.5	6.0	11.7	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.9	39.5	39.7	32.6	47.0	47.8	80.5	33.3	28.0	72.6	32.0	20.1
LnGrp LOS	E	D	D	C	D	D	F	C	C	E	C	C
Approach Vol, veh/h		678			723			895			1575	
Approach Delay, s/veh		48.3			43.6			36.6			33.2	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	45.8	17.3	32.0	12.0	52.5	20.0	29.3
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	15.3	37.3	12.4	44.9	7.3	45.3	14.3	43.0
Max Q Clear Time (g_c+I1), s	12.9	20.9	11.6	13.3	6.9	29.2	16.3	19.4
Green Ext Time (p_c), s	0.1	4.8	0.0	2.5	0.0	8.0	0.0	3.4

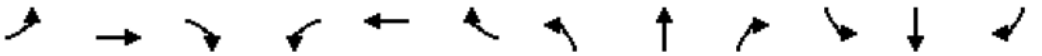
Intersection Summary	
HCM 7th Control Delay, s/veh	38.6
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	31	3	533	22	50	11	430	613	32	259	61
Future Volume (veh/h)	27	31	3	533	22	50	11	430	613	32	259	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	29	34	3	579	24	54	12	467	666	35	282	66
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	212	202	18	719	527	446	46	808	807	270	1256	749
Arrive On Green	0.12	0.12	0.12	0.28	0.28	0.28	0.03	0.23	0.23	0.15	0.36	0.36
Sat Flow, veh/h	1767	1681	148	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	29	0	37	579	24	54	12	467	666	35	282	66
Grp Sat Flow(s),veh/h/ln	1767	0	1829	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	1.3	0.0	1.7	25.6	0.9	2.3	0.6	10.8	21.0	1.6	5.1	2.1
Cycle Q Clear(g_c), s	1.3	0.0	1.7	25.6	0.9	2.3	0.6	10.8	21.0	1.6	5.1	2.1
Prop In Lane	1.00		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	0	220	719	527	446	46	808	807	270	1256	749
V/C Ratio(X)	0.14	0.00	0.17	0.81	0.05	0.12	0.26	0.58	0.83	0.13	0.22	0.09
Avail Cap(c_a), veh/h	212	0	787	719	1102	934	174	808	807	270	1256	749
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	0.0	36.2	22.6	23.8	24.3	43.8	31.4	18.8	33.5	20.6	13.1
Incr Delay (d2), s/veh	0.3	0.0	0.4	6.7	0.0	0.1	3.0	1.0	7.0	0.2	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(50%),veh/ln	0.6	0.0	0.7	11.2	0.4	0.9	0.3	4.6	12.3	0.7	2.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.3	0.0	36.6	29.3	23.8	24.4	46.8	32.4	25.9	33.7	20.7	13.2
LnGrp LOS	D		D	C	C	C	D	C	C	C	C	B
Approach Vol, veh/h		66			657			1145			383	
Approach Delay, s/veh		36.5			28.7			28.7			20.6	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.0	16.0	7.0	37.6	16.0	31.0	18.6	26.0
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	26.0	39.4	9.0	26.0	11.0	54.4	14.0	21.0
Max Q Clear Time (g_c+I1), s	27.6	3.7	2.6	7.1	3.3	4.3	3.6	23.0
Green Ext Time (p_c), s	0.0	0.1	0.0	1.8	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	27.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	199	8	124	159	226	4	501	81	180	649	35
Future Volume (veh/h)	32	199	8	124	159	226	4	501	81	180	649	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	35	216	9	135	173	246	4	545	88	196	705	38
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	42	259	257	164	211	533	97	689	334	234	940	456
Arrive On Green	0.17	0.17	0.17	0.21	0.21	0.21	0.06	0.22	0.22	0.13	0.29	0.29
Sat Flow, veh/h	253	1560	1547	783	1004	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	251	0	9	308	0	246	4	545	88	196	705	38
Grp Sat Flow(s),veh/h/ln	1813	0	1547	1787	0	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	12.0	0.0	0.4	14.7	0.0	11.1	0.2	14.5	4.2	9.8	17.9	1.6
Cycle Q Clear(g_c), s	12.0	0.0	0.4	14.7	0.0	11.1	0.2	14.5	4.2	9.8	17.9	1.6
Prop In Lane	0.14		1.00	0.44		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	301	0	257	375	0	533	97	689	334	234	940	456
V/C Ratio(X)	0.83	0.00	0.04	0.82	0.00	0.46	0.04	0.79	0.26	0.84	0.75	0.08
Avail Cap(c_a), veh/h	496	0	423	608	0	735	97	1068	518	398	1619	786
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	0.0	31.3	33.8	0.0	22.9	40.0	33.2	29.2	37.8	28.6	22.8
Incr Delay (d2), s/veh	6.3	0.0	0.1	4.7	0.0	0.6	0.2	2.3	0.4	7.7	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(50%),veh/ln	5.5	0.0	0.2	6.4	0.0	3.8	0.1	5.3	1.5	4.4	6.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.5	0.0	31.4	38.5	0.0	23.5	40.2	35.5	29.6	45.5	29.8	22.9
LnGrp LOS	D		C	D		C	D	D	C	D	C	C
Approach Vol, veh/h		260			554			637			939	
Approach Delay, s/veh		42.1			31.8			34.7			32.8	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.6	26.3		21.4	9.5	33.4		25.3				
Change Period (Y+Rc), s	4.5	7.0		6.5	4.5	7.0		6.5				
Max Green Setting (Gmax), s	20.5	30.0		24.5	5.0	45.5		30.5				
Max Q Clear Time (g_c+I1), s	11.8	16.5		14.0	2.2	19.9		16.7				
Green Ext Time (p_c), s	0.3	2.9		0.9	0.0	4.5		2.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			34.1									
HCM 7th LOS			C									



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	286	4	1	582	299	139
Future Volume (veh/h)	286	4	1	582	299	139
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	311	4	1	633	325	151
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	391	5	198	801	450	393
Arrive On Green	0.24	0.24	0.12	0.49	0.26	0.26
Sat Flow, veh/h	1640	21	1668	1633	1699	1485
Grp Volume(v), veh/h	316	0	1	633	325	151
Grp Sat Flow(s),veh/h/ln	1666	0	1668	1633	1699	1485
Q Serve(g_s), s	7.5	0.0	0.0	13.6	7.3	3.5
Cycle Q Clear(g_c), s	7.5	0.0	0.0	13.6	7.3	3.5
Prop In Lane	0.98	0.01	1.00			1.00
Lane Grp Cap(c), veh/h	397	0	198	801	450	393
V/C Ratio(X)	0.80	0.00	0.01	0.79	0.72	0.38
Avail Cap(c_a), veh/h	614	0	198	1286	953	833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	0.0	16.3	8.9	14.1	12.7
Incr Delay (d2), s/veh	4.1	0.0	0.0	1.8	2.2	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.0	2.4	2.1	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	19.1	0.0	16.3	10.7	16.3	13.3
LnGrp LOS	B		B	B	B	B
Approach Vol, veh/h	316			634	476	
Approach Delay, s/veh	19.1			10.7	15.3	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	27.5		14.5	9.5	18.0
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	33.1		15.5	5.0	23.6
Max Q Clear Time (g_c+I1), s	15.6		9.5	2.0	9.3
Green Ext Time (p_c), s	3.4		0.5	0.0	1.8

Intersection Summary		
HCM 7th Control Delay, s/veh	14.1	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	180	122	0	336	4	248	0	1	7	0	2
Future Volume (veh/h)	1	180	122	0	336	4	248	0	1	7	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	1	196	133	0	365	4	270	0	1	8	0	2
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, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	287	698	634	492	484	5	526	0	1	477	19	81
Arrive On Green	0.00	0.43	0.43	0.00	0.30	0.30	0.24	0.00	0.24	0.24	0.00	0.24
Sat Flow, veh/h	1668	1633	1485	1668	1612	18	1417	0	5	1290	82	343
Grp Volume(v), veh/h	1	196	133	0	0	369	271	0	0	10	0	0
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	0	1630	1422	0	0	1716	0	0
Q Serve(g_s), s	0.0	2.9	2.1	0.0	0.0	7.7	6.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	2.9	2.1	0.0	0.0	7.7	6.7	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	1.00		0.00	0.80		0.20
Lane Grp Cap(c), veh/h	287	698	634	492	0	489	527	0	0	577	0	0
V/C Ratio(X)	0.00	0.28	0.21	0.00	0.00	0.75	0.51	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	511	1023	930	711	0	1017	736	0	0	791	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	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.0	7.0	6.7	0.0	0.0	11.8	13.5	0.0	0.0	11.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	0.0	2.4	0.8	0.0	0.0	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(50%),veh/ln	0.0	0.5	0.3	0.0	0.0	1.9	1.4	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.0	7.2	6.9	0.0	0.0	14.2	14.2	0.0	0.0	11.0	0.0	0.0
LnGrp LOS	A	A	A			B	B			B		
Approach Vol, veh/h		330			369			271			10	
Approach Delay, s/veh		7.1			14.2			14.2			11.0	
Approach LOS		A			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.0	22.9		14.5	4.8	18.1		14.5				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.3	23.4		14.3	5.1	23.3		14.3				
Max Q Clear Time (g_c+I1), s	10.0	4.9		2.2	2.0	9.7		8.7				
Green Ext Time (p_c), s	0.0	1.2		0.0	0.0	1.5		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	11.8
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	0	165	0	0	0	107	271	0	0	193	67
Future Volume (veh/h)	137	0	165	0	0	0	107	271	0	0	193	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1633	1752	1752	1633	1752
Adj Flow Rate, veh/h	149	0	179	0	0	0	116	295	0	0	210	73
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, %	10	10	10	10	10	10	10	18	10	10	18	10
Cap, veh/h	495	0	270	191	319	0	508	790	0	465	433	394
Arrive On Green	0.18	0.00	0.18	0.00	0.00	0.00	0.09	0.48	0.00	0.00	0.27	0.27
Sat Flow, veh/h	1668	0	1485	1129	1752	0	1668	1633	0	1668	1633	1485
Grp Volume(v), veh/h	149	0	179	0	0	0	116	295	0	0	210	73
Grp Sat Flow(s),veh/h/ln	1668	0	1485	1129	1752	0	1668	1633	0	1668	1633	1485
Q Serve(g_s), s	3.0	0.0	4.2	0.0	0.0	0.0	1.7	4.3	0.0	0.0	4.1	1.4
Cycle Q Clear(g_c), s	3.0	0.0	4.2	0.0	0.0	0.0	1.7	4.3	0.0	0.0	4.1	1.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	495	0	270	191	319	0	508	790	0	465	433	394
V/C Ratio(X)	0.30	0.00	0.66	0.00	0.00	0.00	0.23	0.37	0.00	0.00	0.48	0.19
Avail Cap(c_a), veh/h	824	0	563	414	665	0	609	1014	0	682	980	891
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	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	0.0	14.3	0.0	0.0	0.0	7.6	6.1	0.0	0.0	11.7	10.7
Incr Delay (d2), s/veh	0.3	0.0	2.8	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.8	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(50%),veh/ln	0.9	0.0	1.2	0.0	0.0	0.0	0.3	0.6	0.0	0.0	1.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.2	0.0	17.1	0.0	0.0	0.0	7.8	6.4	0.0	0.0	12.5	10.9
LnGrp LOS	B		B				A	A			B	B
Approach Vol, veh/h		328			0			411			283	
Approach Delay, s/veh		15.8			0.0			6.8			12.1	
Approach LOS		B						A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	25.1		12.6	8.2	16.9		12.6				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.3	23.4		14.3	5.8	22.6		14.3				
Max Q Clear Time (g_c+I1), s	10.0	6.3		6.2	3.7	6.1		0.0				
Green Ext Time (p_c), s	0.0	1.3		0.9	0.0	1.1		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	11.1
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	0	457	98	2	34	274	226	71	13	368	115
Future Volume (veh/h)	116	0	457	98	2	34	274	226	71	13	368	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	121	0	476	102	2	35	285	235	74	14	383	120
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	488	542	683	379	25	438	417	703	596	411	470	399
Arrive On Green	0.31	0.00	0.31	0.31	0.31	0.31	0.15	0.40	0.40	0.02	0.27	0.27
Sat Flow, veh/h	1284	1752	1485	860	81	1416	1668	1752	1485	1668	1752	1485
Grp Volume(v), veh/h	121	0	476	102	0	37	285	235	74	14	383	120
Grp Sat Flow(s),veh/h/ln	1284	1752	1485	860	0	1497	1668	1752	1485	1668	1752	1485
Q Serve(g_s), s	4.7	0.0	16.2	5.9	0.0	1.1	7.2	5.9	2.0	0.4	13.0	4.1
Cycle Q Clear(g_c), s	5.8	0.0	16.2	5.9	0.0	1.1	7.2	5.9	2.0	0.4	13.0	4.1
Prop In Lane	1.00		1.00	1.00		0.95	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	488	542	683	379	0	463	417	703	596	411	470	399
V/C Ratio(X)	0.25	0.00	0.70	0.27	0.00	0.08	0.68	0.33	0.12	0.03	0.81	0.30
Avail Cap(c_a), veh/h	635	743	853	478	0	635	568	1120	949	513	836	709
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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	0.0	13.7	17.2	0.0	15.6	14.1	13.2	12.0	16.4	21.8	18.5
Incr Delay (d2), s/veh	0.3	0.0	1.8	0.4	0.0	0.1	2.0	0.3	0.1	0.0	3.5	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(50%),veh/ln	1.2	0.0	4.2	1.0	0.0	0.3	2.2	1.8	0.5	0.1	4.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.9	0.0	15.5	17.6	0.0	15.6	16.1	13.4	12.1	16.4	25.3	19.0
LnGrp LOS	B		B	B		B	B	B	B	B	C	B
Approach Vol, veh/h		597			139			594			517	
Approach Delay, s/veh		16.0			17.1			14.5			23.6	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	32.5		25.4	14.3	24.0		25.4				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.3	40.7		27.0	15.3	30.4		27.0				
Max Q Clear Time (g_c+I1), s	2.4	7.9		18.2	9.2	15.0		7.9				
Green Ext Time (p_c), s	0.0	1.4		1.5	0.4	2.1		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	17.7
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	28	207	80	40	40	118	535	57	28	957	28
Future Volume (veh/h)	40	28	207	80	40	40	118	535	57	28	957	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	43	30	225	87	43	43	128	582	62	30	1040	30
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	216	293	320	229	135	135	194	1136	1003	479	1103	975
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.05	0.65	0.65	0.03	0.63	0.63
Sat Flow, veh/h	1280	1826	1547	1098	838	838	1739	1752	1547	1739	1752	1547
Grp Volume(v), veh/h	43	30	225	87	0	86	128	582	62	30	1040	30
Grp Sat Flow(s),veh/h/ln	1280	1826	1547	1098	0	1675	1739	1752	1547	1739	1752	1547
Q Serve(g_s), s	3.3	1.5	14.3	7.8	0.0	4.8	2.7	18.5	1.6	0.6	57.3	0.8
Cycle Q Clear(g_c), s	8.1	1.5	14.3	9.3	0.0	4.8	2.7	18.5	1.6	0.6	57.3	0.8
Prop In Lane	1.00		1.00	1.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	216	293	320	229	0	269	194	1136	1003	479	1103	975
V/C Ratio(X)	0.20	0.10	0.70	0.38	0.00	0.32	0.66	0.51	0.06	0.06	0.94	0.03
Avail Cap(c_a), veh/h	336	465	466	332	0	427	230	1332	1177	515	1299	1148
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	42.9	37.9	39.0	41.9	0.0	39.3	25.3	9.8	6.8	7.7	17.9	7.4
Incr Delay (d2), s/veh	0.4	0.2	2.8	1.0	0.0	0.7	5.3	0.4	0.0	0.1	12.4	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(50%),veh/ln	1.0	0.7	5.5	2.1	0.0	2.0	2.1	5.6	0.4	0.2	21.5	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.4	38.1	41.8	42.9	0.0	40.0	30.6	10.2	6.9	7.7	30.3	7.4
LnGrp LOS	D	D	D	D		D	C	B	A	A	C	A
Approach Vol, veh/h		298			173			772			1100	
Approach Delay, s/veh		41.7			41.5			13.3			29.0	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	75.6		22.7	9.6	73.7		22.7				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.1	80.6		27.0	7.1	78.6		27.0				
Max Q Clear Time (g_c+I1), s	2.6	20.5		16.3	4.7	59.3		11.3				
Green Ext Time (p_c), s	0.0	3.8		0.7	0.1	7.5		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	26.4
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	92	177	112	80	100	123	556	45	118	1056	140
Future Volume (veh/h)	106	92	177	112	80	100	123	556	45	118	1056	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	115	100	192	122	87	109	134	604	49	128	1148	152
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, %	8	8	8	8	8	8	7	7	7	5	5	5
Cap, veh/h	337	313	264	317	313	264	165	1393	113	161	1331	176
Arrive On Green	0.06	0.18	0.18	0.06	0.18	0.18	0.10	0.44	0.44	0.09	0.43	0.43
Sat Flow, veh/h	1697	1781	1502	1697	1781	1502	1711	3196	259	1739	3078	407
Grp Volume(v), veh/h	115	100	192	122	87	109	134	322	331	128	646	654
Grp Sat Flow(s),veh/h/ln	1697	1781	1502	1697	1781	1502	1711	1706	1748	1739	1735	1750
Q Serve(g_s), s	4.7	4.2	10.3	5.0	3.6	5.5	6.5	11.1	11.2	6.1	28.6	28.8
Cycle Q Clear(g_c), s	4.7	4.2	10.3	5.0	3.6	5.5	6.5	11.1	11.2	6.1	28.6	28.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.23
Lane Grp Cap(c), veh/h	337	313	264	317	313	264	165	744	762	161	750	757
V/C Ratio(X)	0.34	0.32	0.73	0.38	0.28	0.41	0.81	0.43	0.43	0.79	0.86	0.86
Avail Cap(c_a), veh/h	337	714	602	317	714	602	192	744	762	322	846	854
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	26.7	30.6	33.1	26.8	30.3	31.1	37.6	16.6	16.7	37.7	21.8	21.8
Incr Delay (d2), s/veh	0.6	0.6	3.8	0.8	0.5	1.0	20.2	0.4	0.4	8.5	8.2	8.5
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(50%),veh/ln	1.9	1.8	3.9	2.0	1.5	2.0	3.5	4.0	4.1	2.9	12.0	12.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.3	31.1	36.9	27.6	30.8	32.1	57.8	17.0	17.0	46.2	30.0	30.3
LnGrp LOS	C	C	D	C	C	C	E	B	B	D	C	C
Approach Vol, veh/h		407			318			787			1428	
Approach Delay, s/veh		32.8			30.0			24.0			31.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	42.5	9.6	20.4	12.7	42.2	9.6	20.4
Change Period (Y+Rc), s	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5
Max Green Setting (Gmax), s	15.7	35.2	5.1	34.0	9.5	41.4	5.1	34.0
Max Q Clear Time (g_c+I1), s	8.1	13.2	7.0	12.3	8.5	30.8	6.7	7.5
Green Ext Time (p_c), s	0.2	3.8	0.0	1.2	0.0	5.9	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.5
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	547	1	22	367	111	1	28	11	230	57	0
Future Volume (veh/h)	1	547	1	22	367	111	1	28	11	230	57	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	1	570	1	23	382	116	1	29	11	240	59	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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	4	763	432	47	833	471	89	489	418	442	72	418
Arrive On Green	0.00	0.29	0.29	0.03	0.32	0.32	0.28	0.28	0.28	0.28	0.28	0.00
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	12	1736	1485	1037	255	1485
Grp Volume(v), veh/h	1	570	1	23	382	116	30	0	11	299	0	0
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1747	0	1485	1292	0	1485
Q Serve(g_s), s	0.0	8.5	0.0	0.6	5.0	2.5	0.0	0.0	0.2	9.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.5	0.0	0.6	5.0	2.5	0.5	0.0	0.2	9.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.03		1.00	0.80		1.00
Lane Grp Cap(c), veh/h	4	763	432	47	833	471	578	0	418	514	0	418
V/C Ratio(X)	0.26	0.75	0.00	0.49	0.46	0.25	0.05	0.00	0.03	0.58	0.00	0.00
Avail Cap(c_a), veh/h	193	1116	631	193	1116	631	862	0	662	736	0	662
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	21.6	13.9	10.9	20.7	11.8	10.9	11.4	0.0	11.3	14.8	0.0	0.0
Incr Delay (d2), s/veh	32.2	1.6	0.0	7.9	0.4	0.3	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(50%),veh/ln	0.0	1.8	0.0	0.3	1.0	0.6	0.1	0.0	0.1	2.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.8	15.5	10.9	28.6	12.2	11.2	11.4	0.0	11.3	15.9	0.0	0.0
LnGrp LOS	D	B	B	C	B	B	B		B	B		
Approach Vol, veh/h		572			521			41			299	
Approach Delay, s/veh		15.6			12.7			11.4			15.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	19.5		17.9	4.8	20.6		17.9				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	18.4		19.3	5.0	18.4		19.3				
Max Q Clear Time (g_c+I1), s	2.6	10.5		11.5	2.0	7.0		2.5				
Green Ext Time (p_c), s	0.0	2.1		0.9	0.0	2.0		0.1				

Intersection Summary		
HCM 7th Control Delay, s/veh	14.5	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	302	1	11	13	19	12	73	380	3	7	1295	26
Future Volume (veh/h)	302	1	11	13	19	12	73	380	3	7	1295	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	328	1	12	14	21	13	79	413	3	8	1408	28
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	408	343	291	211	118	100	138	981	832	34	1662	33
Arrive On Green	0.15	0.19	0.19	0.03	0.07	0.07	0.16	1.00	1.00	0.02	0.48	0.48
Sat Flow, veh/h	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	3451	69
Grp Volume(v), veh/h	328	1	12	14	21	13	79	413	3	8	701	735
Grp Sat Flow(s),veh/h/ln	1725	1811	1535	1725	1811	1535	1725	1811	1535	1725	1721	1799
Q Serve(g_s), s	15.3	0.0	0.6	0.7	1.1	0.8	4.2	0.0	0.0	0.5	35.7	35.8
Cycle Q Clear(g_c), s	15.3	0.0	0.6	0.7	1.1	0.8	4.2	0.0	0.0	0.5	35.7	35.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	408	343	291	211	118	100	138	981	832	34	829	866
V/C Ratio(X)	0.80	0.00	0.04	0.07	0.18	0.13	0.57	0.42	0.00	0.23	0.85	0.85
Avail Cap(c_a), veh/h	408	343	291	318	145	123	157	981	832	174	829	866
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	1.00	1.00	1.00	1.00	1.00	0.89	0.89	0.89	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	32.9	33.1	41.4	44.2	44.1	40.4	0.0	0.0	48.3	22.7	22.7
Incr Delay (d2), s/veh	11.1	0.0	0.1	0.1	0.7	0.6	3.4	1.2	0.0	3.4	10.4	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(50%),veh/ln	8.2	0.0	0.2	0.3	0.5	0.3	1.8	0.3	0.0	0.2	14.7	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.5	32.9	33.2	41.5	44.9	44.6	43.8	1.2	0.0	51.7	33.1	32.8
LnGrp LOS	D	C	C	D	D	D	D	A	A	D	C	C
Approach Vol, veh/h		341			48			495			1444	
Approach Delay, s/veh		46.9			43.8			8.0			33.0	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	61.7	7.6	24.0	12.7	55.7	20.0	11.6
Change Period (Y+Rc), s	4.7	7.5	4.7	5.1	4.7	7.5	4.7	5.1
Max Green Setting (Gmax), s	10.1	44.6	9.1	14.2	9.1	45.6	15.3	8.0
Max Q Clear Time (g_c+I1), s	2.5	2.0	2.7	2.6	6.2	37.8	17.3	3.1
Green Ext Time (p_c), s	0.0	2.3	0.0	0.0	0.0	4.8	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	30.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	395	327	488	332	48	237	228	357	42	161	26
Future Volume (veh/h)	38	395	327	488	332	48	237	228	357	42	161	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	41	425	352	525	357	52	255	245	384	45	173	28
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	97	521	651	624	646	94	360	434	654	271	230	37
Arrive On Green	0.06	0.29	0.29	0.18	0.41	0.41	0.14	0.24	0.24	0.06	0.15	0.15
Sat Flow, veh/h	1739	1826	1547	3374	1558	227	1739	1826	1547	1739	1533	248
Grp Volume(v), veh/h	41	425	352	525	0	409	255	245	384	45	0	201
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1687	0	1785	1739	1826	1547	1739	0	1781
Q Serve(g_s), s	2.2	20.6	16.2	14.3	0.0	16.6	11.3	11.2	18.1	2.0	0.0	10.3
Cycle Q Clear(g_c), s	2.2	20.6	16.2	14.3	0.0	16.6	11.3	11.2	18.1	2.0	0.0	10.3
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	97	521	651	624	0	740	360	434	654	271	0	268
V/C Ratio(X)	0.42	0.82	0.54	0.84	0.00	0.55	0.71	0.56	0.59	0.17	0.00	0.75
Avail Cap(c_a), veh/h	146	735	832	861	0	1037	360	714	891	315	0	618
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	0.00	1.00
Uniform Delay (d), s/veh	43.5	31.7	20.7	37.4	0.0	21.1	27.8	31.9	21.1	30.6	0.0	38.7
Incr Delay (d2), s/veh	2.9	4.9	0.7	5.5	0.0	0.6	6.3	1.2	0.8	0.3	0.0	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(50%),veh/ln	1.0	9.6	5.6	6.3	0.0	6.8	5.1	4.9	6.2	0.9	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	46.4	36.6	21.4	42.9	0.0	21.8	34.1	33.1	21.9	30.9	0.0	42.9
LnGrp LOS	D	D	C	D		C	C	C	C	C		D
Approach Vol, veh/h		818			934			884			246	
Approach Delay, s/veh		30.5			33.7			28.5			40.7	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	33.6	18.6	20.7	10.0	45.9	10.3	29.0
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	24.3	38.3	12.9	* 33	8.0	* 55	8.0	37.2
Max Q Clear Time (g_c+I1), s	16.3	23.6	13.3	12.3	4.2	18.6	5.0	20.1
Green Ext Time (p_c), s	1.3	3.5	0.0	1.1	0.0	2.9	0.0	2.5

Intersection Summary	
HCM 7th Control Delay, s/veh	31.8
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	73	95	170	65	132	67	131	996	24	43	976	82
Future Volume (veh/h)	73	95	170	65	132	67	131	996	24	43	976	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	79	103	185	71	143	73	142	1083	26	47	1061	89
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	226	303	257	241	303	257	181	1732	42	78	1402	118
Arrive On Green	0.00	0.17	0.17	0.00	0.17	0.17	0.10	0.50	0.50	0.04	0.43	0.43
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3462	83	1739	3240	272
Grp Volume(v), veh/h	79	103	185	71	143	73	142	543	566	47	568	582
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1735	1811	1739	1735	1777
Q Serve(g_s), s	0.1	3.1	7.1	0.1	4.4	2.6	5.0	14.2	14.2	1.7	17.3	17.3
Cycle Q Clear(g_c), s	0.1	3.1	7.1	0.1	4.4	2.6	5.0	14.2	14.2	1.7	17.3	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	1.00		0.15
Lane Grp Cap(c), veh/h	226	303	257	241	303	257	181	868	906	78	751	769
V/C Ratio(X)	0.35	0.34	0.72	0.29	0.47	0.28	0.78	0.63	0.63	0.61	0.76	0.76
Avail Cap(c_a), veh/h	504	1258	1066	519	1258	1066	342	1425	1488	183	1253	1284
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	27.3	23.1	24.7	26.0	23.6	22.8	27.3	11.4	11.4	29.3	15.0	15.0
Incr Delay (d2), s/veh	0.9	0.7	3.8	0.7	1.1	0.6	7.2	0.7	0.7	7.4	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(50%),veh/ln	1.1	1.3	2.8	1.0	1.9	0.9	2.2	4.2	4.4	0.8	5.6	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.2	23.7	28.5	26.6	24.8	23.5	34.6	12.1	12.1	36.7	16.6	16.5
LnGrp LOS	C	C	C	C	C	C	C	B	B	D	B	B
Approach Vol, veh/h		367			287			1251			1197	
Approach Delay, s/veh		27.1			24.9			14.6			17.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	38.5	0.0	16.1	12.2	34.3	0.0	16.1
Change Period (Y+Rc), s	5.2	7.2	5.7	5.7	5.7	7.2	5.7	5.7
Max Green Setting (Gmax), s	6.6	51.4	10.1	43.1	12.3	45.2	10.1	43.1
Max Q Clear Time (g_c+I1), s	3.7	16.2	0.0	9.1	7.0	19.3	0.0	6.4
Green Ext Time (p_c), s	0.0	7.9	0.0	1.3	0.1	7.8	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	18.1
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	294	83	201	281	148	90	956	151	152	906	237
Future Volume (veh/h)	235	294	83	201	281	148	90	956	151	152	906	237
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	253	316	89	216	302	159	97	1028	162	163	974	255
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	233	475	131	257	396	204	122	1381	616	193	1522	788
Arrive On Green	0.07	0.18	0.18	0.07	0.18	0.18	0.07	0.40	0.40	0.11	0.44	0.44
Sat Flow, veh/h	1739	2683	744	1739	2217	1139	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	253	202	203	216	235	226	97	1028	162	163	974	255
Grp Sat Flow(s),veh/h/ln	1739	1735	1692	1739	1735	1621	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	7.3	11.3	11.6	7.5	13.3	13.8	5.7	26.3	7.3	9.5	22.7	10.0
Cycle Q Clear(g_c), s	7.3	11.3	11.6	7.5	13.3	13.8	5.7	26.3	7.3	9.5	22.7	10.0
Prop In Lane	1.00		0.44	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	307	299	257	310	290	122	1381	616	193	1522	788
V/C Ratio(X)	1.09	0.66	0.68	0.84	0.76	0.78	0.80	0.74	0.26	0.85	0.64	0.32
Avail Cap(c_a), veh/h	233	716	698	257	719	672	179	1381	616	223	1522	788
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	39.9	39.8	39.9	38.0	40.5	40.7	47.5	26.7	21.0	45.3	22.7	15.0
Incr Delay (d2), s/veh	83.5	2.4	2.7	21.2	3.8	4.6	14.0	3.7	1.0	22.4	2.1	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(50%),veh/ln	7.8	4.9	4.9	3.4	5.8	5.7	2.9	10.8	2.7	5.2	9.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	123.4	42.2	42.6	59.3	44.2	45.2	61.5	30.4	22.0	67.6	24.8	16.1
LnGrp LOS	F	D	D	E	D	D	E	C	C	E	C	B
Approach Vol, veh/h		658			677			1287			1392	
Approach Delay, s/veh		73.6			49.4			31.7			28.2	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	48.5	13.2	24.8	13.0	52.7	13.0	25.0
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	13.3	41.3	7.5	42.8	10.7	43.9	7.3	43.0
Max Q Clear Time (g_c+I1), s	11.5	28.3	9.5	13.6	7.7	24.7	9.3	15.8
Green Ext Time (p_c), s	0.1	5.9	0.0	2.3	0.0	7.2	0.0	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	40.3
HCM 7th LOS	D

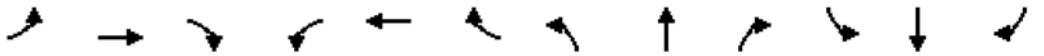


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	243	1	41	1120	4	14	19	238	480	8	719	299
Future Volume (veh/h)	243	1	41	1120	4	14	19	238	480	8	719	299
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	251	1	42	1155	4	14	20	245	495	8	741	308
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	278	3	116	1046	824	698	60	595	1093	169	812	610
Arrive On Green	0.16	0.08	0.08	0.53	0.44	0.44	0.03	0.17	0.17	0.10	0.23	0.23
Sat Flow, veh/h	1767	37	1541	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	251	0	43	1155	4	14	20	245	495	8	741	308
Grp Sat Flow(s),veh/h/ln	1767	0	1578	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	20.4	0.0	3.8	77.0	0.2	0.7	1.6	9.1	20.5	0.6	30.0	21.8
Cycle Q Clear(g_c), s	20.4	0.0	3.8	77.0	0.2	0.7	1.6	9.1	20.5	0.6	30.0	21.8
Prop In Lane	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	278	0	119	1046	824	698	60	595	1093	169	812	610
V/C Ratio(X)	0.90	0.00	0.36	1.10	0.00	0.02	0.33	0.41	0.45	0.05	0.91	0.51
Avail Cap(c_a), veh/h	459	0	425	1046	994	843	109	723	1150	169	844	624
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.5	0.0	64.3	27.1	22.6	22.8	69.0	54.3	9.9	60.1	54.9	34.1
Incr Delay (d2), s/veh	13.3	0.0	1.9	60.9	0.0	0.0	3.1	0.5	0.3	0.1	13.9	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(50%),veh/ln	10.1	0.0	1.6	49.8	0.1	0.3	0.8	4.1	6.8	0.3	14.8	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.8	0.0	66.2	88.0	22.6	22.8	72.1	54.8	10.2	60.2	68.8	34.8
LnGrp LOS	E		E	F	C	C	E	D	B	E	E	C
Approach Vol, veh/h		294			1173			760			1057	
Approach Delay, s/veh		72.7			87.0			26.2			58.8	
Approach LOS		E			F			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	82.0	16.0	9.6	38.7	28.0	70.0	18.6	29.7
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	77.0	39.4	9.0	35.0	38.0	78.4	14.0	30.0
Max Q Clear Time (g_c+I1), s	79.0	5.8	3.6	32.0	22.4	2.7	2.6	22.5
Green Ext Time (p_c), s	0.0	0.2	0.0	1.7	0.6	0.1	0.0	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	62.6
HCM 7th LOS	E

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	172	6	93	174	380	9	746	110	479	767	47
Future Volume (veh/h)	41	172	6	93	174	380	9	746	110	479	767	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	45	187	7	101	189	413	10	811	120	521	834	51
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	159	195	166	252	497	880	21	800	388	516	1708	829
Arrive On Green	0.00	0.11	0.11	0.10	0.27	0.27	0.01	0.25	0.25	0.30	0.54	0.54
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	45	187	7	101	189	413	10	811	120	521	834	51
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	0.1	10.2	0.4	4.8	8.4	15.7	0.6	25.1	6.3	29.7	16.4	1.6
Cycle Q Clear(g_c), s	0.1	10.2	0.4	4.8	8.4	15.7	0.6	25.1	6.3	29.7	16.4	1.6
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	159	195	166	252	497	880	21	800	388	516	1708	829
V/C Ratio(X)	0.28	0.96	0.04	0.40	0.38	0.47	0.47	1.01	0.31	1.01	0.49	0.06
Avail Cap(c_a), veh/h	331	195	166	252	497	880	87	800	388	516	1708	829
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	42.1	44.4	40.1	32.5	29.6	12.7	49.1	37.5	30.4	35.1	14.6	11.1
Incr Delay (d2), s/veh	1.0	52.0	0.1	1.0	0.5	0.4	15.6	35.2	0.4	41.8	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	7.2	0.2	2.0	3.5	4.7	0.3	12.9	2.3	17.4	5.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.1	96.4	40.2	33.5	30.0	13.1	64.7	72.7	30.9	76.9	14.8	11.2
LnGrp LOS	D	F	D	C	C	B	E	F	C	F	B	B
Approach Vol, veh/h		239			703			941			1406	
Approach Delay, s/veh		84.7			20.6			67.3			37.7	
Approach LOS		F			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.2	32.1	16.5	17.2	5.7	60.6	0.0	33.7
Change Period (Y+Rc), s	4.5	7.0	6.5	6.5	4.5	7.0	6.5	6.5
Max Green Setting (Gmax), s	29.7	25.1	10.0	10.7	5.0	49.8	10.0	10.7
Max Q Clear Time (g_c+I1), s	31.7	27.1	6.8	12.2	2.6	18.4	0.0	17.7
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.0	5.8	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	45.9
HCM 7th LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	108	2	1	255	761	324
Future Volume (veh/h)	108	2	1	255	761	324
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	119	0	1	277	827	352
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	297	132	147	1156	917	801
Arrive On Green	0.09	0.00	0.09	0.71	0.54	0.54
Sat Flow, veh/h	3337	1485	1668	1633	1699	1485
Grp Volume(v), veh/h	119	0	1	277	827	352
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1633	1699	1485
Q Serve(g_s), s	1.9	0.0	0.0	3.3	24.5	8.0
Cycle Q Clear(g_c), s	1.9	0.0	0.0	3.3	24.5	8.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	297	132	147	1156	917	801
V/C Ratio(X)	0.40	0.00	0.01	0.24	0.90	0.44
Avail Cap(c_a), veh/h	297	132	149	1268	1032	902
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	0.0	23.4	2.9	11.6	7.8
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.1	10.1	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	0.2	7.7	1.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.0	0.0	23.4	3.0	21.7	8.2
LnGrp LOS	C		C	A	C	A
Approach Vol, veh/h	119			278	1179	
Approach Delay, s/veh	25.0			3.1	17.7	
Approach LOS	C			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	46.6		9.5	9.4	37.2
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	43.6		5.0	5.0	34.1
Max Q Clear Time (g_c+I1), s	5.3		3.9	2.0	26.5
Green Ext Time (p_c), s	1.4		0.0	0.0	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	15.6
HCM 7th 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												
Traffic Volume (veh/h)	191	326	240	37	122	189	81	0	12	68	0	63
Future Volume (veh/h)	191	326	240	37	122	189	81	0	12	68	0	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	208	354	293	40	133	205	88	0	13	74	0	68
Peak Hour Factor	0.92	0.92	0.82	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	597	565	514	388	434	395	329	0	235	377	0	235
Arrive On Green	0.13	0.35	0.35	0.05	0.27	0.27	0.15	0.00	0.15	0.15	0.00	0.15
Sat Flow, veh/h	1668	1633	1485	1668	1633	1485	1249	0	1585	1312	0	1585
Grp Volume(v), veh/h	208	354	293	40	133	205	88	0	13	74	0	68
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	1633	1485	1249	0	1585	1312	0	1585
Q Serve(g_s), s	3.2	6.8	6.0	0.6	2.4	4.4	2.5	0.0	0.3	1.9	0.0	1.4
Cycle Q Clear(g_c), s	3.2	6.8	6.0	0.6	2.4	4.4	4.0	0.0	0.3	2.2	0.0	1.4
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	597	565	514	388	434	395	329	0	235	377	0	235
V/C Ratio(X)	0.35	0.63	0.57	0.10	0.31	0.52	0.27	0.00	0.06	0.20	0.00	0.29
Avail Cap(c_a), veh/h	712	1177	1070	548	1090	991	486	0	434	542	0	434
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	7.9	10.3	10.0	9.3	11.0	11.8	16.0	0.0	13.7	14.7	0.0	14.2
Incr Delay (d2), s/veh	0.3	1.1	1.0	0.1	0.4	1.1	0.4	0.0	0.1	0.3	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(50%),veh/ln	0.6	1.4	1.2	0.1	0.6	1.0	0.5	0.0	0.1	0.4	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.2	11.4	11.0	9.5	11.4	12.8	16.4	0.0	13.8	14.9	0.0	14.9
LnGrp LOS	A	B	B	A	B	B	B		B	B		B
Approach Vol, veh/h		855			378			101			142	
Approach Delay, s/veh		10.5			12.0			16.1			14.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.4	19.9		11.3	9.4	16.9		11.3				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.3	27.1		10.3	7.3	25.1		10.3				
Max Q Clear Time (g_c+I1), s	2.6	8.8		4.2	5.2	6.4		6.0				
Green Ext Time (p_c), s	0.0	2.6		0.2	0.1	1.2		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	11.7
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	18	265	97	4	7	378	594	79	35	287	101
Future Volume (veh/h)	178	18	265	97	4	7	378	594	79	35	287	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	193	20	288	105	4	8	411	646	86	38	312	110
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	404	375	566	337	112	223	542	756	641	67	1012	452
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.17	0.43	0.43	0.04	0.30	0.30
Sat Flow, veh/h	1313	1752	1485	1003	521	1043	3237	1752	1485	1668	3328	1485
Grp Volume(v), veh/h	193	20	288	105	0	12	411	646	86	38	312	110
Grp Sat Flow(s),veh/h/ln	1313	1752	1485	1003	0	1564	1618	1752	1485	1668	1664	1485
Q Serve(g_s), s	7.5	0.5	8.2	5.1	0.0	0.3	6.7	18.3	1.9	1.2	4.0	3.1
Cycle Q Clear(g_c), s	7.8	0.5	8.2	5.6	0.0	0.3	6.7	18.3	1.9	1.2	4.0	3.1
Prop In Lane	1.00		1.00	1.00		0.67	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	404	375	566	337	0	335	542	756	641	67	1012	452
V/C Ratio(X)	0.48	0.05	0.51	0.31	0.00	0.04	0.76	0.85	0.13	0.57	0.31	0.24
Avail Cap(c_a), veh/h	911	1051	1139	724	0	938	741	1105	936	152	1640	731
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	20.2	17.2	13.1	19.4	0.0	17.1	21.8	14.1	9.4	25.9	14.7	14.4
Incr Delay (d2), s/veh	0.9	0.1	0.7	0.5	0.0	0.0	3.1	4.6	0.1	7.4	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(50%),veh/ln	1.9	0.2	2.1	1.0	0.0	0.1	2.3	5.7	0.4	0.6	1.2	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.1	17.2	13.8	19.9	0.0	17.2	24.9	18.7	9.5	33.3	14.9	14.7
LnGrp LOS	C	B	B	B		B	C	B	A	C	B	B
Approach Vol, veh/h		501			117			1143			460	
Approach Delay, s/veh		16.7			19.7			20.2			16.3	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	30.6		17.5	13.9	23.6		17.5				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	34.7		33.0	12.6	27.1		33.0				
Max Q Clear Time (g_c+I1), s	3.2	20.3		10.2	8.7	6.0		7.6				
Green Ext Time (p_c), s	0.0	3.5		1.6	0.6	2.0		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	18.6
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	80	88	74	32	32	227	1074	185	80	512	80
Future Volume (veh/h)	32	80	88	74	32	32	227	1074	185	80	512	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	35	87	96	80	35	35	247	1167	201	87	557	87
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	309	279	236	261	279	236	561	1544	718	316	1383	643
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.12	0.46	0.46	0.07	0.42	0.42
Sat Flow, veh/h	1299	1826	1547	1172	1826	1547	1739	3328	1547	1739	3328	1547
Grp Volume(v), veh/h	35	87	96	80	35	35	247	1167	201	87	557	87
Grp Sat Flow(s),veh/h/ln	1299	1826	1547	1172	1826	1547	1739	1664	1547	1739	1664	1547
Q Serve(g_s), s	1.3	2.3	3.1	3.6	0.9	1.1	4.2	15.8	4.4	1.5	6.4	1.9
Cycle Q Clear(g_c), s	2.2	2.3	3.1	5.9	0.9	1.1	4.2	15.8	4.4	1.5	6.4	1.9
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	309	279	236	261	279	236	561	1544	718	316	1383	643
V/C Ratio(X)	0.11	0.31	0.41	0.31	0.13	0.15	0.44	0.76	0.28	0.28	0.40	0.14
Avail Cap(c_a), veh/h	894	1102	934	789	1102	934	659	2112	982	358	1844	857
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	21.0	20.6	20.9	23.2	20.0	20.1	7.6	12.1	9.0	9.8	11.2	9.9
Incr Delay (d2), s/veh	0.2	0.6	1.1	0.7	0.2	0.3	0.5	1.1	0.2	0.5	0.2	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(50%),veh/ln	0.4	0.9	1.0	0.9	0.3	0.4	1.0	3.9	1.0	0.4	1.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.1	21.2	22.0	23.9	20.2	20.4	8.1	13.2	9.2	10.2	11.4	10.0
LnGrp LOS	C	C	C	C	C	C	A	B	A	B	B	A
Approach Vol, veh/h		218			150			1615			731	
Approach Delay, s/veh		21.6			22.2			11.9			11.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	32.3		14.1	11.0	29.6		14.1				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	34.7		33.0	9.4	30.3		33.0				
Max Q Clear Time (g_c+I1), s	3.5	17.8		5.1	6.2	8.4		7.9				
Green Ext Time (p_c), s	0.0	7.5		0.8	0.2	3.4		0.5				

Intersection Summary		
HCM 7th Control Delay, s/veh	13.0	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	236	119	93	63	129	220	208	1228	129	105	477	109
Future Volume (veh/h)	236	119	93	63	129	220	208	1228	129	105	477	109
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	257	129	101	68	140	239	226	1335	140	114	518	118
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, %	8	8	8	8	8	8	7	7	7	5	5	5
Cap, veh/h	288	361	536	304	336	407	262	1573	766	142	1351	689
Arrive On Green	0.06	0.20	0.20	0.04	0.19	0.19	0.15	0.46	0.46	0.08	0.39	0.39
Sat Flow, veh/h	1697	1781	1503	1697	1781	1503	1711	3413	1515	1739	3469	1539
Grp Volume(v), veh/h	257	129	101	68	140	239	226	1335	140	114	518	118
Grp Sat Flow(s),veh/h/ln	1697	1781	1503	1697	1781	1503	1711	1706	1515	1739	1735	1539
Q Serve(g_s), s	5.5	5.9	4.4	3.0	6.6	13.1	12.2	32.9	4.8	6.1	10.2	4.4
Cycle Q Clear(g_c), s	5.5	5.9	4.4	3.0	6.6	13.1	12.2	32.9	4.8	6.1	10.2	4.4
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	288	361	536	304	336	407	262	1573	766	142	1351	689
V/C Ratio(X)	0.89	0.36	0.19	0.22	0.42	0.59	0.86	0.85	0.18	0.80	0.38	0.17
Avail Cap(c_a), veh/h	288	644	774	324	640	663	371	1831	880	174	1455	735
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	37.0	32.5	21.1	29.2	33.9	30.0	39.2	22.7	12.8	42.8	20.8	15.7
Incr Delay (d2), s/veh	27.2	0.6	0.2	0.4	0.8	1.3	13.7	3.5	0.1	19.5	0.2	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(50%),veh/ln	5.7	2.6	1.5	1.2	2.9	4.7	5.9	12.7	1.6	3.3	3.9	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	64.2	33.1	21.3	29.6	34.7	31.4	52.9	26.2	12.9	62.3	21.0	15.8
LnGrp LOS	E	C	C	C	C	C	D	C	B	E	C	B
Approach Vol, veh/h		487			447			1701			750	
Approach Delay, s/veh		47.1			32.1			28.6			26.5	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	49.2	8.7	24.7	19.0	42.4	10.0	23.4
Change Period (Y+Rc), s	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5
Max Green Setting (Gmax), s	9.5	50.9	5.3	34.3	20.6	39.8	5.5	34.1
Max Q Clear Time (g_c+I1), s	8.1	34.9	5.0	7.9	14.2	12.2	7.5	15.1
Green Ext Time (p_c), s	0.0	8.9	0.0	1.1	0.3	3.8	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	31.3
HCM 7th 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												
Traffic Volume (veh/h)	205	494	59	13	353	180	71	132	18	113	102	84
Future Volume (veh/h)	205	494	59	13	353	180	71	132	18	113	102	84
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	218	526	63	14	376	191	76	140	19	120	109	89
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	259	932	111	67	472	236	200	295	40	227	372	541
Arrive On Green	0.16	0.39	0.39	0.04	0.28	0.28	0.12	0.20	0.20	0.14	0.21	0.21
Sat Flow, veh/h	1668	2359	282	1668	1689	845	1668	1507	204	1668	1752	1464
Grp Volume(v), veh/h	218	292	297	14	291	276	76	0	159	120	109	89
Grp Sat Flow(s),veh/h/ln	1668	1312	1329	1668	1312	1222	1668	0	1711	1668	1752	1464
Q Serve(g_s), s	10.5	14.3	14.4	0.7	16.9	17.4	3.5	0.0	6.8	5.5	4.3	3.4
Cycle Q Clear(g_c), s	10.5	14.3	14.4	0.7	16.9	17.4	3.5	0.0	6.8	5.5	4.3	3.4
Prop In Lane	1.00		0.21	1.00		0.69	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	259	518	525	67	367	342	200	0	336	227	372	541
V/C Ratio(X)	0.84	0.56	0.57	0.21	0.79	0.81	0.38	0.00	0.47	0.53	0.29	0.16
Avail Cap(c_a), veh/h	451	692	701	243	528	492	253	0	664	269	697	813
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	1.00	1.00
Uniform Delay (d), s/veh	33.8	19.4	19.4	38.3	27.5	27.6	33.4	0.0	29.4	33.1	27.3	17.6
Incr Delay (d2), s/veh	7.2	1.0	1.0	1.5	5.2	6.5	1.2	0.0	1.0	1.9	0.4	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(50%),veh/ln	4.6	4.2	4.3	0.3	5.5	5.4	1.5	0.0	2.9	2.3	1.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.1	20.4	20.4	39.9	32.7	34.1	34.6	0.0	30.4	35.0	27.7	17.7
LnGrp LOS	D	C	C	D	C	C	C		C	D	C	B
Approach Vol, veh/h		807			581			235			318	
Approach Delay, s/veh		26.0			33.6			31.8			27.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	37.7	14.6	22.2	17.5	28.1	15.9	20.9
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.6	43.5	12.5	32.8	22.3	33.2	13.3	32.0
Max Q Clear Time (g_c+I1), s	12.7	16.4	5.5	6.3	12.5	19.4	7.5	8.8
Green Ext Time (p_c), s	0.0	3.8	0.1	0.3	0.4	3.0	0.1	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	29.2
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	599	1	35	1	17	12	115	769	5	6	585	20
Future Volume (veh/h)	599	1	35	1	17	12	115	769	5	6	585	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	652	0	38	1	18	13	125	836	5	7	636	22
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	748	0	333	75	79	67	149	1877	11	30	1582	55
Arrive On Green	0.22	0.00	0.22	0.04	0.04	0.04	0.17	1.00	1.00	0.02	0.47	0.47
Sat Flow, veh/h	3450	0	1535	1725	1811	1535	1725	3507	21	1725	3393	117
Grp Volume(v), veh/h	652	0	38	1	18	13	125	410	431	7	322	336
Grp Sat Flow(s),veh/h/ln	1725	0	1535	1725	1811	1535	1725	1721	1807	1725	1721	1790
Q Serve(g_s), s	21.9	0.0	2.4	0.1	1.2	1.0	8.4	0.0	0.0	0.5	14.8	14.8
Cycle Q Clear(g_c), s	21.9	0.0	2.4	0.1	1.2	1.0	8.4	0.0	0.0	0.5	14.8	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		0.07
Lane Grp Cap(c), veh/h	748	0	333	75	79	67	149	921	967	30	802	834
V/C Ratio(X)	0.87	0.00	0.11	0.01	0.23	0.19	0.84	0.45	0.45	0.23	0.40	0.40
Avail Cap(c_a), veh/h	1090	0	485	115	121	102	239	921	967	144	802	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)	1.00	0.00	1.00	1.00	1.00	1.00	0.39	0.39	0.39	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	0.0	37.7	54.9	55.4	55.3	48.8	0.0	0.0	58.2	21.0	21.0
Incr Delay (d2), s/veh	5.5	0.0	0.2	0.1	1.4	1.4	5.7	0.6	0.6	3.9	1.5	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(50%),veh/ln	9.4	0.0	0.9	0.0	0.5	0.4	3.4	0.2	0.2	0.2	5.8	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	50.9	0.0	37.9	55.0	56.9	56.7	54.5	0.6	0.6	62.1	22.5	22.5
LnGrp LOS	D		D	D	E	E	D	A	A	E	C	C
Approach Vol, veh/h		690			32			966			665	
Approach Delay, s/veh		50.1			56.7			7.6			22.9	
Approach LOS		D			E			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.8	71.7		31.1	15.1	63.4		10.3				
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1				
Max Green Setting (Gmax), s	10.0	41.7		37.9	16.6	35.1		8.0				
Max Q Clear Time (g_c+I1), s	2.5	2.0		23.9	10.4	16.8		3.2				
Green Ext Time (p_c), s	0.0	4.9		2.1	0.1	3.2		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	25.1
HCM 7th 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												
Traffic Volume (veh/h)	31	170	20	0	230	284	5	2	2	92	9	68
Future Volume (veh/h)	31	170	20	0	230	284	5	2	2	92	9	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	34	185	22	0	250	309	5	2	2	107	0	74
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	401	1133	641	485	733	415	14	6	18	352	0	157
Arrive On Green	0.04	0.43	0.43	0.00	0.28	0.28	0.01	0.01	0.01	0.11	0.00	0.11
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	1208	483	1485	3337	0	1485
Grp Volume(v), veh/h	34	185	22	0	250	309	7	0	2	107	0	74
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1691	0	1485	1668	0	1485
Q Serve(g_s), s	0.5	1.8	0.4	0.0	3.1	7.9	0.2	0.0	0.1	1.2	0.0	1.9
Cycle Q Clear(g_c), s	0.5	1.8	0.4	0.0	3.1	7.9	0.2	0.0	0.1	1.2	0.0	1.9
Prop In Lane	1.00		1.00	1.00		1.00	0.71		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	401	1133	641	485	733	415	20	0	18	352	0	157
V/C Ratio(X)	0.08	0.16	0.03	0.00	0.34	0.74	0.35	0.00	0.11	0.30	0.00	0.47
Avail Cap(c_a), veh/h	541	1227	694	682	1221	691	208	0	183	571	0	254
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	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.8	7.2	6.8	0.0	11.9	13.6	20.3	0.0	20.3	17.1	0.0	17.5
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.0	0.3	2.7	10.0	0.0	2.8	0.5	0.0	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(50%),veh/ln	0.1	0.3	0.1	0.0	0.6	2.0	0.1	0.0	0.0	0.4	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	8.9	7.3	6.8	0.0	12.2	16.3	30.4	0.0	23.1	17.6	0.0	19.7
LnGrp LOS	A	A	A		B	B	C		C	B		B
Approach Vol, veh/h		241			559			9			181	
Approach Delay, s/veh		7.5			14.4			28.7			18.5	
Approach LOS		A			B			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	24.8		10.3	6.3	18.5		6.4				
Change Period (Y+Rc), s	4.7	6.9		5.9	4.7	6.9		5.9				
Max Green Setting (Gmax), s	5.3	19.4		7.1	5.1	19.3		5.1				
Max Q Clear Time (g_c+I1), s	0.0	3.8		3.9	2.5	9.9		2.2				
Green Ext Time (p_c), s	0.0	0.9		0.0	0.0	1.7		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.6
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



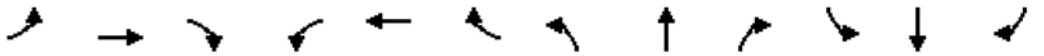
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	25	0	1040	37	424	0	0	877	132
Future Volume (veh/h)	0	0	0	25	0	1040	37	424	0	0	877	132
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				0	0	1159	40	461	0	0	953	143
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				0	555	1410	85	1907	0	0	1497	668
Arrive On Green				0.00	0.00	0.30	0.10	1.00	0.00	0.00	0.43	0.43
Sat Flow, veh/h				0	1826	4642	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				0	0	1159	40	461	0	0	953	143
Grp Sat Flow(s),veh/h/ln				0	1826	1547	1739	1735	0	0	1735	1547
Q Serve(g_s), s				0.0	0.0	20.9	2.0	0.0	0.0	0.0	19.4	5.2
Cycle Q Clear(g_c), s				0.0	0.0	20.9	2.0	0.0	0.0	0.0	19.4	5.2
Prop In Lane				0.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				0	555	1410	85	1907	0	0	1497	668
V/C Ratio(X)				0.00	0.00	0.82	0.47	0.24	0.00	0.00	0.64	0.21
Avail Cap(c_a), veh/h				0	751	1908	135	1907	0	0	1497	668
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				0.0	0.0	29.1	39.5	0.0	0.0	0.0	20.0	16.0
Incr Delay (d2), s/veh				0.0	0.0	2.2	3.9	0.3	0.0	0.0	2.1	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
%ile BackOfQ(50%),veh/ln				0.0	0.0	7.2	0.9	0.1	0.0	0.0	7.7	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				0.0	0.0	31.3	43.4	0.3	0.0	0.0	22.1	16.8
LnGrp LOS						C	D	A			C	B
Approach Vol, veh/h					1159			501			1096	
Approach Delay, s/veh					31.3			3.7			21.4	
Approach LOS					C			A			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	55.6		10.6	44.9		34.4
Change Period (Y+Rc), s	6.1		6.2	6.1		7.1
Max Green Setting (Gmax), s	39.8		7.0	26.6		37.0
Max Q Clear Time (g_c+I1), s	2.0		4.0	21.4		22.9
Green Ext Time (p_c), s	3.3		0.0	3.0		4.5

Intersection Summary		
HCM 7th Control Delay, s/veh	22.4	
HCM 7th LOS	C	

Notes

User approved pedestrian interval to be less than phase max green.
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												
Traffic Volume (veh/h)	39	247	10	153	197	614	4	793	101	371	881	44
Future Volume (veh/h)	39	247	10	153	197	614	4	793	101	371	881	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	42	268	11	166	214	667	4	862	110	403	958	48
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	167	276	234	252	578	850	87	862	418	406	1445	702
Arrive On Green	0.00	0.15	0.15	0.10	0.32	0.32	0.05	0.27	0.27	0.23	0.45	0.45
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	42	268	11	166	214	667	4	862	110	403	958	48
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	0.1	14.6	0.6	7.7	9.1	31.6	0.2	27.0	5.6	23.1	23.5	1.7
Cycle Q Clear(g_c), s	0.1	14.6	0.6	7.7	9.1	31.6	0.2	27.0	5.6	23.1	23.5	1.7
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	167	276	234	252	578	850	87	862	418	406	1445	702
V/C Ratio(X)	0.25	0.97	0.05	0.66	0.37	0.78	0.05	1.00	0.26	0.99	0.66	0.07
Avail Cap(c_a), veh/h	282	276	234	253	578	850	87	862	418	406	1445	702
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	38.4	42.2	36.2	30.8	26.4	17.8	45.2	36.4	28.6	38.2	21.3	15.4
Incr Delay (d2), s/veh	0.8	46.1	0.1	6.1	0.4	4.9	0.2	30.8	0.3	42.9	1.1	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(50%),veh/ln	0.9	9.7	0.2	3.4	3.7	11.4	0.1	13.3	2.0	13.9	7.9	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.2	88.2	36.3	36.9	26.8	22.7	45.4	67.2	29.0	81.1	22.5	15.4
LnGrp LOS	D	F	D	D	C	C	D	F	C	F	C	B
Approach Vol, veh/h		321			1047			976			1409	
Approach Delay, s/veh		80.0			25.8			62.8			39.0	
Approach LOS		F			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.8	34.0	16.5	21.6	9.5	52.3	0.0	38.1
Change Period (Y+Rc), s	4.5	7.0	6.5	6.5	4.5	7.0	4.5	6.5
Max Green Setting (Gmax), s	23.3	27.0	10.1	15.1	5.0	45.3	6.7	20.5
Max Q Clear Time (g_c+I1), s	25.1	29.0	9.7	16.6	2.2	25.5	0.0	33.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	45.0
HCM 7th LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	403	5	1	923	440	184
Future Volume (veh/h)	403	5	1	923	440	184
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	443	0	1	1003	478	200
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	548	244	121	1094	903	790
Arrive On Green	0.16	0.00	0.07	0.67	0.53	0.53
Sat Flow, veh/h	3337	1485	1668	1633	1699	1485
Grp Volume(v), veh/h	443	0	1	1003	478	200
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1633	1699	1485
Q Serve(g_s), s	8.8	0.0	0.0	36.1	12.6	5.0
Cycle Q Clear(g_c), s	8.8	0.0	0.0	36.1	12.6	5.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	548	244	121	1094	903	790
V/C Ratio(X)	0.81	0.00	0.01	0.92	0.53	0.25
Avail Cap(c_a), veh/h	655	291	121	1546	1374	1200
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	0.0	29.6	9.7	10.5	8.7
Incr Delay (d2), s/veh	6.4	0.0	0.0	6.9	0.5	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.0	8.0	3.4	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	34.1	0.0	29.6	16.6	11.0	8.9
LnGrp LOS	C		C	B	B	A
Approach Vol, veh/h	443			1004	678	
Approach Delay, s/veh	34.1			16.6	10.3	
Approach LOS	C			B	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	53.0		15.8	9.5	43.5
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	65.1		13.5	5.0	55.6
Max Q Clear Time (g_c+I1), s	38.1		10.8	2.0	14.6
Green Ext Time (p_c), s	8.0		0.5	0.0	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	18.2
HCM 7th 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												
Traffic Volume (veh/h)	107	197	137	21	392	111	299	0	47	239	0	234
Future Volume (veh/h)	107	197	137	21	392	111	299	0	47	239	0	234
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	116	214	149	23	426	121	325	0	51	260	0	254
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, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	225	539	490	347	479	435	433	0	690	616	0	690
Arrive On Green	0.06	0.33	0.33	0.02	0.29	0.29	0.44	0.00	0.44	0.44	0.00	0.44
Sat Flow, veh/h	1668	1633	1485	1668	1633	1485	1054	0	1585	1268	0	1585
Grp Volume(v), veh/h	116	214	149	23	426	121	325	0	51	260	0	254
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	1633	1485	1054	0	1585	1268	0	1585
Q Serve(g_s), s	4.0	8.3	6.2	0.8	20.6	5.2	24.7	0.0	1.5	12.4	0.0	8.9
Cycle Q Clear(g_c), s	4.0	8.3	6.2	0.8	20.6	5.2	33.6	0.0	1.5	14.0	0.0	8.9
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	225	539	490	347	479	435	433	0	690	616	0	690
V/C Ratio(X)	0.51	0.40	0.30	0.07	0.89	0.28	0.75	0.00	0.07	0.42	0.00	0.37
Avail Cap(c_a), veh/h	225	597	543	407	595	541	452	0	720	639	0	720
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	21.3	21.3	20.6	19.6	27.9	22.5	27.0	0.0	13.6	17.7	0.0	15.7
Incr Delay (d2), s/veh	2.0	0.5	0.3	0.1	13.3	0.3	6.6	0.0	0.0	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(50%),veh/ln	1.5	2.9	1.9	0.3	8.8	1.6	6.2	0.0	0.5	3.1	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.3	21.8	20.9	19.7	41.2	22.8	33.6	0.0	13.6	18.1	0.0	16.0
LnGrp LOS	C	C	C	B	D	C	C		B	B		B
Approach Vol, veh/h		479			570			376			514	
Approach Delay, s/veh		21.9			36.4			30.9			17.1	
Approach LOS		C			D			C			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	34.2		41.7	9.8	31.1		41.7				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.0	30.2		37.5	5.1	30.1		37.5				
Max Q Clear Time (g_c+I1), s	2.8	10.3		16.0	6.0	22.6		35.6				
Green Ext Time (p_c), s	0.0	1.4		2.2	0.0	1.6		0.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	26.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	6	530	137	15	34	384	397	130	12	736	235
Future Volume (veh/h)	187	6	530	137	15	34	384	397	130	12	736	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	195	6	552	143	16	35	400	414	135	12	767	245
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	504	608	735	367	170	372	477	731	620	24	947	423
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.15	0.42	0.42	0.01	0.28	0.28
Sat Flow, veh/h	1268	1752	1485	797	489	1070	3237	1752	1485	1668	3328	1485
Grp Volume(v), veh/h	195	6	552	143	0	51	400	414	135	12	767	245
Grp Sat Flow(s),veh/h/ln	1268	1752	1485	797	0	1559	1618	1752	1485	1668	1664	1485
Q Serve(g_s), s	9.6	0.2	23.5	11.2	0.0	1.7	9.4	14.1	4.6	0.6	16.8	11.1
Cycle Q Clear(g_c), s	11.3	0.2	23.5	11.4	0.0	1.7	9.4	14.1	4.6	0.6	16.8	11.1
Prop In Lane	1.00		1.00	1.00		0.69	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	504	608	735	367	0	541	477	731	620	24	947	423
V/C Ratio(X)	0.39	0.01	0.75	0.39	0.00	0.09	0.84	0.57	0.22	0.49	0.81	0.58
Avail Cap(c_a), veh/h	597	737	844	426	0	656	508	775	657	106	1163	519
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	16.8	15.9	20.5	0.0	17.3	32.5	17.4	14.6	38.3	26.1	24.0
Incr Delay (d2), s/veh	0.5	0.0	3.3	0.7	0.0	0.1	11.3	0.9	0.2	14.4	3.6	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(50%),veh/ln	2.5	0.1	6.8	1.9	0.0	0.5	4.1	4.9	1.3	0.3	6.2	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.6	16.8	19.2	21.2	0.0	17.3	43.8	18.3	14.8	52.7	29.7	25.3
LnGrp LOS	C	B	B	C		B	D	B	B	D	C	C
Approach Vol, veh/h		753			194			949			1024	
Approach Delay, s/veh		19.8			20.2			28.5			28.9	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	39.6		32.9	16.3	29.2		32.9				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	34.7		33.0	12.3	27.4		33.0				
Max Q Clear Time (g_c+I1), s	2.6	16.1		25.5	11.4	18.8		13.4				
Green Ext Time (p_c), s	0.0	2.4		1.8	0.1	3.5		1.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	25.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	72	293	240	104	104	182	742	159	72	1367	72
Future Volume (veh/h)	104	72	293	240	104	104	182	742	159	72	1367	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	113	78	318	261	113	113	198	807	173	78	1486	78
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	333	524	572	309	524	444	226	1741	809	339	1597	743
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.08	0.52	0.52	0.04	0.48	0.48
Sat Flow, veh/h	1127	1826	1547	965	1826	1547	1739	3328	1547	1739	3328	1547
Grp Volume(v), veh/h	113	78	318	261	113	113	198	807	173	78	1486	78
Grp Sat Flow(s),veh/h/ln	1127	1826	1547	965	1826	1547	1739	1664	1547	1739	1664	1547
Q Serve(g_s), s	9.7	3.7	18.8	29.3	5.4	6.5	7.4	17.6	6.9	2.6	48.3	3.2
Cycle Q Clear(g_c), s	15.2	3.7	18.8	33.0	5.4	6.5	7.4	17.6	6.9	2.6	48.3	3.2
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	333	524	572	309	524	444	226	1741	809	339	1597	743
V/C Ratio(X)	0.34	0.15	0.56	0.85	0.22	0.25	0.87	0.46	0.21	0.23	0.93	0.11
Avail Cap(c_a), veh/h	333	524	572	309	524	444	268	1854	862	355	1660	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)	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	37.0	30.6	28.8	43.7	31.2	31.6	29.9	17.3	14.7	14.7	28.1	16.4
Incr Delay (d2), s/veh	0.6	0.1	1.2	19.1	0.2	0.3	23.2	0.2	0.1	0.3	9.6	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(50%),veh/ln	2.7	1.6	6.8	8.9	2.3	2.4	4.2	6.0	2.2	1.0	19.1	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.6	30.7	30.0	62.8	31.4	31.9	53.2	17.5	14.9	15.0	37.7	16.5
LnGrp LOS	D	C	C	E	C	C	D	B	B	B	D	B
Approach Vol, veh/h		509			487			1178			1642	
Approach Delay, s/veh		31.8			48.3			23.1			35.7	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	67.1		38.7	14.3	62.1		38.7
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	5.6	64.1		33.0	12.3	57.4		33.0
Max Q Clear Time (g_c+I1), s	4.6	19.6		20.8	9.4	50.3		35.0
Green Ext Time (p_c), s	0.0	6.2		1.6	0.1	4.9		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	32.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	97	231	118	84	199	145	777	48	271	1534	284
Future Volume (veh/h)	201	97	231	118	84	199	145	777	48	271	1534	284
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	218	105	251	128	91	216	158	845	52	295	1667	309
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, %	8	8	8	8	8	8	7	7	7	5	5	5
Cap, veh/h	274	323	427	261	322	552	175	1449	710	324	1764	853
Arrive On Green	0.05	0.18	0.18	0.04	0.18	0.18	0.10	0.42	0.42	0.19	0.51	0.51
Sat Flow, veh/h	1697	1781	1502	1697	1781	1502	1711	3413	1515	1739	3469	1541
Grp Volume(v), veh/h	218	105	251	128	91	216	158	845	52	295	1667	309
Grp Sat Flow(s),veh/h/ln	1697	1781	1502	1697	1781	1502	1711	1706	1515	1739	1735	1541
Q Serve(g_s), s	5.5	6.3	17.6	5.4	5.4	13.0	11.2	23.1	2.3	20.3	55.5	13.7
Cycle Q Clear(g_c), s	5.5	6.3	17.6	5.4	5.4	13.0	11.2	23.1	2.3	20.3	55.5	13.7
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	274	323	427	261	322	552	175	1449	710	324	1764	853
V/C Ratio(X)	0.79	0.33	0.59	0.49	0.28	0.39	0.90	0.58	0.07	0.91	0.95	0.36
Avail Cap(c_a), veh/h	274	497	574	261	496	699	175	1449	710	403	1789	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	47.1	43.5	37.6	41.8	43.2	28.6	54.2	26.9	17.9	48.7	28.4	15.2
Incr Delay (d2), s/veh	14.9	0.6	1.3	1.4	0.5	0.5	41.5	0.6	0.0	21.4	10.9	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(50%),veh/ln	5.2	2.9	6.5	1.1	2.4	4.7	6.7	9.2	0.8	10.5	24.1	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.0	44.1	38.9	43.2	43.7	29.1	95.7	27.5	17.9	70.1	39.3	15.5
LnGrp LOS	E	D	D	D	D	C	F	C	B	E	D	B
Approach Vol, veh/h		574			435			1055			2271	
Approach Delay, s/veh		48.6			36.3			37.2			40.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.3	57.4	9.9	27.6	17.0	67.6	10.0	27.5
Change Period (Y+Rc), s	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5
Max Green Setting (Gmax), s	22.8	47.2	5.4	34.1	12.5	63.0	5.5	34.0
Max Q Clear Time (g_c+I1), s	22.3	25.1	7.4	19.6	13.2	57.5	7.5	15.0
Green Ext Time (p_c), s	0.4	5.9	0.0	1.3	0.0	4.6	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	40.1
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	640	50	24	444	107	75	80	21	234	141	252
Future Volume (veh/h)	121	640	50	24	444	107	75	80	21	234	141	252
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	129	681	53	26	472	114	80	85	22	249	150	268
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	223	859	67	108	585	140	199	255	66	288	427	556
Arrive On Green	0.13	0.35	0.35	0.06	0.28	0.28	0.12	0.19	0.19	0.17	0.24	0.24
Sat Flow, veh/h	1668	2466	192	1668	2096	503	1668	1337	346	1668	1752	1466
Grp Volume(v), veh/h	129	362	372	26	294	292	80	0	107	249	150	268
Grp Sat Flow(s),veh/h/ln	1668	1312	1345	1668	1312	1287	1668	0	1683	1668	1752	1466
Q Serve(g_s), s	6.2	21.3	21.3	1.3	17.8	18.1	3.8	0.0	4.7	12.4	6.1	11.9
Cycle Q Clear(g_c), s	6.2	21.3	21.3	1.3	17.8	18.1	3.8	0.0	4.7	12.4	6.1	11.9
Prop In Lane	1.00		0.14	1.00		0.39	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	223	457	469	108	367	359	199	0	320	288	427	556
V/C Ratio(X)	0.58	0.79	0.79	0.24	0.80	0.81	0.40	0.00	0.33	0.87	0.35	0.48
Avail Cap(c_a), veh/h	259	559	573	234	539	529	249	0	629	395	808	875
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	1.00	1.00
Uniform Delay (d), s/veh	34.8	25.1	25.1	38.1	28.7	28.8	34.9	0.0	30.0	34.5	26.8	20.3
Incr Delay (d2), s/veh	2.4	6.3	6.2	1.1	5.4	6.0	1.3	0.0	0.6	13.7	0.5	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(50%),veh/ln	2.6	7.0	7.2	0.5	5.9	5.9	1.6	0.0	2.0	6.1	2.6	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.2	31.4	31.3	39.2	34.1	34.8	36.2	0.0	30.6	48.2	27.3	21.0
LnGrp LOS	D	C	C	D	C	C	D		C	D	C	C
Approach Vol, veh/h		863			612			187			667	
Approach Delay, s/veh		32.3			34.6			33.0			32.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	34.9	14.9	25.6	16.1	29.0	19.5	21.0
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.6	36.5	12.8	39.5	13.3	35.2	20.3	32.0
Max Q Clear Time (g_c+I1), s	13.3	23.3	5.8	13.9	8.2	20.1	14.4	6.7
Green Ext Time (p_c), s	0.0	3.8	0.1	1.9	0.1	3.2	0.4	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	33.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	1	12	14	20	13	81	487	4	7	1707	28
Future Volume (veh/h)	358	1	12	14	20	13	81	487	4	7	1707	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	390	0	13	15	22	14	88	529	4	8	1855	30
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	438	0	195	85	89	76	107	2256	17	33	2084	34
Arrive On Green	0.13	0.00	0.13	0.05	0.05	0.05	0.12	1.00	1.00	0.02	0.60	0.60
Sat Flow, veh/h	3450	0	1535	1725	1811	1535	1725	3500	26	1725	3466	56
Grp Volume(v), veh/h	390	0	13	15	22	14	88	260	273	8	919	966
Grp Sat Flow(s),veh/h/ln	1725	0	1535	1725	1811	1535	1725	1721	1806	1725	1721	1801
Q Serve(g_s), s	15.6	0.0	1.0	1.2	1.6	1.2	7.0	0.0	0.0	0.6	63.9	64.6
Cycle Q Clear(g_c), s	15.6	0.0	1.0	1.2	1.6	1.2	7.0	0.0	0.0	0.6	63.9	64.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		0.03
Lane Grp Cap(c), veh/h	438	0	195	85	89	76	107	1109	1164	33	1035	1083
V/C Ratio(X)	0.89	0.00	0.07	0.18	0.25	0.19	0.82	0.23	0.23	0.24	0.89	0.89
Avail Cap(c_a), veh/h	466	0	207	100	105	89	117	1109	1164	124	1035	1083
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	1.00	1.00	0.87	0.87	0.87	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	0.0	53.8	63.8	64.0	63.9	60.5	0.0	0.0	67.7	23.9	24.0
Incr Delay (d2), s/veh	18.1	0.0	0.1	1.0	1.4	1.2	29.8	0.4	0.4	3.7	11.2	11.2
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(50%),veh/ln	7.7	0.0	0.4	0.5	0.8	0.5	3.7	0.1	0.1	0.3	25.9	27.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	78.2	0.0	53.9	64.8	65.5	65.0	90.3	0.4	0.4	71.4	35.1	35.2
LnGrp LOS	E		D	E	E	E	F	A	A	E	D	D
Approach Vol, veh/h		403			51			621			1893	
Approach Delay, s/veh		77.4			65.1			13.2			35.3	
Approach LOS		E			E			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	97.7		22.9	13.4	91.7		12.0				
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1				
Max Green Setting (Gmax), s	10.1	80.5		18.9	9.5	81.1		8.1				
Max Q Clear Time (g_c+I1), s	2.6	2.0		17.6	9.0	66.6		3.6				
Green Ext Time (p_c), s	0.0	2.8		0.2	0.0	10.1		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	36.9
HCM 7th 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												
Traffic Volume (veh/h)	37	261	9	2	274	160	12	9	2	350	5	51
Future Volume (veh/h)	37	261	9	2	274	160	12	9	2	350	5	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	40	284	10	2	298	174	13	10	2	384	0	55
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	372	743	420	377	633	358	29	22	45	400	0	178
Arrive On Green	0.04	0.28	0.28	0.00	0.24	0.24	0.03	0.03	0.03	0.12	0.00	0.12
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	963	741	1485	3337	0	1485
Grp Volume(v), veh/h	40	284	10	2	298	174	23	0	2	384	0	55
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1704	0	1485	1668	0	1485
Q Serve(g_s), s	0.7	3.6	0.2	0.0	4.0	4.2	0.6	0.0	0.1	4.7	0.0	1.4
Cycle Q Clear(g_c), s	0.7	3.6	0.2	0.0	4.0	4.2	0.6	0.0	0.1	4.7	0.0	1.4
Prop In Lane	1.00		1.00	1.00		1.00	0.57		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	372	743	420	377	633	358	51	0	45	400	0	178
V/C Ratio(X)	0.11	0.38	0.02	0.01	0.47	0.49	0.45	0.00	0.04	0.96	0.00	0.31
Avail Cap(c_a), veh/h	499	791	448	574	791	448	205	0	179	1135	0	505
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	11.0	12.0	10.7	11.9	13.5	13.5	19.8	0.0	19.5	18.2	0.0	16.7
Incr Delay (d2), s/veh	0.1	0.3	0.0	0.0	0.5	1.0	6.0	0.0	0.4	13.5	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(50%),veh/ln	0.2	0.7	0.0	0.0	0.8	1.0	0.3	0.0	0.0	2.2	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.2	12.3	10.8	11.9	14.0	14.5	25.8	0.0	19.9	31.6	0.0	17.7
LnGrp LOS	B	B	B	B	B	B	C		B	C		B
Approach Vol, veh/h		334			474			25			439	
Approach Delay, s/veh		12.1			14.2			25.3			29.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	18.6		10.9	6.5	16.9		7.2				
Change Period (Y+Rc), s	4.7	6.9		5.9	4.7	6.9		5.9				
Max Green Setting (Gmax), s	5.0	12.5		14.1	5.0	12.5		5.0				
Max Q Clear Time (g_c+I1), s	2.0	5.6		3.4	2.7	6.2		2.6				
Green Ext Time (p_c), s	0.0	0.8		0.0	0.0	1.2		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	19.3
HCM 7th 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												
Traffic Volume (veh/h)	0	0	0	38	0	809	9	318	0	0	1329	175
Future Volume (veh/h)	0	0	0	38	0	809	9	318	0	0	1329	175
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				0	0	914	10	342	0	0	1429	188
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				0	432	1099	29	2232	0	0	1978	882
Arrive On Green				0.00	0.00	0.24	0.02	0.64	0.00	0.00	0.57	0.57
Sat Flow, veh/h				0	1826	4642	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				0	0	914	10	342	0	0	1429	188
Grp Sat Flow(s),veh/h/ln				0	1826	1547	1739	1735	0	0	1735	1547
Q Serve(g_s), s				0.0	0.0	20.6	0.6	4.3	0.0	0.0	33.1	6.5
Cycle Q Clear(g_c), s				0.0	0.0	20.6	0.6	4.3	0.0	0.0	33.1	6.5
Prop In Lane				0.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				0	432	1099	29	2232	0	0	1978	882
V/C Ratio(X)				0.00	0.00	0.83	0.34	0.15	0.00	0.00	0.72	0.21
Avail Cap(c_a), veh/h				0	614	1561	111	2232	0	0	1978	882
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				0.0	0.0	39.9	53.5	7.8	0.0	0.0	17.3	11.6
Incr Delay (d2), s/veh				0.0	0.0	2.7	6.8	0.1	0.0	0.0	2.3	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
%ile BackOfQ(50%),veh/ln				0.0	0.0	7.6	0.3	1.5	0.0	0.0	12.8	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				0.0	0.0	42.6	60.2	7.9	0.0	0.0	19.6	12.1
LnGrp LOS						D	E	A			B	B
Approach Vol, veh/h					914			352			1617	
Approach Delay, s/veh					42.6			9.4			18.7	
Approach LOS					D			A			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	76.9		8.0	68.8		33.1
Change Period (Y+Rc), s	6.1		6.2	6.1		7.1
Max Green Setting (Gmax), s	59.8		7.0	46.6		37.0
Max Q Clear Time (g_c+I1), s	6.3		2.6	35.1		22.6
Green Ext Time (p_c), s	2.4		0.0	7.7		3.5

Intersection Summary		
HCM 7th Control Delay, s/veh	25.2	
HCM 7th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	92	771	377	425	689	89
Future Volume (veh/h)	92	771	377	425	689	89
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	100	0	410	462	749	97
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	125		528	1272	851	728
Arrive On Green	0.08	0.00	0.16	0.73	0.49	0.49
Sat Flow, veh/h	1668	1485	3237	1737	1737	1485
Grp Volume(v), veh/h	100	0	410	462	749	97
Grp Sat Flow(s),veh/h/ln	1668	1485	1618	1737	1737	1485
Q Serve(g_s), s	3.4	0.0	6.9	5.5	22.1	2.0
Cycle Q Clear(g_c), s	3.4	0.0	6.9	5.5	22.1	2.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	125		528	1272	851	728
V/C Ratio(X)	0.80		0.78	0.36	0.88	0.13
Avail Cap(c_a), veh/h	190		652	1598	1111	950
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	22.9	2.8	13.0	7.9
Incr Delay (d2), s/veh	12.8	0.0	4.7	0.2	6.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.5	0.2	6.9	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	38.8	0.0	27.6	3.0	19.8	8.0
LnGrp LOS	D		C	A	B	A
Approach Vol, veh/h	100			872	846	
Approach Delay, s/veh	38.8			14.5	18.4	
Approach LOS	D			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		48.3		8.8	13.8	34.5
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		52.5		6.5	11.5	36.5
Max Q Clear Time (g_c+I1), s		7.5		5.4	8.9	24.1
Green Ext Time (p_c), s		2.6		0.0	0.4	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	17.7
HCM 7th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	172	6	93	174	474	9	781	110	807	896	47
Future Volume (veh/h)	41	172	6	93	174	474	9	781	110	807	896	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	45	187	7	101	189	515	10	849	120	877	974	51
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	153	199	169	254	500	1468	21	896	435	894	1702	826
Arrive On Green	0.00	0.11	0.11	0.10	0.27	0.27	0.01	0.28	0.28	0.26	0.53	0.53
Sat Flow, veh/h	1739	1826	1547	1739	1826	2723	1739	3188	1547	3374	3188	1547
Grp Volume(v), veh/h	45	187	7	101	189	515	10	849	120	877	974	51
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1362	1739	1594	1547	1687	1594	1547
Q Serve(g_s), s	0.1	10.2	0.4	4.8	8.4	10.8	0.6	26.1	6.0	25.8	20.5	1.6
Cycle Q Clear(g_c), s	0.1	10.2	0.4	4.8	8.4	10.8	0.6	26.1	6.0	25.8	20.5	1.6
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	153	199	169	254	500	1468	21	896	435	894	1702	826
V/C Ratio(X)	0.29	0.94	0.04	0.40	0.38	0.35	0.47	0.95	0.28	0.98	0.57	0.06
Avail Cap(c_a), veh/h	325	199	169	254	500	1468	87	896	435	894	1702	826
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	42.1	44.2	39.9	32.4	29.4	13.1	49.1	35.2	28.0	36.5	15.6	11.2
Incr Delay (d2), s/veh	1.1	46.8	0.1	1.0	0.5	0.1	15.6	18.7	0.3	25.4	0.5	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(50%),veh/ln	1.0	7.0	0.2	2.0	3.5	2.9	0.3	11.5	2.1	12.9	6.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.2	91.0	40.0	33.4	29.9	13.2	64.7	53.9	28.4	61.9	16.1	11.3
LnGrp LOS	D	F	D	C	C	B	E	D	C	E	B	B
Approach Vol, veh/h		239			805			979			1902	
Approach Delay, s/veh		80.5			19.7			50.9			37.1	
Approach LOS		F			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.0	35.1	16.5	17.4	5.7	60.4	0.0	33.9
Change Period (Y+Rc), s	4.5	7.0	6.5	6.5	4.5	7.0	6.5	6.5
Max Green Setting (Gmax), s	26.5	28.1	10.0	10.9	5.0	49.6	10.0	10.9
Max Q Clear Time (g_c+I1), s	27.8	28.1	6.8	12.2	2.6	22.5	0.0	12.8
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.0	6.8	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	39.6
HCM 7th LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	127	2	1	329	1045	408
Future Volume (veh/h)	127	2	1	329	1045	408
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	140	0	1	358	1136	443
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	193	86	209	2516	1191	1041
Arrive On Green	0.06	0.00	0.06	0.81	0.70	0.70
Sat Flow, veh/h	3337	1485	1668	3185	1699	1485
Grp Volume(v), veh/h	140	0	1	358	1136	443
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1552	1699	1485
Q Serve(g_s), s	3.6	0.0	0.0	2.1	52.3	11.0
Cycle Q Clear(g_c), s	3.6	0.0	0.0	2.1	52.3	11.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	193	86	209	2516	1191	1041
V/C Ratio(X)	0.73	0.00	0.00	0.14	0.95	0.43
Avail Cap(c_a), veh/h	193	86	209	2636	1257	1098
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	0.0	19.1	1.8	11.7	5.5
Incr Delay (d2), s/veh	12.9	0.0	0.0	0.0	15.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	0.1	16.0	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	53.0	0.0	19.1	1.8	27.0	5.8
LnGrp LOS	D		B	A	C	A
Approach Vol, veh/h	140			359	1579	
Approach Delay, s/veh	53.0			1.8	21.0	
Approach LOS	D			A	C	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	77.1		9.5	9.5	67.6
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	73.6		5.0	5.0	64.1
Max Q Clear Time (g_c+I1), s	4.1		5.6	2.0	54.3
Green Ext Time (p_c), s	2.2		0.0	0.0	6.4

Intersection Summary	
HCM 7th Control Delay, s/veh	19.9
HCM 7th 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												
Traffic Volume (veh/h)	277	411	352	54	143	275	110	0	17	91	0	86
Future Volume (veh/h)	277	411	352	54	143	275	110	0	17	91	0	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	301	447	429	59	155	299	137	0	0	99	0	93
Peak Hour Factor	0.92	0.92	0.82	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	636	632	574	371	460	418	658	230	0	342	230	183
Arrive On Green	0.17	0.39	0.39	0.06	0.28	0.28	0.12	0.00	0.00	0.12	0.00	0.12
Sat Flow, veh/h	1668	1633	1485	1668	1633	1485	2441	1870	0	1328	1870	1485
Grp Volume(v), veh/h	301	447	429	59	155	299	137	0	0	99	0	93
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	1633	1485	1221	1870	0	1328	1870	1485
Q Serve(g_s), s	4.6	9.3	10.0	1.0	3.0	7.3	2.1	0.0	0.0	2.8	0.0	2.4
Cycle Q Clear(g_c), s	4.6	9.3	10.0	1.0	3.0	7.3	2.1	0.0	0.0	2.8	0.0	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	636	632	574	371	460	418	658	230	0	342	230	183
V/C Ratio(X)	0.47	0.71	0.75	0.16	0.34	0.72	0.21	0.00	0.00	0.29	0.00	0.51
Avail Cap(c_a), veh/h	795	1112	1011	479	889	808	983	479	0	519	479	380
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	6.9	10.4	10.6	9.4	11.5	13.0	16.4	0.0	0.0	16.7	0.0	16.5
Incr Delay (d2), s/veh	0.5	1.5	2.0	0.2	0.4	2.3	0.2	0.0	0.0	0.5	0.0	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(50%),veh/ln	0.7	2.0	2.0	0.2	0.7	1.8	0.4	0.0	0.0	0.7	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.5	11.9	12.6	9.6	11.9	15.3	16.5	0.0	0.0	17.2	0.0	18.7
LnGrp LOS	A	B	B	A	B	B	B			B		B
Approach Vol, veh/h		1177			513			137			192	
Approach Delay, s/veh		11.0			13.6			16.5			17.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	22.5		10.7	11.3	18.2		10.7				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	27.4		10.3	10.5	21.9		10.3				
Max Q Clear Time (g_c+I1), s	3.0	12.0		4.8	6.6	9.3		4.1				
Green Ext Time (p_c), s	0.0	3.5		0.2	0.3	1.4		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.7
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	24	27	451	56	86	442
Future Volume (veh/h)	24	27	451	56	86	442
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1752	1752	1633	1752	1752	1633
Adj Flow Rate, veh/h	26	29	490	61	93	480
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	18	10	10	18
Cap, veh/h	43	48	615	77	137	1040
Arrive On Green	0.06	0.06	0.43	0.43	0.08	0.64
Sat Flow, veh/h	729	813	1424	177	1668	1633
Grp Volume(v), veh/h	56	0	0	551	93	480
Grp Sat Flow(s),veh/h/ln	1569	0	0	1601	1668	1633
Q Serve(g_s), s	1.3	0.0	0.0	11.4	2.1	5.8
Cycle Q Clear(g_c), s	1.3	0.0	0.0	11.4	2.1	5.8
Prop In Lane	0.46	0.52		0.11	1.00	
Lane Grp Cap(c), veh/h	92	0	0	691	137	1040
V/C Ratio(X)	0.61	0.00	0.00	0.80	0.68	0.46
Avail Cap(c_a), veh/h	1111	0	0	1277	276	1774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	0.0	0.0	9.4	17.0	3.6
Incr Delay (d2), s/veh	6.3	0.0	0.0	2.2	5.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	2.5	0.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.8	0.0	0.0	11.6	22.8	3.9
LnGrp LOS	C			B	C	A
Approach Vol, veh/h	56		551			573
Approach Delay, s/veh	23.8		11.6			6.9
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.8	23.4			31.2	6.9
Change Period (Y+Rc), s	4.7	6.9			6.9	4.7
Max Green Setting (Gmax), s	6.3	30.4			41.4	27.0
Max Q Clear Time (g_c+I1), s	4.1	13.4			7.8	3.3
Green Ext Time (p_c), s	0.0	3.1			3.0	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	9.9
HCM 7th 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												
Traffic Volume (veh/h)	176	28	301	99	7	8	514	807	87	42	339	100
Future Volume (veh/h)	176	28	301	99	7	8	514	807	87	42	339	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	191	30	327	108	8	9	559	877	95	46	368	109
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	338	345	1065	267	148	167	681	951	806	67	1239	553
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.21	0.54	0.54	0.04	0.37	0.37
Sat Flow, veh/h	1307	1752	2613	959	753	847	3237	1752	1485	1668	3328	1485
Grp Volume(v), veh/h	191	30	327	108	0	17	559	877	95	46	368	109
Grp Sat Flow(s),veh/h/ln	1307	1752	1306	959	0	1599	1618	1752	1485	1668	1664	1485
Q Serve(g_s), s	10.9	1.1	6.7	8.1	0.0	0.7	13.0	36.0	2.5	2.1	6.1	3.9
Cycle Q Clear(g_c), s	11.6	1.1	6.7	9.2	0.0	0.7	13.0	36.0	2.5	2.1	6.1	3.9
Prop In Lane	1.00		1.00	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	338	345	1065	267	0	315	681	951	806	67	1239	553
V/C Ratio(X)	0.57	0.09	0.31	0.40	0.00	0.05	0.82	0.92	0.12	0.68	0.30	0.20
Avail Cap(c_a), veh/h	629	736	1647	481	0	672	1100	1108	939	106	1239	553
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	30.3	25.8	15.8	29.6	0.0	25.6	29.6	16.5	8.8	37.2	17.4	16.7
Incr Delay (d2), s/veh	1.5	0.1	0.2	1.0	0.0	0.1	2.7	11.4	0.1	11.6	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(50%),veh/ln	3.2	0.4	1.7	1.8	0.0	0.2	4.7	13.5	0.6	1.0	2.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.8	25.9	15.9	30.5	0.0	25.7	32.3	27.9	8.8	48.8	17.5	16.9
LnGrp LOS	C	C	B	C		C	C	C	A	D	B	B
Approach Vol, veh/h		548			125			1531			523	
Approach Delay, s/veh		22.0			29.9			28.3			20.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	49.5		21.2	21.2	36.2		21.2				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	49.7		33.0	26.7	28.0		33.0				
Max Q Clear Time (g_c+I1), s	4.1	38.0		13.6	15.0	8.1		11.2				
Green Ext Time (p_c), s	0.0	4.6		1.9	1.6	2.3		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	25.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	80	105	75	32	32	287	1470	193	80	613	80
Future Volume (veh/h)	32	80	105	75	32	32	287	1470	193	80	613	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	35	87	114	82	35	35	312	1598	210	87	666	87
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	262	264	224	214	264	224	593	1894	880	236	2446	791
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.11	0.57	0.57	0.06	0.51	0.51
Sat Flow, veh/h	1299	1826	1547	1153	1826	1547	1739	3328	1547	1739	4782	1547
Grp Volume(v), veh/h	35	87	114	82	35	35	312	1598	210	87	666	87
Grp Sat Flow(s),veh/h/ln	1299	1826	1547	1153	1826	1547	1739	1664	1547	1739	1594	1547
Q Serve(g_s), s	1.8	3.2	5.1	5.2	1.3	1.5	5.8	29.9	5.1	1.7	5.9	2.2
Cycle Q Clear(g_c), s	3.1	3.2	5.1	8.4	1.3	1.5	5.8	29.9	5.1	1.7	5.9	2.2
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	262	264	224	214	264	224	593	1894	880	236	2446	791
V/C Ratio(X)	0.13	0.33	0.51	0.38	0.13	0.16	0.53	0.84	0.24	0.37	0.27	0.11
Avail Cap(c_a), veh/h	645	803	680	554	803	680	884	2203	1024	255	2446	791
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	29.3	28.8	29.6	32.6	28.0	28.1	6.4	13.4	8.1	14.0	10.4	9.5
Incr Delay (d2), s/veh	0.2	0.7	1.8	1.1	0.2	0.3	0.7	2.8	0.1	1.0	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(50%),veh/ln	0.5	1.4	1.9	1.4	0.5	0.5	1.4	8.4	1.2	0.5	1.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.6	29.5	31.4	33.7	28.2	28.4	7.1	16.2	8.2	15.0	10.5	9.6
LnGrp LOS	C	C	C	C	C	C	A	B	A	B	B	A
Approach Vol, veh/h		236			152			2120			840	
Approach Delay, s/veh		30.5			31.2			14.1			10.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	49.6		16.6	13.2	45.3		16.6				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	49.7		33.0	21.1	33.6		33.0				
Max Q Clear Time (g_c+I1), s	3.3	31.9		7.1	7.8	7.9		10.4				
Green Ext Time (p_c), s	0.0	10.8		0.9	0.7	4.4		0.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	15.2
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	877	6	3	508	28	14	5	2	17	3	42
Future Volume (veh/h)	113	877	6	3	508	28	14	5	2	17	3	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1381	1737	1737	1381	1737	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	118	914	6	3	529	29	15	5	2	18	3	44
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, %	11	35	11	11	35	11	11	11	11	11	11	11
Cap, veh/h	150	1194	670	7	967	542	322	88	301	363	50	301
Arrive On Green	0.09	0.45	0.45	0.00	0.37	0.37	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1654	2624	1472	1654	2624	1472	948	432	1472	1109	243	1472
Grp Volume(v), veh/h	118	914	6	3	529	29	20	0	2	21	0	44
Grp Sat Flow(s),veh/h/ln	1654	1312	1472	1654	1312	1472	1380	0	1472	1352	0	1472
Q Serve(g_s), s	3.4	14.3	0.1	0.1	7.8	0.6	0.0	0.0	0.1	0.2	0.0	1.2
Cycle Q Clear(g_c), s	3.4	14.3	0.1	0.1	7.8	0.6	0.5	0.0	0.1	0.6	0.0	1.2
Prop In Lane	1.00		1.00	1.00		1.00	0.75		1.00	0.86		1.00
Lane Grp Cap(c), veh/h	150	1194	670	7	967	542	410	0	301	413	0	301
V/C Ratio(X)	0.79	0.77	0.01	0.44	0.55	0.05	0.05	0.00	0.01	0.05	0.00	0.15
Avail Cap(c_a), veh/h	405	2117	1187	169	1741	977	1627	0	1623	1631	0	1623
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	21.8	11.2	7.3	24.3	12.2	10.0	15.7	0.0	15.5	15.7	0.0	16.0
Incr Delay (d2), s/veh	8.8	1.1	0.0	39.7	0.5	0.0	0.0	0.0	0.0	0.1	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(50%),veh/ln	1.4	2.5	0.0	0.1	1.6	0.1	0.1	0.0	0.0	0.2	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.6	12.2	7.3	64.0	12.7	10.0	15.7	0.0	15.5	15.8	0.0	16.2
LnGrp LOS	C	B	A	E	B	B	B		B	B		B
Approach Vol, veh/h		1038			561			22			65	
Approach Delay, s/veh		14.3			12.9			15.7			16.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.9	29.2		14.9	9.1	24.9		14.9				
Change Period (Y+Rc), s	4.7	6.9		4.9	4.7	6.9		4.9				
Max Green Setting (Gmax), s	5.3	39.5		54.0	12.0	32.5		54.0				
Max Q Clear Time (g_c+I1), s	2.1	16.3		3.2	5.4	9.8		2.5				
Green Ext Time (p_c), s	0.0	6.0		0.2	0.1	3.2		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.9
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	352	494	59	13	353	243	71	157	18	130	109	126
Future Volume (veh/h)	352	494	59	13	353	243	71	157	18	130	109	126
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	0.99		0.98	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	374	526	63	14	376	259	76	167	19	138	116	134
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	414	950	113	66	510	285	446	297	34	419	370	678
Arrive On Green	0.25	0.40	0.40	0.04	0.19	0.19	0.12	0.19	0.19	0.14	0.21	0.21
Sat Flow, veh/h	1668	2360	282	1668	2624	1469	1668	1542	175	1668	1752	1463
Grp Volume(v), veh/h	374	292	297	14	376	259	76	0	186	138	116	134
Grp Sat Flow(s),veh/h/ln	1668	1312	1329	1668	1312	1469	1668	0	1717	1668	1752	1463
Q Serve(g_s), s	18.3	14.4	14.5	0.7	11.4	14.5	2.8	0.0	8.3	5.1	4.7	4.6
Cycle Q Clear(g_c), s	18.3	14.4	14.5	0.7	11.4	14.5	2.8	0.0	8.3	5.1	4.7	4.6
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	414	529	535	66	510	285	446	0	331	419	370	678
V/C Ratio(X)	0.90	0.55	0.56	0.21	0.74	0.91	0.17	0.00	0.56	0.33	0.31	0.20
Avail Cap(c_a), veh/h	521	698	706	238	950	532	486	0	652	428	665	924
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	1.00	1.00
Uniform Delay (d), s/veh	30.7	19.3	19.4	39.2	31.9	33.2	21.0	0.0	30.8	21.1	28.1	13.5
Incr Delay (d2), s/veh	16.3	0.9	0.9	1.6	2.1	10.7	0.2	0.0	1.5	0.5	0.5	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(50%),veh/ln	8.9	4.2	4.3	0.3	3.6	5.9	1.1	0.0	3.5	2.0	2.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.0	20.2	20.3	40.7	34.0	43.9	21.2	0.0	32.3	21.6	28.6	13.7
LnGrp LOS	D	C	C	D	C	D	C		C	C	C	B
Approach Vol, veh/h		963			649			262			388	
Approach Delay, s/veh		30.6			38.1			29.1			20.9	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	39.0	14.7	22.5	25.6	21.5	16.2	20.9
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.6	44.8	12.0	32.0	26.3	30.5	12.0	32.0
Max Q Clear Time (g_c+I1), s	12.7	16.5	4.8	6.7	20.3	13.4	7.1	10.3
Green Ext Time (p_c), s	0.0	3.9	0.1	0.3	0.6	1.3	0.1	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	30.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	501	0	24	459	378	1	90	36	121	33	1
Future Volume (veh/h)	0	501	0	24	459	378	1	90	36	121	33	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	0	545	0	26	499	411	1	98	39	84	103	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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	4	724	410	51	1075	608	2	157	134	166	174	148
Arrive On Green	0.00	0.28	0.00	0.03	0.41	0.41	0.09	0.09	0.09	0.10	0.10	0.10
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	18	1733	1485	1668	1752	1485
Grp Volume(v), veh/h	0	545	0	26	499	411	99	0	39	84	103	1
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1751	0	1485	1668	1752	1485
Q Serve(g_s), s	0.0	8.7	0.0	0.7	6.3	10.3	2.5	0.0	1.1	2.2	2.6	0.0
Cycle Q Clear(g_c), s	0.0	8.7	0.0	0.7	6.3	10.3	2.5	0.0	1.1	2.2	2.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.01		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	4	724	410	51	1075	608	158	0	134	166	174	148
V/C Ratio(X)	0.00	0.75	0.00	0.51	0.46	0.68	0.63	0.00	0.29	0.51	0.59	0.01
Avail Cap(c_a), veh/h	183	1057	598	183	1075	608	280	0	237	230	242	205
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	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	15.1	0.0	21.8	9.8	11.0	20.0	0.0	19.4	19.5	19.7	18.5
Incr Delay (d2), s/veh	0.0	1.8	0.0	7.5	0.3	3.0	4.0	0.0	1.2	2.4	3.2	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.0	0.0	0.3	1.1	2.5	1.0	0.0	0.3	0.8	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	16.9	0.0	29.3	10.1	14.0	24.0	0.0	20.6	21.9	22.9	18.6
LnGrp LOS		B		C	B	B	C		C	C	C	B
Approach Vol, veh/h		545			936			138			188	
Approach Delay, s/veh		16.9			12.4			23.1			22.4	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.1	19.5		10.2	0.0	25.6		9.8				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.3	18.4		6.3	5.0	18.4		7.3				
Max Q Clear Time (g_c+I1), s	2.7	10.7		4.6	0.0	12.3		4.5				
Green Ext Time (p_c), s	0.0	1.9		0.1	0.0	2.3		0.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	15.6
HCM 7th 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												
Traffic Volume (veh/h)	821	1	35	1	17	12	155	1049	5	6	714	20
Future Volume (veh/h)	821	1	35	1	17	12	155	1049	5	6	714	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	893	0	38	1	18	13	168	1140	5	7	776	22
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	975	0	434	68	71	60	189	1799	8	29	2073	59
Arrive On Green	0.28	0.00	0.28	0.04	0.04	0.04	0.22	1.00	1.00	0.02	0.42	0.42
Sat Flow, veh/h	3450	0	1535	1725	1811	1535	1725	3513	15	1725	4942	140
Grp Volume(v), veh/h	893	0	38	1	18	13	168	558	587	7	517	281
Grp Sat Flow(s),veh/h/ln	1725	0	1535	1725	1811	1535	1725	1721	1808	1725	1648	1786
Q Serve(g_s), s	37.6	0.0	2.7	0.1	1.4	1.2	14.2	0.0	0.0	0.6	16.2	16.3
Cycle Q Clear(g_c), s	37.6	0.0	2.7	0.1	1.4	1.2	14.2	0.0	0.0	0.6	16.2	16.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		0.08
Lane Grp Cap(c), veh/h	975	0	434	68	71	60	189	881	926	29	1382	749
V/C Ratio(X)	0.92	0.00	0.09	0.01	0.25	0.22	0.89	0.63	0.63	0.24	0.37	0.38
Avail Cap(c_a), veh/h	1171	0	521	92	97	82	283	881	926	115	1382	749
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	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.1	0.0	39.6	69.3	69.9	69.8	57.7	0.0	0.0	72.8	30.0	30.0
Incr Delay (d2), s/veh	10.0	0.0	0.1	0.1	1.8	1.8	2.4	0.3	0.3	4.2	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(50%),veh/ln	17.0	0.0	1.0	0.0	0.7	0.5	5.5	0.1	0.1	0.3	6.3	7.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.1	0.0	39.7	69.4	71.8	71.6	60.1	0.3	0.3	77.0	30.8	31.4
LnGrp LOS	E		D	E	E	E	E	A	A	E	C	C
Approach Vol, veh/h		931			32			1313			805	
Approach Delay, s/veh		61.2			71.6			8.0			31.4	
Approach LOS		E			E			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	84.3		47.5	21.1	70.4		11.0				
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1				
Max Green Setting (Gmax), s	10.0	58.7		50.9	24.6	44.1		8.0				
Max Q Clear Time (g_c+I1), s	2.6	2.0		39.6	16.2	18.3		3.4				
Green Ext Time (p_c), s	0.0	7.9		2.8	0.2	4.6		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	30.8
HCM 7th 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												
Traffic Volume (veh/h)	12	6	69	14	1	1	29	1190	25	2	417	330
Future Volume (veh/h)	12	6	69	14	1	1	29	1190	25	2	417	330
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	13	7	75	15	1	1	32	1293	27	2	453	359
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	61	33	82	86	6	82	92	1251	1060	92	2377	1060
Arrive On Green	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.69	0.69	0.04	0.46	0.46
Sat Flow, veh/h	1140	614	1535	1622	108	1535	1725	1811	1535	1725	3441	1535
Grp Volume(v), veh/h	20	0	75	16	0	1	32	1293	27	2	453	359
Grp Sat Flow(s),veh/h/ln	1754	0	1535	1730	0	1535	1725	1811	1535	1725	1721	1535
Q Serve(g_s), s	1.6	0.0	7.3	1.3	0.0	0.1	2.7	103.6	0.8	0.2	11.6	22.4
Cycle Q Clear(g_c), s	1.6	0.0	7.3	1.3	0.0	0.1	2.7	103.6	0.8	0.2	11.6	22.4
Prop In Lane	0.65		1.00	0.94		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	0	82	92	0	82	92	1251	1060	92	2377	1060
V/C Ratio(X)	0.21	0.00	0.92	0.17	0.00	0.01	0.35	1.03	0.03	0.02	0.19	0.34
Avail Cap(c_a), veh/h	94	0	82	92	0	82	92	1251	1060	92	2377	1060
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92
Uniform Delay (d), s/veh	68.0	0.0	70.7	67.8	0.0	67.3	68.5	23.2	7.3	68.5	15.6	18.5
Incr Delay (d2), s/veh	1.1	0.0	71.9	0.9	0.0	0.1	2.2	34.5	0.0	0.1	0.2	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(50%),veh/ln	0.7	0.0	4.4	0.6	0.0	0.0	1.2	47.9	0.3	0.1	4.6	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.1	0.0	142.5	68.7	0.0	67.3	70.7	57.7	7.3	68.6	15.8	19.3
LnGrp LOS	E		F	E		E	E	F	A	E	B	B
Approach Vol, veh/h		95			17			1352			814	
Approach Delay, s/veh		127.1			68.6			57.0			17.4	
Approach LOS		F			E			E			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.7	111.1		13.1	12.7	111.1		13.1				
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1				
Max Green Setting (Gmax), s	8.0	103.6		8.0	8.0	103.6		8.0				
Max Q Clear Time (g_c+I1), s	2.3	105.6		9.3	4.7	24.4		3.3				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.1		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	45.9
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	96	130	28	119	101	96	1447	48	112	742	26
Future Volume (veh/h)	67	96	130	28	119	101	96	1447	48	112	742	26
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	68	98	133	29	121	103	98	1477	49	114	757	27
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, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	154	227	329	101	172	146	298	1309	638	173	1932	655
Arrive On Green	0.09	0.13	0.13	0.06	0.10	0.10	0.09	0.43	0.43	0.10	0.44	0.44
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	4378	1485
Grp Volume(v), veh/h	68	98	133	29	121	103	98	1477	49	114	757	27
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1459	1485
Q Serve(g_s), s	3.9	5.3	7.8	1.7	6.8	6.9	2.9	43.8	2.0	6.7	11.9	1.1
Cycle Q Clear(g_c), s	3.9	5.3	7.8	1.7	6.8	6.9	2.9	43.8	2.0	6.7	11.9	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	154	227	329	101	172	146	298	1309	638	173	1932	655
V/C Ratio(X)	0.44	0.43	0.40	0.29	0.70	0.71	0.33	1.13	0.08	0.66	0.39	0.04
Avail Cap(c_a), veh/h	213	876	879	180	842	713	327	1309	638	180	1932	655
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	43.8	40.9	33.9	45.8	44.5	44.6	43.3	29.1	17.2	44.0	19.2	16.2
Incr Delay (d2), s/veh	2.0	1.3	0.8	1.5	5.2	6.2	0.6	68.1	0.1	8.1	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(50%),veh/ln	1.7	2.3	2.8	0.7	3.1	2.7	1.1	26.3	0.6	3.0	3.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	45.8	42.2	34.7	47.4	49.7	50.7	44.0	97.2	17.2	52.1	19.4	16.2
LnGrp LOS	D	D	C	D	D	D	D	F	B	D	B	B
Approach Vol, veh/h		299			253			1624			898	
Approach Delay, s/veh		39.7			49.9			91.5			23.4	
Approach LOS		D			D			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	52.2	11.9	21.6	15.1	53.4	15.1	18.4
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	10.6	43.8	11.0	51.0	10.3	44.5	13.0	49.0
Max Q Clear Time (g_c+I1), s	8.7	45.8	3.7	9.8	4.9	13.9	5.9	8.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.1	5.1	0.1	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	63.2
HCM 7th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	81	112	12	91	14	111	1783	16	15	1057	53
Future Volume (veh/h)	78	81	112	12	91	14	111	1783	16	15	1057	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	85	88	122	13	99	15	121	1938	0	16	1149	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	107	93	118	43	262	37	143	1920		66	2548	
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.09	0.61	0.00	0.04	0.56	0.00
Sat Flow, veh/h	380	475	603	79	1340	190	1668	3159	1485	1668	4540	1485
Grp Volume(v), veh/h	295	0	0	127	0	0	121	1938	0	16	1149	0
Grp Sat Flow(s),veh/h/ln	1458	0	0	1609	0	0	1668	1580	1485	1668	1513	1485
Q Serve(g_s), s	18.9	0.0	0.0	0.0	0.0	0.0	10.3	87.3	0.0	1.3	21.4	0.0
Cycle Q Clear(g_c), s	28.1	0.0	0.0	9.2	0.0	0.0	10.3	87.3	0.0	1.3	21.4	0.0
Prop In Lane	0.29		0.41	0.10		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	318	0	0	342	0	0	143	1920		66	2548	
V/C Ratio(X)	0.93	0.00	0.00	0.37	0.00	0.00	0.85	1.01		0.24	0.45	
Avail Cap(c_a), veh/h	318	0	0	342	0	0	229	1920		139	2548	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	58.2	0.0	0.0	50.2	0.0	0.0	64.7	28.2	0.0	66.9	18.5	0.0
Incr Delay (d2), s/veh	32.6	0.0	0.0	0.7	0.0	0.0	14.9	22.9	0.0	1.9	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(50%),veh/ln	18.7	0.0	0.0	4.1	0.0	0.0	4.8	34.6	0.0	0.6	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	90.8	0.0	0.0	50.9	0.0	0.0	79.6	51.0	0.0	68.8	18.6	0.0
LnGrp LOS	F			D			E	F		E	B	
Approach Vol, veh/h		295			127			2059			1165	
Approach Delay, s/veh		90.8			50.9			52.7			19.3	
Approach LOS		F			D			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.4	95.7		36.6	18.0	89.0		36.6
Change Period (Y+Rc), s	5.7	8.4		8.5	5.7	8.4		8.5
Max Green Setting (Gmax), s	12.6	87.3		28.1	19.7	79.6		28.1
Max Q Clear Time (g_c+I1), s	13.3	89.3		30.1	12.3	23.4		11.2
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	9.1		0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	45.1
HCM 7th LOS	D

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	1	254	6	2	2	382	1760	2	1	1084	74
Future Volume (veh/h)	135	1	254	6	2	2	382	1760	2	1	1084	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	147	1	276	7	2	2	415	1913	2	1	1178	80
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	322	2	516	31	9	9	497	1816	2	5	1863	609
Arrive On Green	0.19	0.19	0.19	0.03	0.03	0.03	0.15	0.56	0.56	0.00	0.41	0.41
Sat Flow, veh/h	1658	11	1485	1047	299	299	3237	3239	3	1668	4540	1485
Grp Volume(v), veh/h	148	0	276	11	0	0	415	933	982	1	1178	80
Grp Sat Flow(s),veh/h/ln	1669	0	1485	1646	0	0	1618	1580	1662	1668	1513	1485
Q Serve(g_s), s	6.6	0.0	12.6	0.6	0.0	0.0	10.5	47.5	47.5	0.1	17.5	2.8
Cycle Q Clear(g_c), s	6.6	0.0	12.6	0.6	0.0	0.0	10.5	47.5	47.5	0.1	17.5	2.8
Prop In Lane	0.99		1.00	0.64		0.18	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	324	0	516	49	0	0	497	886	932	5	1863	609
V/C Ratio(X)	0.46	0.00	0.53	0.23	0.00	0.00	0.84	1.05	1.05	0.20	0.63	0.13
Avail Cap(c_a), veh/h	1034	0	1148	262	0	0	592	886	932	266	2439	797
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	0.0	22.1	40.1	0.0	0.0	34.8	18.6	18.6	42.1	19.9	15.6
Incr Delay (d2), s/veh	1.0	0.0	0.9	2.3	0.0	0.0	8.7	45.2	44.6	18.2	0.4	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(50%),veh/ln	2.6	0.0	4.2	0.2	0.0	0.0	4.4	23.9	25.0	0.0	5.3	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.2	0.0	23.0	42.5	0.0	0.0	43.6	63.8	63.2	60.3	20.2	15.7
LnGrp LOS	C		C	D			D	F	F	E	C	B
Approach Vol, veh/h		424			11			2330			1259	
Approach Delay, s/veh		25.9			42.5			60.0			20.0	
Approach LOS		C			D			E			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	52.0		20.9	17.5	39.3		7.0				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	13.5	47.5		52.5	15.5	45.5		13.5				
Max Q Clear Time (g_c+I1), s	2.1	49.5		14.6	12.5	19.5		2.6				
Green Ext Time (p_c), s	0.0	0.0		1.8	0.5	8.5		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	43.8
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	598	194	1	2	144	92	1	2	1	69	2	512
Future Volume (veh/h)	598	194	1	2	144	92	1	2	1	69	2	512
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	427	512	1	2	155	99	1	2	1	74	0	552
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	620	649	1	4	280	169	3	309	143	125	0	1734
Arrive On Green	0.35	0.35	0.35	0.13	0.13	0.13	0.00	0.13	0.13	0.07	0.00	0.20
Sat Flow, veh/h	1767	1851	4	28	2153	1296	1767	2344	1080	1767	0	3145
Grp Volume(v), veh/h	427	0	513	132	0	124	1	1	2	74	0	552
Grp Sat Flow(s),veh/h/ln	1767	0	1855	1854	0	1622	1767	1763	1661	1767	0	1572
Q Serve(g_s), s	12.5	0.0	15.0	4.0	0.0	4.4	0.0	0.0	0.0	2.5	0.0	5.8
Cycle Q Clear(g_c), s	12.5	0.0	15.0	4.0	0.0	4.4	0.0	0.0	0.0	2.5	0.0	5.8
Prop In Lane	1.00		0.00	0.02		0.80	1.00		0.65	1.00		1.00
Lane Grp Cap(c), veh/h	620	0	650	241	0	211	3	233	219	125	0	1734
V/C Ratio(X)	0.69	0.00	0.79	0.55	0.00	0.59	0.34	0.01	0.01	0.59	0.00	0.32
Avail Cap(c_a), veh/h	959	0	1007	887	0	776	175	803	756	184	0	2550
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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.9	0.0	17.7	24.7	0.0	24.8	30.2	22.9	22.9	27.3	0.0	7.4
Incr Delay (d2), s/veh	1.4	0.0	2.3	1.9	0.0	2.6	58.0	0.0	0.0	4.5	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	0.0	6.0	1.8	0.0	1.7	0.1	0.0	0.0	1.1	0.0	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.2	0.0	20.0	26.6	0.0	27.4	88.2	22.9	22.9	31.8	0.0	7.5
LnGrp LOS	B		C	C		C	F	C	C	C		A
Approach Vol, veh/h		940			256			4			626	
Approach Delay, s/veh		19.2			27.0			39.2			10.4	
Approach LOS		B			C			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	12.7		26.4	4.8	16.9		12.6
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7
Max Green Setting (Gmax), s	6.3	27.6		32.9	6.0	27.9		29.0
Max Q Clear Time (g_c+I1), s	4.5	2.0		17.0	2.0	7.8		6.4
Green Ext Time (p_c), s	0.0	0.0		4.2	0.0	2.2		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	17.3
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	124	496	932	913	621	170
Future Volume (veh/h)	124	496	932	913	621	170
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1737	1737	1752
Adj Flow Rate, veh/h	135	0	1013	992	675	185
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	11	11	10
Cap, veh/h	156		1065	1361	702	600
Arrive On Green	0.09	0.00	0.33	0.78	0.40	0.40
Sat Flow, veh/h	1668	1485	3237	1737	1737	1485
Grp Volume(v), veh/h	135	0	1013	992	675	185
Grp Sat Flow(s),veh/h/ln	1668	1485	1618	1737	1737	1485
Q Serve(g_s), s	7.2	0.0	27.4	25.8	33.9	7.6
Cycle Q Clear(g_c), s	7.2	0.0	27.4	25.8	33.9	7.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	156		1065	1361	702	600
V/C Ratio(X)	0.86		0.95	0.73	0.96	0.31
Avail Cap(c_a), veh/h	156		1069	1368	707	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	29.4	4.9	26.0	18.2
Incr Delay (d2), s/veh	36.0	0.0	17.0	2.0	24.6	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	11.9	4.0	16.7	2.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	76.1	0.0	46.3	6.9	50.6	18.5
LnGrp LOS	E		D	A	D	B
Approach Vol, veh/h	135			2005	860	
Approach Delay, s/veh	76.1			26.8	43.7	
Approach LOS	E			C	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		76.7		12.9	34.0	42.7
Change Period (Y+Rc), s		6.5		4.5	4.5	6.5
Max Green Setting (Gmax), s		70.6		8.4	29.6	36.5
Max Q Clear Time (g_c+I1), s		27.8		9.2	29.4	35.9
Green Ext Time (p_c), s		8.6		0.0	0.1	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	33.9
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	247	10	153	197	1024	4	955	101	545	948	44
Future Volume (veh/h)	39	247	10	153	197	1024	4	955	101	545	948	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	42	268	11	166	214	1113	4	1038	110	592	1030	48
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	135	276	234	251	577	1351	87	1033	501	607	1447	703
Arrive On Green	0.00	0.15	0.15	0.10	0.32	0.32	0.05	0.32	0.32	0.18	0.45	0.45
Sat Flow, veh/h	1739	1826	1547	1739	1826	2723	1739	3188	1547	3374	3188	1547
Grp Volume(v), veh/h	42	268	11	166	214	1113	4	1038	110	592	1030	48
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1362	1739	1594	1547	1687	1594	1547
Q Serve(g_s), s	0.1	14.6	0.6	7.7	9.1	31.6	0.2	32.4	5.2	17.5	26.1	1.7
Cycle Q Clear(g_c), s	0.1	14.6	0.6	7.7	9.1	31.6	0.2	32.4	5.2	17.5	26.1	1.7
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	135	276	234	251	577	1351	87	1033	501	607	1447	703
V/C Ratio(X)	0.31	0.97	0.05	0.66	0.37	0.82	0.05	1.01	0.22	0.97	0.71	0.07
Avail Cap(c_a), veh/h	222	276	234	251	577	1351	87	1033	501	607	1447	703
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	39.9	42.2	36.3	30.8	26.5	21.5	45.2	33.8	24.6	40.8	22.0	15.4
Incr Delay (d2), s/veh	1.3	46.3	0.1	6.3	0.4	4.3	0.2	29.2	0.2	30.1	1.7	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(50%),veh/ln	0.9	9.8	0.2	3.5	3.7	10.4	0.1	15.5	1.8	9.3	8.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.2	88.6	36.4	37.1	26.9	25.8	45.4	63.0	24.8	70.9	23.7	15.4
LnGrp LOS	D	F	D	D	C	C	D	F	C	E	C	B
Approach Vol, veh/h		321			1493			1152			1670	
Approach Delay, s/veh		80.6			27.2			59.3			40.2	
Approach LOS		F			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	39.4	16.5	21.6	9.5	52.4	0.0	38.1
Change Period (Y+Rc), s	4.5	7.0	6.5	6.5	4.5	7.0	4.5	6.5
Max Green Setting (Gmax), s	18.0	32.4	10.0	15.1	5.0	45.4	5.1	22.0
Max Q Clear Time (g_c+I1), s	19.5	34.4	9.7	16.6	2.2	28.1	0.0	33.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	6.2	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	43.6
HCM 7th LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	507	5	1	1276	580	223
Future Volume (veh/h)	507	5	1	1276	580	223
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	556	0	1	1387	630	242
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	725	322	137	1847	746	974
Arrive On Green	0.22	0.00	0.08	0.60	0.44	0.44
Sat Flow, veh/h	3337	1485	1668	3185	1699	1485
Grp Volume(v), veh/h	556	0	1	1387	630	242
Grp Sat Flow(s),veh/h/ln	1668	1485	1668	1552	1699	1485
Q Serve(g_s), s	9.5	0.0	0.0	19.9	20.1	4.1
Cycle Q Clear(g_c), s	9.5	0.0	0.0	19.9	20.1	4.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	725	322	137	1847	746	974
V/C Ratio(X)	0.77	0.00	0.01	0.75	0.84	0.25
Avail Cap(c_a), veh/h	1256	559	140	2842	1288	1448
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	0.0	25.6	9.0	15.2	4.3
Incr Delay (d2), s/veh	1.7	0.0	0.0	0.6	2.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	0.0	3.7	6.0	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	24.1	0.0	25.6	9.6	17.9	4.4
LnGrp LOS	C		C	A	B	A
Approach Vol, veh/h	556			1388	872	
Approach Delay, s/veh	24.1			9.6	14.2	
Approach LOS	C			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	43.1		17.7	9.5	33.6
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	55.7		22.9	5.1	46.1
Max Q Clear Time (g_c+I1), s	21.9		11.5	2.0	22.1
Green Ext Time (p_c), s	11.6		1.7	0.0	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	13.9
HCM 7th 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												
Traffic Volume (veh/h)	150	238	193	30	498	154	439	0	69	347	0	342
Future Volume (veh/h)	150	238	193	30	498	154	439	0	69	347	0	342
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	163	259	210	33	541	167	547	0	0	377	0	372
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, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	248	663	602	403	604	549	824	630	0	540	630	500
Arrive On Green	0.07	0.41	0.41	0.03	0.37	0.37	0.34	0.00	0.00	0.34	0.00	0.34
Sat Flow, veh/h	1668	1633	1485	1668	1633	1485	1893	1870	0	1328	1870	1485
Grp Volume(v), veh/h	163	259	210	33	541	167	547	0	0	377	0	372
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	1633	1485	946	1870	0	1328	1870	1485
Q Serve(g_s), s	4.7	8.6	7.5	0.9	24.0	6.1	20.8	0.0	0.0	20.3	0.0	17.1
Cycle Q Clear(g_c), s	4.7	8.6	7.5	0.9	24.0	6.1	20.8	0.0	0.0	20.3	0.0	17.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	663	602	403	604	549	824	630	0	540	630	500
V/C Ratio(X)	0.66	0.39	0.35	0.08	0.90	0.30	0.66	0.00	0.00	0.70	0.00	0.74
Avail Cap(c_a), veh/h	248	751	683	456	745	677	1227	1028	0	823	1028	816
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	18.1	16.2	15.8	14.2	22.9	17.2	23.8	0.0	0.0	23.7	0.0	22.6
Incr Delay (d2), s/veh	6.1	0.4	0.3	0.1	11.7	0.3	0.9	0.0	0.0	1.6	0.0	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(50%),veh/ln	1.9	2.8	2.2	0.3	9.6	1.8	4.0	0.0	0.0	5.6	0.0	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.3	16.5	16.2	14.3	34.5	17.5	24.8	0.0	0.0	25.3	0.0	24.8
LnGrp LOS	C	B	B	B	C	B	C			C		C
Approach Vol, veh/h		632			741			547			749	
Approach Delay, s/veh		18.4			29.8			24.8			25.1	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	38.1		31.6	10.0	35.4		31.6				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	35.4		42.3	5.3	35.1		42.3				
Max Q Clear Time (g_c+I1), s	2.9	10.6		22.3	6.7	26.0		22.8				
Green Ext Time (p_c), s	0.0	1.9		2.4	0.0	2.4		3.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	24.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	75	117	591	36	54	622
Future Volume (veh/h)	75	117	591	36	54	622
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1752	1752	1633	1752	1752	1633
Adj Flow Rate, veh/h	81	126	635	39	58	669
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	10	10	18	10	10	18
Cap, veh/h	102	158	734	45	89	1014
Arrive On Green	0.17	0.17	0.48	0.48	0.05	0.62
Sat Flow, veh/h	605	940	1523	94	1668	1633
Grp Volume(v), veh/h	208	0	0	674	58	669
Grp Sat Flow(s),veh/h/ln	1552	0	0	1616	1668	1633
Q Serve(g_s), s	7.1	0.0	0.0	20.4	1.9	14.5
Cycle Q Clear(g_c), s	7.1	0.0	0.0	20.4	1.9	14.5
Prop In Lane	0.39	0.61		0.06	1.00	
Lane Grp Cap(c), veh/h	261	0	0	780	89	1014
V/C Ratio(X)	0.80	0.00	0.00	0.86	0.65	0.66
Avail Cap(c_a), veh/h	761	0	0	1222	155	1525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.0	0.0	0.0	12.7	25.5	6.7
Incr Delay (d2), s/veh	5.5	0.0	0.0	4.1	7.8	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	5.9	0.8	2.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	27.5	0.0	0.0	16.8	33.3	7.4
LnGrp LOS	C			B	C	A
Approach Vol, veh/h	208		674			727
Approach Delay, s/veh	27.5		16.8			9.5
Approach LOS	C		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.6	33.4			41.1	14.0
Change Period (Y+Rc), s	4.7	6.9			6.9	4.7
Max Green Setting (Gmax), s	5.1	41.6			51.4	27.0
Max Q Clear Time (g_c+I1), s	3.9	22.4			16.5	9.1
Green Ext Time (p_c), s	0.0	4.2			4.7	0.6

Intersection Summary	
HCM 7th Control Delay, s/veh	14.9
HCM 7th 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												
Traffic Volume (veh/h)	185	11	700	146	27	42	451	499	134	15	1002	233
Future Volume (veh/h)	185	11	700	146	27	42	451	499	134	15	1002	233
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	193	11	729	152	28	44	470	520	140	16	1044	243
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	388	486	1160	270	170	268	540	870	738	31	1160	518
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.17	0.50	0.50	0.02	0.35	0.35
Sat Flow, veh/h	1244	1752	2613	673	614	964	3237	1752	1485	1668	3328	1485
Grp Volume(v), veh/h	193	11	729	152	0	72	470	520	140	16	1044	243
Grp Sat Flow(s),veh/h/ln	1244	1752	1306	673	0	1578	1618	1752	1485	1668	1664	1485
Q Serve(g_s), s	11.6	0.4	18.0	17.7	0.0	2.9	11.8	17.7	4.4	0.8	24.8	10.6
Cycle Q Clear(g_c), s	14.5	0.4	18.0	18.1	0.0	2.9	11.8	17.7	4.4	0.8	24.8	10.6
Prop In Lane	1.00		1.00	1.00		0.61	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	388	486	1160	270	0	438	540	870	738	31	1160	518
V/C Ratio(X)	0.50	0.02	0.63	0.56	0.00	0.16	0.87	0.60	0.19	0.52	0.90	0.47
Avail Cap(c_a), veh/h	535	693	1469	349	0	624	555	870	738	100	1212	541
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	28.3	21.9	17.9	28.5	0.0	22.8	33.9	15.0	11.7	40.6	25.8	21.2
Incr Delay (d2), s/veh	1.0	0.0	0.6	1.8	0.0	0.2	13.8	1.1	0.1	12.7	9.1	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(50%),veh/ln	3.2	0.1	4.6	2.7	0.0	1.0	5.2	5.9	1.2	0.4	9.9	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.3	21.9	18.5	30.3	0.0	23.0	47.7	16.2	11.8	53.3	34.9	21.8
LnGrp LOS	C	C	B	C		C	D	B	B	D	C	C
Approach Vol, veh/h		933			224			1130			1303	
Approach Delay, s/veh		20.7			28.0			28.7			32.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	48.4		28.9	18.6	36.0		28.9				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	39.7		33.0	14.3	30.4		33.0				
Max Q Clear Time (g_c+I1), s	2.8	19.7		20.0	13.8	26.8		20.1				
Green Ext Time (p_c), s	0.0	3.2		3.2	0.1	2.3		1.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	28.0
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	72	369	250	104	104	215	938	162	72	1859	72
Future Volume (veh/h)	104	72	369	250	104	104	215	938	162	72	1859	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	113	78	401	272	113	113	234	1020	176	78	2021	78
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	326	515	603	285	515	437	261	1765	821	278	2212	716
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.11	0.53	0.53	0.04	0.46	0.46
Sat Flow, veh/h	1127	1826	1547	894	1826	1547	1739	3328	1547	1739	4782	1547
Grp Volume(v), veh/h	113	78	401	272	113	113	234	1020	176	78	2021	78
Grp Sat Flow(s),veh/h/ln	1127	1826	1547	894	1826	1547	1739	1664	1547	1739	1594	1547
Q Serve(g_s), s	10.0	3.7	25.0	29.3	5.5	6.6	10.4	24.3	7.0	2.7	46.0	3.3
Cycle Q Clear(g_c), s	15.5	3.7	25.0	33.0	5.5	6.6	10.4	24.3	7.0	2.7	46.0	3.3
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	326	515	603	285	515	437	261	1765	821	278	2212	716
V/C Ratio(X)	0.35	0.15	0.67	0.95	0.22	0.26	0.90	0.58	0.21	0.28	0.91	0.11
Avail Cap(c_a), veh/h	326	515	603	285	515	437	287	1811	842	300	2266	733
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	38.0	31.5	29.4	46.4	32.1	32.5	33.9	18.6	14.5	16.6	29.2	17.8
Incr Delay (d2), s/veh	0.6	0.1	2.8	40.7	0.2	0.3	26.7	0.4	0.1	0.5	6.2	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(50%),veh/ln	2.7	1.6	9.3	11.1	2.4	2.4	8.3	8.4	2.3	1.0	16.9	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.7	31.6	32.2	87.2	32.3	32.8	60.6	19.0	14.7	17.1	35.4	17.8
LnGrp LOS	D	C	C	F	C	C	E	B	B	B	D	B
Approach Vol, veh/h		592			498			1430			2177	
Approach Delay, s/veh		33.3			62.4			25.3			34.1	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	68.9		38.7	17.2	61.0		38.7
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	6.1	63.6		33.0	14.3	55.4		33.0
Max Q Clear Time (g_c+I1), s	4.7	26.3		27.0	12.4	48.0		35.0
Green Ext Time (p_c), s	0.0	8.3		1.3	0.1	6.1		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	34.3
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	916	8	0	928	13	3	0	0	16	6	146
Future Volume (veh/h)	62	916	8	0	928	13	3	0	0	16	6	146
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1381	1737	1737	1381	1737	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	67	996	9	0	1009	14	3	0	0	17	7	159
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, %	11	35	11	11	35	11	11	11	11	11	11	11
Cap, veh/h	95	1615	906	3	1246	699	314	0	260	271	92	260
Arrive On Green	0.06	0.62	0.62	0.00	0.47	0.47	0.18	0.00	0.00	0.18	0.18	0.18
Sat Flow, veh/h	1654	2624	1472	1654	2624	1472	1059	0	1472	921	522	1472
Grp Volume(v), veh/h	67	996	9	0	1009	14	3	0	0	24	0	159
Grp Sat Flow(s),veh/h/ln	1654	1312	1472	1654	1312	1472	1059	0	1472	1443	0	1472
Q Serve(g_s), s	2.3	13.3	0.1	0.0	18.6	0.3	0.1	0.0	0.0	0.0	0.0	5.7
Cycle Q Clear(g_c), s	2.3	13.3	0.1	0.0	18.6	0.3	0.8	0.0	0.0	0.7	0.0	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	0.71		1.00
Lane Grp Cap(c), veh/h	95	1615	906	3	1246	699	314	0	260	363	0	260
V/C Ratio(X)	0.70	0.62	0.01	0.00	0.81	0.02	0.01	0.00	0.00	0.07	0.00	0.61
Avail Cap(c_a), veh/h	146	1830	1026	146	1830	1026	1193	0	1403	1463	0	1403
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	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.2	6.8	4.2	0.0	12.7	7.9	19.8	0.0	0.0	19.5	0.0	21.5
Incr Delay (d2), s/veh	9.1	0.5	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.1	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(50%),veh/ln	1.0	1.8	0.0	0.0	3.8	0.1	0.0	0.0	0.0	0.2	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.3	7.3	4.2	0.0	14.5	7.9	19.8	0.0	0.0	19.6	0.0	23.9
LnGrp LOS	D	A	A		B	A	B			B		C
Approach Vol, veh/h		1072			1023			3			183	
Approach Delay, s/veh		9.0			14.4			19.8			23.3	
Approach LOS		A			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	41.8		14.9	8.0	33.8		14.9				
Change Period (Y+Rc), s	4.7	6.9		4.9	4.7	6.9		4.9				
Max Green Setting (Gmax), s	5.3	39.5		54.0	5.0	39.5		54.0				
Max Q Clear Time (g_c+I1), s	10.0	15.3		7.7	4.3	20.6		2.8				
Green Ext Time (p_c), s	0.0	6.8		0.6	0.0	6.3		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.6
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	640	50	24	444	138	75	93	21	313	173	436
Future Volume (veh/h)	198	640	50	24	444	138	75	93	21	313	173	436
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	211	681	53	26	472	147	80	99	22	333	184	464
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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	244	777	60	105	609	341	427	399	89	567	533	664
Arrive On Green	0.15	0.31	0.31	0.06	0.23	0.23	0.11	0.29	0.29	0.13	0.30	0.30
Sat Flow, veh/h	1668	2466	192	1668	2624	1472	1668	1385	308	1668	1752	1470
Grp Volume(v), veh/h	211	362	372	26	472	147	80	0	121	333	184	464
Grp Sat Flow(s),veh/h/ln	1668	1312	1345	1668	1312	1472	1668	0	1693	1668	1752	1470
Q Serve(g_s), s	11.6	24.4	24.5	1.4	15.7	8.0	2.8	0.0	5.1	12.0	7.6	23.7
Cycle Q Clear(g_c), s	11.6	24.4	24.5	1.4	15.7	8.0	2.8	0.0	5.1	12.0	7.6	23.7
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	244	413	424	105	609	341	427	0	488	567	533	664
V/C Ratio(X)	0.87	0.88	0.88	0.25	0.78	0.43	0.19	0.00	0.25	0.59	0.35	0.70
Avail Cap(c_a), veh/h	291	488	501	214	856	480	454	0	579	567	600	720
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	1.00	1.00
Uniform Delay (d), s/veh	39.0	30.3	30.3	41.7	33.6	30.6	17.9	0.0	25.5	20.6	25.3	20.6
Incr Delay (d2), s/veh	20.3	14.5	14.4	1.2	2.9	0.9	0.2	0.0	0.3	1.6	0.4	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(50%),veh/ln	6.0	9.0	9.2	0.6	5.1	2.9	1.1	0.0	2.1	5.4	3.2	8.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.3	44.8	44.7	42.9	36.6	31.5	18.1	0.0	25.8	22.2	25.7	23.4
LnGrp LOS	E	D	D	D	D	C	B		C	C	C	C
Approach Vol, veh/h		945			645			201			981	
Approach Delay, s/veh		48.0			35.7			22.7			23.4	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	34.5	15.2	33.2	18.4	26.8	16.7	31.6
Change Period (Y+Rc), s	4.7	5.1	4.7	4.7	4.7	5.1	4.7	4.7
Max Green Setting (Gmax), s	12.0	34.8	12.0	32.0	16.3	30.5	12.0	32.0
Max Q Clear Time (g_c+I1), s	13.4	26.5	4.8	25.7	13.6	17.7	14.0	7.1
Green Ext Time (p_c), s	0.0	2.9	0.1	1.7	0.2	3.0	0.0	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	34.6
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	686	1	26	444	209	1	48	13	479	103	0
Future Volume (veh/h)	1	686	1	26	444	209	1	48	13	479	103	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1381	1752	1752	1381	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	1	715	1	27	462	218	1	50	14	575	0	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, %	10	35	10	10	35	10	10	10	10	10	10	10
Cap, veh/h	3	886	501	50	960	543	2	92	79	733	0	326
Arrive On Green	0.00	0.34	0.34	0.03	0.37	0.37	0.05	0.05	0.05	0.22	0.00	0.00
Sat Flow, veh/h	1668	2624	1485	1668	2624	1485	34	1716	1485	3337	0	1485
Grp Volume(v), veh/h	1	715	1	27	462	218	51	0	14	575	0	0
Grp Sat Flow(s),veh/h/ln	1668	1312	1485	1668	1312	1485	1750	0	1485	1668	0	1485
Q Serve(g_s), s	0.0	15.9	0.0	1.0	8.7	7.0	1.8	0.0	0.6	10.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.9	0.0	1.0	8.7	7.0	1.8	0.0	0.6	10.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	3	886	501	50	960	543	94	0	79	733	0	326
V/C Ratio(X)	0.38	0.81	0.00	0.54	0.48	0.40	0.54	0.00	0.18	0.78	0.00	0.00
Avail Cap(c_a), veh/h	130	1317	745	138	1330	752	145	0	123	1268	0	564
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	31.9	19.3	14.0	30.6	15.6	15.1	29.5	0.0	28.9	23.5	0.0	0.0
Incr Delay (d2), s/veh	73.3	2.3	0.0	8.9	0.4	0.5	4.8	0.0	1.0	1.9	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(50%),veh/ln	0.1	4.1	0.0	0.5	2.1	1.9	0.8	0.0	0.2	3.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	105.2	21.6	14.0	39.5	16.0	15.6	34.3	0.0	30.0	25.4	0.0	0.0
LnGrp LOS	F	C	B	D	B	B	C		C	C		
Approach Vol, veh/h		717			707			65			575	
Approach Delay, s/veh		21.7			16.7			33.4			25.4	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	28.5		19.7	4.8	30.3		9.1				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.3	32.1		24.3	5.0	32.4		5.3				
Max Q Clear Time (g_c+I1), s	3.0	17.9		12.4	2.0	10.7		3.8				
Green Ext Time (p_c), s	0.0	3.7		1.7	0.0	3.4		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	21.4
HCM 7th 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												
Traffic Volume (veh/h)	467	1	12	14	20	13	101	629	4	7	2329	28
Future Volume (veh/h)	467	1	12	14	20	13	101	629	4	7	2329	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	509	0	13	15	22	14	110	684	4	8	2532	30
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	557	0	248	81	85	72	129	2186	13	33	2858	34
Arrive On Green	0.16	0.00	0.16	0.05	0.05	0.05	0.15	1.00	1.00	0.02	0.57	0.57
Sat Flow, veh/h	3450	0	1535	1725	1811	1535	1725	3507	21	1725	5037	60
Grp Volume(v), veh/h	509	0	13	15	22	14	110	336	352	8	1655	907
Grp Sat Flow(s),veh/h/ln	1725	0	1535	1725	1811	1535	1725	1721	1807	1725	1648	1800
Q Serve(g_s), s	21.8	0.0	1.1	1.3	1.8	1.3	9.3	0.0	0.0	0.7	65.4	65.9
Cycle Q Clear(g_c), s	21.8	0.0	1.1	1.3	1.8	1.3	9.3	0.0	0.0	0.7	65.4	65.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		0.03
Lane Grp Cap(c), veh/h	557	0	248	81	85	72	129	1072	1127	33	1870	1022
V/C Ratio(X)	0.91	0.00	0.05	0.19	0.26	0.19	0.85	0.31	0.31	0.25	0.88	0.89
Avail Cap(c_a), veh/h	596	0	265	93	98	83	132	1072	1127	116	1870	1022
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	1.00	1.00	0.74	0.74	0.74	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.9	0.0	53.2	68.7	69.0	68.7	63.0	0.0	0.0	72.5	28.2	28.3
Incr Delay (d2), s/veh	18.0	0.0	0.1	1.1	1.6	1.3	30.3	0.6	0.5	3.8	6.6	11.4
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(50%),veh/ln	10.6	0.0	0.4	0.6	0.8	0.5	4.8	0.2	0.2	0.3	25.0	28.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	79.9	0.0	53.3	69.8	70.5	70.0	93.3	0.6	0.5	76.4	34.7	39.7
LnGrp LOS	E		D	E	E	E	F	A	A	E	C	D
Approach Vol, veh/h		522			51			798			2570	
Approach Delay, s/veh		79.2			70.2			13.3			36.6	
Approach LOS		E			E			B			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.5	101.0		29.3	15.9	92.6		12.1				
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1				
Max Green Setting (Gmax), s	10.3	83.5		25.9	11.5	82.1		8.1				
Max Q Clear Time (g_c+I1), s	2.7	2.0		23.8	11.3	67.9		3.8				
Green Ext Time (p_c), s	0.0	3.9		0.5	0.0	12.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	38.0
HCM 7th 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												
Traffic Volume (veh/h)	22	2	181	29	5	1	19	709	14	0	1302	1056
Future Volume (veh/h)	22	2	181	29	5	1	19	709	14	0	1302	1056
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811	1811
Adj Flow Rate, veh/h	24	2	197	32	5	1	21	771	15	0	1415	1148
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, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	150	13	144	64	10	65	92	1350	1144	1	2274	1014
Arrive On Green	0.09	0.09	0.09	0.04	0.04	0.04	0.05	0.75	0.75	0.00	1.00	1.00
Sat Flow, veh/h	1598	133	1535	1501	235	1535	1725	1811	1535	1725	3441	1535
Grp Volume(v), veh/h	26	0	197	37	0	1	21	771	15	0	1415	1148
Grp Sat Flow(s),veh/h/ln	1731	0	1535	1736	0	1535	1725	1811	1535	1725	1721	1535
Q Serve(g_s), s	2.1	0.0	14.1	3.1	0.0	0.1	1.8	28.3	0.4	0.0	0.0	99.1
Cycle Q Clear(g_c), s	2.1	0.0	14.1	3.1	0.0	0.1	1.8	28.3	0.4	0.0	0.0	99.1
Prop In Lane	0.92		1.00	0.86		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	0	144	74	0	65	92	1350	1144	1	2274	1014
V/C Ratio(X)	0.16	0.00	1.37	0.50	0.00	0.02	0.23	0.57	0.01	0.00	0.62	1.13
Avail Cap(c_a), veh/h	163	0	144	122	0	107	97	1350	1144	92	2274	1014
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	1.00	1.00	1.00	1.00	0.00	0.29	0.29
Uniform Delay (d), s/veh	62.5	0.0	67.9	70.3	0.0	68.8	68.0	8.5	4.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	202.3	5.2	0.0	0.1	1.2	1.8	0.0	0.0	0.4	63.4
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(50%),veh/ln	0.9	0.0	13.5	1.5	0.0	0.0	0.8	9.5	0.1	0.0	0.1	17.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.0	0.0	270.3	75.5	0.0	68.9	69.3	10.2	4.9	0.0	0.4	63.4
LnGrp LOS	E		F	E		E	E	B	A		A	F
Approach Vol, veh/h		223			38			807			2563	
Approach Delay, s/veh		246.1			75.3			11.6			28.6	
Approach LOS		F			E			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	119.3		19.2	12.7	106.6		11.5				
Change Period (Y+Rc), s	4.7	7.5		5.1	4.7	7.5		5.1				
Max Green Setting (Gmax), s	8.3	95.0		14.1	8.4	94.6		10.5				
Max Q Clear Time (g_c+I1), s	10.3	30.3		16.1	3.8	101.1		5.1				
Green Ext Time (p_c), s	0.0	5.5		0.0	0.0	0.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	38.7
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	78	177	50	124	92	77	901	15	139	1830	43
Future Volume (veh/h)	37	78	177	50	124	92	77	901	15	139	1830	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1604	1752	1752	1604	1752
Adj Flow Rate, veh/h	39	82	186	53	131	97	81	948	16	146	1926	45
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	10	10	10	10	10	10	10	20	10	10	20	10
Cap, veh/h	119	245	335	137	264	224	278	1241	605	173	1860	631
Arrive On Green	0.07	0.14	0.14	0.08	0.15	0.15	0.09	0.41	0.41	0.10	0.42	0.42
Sat Flow, veh/h	1668	1752	1485	1668	1752	1485	3237	3047	1485	1668	4378	1485
Grp Volume(v), veh/h	39	82	186	53	131	97	81	948	16	146	1926	45
Grp Sat Flow(s),veh/h/ln	1668	1752	1485	1668	1752	1485	1618	1523	1485	1668	1459	1485
Q Serve(g_s), s	2.3	4.5	11.7	3.2	7.2	6.3	2.5	28.2	0.7	9.1	44.8	1.9
Cycle Q Clear(g_c), s	2.3	4.5	11.7	3.2	7.2	6.3	2.5	28.2	0.7	9.1	44.8	1.9
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	119	245	335	137	264	224	278	1241	605	173	1860	631
V/C Ratio(X)	0.33	0.34	0.56	0.39	0.50	0.43	0.29	0.76	0.03	0.85	1.04	0.07
Avail Cap(c_a), veh/h	174	847	846	174	847	718	307	1257	612	179	1860	631
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	46.6	41.0	36.2	45.9	41.1	40.7	45.2	26.9	18.7	46.4	30.3	18.0
Incr Delay (d2), s/veh	1.6	0.8	1.4	1.8	1.4	1.3	0.6	2.8	0.0	28.7	30.7	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(50%),veh/ln	1.0	1.9	4.2	1.3	3.1	2.3	1.0	9.7	0.2	4.9	19.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	48.2	41.8	37.6	47.6	42.5	42.0	45.8	29.7	18.7	75.1	61.1	18.0
LnGrp LOS	D	D	D	D	D	D	D	C	B	E	F	B
Approach Vol, veh/h		307			281			1045			2117	
Approach Delay, s/veh		40.1			43.3			30.8			61.1	
Approach LOS		D			D			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	51.3	14.4	23.1	14.8	53.2	13.2	24.3
Change Period (Y+Rc), s	5.7	8.4	5.7	8.4	5.7	8.4	5.7	8.4
Max Green Setting (Gmax), s	11.3	43.5	11.0	51.0	10.0	44.8	11.0	51.0
Max Q Clear Time (g_c+I1), s	11.1	30.2	5.2	13.7	4.5	46.8	4.3	9.2
Green Ext Time (p_c), s	0.0	4.9	0.0	1.0	0.1	0.0	0.0	1.0

Intersection Summary	
HCM 7th Control Delay, s/veh	49.6
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	43	99	16	66	14	87	1235	14	22	2196	105
Future Volume (veh/h)	39	43	99	16	66	14	87	1235	14	22	2196	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	42	47	108	17	72	15	95	1342	0	24	2387	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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	74	49	96	59	137	26	188	1904		98	2492	
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.60	0.00	0.06	0.55	0.00
Sat Flow, veh/h	267	448	868	154	1244	236	1668	3159	1485	1668	4540	1485
Grp Volume(v), veh/h	197	0	0	104	0	0	95	1342	0	24	2387	0
Grp Sat Flow(s),veh/h/ln	1583	0	0	1634	0	0	1668	1580	1485	1668	1513	1485
Q Serve(g_s), s	5.1	0.0	0.0	0.0	0.0	0.0	5.3	29.0	0.0	1.4	49.5	0.0
Cycle Q Clear(g_c), s	10.9	0.0	0.0	5.8	0.0	0.0	5.3	29.0	0.0	1.4	49.5	0.0
Prop In Lane	0.21		0.55	0.16		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	219	0	0	222	0	0	188	1904		98	2492	
V/C Ratio(X)	0.90	0.00	0.00	0.47	0.00	0.00	0.51	0.70		0.25	0.96	
Avail Cap(c_a), veh/h	219	0	0	222	0	0	202	1904		202	2502	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.5	0.0	0.0	41.7	0.0	0.0	41.3	13.6	0.0	44.5	21.2	0.0
Incr Delay (d2), s/veh	35.3	0.0	0.0	1.5	0.0	0.0	2.1	1.2	0.0	1.3	10.0	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(50%),veh/ln	7.0	0.0	0.0	2.5	0.0	0.0	2.2	8.4	0.0	0.6	16.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	79.8	0.0	0.0	43.2	0.0	0.0	43.4	14.8	0.0	45.8	31.2	0.0
LnGrp LOS	E			D			D	B		D	C	
Approach Vol, veh/h		197			104			1437			2411	
Approach Delay, s/veh		79.8			43.2			16.7			31.4	
Approach LOS		E			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.5	68.0		19.4	16.8	62.7		19.4
Change Period (Y+Rc), s	5.7	8.4		8.5	5.7	8.4		8.5
Max Green Setting (Gmax), s	12.0	54.5		10.9	12.0	54.5		10.9
Max Q Clear Time (g_c+I1), s	13.4	31.0		12.9	7.3	51.5		7.8
Green Ext Time (p_c), s	0.0	9.6		0.0	0.1	2.8		0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	28.9
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	2	324	4	4	1	269	1215	2	1	2143	144
Future Volume (veh/h)	91	2	324	4	4	1	269	1215	2	1	2143	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1663	1752	1752	1663	1752
Adj Flow Rate, veh/h	99	2	352	4	4	1	292	1321	2	1	2329	157
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, %	10	10	10	10	10	10	10	16	10	10	16	10
Cap, veh/h	390	8	504	18	18	4	327	1866	3	5	2173	711
Arrive On Green	0.24	0.24	0.24	0.02	0.02	0.02	0.10	0.58	0.58	0.00	0.48	0.48
Sat Flow, veh/h	1637	33	1485	747	747	187	3237	3237	5	1668	4540	1485
Grp Volume(v), veh/h	101	0	352	9	0	0	292	645	678	1	2329	157
Grp Sat Flow(s),veh/h/ln	1670	0	1485	1681	0	0	1618	1580	1662	1668	1513	1485
Q Serve(g_s), s	5.6	0.0	23.4	0.6	0.0	0.0	10.2	33.2	33.2	0.1	54.5	7.0
Cycle Q Clear(g_c), s	5.6	0.0	23.4	0.6	0.0	0.0	10.2	33.2	33.2	0.1	54.5	7.0
Prop In Lane	0.98		1.00	0.44		0.11	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	398	0	504	40	0	0	327	911	958	5	2173	711
V/C Ratio(X)	0.25	0.00	0.70	0.22	0.00	0.00	0.89	0.71	0.71	0.20	1.07	0.22
Avail Cap(c_a), veh/h	733	0	802	162	0	0	327	911	958	161	2173	711
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.2	0.0	32.6	54.5	0.0	0.0	50.6	17.2	17.2	56.6	29.7	17.3
Incr Delay (d2), s/veh	0.3	0.0	1.8	2.8	0.0	0.0	25.2	2.5	2.4	18.4	41.9	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(50%),veh/ln	2.3	0.0	8.3	0.3	0.0	0.0	5.1	10.9	11.4	0.1	25.8	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.5	0.0	34.3	57.3	0.0	0.0	75.8	19.8	19.7	75.0	71.6	17.5
LnGrp LOS	D		C	E			E	B	B	E	F	B
Approach Vol, veh/h		453			9			1615			2487	
Approach Delay, s/veh		34.6			57.3			29.9			68.2	
Approach LOS		C			E			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	70.2		31.7	16.0	59.0		7.2				
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	11.6	55.0		50.0	11.5	54.5		11.0				
Max Q Clear Time (g_c+I1), s	2.1	35.2		25.4	12.2	56.5		2.6				
Green Ext Time (p_c), s	0.0	7.9		1.8	0.0	0.0		0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	51.3
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	495	128	0	6	35	9	15	6	1	17	7	1255
Future Volume (veh/h)	495	128	0	6	35	9	15	6	1	17	7	1255
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	339	418	0	7	38	10	16	7	1	18	0	1369
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	491	515	0	34	182	47	40	1122	156	44	0	2016
Arrive On Green	0.28	0.28	0.00	0.07	0.07	0.07	0.02	0.36	0.36	0.03	0.00	0.36
Sat Flow, veh/h	1767	1856	0	465	2473	635	1767	3107	433	1767	0	3145
Grp Volume(v), veh/h	339	418	0	28	0	27	16	4	4	18	0	1369
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1832	0	1741	1767	1763	1778	1767	0	1572
Q Serve(g_s), s	12.5	15.4	0.0	1.0	0.0	1.1	0.7	0.1	0.1	0.7	0.0	20.2
Cycle Q Clear(g_c), s	12.5	15.4	0.0	1.0	0.0	1.1	0.7	0.1	0.1	0.7	0.0	20.2
Prop In Lane	1.00		0.00	0.25		0.36	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	491	515	0	135	0	128	40	636	642	44	0	2016
V/C Ratio(X)	0.69	0.81	0.00	0.20	0.00	0.21	0.40	0.01	0.01	0.41	0.00	0.68
Avail Cap(c_a), veh/h	722	759	0	727	0	690	145	745	751	145	0	2202
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.6	24.6	0.0	31.9	0.0	31.9	35.2	15.0	15.0	35.1	0.0	8.3
Incr Delay (d2), s/veh	1.7	4.2	0.0	0.7	0.0	0.8	6.2	0.0	0.0	5.8	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(50%),veh/ln	5.1	6.9	0.0	0.5	0.0	0.5	0.3	0.0	0.0	0.4	0.0	12.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.4	28.9	0.0	32.6	0.0	32.7	41.5	15.0	15.0	41.0	0.0	9.1
LnGrp LOS	C	C		C		C	D	B	B	D		A
Approach Vol, veh/h		757			55			24			1387	
Approach Delay, s/veh		27.3			32.7			32.6			9.5	
Approach LOS		C			C			C			A	

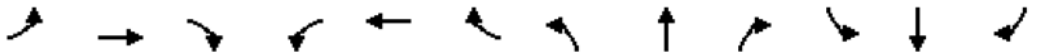
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	31.1		25.4	6.4	31.3		10.1
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7
Max Green Setting (Gmax), s	6.8	30.9		29.9	6.0	30.9		29.0
Max Q Clear Time (g_c+I1), s	2.7	2.1		17.4	2.7	22.2		3.1
Green Ext Time (p_c), s	0.0	0.0		3.0	0.0	4.3		0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	16.4
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	172	6	93	174	306	9	709	110	270	664	47
Future Volume (veh/h)	41	172	6	93	174	306	9	709	110	270	664	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	45	187	7	101	189	333	10	771	120	293	722	51
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	202	243	206	202	244	499	21	885	430	328	1448	703
Arrive On Green	0.12	0.13	0.13	0.12	0.13	0.13	0.01	0.28	0.28	0.19	0.45	0.45
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	45	187	7	101	189	333	10	771	120	293	722	51
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	2.0	8.5	0.3	4.7	8.6	11.5	0.5	19.9	5.2	14.2	13.8	1.6
Cycle Q Clear(g_c), s	2.0	8.5	0.3	4.7	8.6	11.5	0.5	19.9	5.2	14.2	13.8	1.6
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	202	243	206	202	244	499	21	885	430	328	1448	703
V/C Ratio(X)	0.22	0.77	0.03	0.50	0.78	0.67	0.47	0.87	0.28	0.89	0.50	0.07
Avail Cap(c_a), veh/h	202	244	206	202	244	499	101	980	476	353	1448	703
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	34.6	36.1	32.5	35.8	36.1	25.2	42.3	29.7	24.4	34.1	16.6	13.3
Incr Delay (d2), s/veh	0.6	13.8	0.1	1.9	14.5	3.4	14.9	8.0	0.4	22.7	0.3	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(50%),veh/ln	0.8	4.5	0.1	2.0	4.6	5.7	0.3	7.7	1.8	7.5	4.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.1	49.8	32.6	37.7	50.6	28.6	57.2	37.7	24.7	56.8	16.9	13.3
LnGrp LOS	D	D	C	D	D	C	E	D	C	E	B	B
Approach Vol, veh/h		239			623			901			1066	
Approach Delay, s/veh		46.6			36.8			36.2			27.7	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.8	30.9	16.5	18.0	5.6	46.2	16.5	18.0
Change Period (Y+Rc), s	4.5	7.0	6.5	6.5	4.5	7.0	6.5	6.5
Max Green Setting (Gmax), s	17.5	26.5	10.0	11.5	5.0	39.0	10.0	11.5
Max Q Clear Time (g_c+I1), s	16.2	21.9	6.7	10.5	2.5	15.8	4.0	13.5
Green Ext Time (p_c), s	0.1	2.1	0.1	0.1	0.0	4.6	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	34.0
HCM 7th LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	42	2	1	123	391	136
Future Volume (veh/h)	42	2	1	123	391	136
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	46	2	1	134	425	148
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	208	9	456	919	581	508
Arrive On Green	0.13	0.13	0.10	0.56	0.34	0.34
Sat Flow, veh/h	1560	68	1668	1633	1699	1485
Grp Volume(v), veh/h	49	0	1	134	425	148
Grp Sat Flow(s),veh/h/ln	1662	0	1668	1633	1699	1485
Q Serve(g_s), s	1.0	0.0	0.0	1.5	8.2	2.7
Cycle Q Clear(g_c), s	1.0	0.0	0.0	1.5	8.2	2.7
Prop In Lane	0.94	0.04	1.00			1.00
Lane Grp Cap(c), veh/h	222	0	456	919	581	508
V/C Ratio(X)	0.22	0.00	0.00	0.15	0.73	0.29
Avail Cap(c_a), veh/h	403	0	515	1720	1354	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	6.2	3.9	10.8	9.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.1	1.8	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	0.1	1.9	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.0	0.0	6.2	4.0	12.6	9.3
LnGrp LOS	B		A	A	B	A
Approach Vol, veh/h	49			135	573	
Approach Delay, s/veh	15.0			4.0	11.8	
Approach LOS	B			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	28.0		9.5	8.3	19.7
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	39.5		9.1	5.1	29.9
Max Q Clear Time (g_c+I1), s	3.5		3.0	2.0	10.2
Green Ext Time (p_c), s	0.6		0.0	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	10.6
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	188	109	17	72	88	33	0	5	32	0	27
Future Volume (veh/h)	90	188	109	17	72	88	33	0	5	32	0	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	98	204	133	18	78	96	36	0	5	35	0	29
Peak Hour Factor	0.92	0.92	0.82	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	664	597	543	523	489	445	314	0	148	335	0	148
Arrive On Green	0.09	0.37	0.37	0.02	0.30	0.30	0.09	0.00	0.09	0.09	0.00	0.09
Sat Flow, veh/h	1668	1633	1485	1668	1633	1485	1293	0	1585	1322	0	1585
Grp Volume(v), veh/h	98	204	133	18	78	96	36	0	5	35	0	29
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	1633	1485	1293	0	1585	1322	0	1585
Q Serve(g_s), s	1.3	3.0	2.1	0.2	1.2	1.6	0.9	0.0	0.1	0.8	0.0	0.6
Cycle Q Clear(g_c), s	1.3	3.0	2.1	0.2	1.2	1.6	1.4	0.0	0.1	0.9	0.0	0.6
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	664	597	543	523	489	445	314	0	148	335	0	148
V/C Ratio(X)	0.15	0.34	0.24	0.03	0.16	0.22	0.11	0.00	0.03	0.10	0.00	0.20
Avail Cap(c_a), veh/h	780	1340	1218	734	1325	1205	593	0	489	619	0	489
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	6.6	7.7	7.4	7.8	8.6	8.8	14.7	0.0	13.8	14.2	0.0	14.0
Incr Delay (d2), s/veh	0.1	0.3	0.2	0.0	0.2	0.2	0.2	0.0	0.1	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(50%),veh/ln	0.2	0.5	0.3	0.0	0.2	0.3	0.2	0.0	0.0	0.2	0.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.8	8.0	7.6	7.8	8.8	9.0	14.8	0.0	13.9	14.3	0.0	14.6
LnGrp LOS	A	A	A	A	A	A	B		B	B		B
Approach Vol, veh/h		435			192			41			64	
Approach Delay, s/veh		7.6			8.8			14.7			14.5	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	19.1		8.8	7.7	16.9		8.8
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	5.8	27.4		10.3	5.3	27.1		10.3
Max Q Clear Time (g_c+I1), s	2.3	5.0		2.9	3.3	3.6		3.4
Green Ext Time (p_c), s	0.0	1.3		0.1	0.0	0.6		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	8.9
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	0	46	0	0	0	63	240	0	0	247	42
Future Volume (veh/h)	13	0	46	0	0	0	63	240	0	0	247	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1633	1752	1752	1633	1752
Adj Flow Rate, veh/h	14	0	50	0	0	0	68	261	0	0	268	46
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, %	10	10	10	10	10	10	10	18	10	10	18	10
Cap, veh/h	340	0	101	227	119	0	526	873	0	563	515	468
Arrive On Green	0.07	0.00	0.07	0.00	0.00	0.00	0.07	0.53	0.00	0.00	0.32	0.32
Sat Flow, veh/h	1668	0	1485	1269	1752	0	1668	1633	0	1668	1633	1485
Grp Volume(v), veh/h	14	0	50	0	0	0	68	261	0	0	268	46
Grp Sat Flow(s),veh/h/ln	1668	0	1485	1269	1752	0	1668	1633	0	1668	1633	1485
Q Serve(g_s), s	0.3	0.0	1.0	0.0	0.0	0.0	0.7	2.8	0.0	0.0	4.3	0.7
Cycle Q Clear(g_c), s	0.3	0.0	1.0	0.0	0.0	0.0	0.7	2.8	0.0	0.0	4.3	0.7
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	340	0	101	227	119	0	526	873	0	563	515	468
V/C Ratio(X)	0.04	0.00	0.50	0.00	0.00	0.00	0.13	0.30	0.00	0.00	0.52	0.10
Avail Cap(c_a), veh/h	1664	0	1278	1233	1508	0	687	1566	0	821	1550	1409
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	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	14.3	0.0	0.0	0.0	5.7	4.1	0.0	0.0	8.9	7.7
Incr Delay (d2), s/veh	0.0	0.0	3.7	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.8	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(50%),veh/ln	0.1	0.0	0.3	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.9	0.0	18.0	0.0	0.0	0.0	5.8	4.3	0.0	0.0	9.7	7.8
LnGrp LOS	B		B				A	A			A	A
Approach Vol, veh/h		64			0			329			314	
Approach Delay, s/veh		17.1			0.0			4.6			9.4	
Approach LOS		B						A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	23.9		7.9	7.0	16.9		7.9
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	5.3	30.4		27.3	5.3	30.1		27.3
Max Q Clear Time (g_c+I1), s	10.0	4.8		3.0	2.7	6.3		0.0
Green Ext Time (p_c), s	0.0	1.3		0.2	0.0	1.4		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.9
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	13	107	38	2	3	169	316	34	24	184	46
Future Volume (veh/h)	74	13	107	38	2	3	169	316	34	24	184	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	80	14	116	41	2	3	184	343	37	26	200	50
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	365	224	363	342	81	121	588	633	537	446	485	411
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.36	0.36	0.03	0.28	0.28
Sat Flow, veh/h	1322	1752	1485	1180	632	949	1668	1752	1485	1668	1752	1485
Grp Volume(v), veh/h	80	14	116	41	0	5	184	343	37	26	200	50
Grp Sat Flow(s),veh/h/ln	1322	1752	1485	1180	0	1581	1668	1752	1485	1668	1752	1485
Q Serve(g_s), s	2.0	0.3	2.3	1.1	0.0	0.1	2.7	5.6	0.6	0.4	3.4	0.9
Cycle Q Clear(g_c), s	2.1	0.3	2.3	1.4	0.0	0.1	2.7	5.6	0.6	0.4	3.4	0.9
Prop In Lane	1.00		1.00	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	224	363	342	0	202	588	633	537	446	485	411
V/C Ratio(X)	0.22	0.06	0.32	0.12	0.00	0.02	0.31	0.54	0.07	0.06	0.41	0.12
Avail Cap(c_a), veh/h	1183	1309	1283	1073	0	1182	721	1489	1262	624	1387	1175
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	14.7	13.9	11.2	14.5	0.0	13.8	7.5	9.2	7.6	8.9	10.7	9.8
Incr Delay (d2), s/veh	0.3	0.1	0.5	0.2	0.0	0.0	0.3	0.7	0.1	0.1	0.6	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(50%),veh/ln	0.4	0.1	0.5	0.2	0.0	0.0	0.5	1.1	0.1	0.1	0.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.0	14.0	11.7	14.6	0.0	13.8	7.8	9.9	7.6	8.9	11.2	9.9
LnGrp LOS	B	B	B	B		B	A	A	A	A	B	A
Approach Vol, veh/h		210			46			564			276	
Approach Delay, s/veh		13.1			14.5			9.0			10.8	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	20.0		10.3	8.9	16.9		10.3
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	5.6	30.7		27.0	7.1	28.6		27.0
Max Q Clear Time (g_c+I1), s	2.4	7.6		4.3	4.7	5.4		3.4
Green Ext Time (p_c), s	0.0	1.8		0.6	0.1	1.0		0.1

Intersection Summary		
HCM 7th Control Delay, s/veh		10.5
HCM 7th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	30	38	29	12	12	102	534	73	30	277	30
Future Volume (veh/h)	12	30	38	29	12	12	102	534	73	30	277	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	13	33	41	32	13	13	111	580	79	33	301	33
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	301	185	156	293	85	85	582	736	650	351	647	572
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.42	0.42	0.04	0.37	0.37
Sat Flow, veh/h	1352	1826	1547	1294	838	838	1739	1752	1547	1739	1752	1547
Grp Volume(v), veh/h	13	33	41	32	0	26	111	580	79	33	301	33
Grp Sat Flow(s),veh/h/ln	1352	1826	1547	1294	0	1675	1739	1752	1547	1739	1752	1547
Q Serve(g_s), s	0.3	0.7	1.0	0.9	0.0	0.6	1.5	11.3	1.2	0.5	5.1	0.5
Cycle Q Clear(g_c), s	0.9	0.7	1.0	1.6	0.0	0.6	1.5	11.3	1.2	0.5	5.1	0.5
Prop In Lane	1.00		1.00	1.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	301	185	156	293	0	169	582	736	650	351	647	572
V/C Ratio(X)	0.04	0.18	0.26	0.11	0.00	0.15	0.19	0.79	0.12	0.09	0.47	0.06
Avail Cap(c_a), veh/h	1093	1254	1063	1051	0	1151	688	1364	1205	510	1328	1173
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	16.5	16.2	16.3	16.9	0.0	16.1	6.5	9.9	7.0	8.2	9.4	8.0
Incr Delay (d2), s/veh	0.1	0.5	0.9	0.2	0.0	0.4	0.2	1.9	0.1	0.1	0.5	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(50%),veh/ln	0.1	0.2	0.3	0.2	0.0	0.2	0.2	2.4	0.2	0.1	1.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.6	16.6	17.2	17.0	0.0	16.5	6.7	11.8	7.0	8.3	10.0	8.0
LnGrp LOS	B	B	B	B		B	A	B	A	A	A	A
Approach Vol, veh/h		87			58			770			367	
Approach Delay, s/veh		16.9			16.8			10.6			9.6	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	23.4		9.7	8.2	21.4		9.7				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.1	30.6		27.0	5.9	29.8		27.0				
Max Q Clear Time (g_c+I1), s	2.5	13.3		3.0	3.5	7.1		3.6				
Green Ext Time (p_c), s	0.0	3.2		0.3	0.0	1.5		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	11.0
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	119	64	63	129	103	124	615	129	59	253	64
Future Volume (veh/h)	124	119	64	63	129	103	124	615	129	59	253	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	135	129	70	68	140	112	135	668	140	64	275	70
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, %	8	8	8	8	8	8	7	7	7	5	5	5
Cap, veh/h	359	320	270	355	267	225	170	994	208	97	854	213
Arrive On Green	0.09	0.18	0.18	0.06	0.15	0.15	0.10	0.35	0.35	0.06	0.31	0.31
Sat Flow, veh/h	1697	1781	1502	1697	1781	1501	1711	2805	587	1739	2746	686
Grp Volume(v), veh/h	135	129	70	68	140	112	135	406	402	64	172	173
Grp Sat Flow(s),veh/h/ln	1697	1781	1502	1697	1781	1501	1711	1706	1686	1739	1735	1697
Q Serve(g_s), s	3.7	3.6	2.3	1.9	4.1	3.9	4.4	11.5	11.5	2.0	4.3	4.4
Cycle Q Clear(g_c), s	3.7	3.6	2.3	1.9	4.1	3.9	4.4	11.5	11.5	2.0	4.3	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.35	1.00		0.40
Lane Grp Cap(c), veh/h	359	320	270	355	267	225	170	604	597	97	539	528
V/C Ratio(X)	0.38	0.40	0.26	0.19	0.53	0.50	0.80	0.67	0.67	0.66	0.32	0.33
Avail Cap(c_a), veh/h	359	1067	899	406	1067	898	196	1079	1066	156	1054	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	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	18.1	20.6	20.0	18.6	22.3	22.2	25.0	15.5	15.6	26.3	15.0	15.0
Incr Delay (d2), s/veh	0.7	0.8	0.5	0.3	1.6	1.7	17.8	1.3	1.3	7.3	0.3	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(50%),veh/ln	1.4	1.5	0.8	0.7	1.7	1.4	2.4	3.9	3.8	1.0	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.7	21.4	20.5	18.9	23.9	23.9	42.8	16.8	16.9	33.6	15.3	15.4
LnGrp LOS	B	C	C	B	C	C	D	B	B	C	B	B
Approach Vol, veh/h		334			320			943			409	
Approach Delay, s/veh		20.2			22.8			20.6			18.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	25.6	7.8	15.7	10.1	23.2	9.5	14.0
Change Period (Y+Rc), s	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5
Max Green Setting (Gmax), s	5.1	35.9	5.0	34.0	6.5	34.5	5.0	34.0
Max Q Clear Time (g_c+I1), s	4.0	13.5	3.9	5.6	6.4	6.4	5.7	6.1
Green Ext Time (p_c), s	0.0	5.0	0.0	1.0	0.0	1.9	0.0	1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	20.4
HCM 7th 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												
Traffic Volume (veh/h)	32	346	135	291	349	57	232	235	464	64	256	22
Future Volume (veh/h)	32	346	135	291	349	57	232	235	464	64	256	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	35	376	147	316	379	62	252	255	504	70	278	24
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	91	434	511	391	461	75	397	582	673	355	480	41
Arrive On Green	0.05	0.24	0.24	0.12	0.30	0.30	0.09	0.32	0.32	0.07	0.29	0.29
Sat Flow, veh/h	1739	1826	1547	3374	1530	250	1739	1826	1547	1739	1657	143
Grp Volume(v), veh/h	35	376	147	316	0	441	252	255	504	70	0	302
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1687	0	1781	1739	1826	1547	1739	0	1800
Q Serve(g_s), s	1.7	17.3	6.2	8.0	0.0	20.2	8.1	9.7	24.0	2.3	0.0	12.6
Cycle Q Clear(g_c), s	1.7	17.3	6.2	8.0	0.0	20.2	8.1	9.7	24.0	2.3	0.0	12.6
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	91	434	511	391	0	537	397	582	673	355	0	522
V/C Ratio(X)	0.38	0.87	0.29	0.81	0.00	0.82	0.64	0.44	0.75	0.20	0.00	0.58
Avail Cap(c_a), veh/h	159	739	769	434	0	802	397	687	761	384	0	689
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	0.00	1.00
Uniform Delay (d), s/veh	40.2	32.1	21.8	37.8	0.0	28.5	22.0	23.7	20.8	18.8	0.0	26.6
Incr Delay (d2), s/veh	2.6	5.7	0.3	9.9	0.0	4.3	3.3	0.5	3.6	0.3	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(50%),veh/ln	0.8	8.1	2.2	3.8	0.0	8.9	3.8	4.0	8.5	0.9	0.0	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.9	37.8	22.1	47.8	0.0	32.8	25.3	24.2	24.4	19.1	0.0	27.6
LnGrp LOS	D	D	C	D		C	C	C	C	B		C
Approach Vol, veh/h		558			757			1011			372	
Approach Delay, s/veh		34.0			39.1			24.6			26.0	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	27.3	13.8	31.8	9.3	32.8	11.2	34.4
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	10.3	35.5	8.1	* 34	8.0	* 40	8.0	33.0
Max Q Clear Time (g_c+I1), s	10.0	19.3	10.1	14.6	3.7	22.2	4.3	26.0
Green Ext Time (p_c), s	0.2	1.5	0.0	1.7	0.0	2.6	0.0	2.0

Intersection Summary	
HCM 7th Control Delay, s/veh	30.8
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	112	152	251	59	164	108	125	778	53	86	967	52
Future Volume (veh/h)	112	152	251	59	164	108	125	778	53	86	967	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	122	165	273	64	178	117	136	846	58	93	1051	57
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	260	413	350	248	413	350	172	1438	99	119	1334	72
Arrive On Green	0.00	0.23	0.23	0.00	0.23	0.23	0.10	0.44	0.44	0.07	0.40	0.40
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3294	226	1739	3346	181
Grp Volume(v), veh/h	122	165	273	64	178	117	136	445	459	93	545	563
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1735	1785	1739	1735	1793
Q Serve(g_s), s	0.1	5.2	11.2	0.1	5.6	4.3	5.1	13.1	13.1	3.5	18.5	18.5
Cycle Q Clear(g_c), s	0.1	5.2	11.2	0.1	5.6	4.3	5.1	13.1	13.1	3.5	18.5	18.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		0.10
Lane Grp Cap(c), veh/h	260	413	350	248	413	350	172	757	779	119	692	715
V/C Ratio(X)	0.47	0.40	0.78	0.26	0.43	0.33	0.79	0.59	0.59	0.78	0.79	0.79
Avail Cap(c_a), veh/h	516	1167	989	504	1167	989	256	1000	1029	243	974	1007
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	27.7	22.2	24.5	25.8	22.3	21.8	29.6	14.4	14.4	30.8	17.7	17.7
Incr Delay (d2), s/veh	1.3	0.6	3.8	0.5	0.7	0.6	9.5	0.7	0.7	10.5	2.9	2.8
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(50%),veh/ln	1.9	2.2	4.3	0.9	2.4	1.5	2.4	4.3	4.5	1.7	6.7	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.0	22.8	28.3	26.4	23.0	22.4	39.2	15.1	15.1	41.3	20.6	20.5
LnGrp LOS	C	C	C	C	C	C	D	B	B	D	C	C
Approach Vol, veh/h		560			359			1040			1201	
Approach Delay, s/veh		26.8			23.4			18.2			22.2	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	36.6	0.0	20.9	12.4	34.0	0.0	20.9
Change Period (Y+Rc), s	5.2	7.2	5.7	5.7	5.7	7.2	5.7	5.7
Max Green Setting (Gmax), s	4.6	38.8	10.0	43.0	9.9	37.8	10.0	43.0
Max Q Clear Time (g_c+I1), s	5.5	15.1	0.0	13.2	7.1	20.5	0.0	7.6
Green Ext Time (p_c), s	0.1	5.5	0.0	2.0	0.1	6.3	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	21.8
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	323	57	183	356	167	74	627	119	166	934	407
Future Volume (veh/h)	273	323	57	183	356	167	74	627	119	166	934	407
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	297	351	62	199	387	182	80	682	129	180	1015	442
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	317	675	118	363	485	225	101	1143	510	208	1357	796
Arrive On Green	0.12	0.23	0.23	0.11	0.21	0.21	0.06	0.33	0.33	0.12	0.39	0.39
Sat Flow, veh/h	1739	2951	516	1739	2301	1067	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	297	205	208	199	290	279	80	682	129	180	1015	442
Grp Sat Flow(s),veh/h/ln	1739	1735	1733	1739	1735	1634	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	14.3	12.0	12.2	10.2	18.4	18.8	5.3	19.0	7.1	11.8	29.2	22.5
Cycle Q Clear(g_c), s	14.3	12.0	12.2	10.2	18.4	18.8	5.3	19.0	7.1	11.8	29.2	22.5
Prop In Lane	1.00		0.30	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	396	396	363	366	345	101	1143	510	208	1357	796
V/C Ratio(X)	0.94	0.52	0.53	0.55	0.79	0.81	0.79	0.60	0.25	0.87	0.75	0.56
Avail Cap(c_a), veh/h	317	663	663	374	644	606	110	1143	510	245	1357	796
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	34.7	39.1	39.2	31.1	43.3	43.5	53.9	32.4	28.4	50.1	30.4	19.1
Incr Delay (d2), s/veh	34.5	1.0	1.1	1.6	3.9	4.5	30.0	2.3	1.2	23.5	3.8	2.8
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(50%),veh/ln	9.7	5.2	5.3	4.4	8.3	8.0	3.1	8.3	2.8	6.5	12.7	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.2	40.1	40.3	32.7	47.2	48.0	83.9	34.7	29.6	73.6	34.2	21.9
LnGrp LOS	E	D	D	C	D	D	F	C	C	E	C	C
Approach Vol, veh/h		710			768			891			1637	
Approach Delay, s/veh		52.3			43.8			38.4			35.2	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	45.4	18.0	33.0	12.4	52.5	20.0	30.9
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	16.3	36.3	13.0	44.3	7.3	45.3	14.3	43.0
Max Q Clear Time (g_c+I1), s	13.8	21.0	12.2	14.2	7.3	31.2	16.3	20.8
Green Ext Time (p_c), s	0.1	4.6	0.0	2.6	0.0	7.6	0.0	3.6

Intersection Summary	
HCM 7th Control Delay, s/veh	40.6
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	25	0	1040	37	352	0	0	871	112
Future Volume (veh/h)	0	0	0	25	0	1040	37	352	0	0	871	112
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				0	0	1159	40	383	0	0	947	122
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				0	555	1410	85	1907	0	0	1497	668
Arrive On Green				0.00	0.00	0.30	0.10	1.00	0.00	0.00	0.43	0.43
Sat Flow, veh/h				0	1826	4642	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				0	0	1159	40	383	0	0	947	122
Grp Sat Flow(s),veh/h/ln				0	1826	1547	1739	1735	0	0	1735	1547
Q Serve(g_s), s				0.0	0.0	20.9	2.0	0.0	0.0	0.0	19.2	4.4
Cycle Q Clear(g_c), s				0.0	0.0	20.9	2.0	0.0	0.0	0.0	19.2	4.4
Prop In Lane				0.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				0	555	1410	85	1907	0	0	1497	668
V/C Ratio(X)				0.00	0.00	0.82	0.47	0.20	0.00	0.00	0.63	0.18
Avail Cap(c_a), veh/h				0	751	1908	135	1907	0	0	1497	668
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				0.0	0.0	29.1	39.5	0.0	0.0	0.0	20.0	15.8
Incr Delay (d2), s/veh				0.0	0.0	2.2	3.9	0.2	0.0	0.0	2.0	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
%ile BackOfQ(50%),veh/ln				0.0	0.0	7.2	0.9	0.1	0.0	0.0	7.7	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				0.0	0.0	31.3	43.4	0.2	0.0	0.0	22.0	16.4
LnGrp LOS						C	D	A			C	B
Approach Vol, veh/h					1159			423			1069	
Approach Delay, s/veh					31.3			4.3			21.4	
Approach LOS					C			A			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	55.6		10.6	44.9		34.4
Change Period (Y+Rc), s	6.1		6.2	6.1		7.1
Max Green Setting (Gmax), s	39.8		7.0	26.6		37.0
Max Q Clear Time (g_c+I1), s	2.0		4.0	21.2		22.9
Green Ext Time (p_c), s	2.7		0.0	3.0		4.5

Intersection Summary		
HCM 7th Control Delay, s/veh	23.0	
HCM 7th 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												
Traffic Volume (veh/h)	30	34	4	581	24	56	12	460	656	35	281	68
Future Volume (veh/h)	30	34	4	581	24	56	12	460	656	35	281	68
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	33	37	4	632	26	61	13	500	713	38	305	74
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	212	198	21	716	527	446	49	808	807	270	1250	746
Arrive On Green	0.12	0.12	0.12	0.28	0.28	0.28	0.03	0.23	0.23	0.15	0.35	0.35
Sat Flow, veh/h	1767	1646	178	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	33	0	41	632	26	61	13	500	713	38	305	74
Grp Sat Flow(s),veh/h/ln	1767	0	1824	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	1.5	0.0	1.9	26.0	0.9	2.6	0.7	11.7	21.0	1.7	5.6	2.4
Cycle Q Clear(g_c), s	1.5	0.0	1.9	26.0	0.9	2.6	0.7	11.7	21.0	1.7	5.6	2.4
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	0	219	716	527	446	49	808	807	270	1250	746
V/C Ratio(X)	0.16	0.00	0.19	0.88	0.05	0.14	0.27	0.62	0.88	0.14	0.24	0.10
Avail Cap(c_a), veh/h	212	0	784	716	1102	934	174	808	807	270	1250	746
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	0.0	36.3	24.2	23.8	24.4	43.6	31.7	19.9	33.6	20.9	13.3
Incr Delay (d2), s/veh	0.3	0.0	0.4	12.6	0.0	0.1	2.9	1.4	11.4	0.2	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(50%),veh/ln	0.7	0.0	0.8	13.8	0.4	1.0	0.3	5.0	14.7	0.7	2.2	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.5	0.0	36.7	36.7	23.9	24.6	46.5	33.1	31.2	33.8	21.0	13.3
LnGrp LOS	D		D	D	C	C	D	C	C	C	C	B
Approach Vol, veh/h		74			719			1226			417	
Approach Delay, s/veh		36.6			35.2			32.2			20.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.0	16.0	7.1	37.5	16.0	31.0	18.6	26.0
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	26.0	39.4	9.0	26.0	11.0	54.4	14.0	21.0
Max Q Clear Time (g_c+I1), s	28.0	3.9	2.7	7.6	3.5	4.6	3.7	23.0
Green Ext Time (p_c), s	0.0	0.2	0.0	2.0	0.0	0.3	0.0	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	31.3
HCM 7th LOS	C



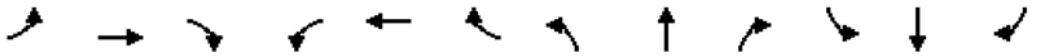
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	507	194	1	2	144	92	1	2	1	69	2	484
Future Volume (veh/h)	507	194	1	2	144	92	1	2	1	69	2	484
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	378	444	1	2	155	99	1	2	1	74	0	521
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	557	584	1	4	296	178	3	327	151	128	0	1654
Arrive On Green	0.32	0.32	0.32	0.14	0.14	0.14	0.00	0.14	0.14	0.07	0.00	0.21
Sat Flow, veh/h	1767	1851	4	28	2153	1296	1767	2344	1080	1767	0	3145
Grp Volume(v), veh/h	378	0	445	132	0	124	1	1	2	74	0	521
Grp Sat Flow(s),veh/h/ln	1767	0	1855	1854	0	1622	1767	1763	1661	1767	0	1572
Q Serve(g_s), s	10.7	0.0	12.4	3.8	0.0	4.1	0.0	0.0	0.0	2.3	0.0	5.4
Cycle Q Clear(g_c), s	10.7	0.0	12.4	3.8	0.0	4.1	0.0	0.0	0.0	2.3	0.0	5.4
Prop In Lane	1.00		0.00	0.02		0.80	1.00		0.65	1.00		1.00
Lane Grp Cap(c), veh/h	557	0	585	255	0	223	3	246	232	128	0	1654
V/C Ratio(X)	0.68	0.00	0.76	0.52	0.00	0.56	0.32	0.01	0.01	0.58	0.00	0.32
Avail Cap(c_a), veh/h	984	0	1033	939	0	821	185	840	792	234	0	2579
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	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.1	0.0	17.7	23.0	0.0	23.1	28.6	21.2	21.2	25.7	0.0	7.7
Incr Delay (d2), s/veh	1.5	0.0	2.1	1.6	0.0	2.2	51.7	0.0	0.0	4.1	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(50%),veh/ln	4.0	0.0	4.9	1.6	0.0	1.6	0.1	0.0	0.0	1.0	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.5	0.0	19.7	24.6	0.0	25.2	80.2	21.2	21.2	29.8	0.0	7.8
LnGrp LOS	B		B	C		C	F	C	C	C		A
Approach Vol, veh/h		823			256			4			595	
Approach Delay, s/veh		19.2			24.9			36.0			10.6	
Approach LOS		B			C			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	12.7		23.2	4.8	16.8		12.6
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7
Max Green Setting (Gmax), s	7.6	27.3		31.9	6.0	28.9		29.0
Max Q Clear Time (g_c+I1), s	4.3	2.0		14.4	2.0	7.4		6.1
Green Ext Time (p_c), s	0.0	0.0		3.7	0.0	2.1		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	17.0
HCM 7th 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												
Traffic Volume (veh/h)	39	247	10	153	197	349	4	662	101	247	819	44
Future Volume (veh/h)	39	247	10	153	197	349	4	662	101	247	819	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1678	1826	1826	1678	1826
Adj Flow Rate, veh/h	42	268	11	166	214	379	4	720	110	268	890	48
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, %	5	5	5	5	5	5	5	15	5	5	15	5
Cap, veh/h	98	309	262	203	461	661	98	840	408	305	1219	592
Arrive On Green	0.06	0.17	0.17	0.12	0.25	0.25	0.06	0.26	0.26	0.18	0.38	0.38
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3188	1547	1739	3188	1547
Grp Volume(v), veh/h	42	268	11	166	214	379	4	720	110	268	890	48
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1594	1547	1739	1594	1547
Q Serve(g_s), s	2.1	12.7	0.5	8.3	8.8	16.5	0.2	19.1	5.0	13.4	21.3	1.8
Cycle Q Clear(g_c), s	2.1	12.7	0.5	8.3	8.8	16.5	0.2	19.1	5.0	13.4	21.3	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	98	309	262	203	461	661	98	840	408	305	1219	592
V/C Ratio(X)	0.43	0.87	0.04	0.82	0.46	0.57	0.04	0.86	0.27	0.88	0.73	0.08
Avail Cap(c_a), veh/h	133	359	304	244	517	709	98	967	470	362	1451	704
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	40.6	36.0	30.9	38.4	28.2	19.3	39.7	31.2	26.0	35.8	23.5	17.5
Incr Delay (d2), s/veh	3.0	17.6	0.1	16.5	0.7	1.0	0.2	6.9	0.4	19.1	1.6	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(50%),veh/ln	0.9	6.8	0.2	4.2	3.7	5.4	0.1	7.4	1.7	6.8	7.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.6	53.6	31.0	54.9	28.9	20.3	39.9	38.1	26.3	54.8	25.1	17.6
LnGrp LOS	D	D	C	D	C	C	D	D	C	D	C	B
Approach Vol, veh/h		321			759			834			1206	
Approach Delay, s/veh		51.5			30.3			36.6			31.4	
Approach LOS		D			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.1	30.4	16.9	21.6	9.5	41.0	9.5	28.9
Change Period (Y+Rc), s	4.5	7.0	6.5	6.5	4.5	7.0	4.5	6.5
Max Green Setting (Gmax), s	18.5	27.0	12.5	17.5	5.0	40.5	6.8	25.2
Max Q Clear Time (g_c+I1), s	15.4	21.1	10.3	14.7	2.2	23.3	4.1	18.5
Green Ext Time (p_c), s	0.2	2.3	0.1	0.4	0.0	5.2	0.0	1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	34.6
HCM 7th LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	165	5	1	450	218	73
Future Volume (veh/h)	165	5	1	450	218	73
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.04	1.00
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
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1633	1699	1752
Adj Flow Rate, veh/h	179	5	1	489	237	79
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	10	18	18	10
Cap, veh/h	269	8	568	858	458	400
Arrive On Green	0.17	0.17	0.13	0.53	0.27	0.27
Sat Flow, veh/h	1609	45	1668	1633	1699	1485
Grp Volume(v), veh/h	185	0	1	489	237	79
Grp Sat Flow(s),veh/h/ln	1663	0	1668	1633	1699	1485
Q Serve(g_s), s	3.9	0.0	0.0	7.5	4.4	1.5
Cycle Q Clear(g_c), s	3.9	0.0	0.0	7.5	4.4	1.5
Prop In Lane	0.97	0.03	1.00			1.00
Lane Grp Cap(c), veh/h	278	0	568	858	458	400
V/C Ratio(X)	0.66	0.00	0.00	0.57	0.52	0.20
Avail Cap(c_a), veh/h	695	0	570	1458	1081	945
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	6.0	6.0	11.5	10.4
Incr Delay (d2), s/veh	2.7	0.0	0.0	0.6	0.9	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	0.8	1.1	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	17.2	0.0	6.0	6.6	12.4	10.7
LnGrp LOS	B		A	A	B	B
Approach Vol, veh/h	185			490	316	
Approach Delay, s/veh	17.2			6.6	12.0	
Approach LOS	B			A	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	26.4		10.7	9.5	16.9
Change Period (Y+Rc), s	6.9		4.5	4.5	6.9
Max Green Setting (Gmax), s	33.1		15.5	5.0	23.6
Max Q Clear Time (g_c+I1), s	9.5		5.9	2.0	6.4
Green Ext Time (p_c), s	2.6		0.3	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	10.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	114	59	9	214	50	133	0	22	110	0	105
Future Volume (veh/h)	46	114	59	9	214	50	133	0	22	110	0	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1633	1752	1752	1633	1752	1752	1870	1752	1752	1870	1752
Adj Flow Rate, veh/h	50	124	64	10	233	54	145	0	24	120	0	114
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, %	10	18	10	10	18	10	10	2	10	10	2	10
Cap, veh/h	423	496	451	487	429	390	391	0	362	470	0	362
Arrive On Green	0.05	0.30	0.30	0.01	0.26	0.26	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	1668	1633	1485	1668	1633	1485	1198	0	1585	1299	0	1585
Grp Volume(v), veh/h	50	124	64	10	233	54	145	0	24	120	0	114
Grp Sat Flow(s),veh/h/ln	1668	1633	1485	1668	1633	1485	1198	0	1585	1299	0	1585
Q Serve(g_s), s	0.8	2.2	1.2	0.2	4.7	1.1	4.4	0.0	0.5	3.0	0.0	2.3
Cycle Q Clear(g_c), s	0.8	2.2	1.2	0.2	4.7	1.1	6.6	0.0	0.5	3.5	0.0	2.3
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	423	496	451	487	429	390	391	0	362	470	0	362
V/C Ratio(X)	0.12	0.25	0.14	0.02	0.54	0.14	0.37	0.00	0.07	0.26	0.00	0.32
Avail Cap(c_a), veh/h	557	657	597	689	657	597	505	0	513	594	0	513
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	9.4	10.0	9.6	10.0	12.0	10.7	15.0	0.0	11.5	12.9	0.0	12.2
Incr Delay (d2), s/veh	0.1	0.3	0.1	0.0	1.1	0.2	0.6	0.0	0.1	0.3	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(50%),veh/ln	0.2	0.5	0.2	0.0	1.2	0.2	0.8	0.0	0.1	0.6	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	9.6	10.2	9.8	10.0	13.1	10.9	15.5	0.0	11.6	13.1	0.0	12.7
LnGrp LOS	A	B	A	B	B	B	B		B	B		B
Approach Vol, veh/h		238			297			169			234	
Approach Delay, s/veh		10.0			12.6			15.0			12.9	
Approach LOS		A			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	18.5		14.4	6.8	16.9		14.4				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.1	15.3		12.3	5.1	15.3		12.3				
Max Q Clear Time (g_c+I1), s	2.2	4.2		5.5	2.8	6.7		8.6				
Green Ext Time (p_c), s	0.0	0.5		0.5	0.0	0.8		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	12.4
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	0	91	0	0	0	68	273	0	0	308	23
Future Volume (veh/h)	52	0	91	0	0	0	68	273	0	0	308	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1633	1752	1752	1633	1752
Adj Flow Rate, veh/h	57	0	99	0	0	0	74	297	0	0	335	25
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, %	10	10	10	10	10	10	10	18	10	10	18	10
Cap, veh/h	404	0	169	214	200	0	449	835	0	520	486	441
Arrive On Green	0.11	0.00	0.11	0.00	0.00	0.00	0.07	0.51	0.00	0.00	0.30	0.30
Sat Flow, veh/h	1668	0	1485	1214	1752	0	1668	1633	0	1668	1633	1485
Grp Volume(v), veh/h	57	0	99	0	0	0	74	297	0	0	335	25
Grp Sat Flow(s),veh/h/ln	1668	0	1485	1214	1752	0	1668	1633	0	1668	1633	1485
Q Serve(g_s), s	1.1	0.0	2.1	0.0	0.0	0.0	0.9	3.7	0.0	0.0	6.1	0.4
Cycle Q Clear(g_c), s	1.1	0.0	2.1	0.0	0.0	0.0	0.9	3.7	0.0	0.0	6.1	0.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	404	0	169	214	200	0	449	835	0	520	486	441
V/C Ratio(X)	0.14	0.00	0.58	0.00	0.00	0.00	0.16	0.36	0.00	0.00	0.69	0.06
Avail Cap(c_a), veh/h	1558	0	1196	1054	1412	0	578	1486	0	764	1481	1346
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	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	14.1	0.0	0.0	0.0	6.8	4.9	0.0	0.0	10.4	8.4
Incr Delay (d2), s/veh	0.2	0.0	3.2	0.0	0.0	0.0	0.2	0.3	0.0	0.0	1.8	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(50%),veh/ln	0.3	0.0	0.6	0.0	0.0	0.0	0.1	0.3	0.0	0.0	1.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.8	0.0	17.3	0.0	0.0	0.0	6.9	5.2	0.0	0.0	12.2	8.5
LnGrp LOS	B		B				A	A			B	A
Approach Vol, veh/h		156			0			371			360	
Approach Delay, s/veh		16.0			0.0			5.5			11.9	
Approach LOS		B						A			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	24.1		9.5	7.2	16.9		9.5
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7
Max Green Setting (Gmax), s	5.3	30.6		27.1	5.1	30.5		27.1
Max Q Clear Time (g_c+I1), s	10.0	5.7		4.1	2.9	8.1		0.0
Green Ext Time (p_c), s	0.0	1.5		0.6	0.0	1.7		0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.0
HCM 7th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	2	227	61	8	19	156	225	52	5	381	99
Future Volume (veh/h)	80	2	227	61	8	19	156	225	52	5	381	99
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752	1752
Adj Flow Rate, veh/h	83	2	236	64	8	20	162	234	54	5	397	103
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, %	10	10	10	10	10	10	10	10	10	10	10	10
Cap, veh/h	405	349	443	378	88	221	414	691	585	485	529	448
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.10	0.39	0.39	0.01	0.30	0.30
Sat Flow, veh/h	1295	1752	1485	1070	443	1109	1668	1752	1485	1668	1752	1485
Grp Volume(v), veh/h	83	2	236	64	0	28	162	234	54	5	397	103
Grp Sat Flow(s),veh/h/ln	1295	1752	1485	1070	0	1552	1668	1752	1485	1668	1752	1485
Q Serve(g_s), s	2.4	0.0	5.7	2.2	0.0	0.6	2.6	4.0	1.0	0.1	8.8	2.3
Cycle Q Clear(g_c), s	3.1	0.0	5.7	2.2	0.0	0.6	2.6	4.0	1.0	0.1	8.8	2.3
Prop In Lane	1.00		1.00	1.00		0.71	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	405	349	443	378	0	309	414	691	585	485	529	448
V/C Ratio(X)	0.20	0.01	0.53	0.17	0.00	0.09	0.39	0.34	0.09	0.01	0.75	0.23
Avail Cap(c_a), veh/h	955	1093	1074	833	0	969	499	1243	1054	667	1182	1002
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	15.4	13.9	12.7	14.8	0.0	14.1	9.2	9.2	8.2	10.4	13.6	11.3
Incr Delay (d2), s/veh	0.2	0.0	1.0	0.2	0.0	0.1	0.6	0.3	0.1	0.0	2.2	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(50%),veh/ln	0.5	0.0	1.4	0.4	0.0	0.2	0.6	0.9	0.2	0.0	2.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.6	13.9	13.7	15.0	0.0	14.3	9.8	9.4	8.3	10.4	15.8	11.6
LnGrp LOS	B	B	B	B		B	A	A	A	B	B	B
Approach Vol, veh/h		321			92			450			505	
Approach Delay, s/veh		14.2			14.8			9.4			14.9	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.0	24.0		14.3	9.0	20.0		14.3				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.3	30.7		27.0	6.5	29.2		27.0				
Max Q Clear Time (g_c+I1), s	2.1	6.0		7.7	4.6	10.8		4.2				
Green Ext Time (p_c), s	0.0	1.3		0.9	0.1	2.2		0.3				

Intersection Summary		
HCM 7th Control Delay, s/veh	12.9	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	29	132	96	41	41	80	367	64	29	659	29
Future Volume (veh/h)	41	29	132	96	41	41	80	367	64	29	659	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1752	1826	1826	1752	1826
Adj Flow Rate, veh/h	45	32	143	104	45	45	87	399	70	32	716	32
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, %	5	5	5	5	5	5	5	10	5	5	10	5
Cap, veh/h	256	270	332	286	124	124	323	886	783	515	831	734
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.07	0.51	0.51	0.04	0.47	0.47
Sat Flow, veh/h	1276	1826	1547	1181	838	838	1739	1752	1547	1739	1752	1547
Grp Volume(v), veh/h	45	32	143	104	0	90	87	399	70	32	716	32
Grp Sat Flow(s),veh/h/ln	1276	1826	1547	1181	0	1675	1739	1752	1547	1739	1752	1547
Q Serve(g_s), s	1.8	0.8	4.4	4.7	0.0	2.7	1.3	8.1	1.3	0.5	20.2	0.6
Cycle Q Clear(g_c), s	4.5	0.8	4.4	5.5	0.0	2.7	1.3	8.1	1.3	0.5	20.2	0.6
Prop In Lane	1.00		1.00	1.00		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	270	332	286	0	248	323	886	783	515	831	734
V/C Ratio(X)	0.18	0.12	0.43	0.36	0.00	0.36	0.27	0.45	0.09	0.06	0.86	0.04
Avail Cap(c_a), veh/h	688	887	855	685	0	814	367	1283	1133	611	1280	1131
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	23.4	20.5	18.9	22.9	0.0	21.3	10.4	8.8	7.1	7.2	13.0	7.8
Incr Delay (d2), s/veh	0.3	0.2	0.9	0.8	0.0	0.9	0.4	0.4	0.0	0.0	3.9	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(50%),veh/ln	0.5	0.3	1.4	1.2	0.0	1.0	0.3	2.0	0.3	0.1	5.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.7	20.7	19.8	23.7	0.0	22.2	10.8	9.1	7.2	7.2	16.9	7.9
LnGrp LOS	C	C	B	C		C	B	A	A	A	B	A
Approach Vol, veh/h		220			194			556			780	
Approach Delay, s/veh		20.7			23.0			9.2			16.1	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	35.0		13.9	8.4	33.3		13.9				
Change Period (Y+Rc), s	4.7	6.9		5.7	4.7	6.9		5.7				
Max Green Setting (Gmax), s	5.6	40.7		27.0	5.1	40.6		27.0				
Max Q Clear Time (g_c+I1), s	2.5	10.1		6.5	3.3	22.2		7.5				
Green Ext Time (p_c), s	0.0	2.4		0.7	0.0	4.2		0.7				

Intersection Summary		
HCM 7th Control Delay, s/veh	15.3	
HCM 7th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	97	125	118	84	102	96	381	48	121	749	140
Future Volume (veh/h)	106	97	125	118	84	102	96	381	48	121	749	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1781	1781	1781	1796	1796	1796	1826	1826	1826
Adj Flow Rate, veh/h	115	105	136	128	91	111	104	414	52	132	814	152
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, %	8	8	8	8	8	8	7	7	7	5	5	5
Cap, veh/h	364	273	230	353	277	233	131	1104	138	166	1109	207
Arrive On Green	0.08	0.15	0.15	0.08	0.16	0.16	0.08	0.36	0.36	0.10	0.38	0.38
Sat Flow, veh/h	1697	1781	1501	1697	1781	1501	1711	3051	381	1739	2915	544
Grp Volume(v), veh/h	115	105	136	128	91	111	104	230	236	132	484	482
Grp Sat Flow(s),veh/h/ln	1697	1781	1501	1697	1781	1501	1711	1706	1725	1739	1735	1724
Q Serve(g_s), s	3.6	3.4	5.4	4.0	2.9	4.3	3.8	6.4	6.5	4.8	15.4	15.4
Cycle Q Clear(g_c), s	3.6	3.4	5.4	4.0	2.9	4.3	3.8	6.4	6.5	4.8	15.4	15.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.32
Lane Grp Cap(c), veh/h	364	273	230	353	277	233	131	617	624	166	660	656
V/C Ratio(X)	0.32	0.38	0.59	0.36	0.33	0.48	0.79	0.37	0.38	0.80	0.73	0.73
Avail Cap(c_a), veh/h	367	944	795	353	944	795	147	917	927	176	959	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	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	20.5	24.5	25.3	20.6	24.1	24.7	29.1	15.1	15.1	28.4	17.1	17.1
Incr Delay (d2), s/veh	0.5	0.9	2.4	0.6	0.7	1.5	22.9	0.4	0.4	20.9	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(50%),veh/ln	1.4	1.5	1.9	1.5	1.2	1.5	2.3	2.2	2.3	2.8	5.5	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.0	25.3	27.7	21.2	24.8	26.2	52.1	15.5	15.5	49.3	18.7	18.8
LnGrp LOS	C	C	C	C	C	C	D	B	B	D	B	B
Approach Vol, veh/h		356			330			570			1098	
Approach Delay, s/veh		24.8			23.9			22.2			22.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	28.7	9.5	15.3	9.4	29.9	9.4	15.5
Change Period (Y+Rc), s	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5
Max Green Setting (Gmax), s	6.5	34.5	5.0	34.0	5.5	35.5	5.0	34.0
Max Q Clear Time (g_c+I1), s	6.8	8.5	6.0	7.4	5.8	17.4	5.6	6.3
Green Ext Time (p_c), s	0.0	2.7	0.0	1.1	0.0	5.7	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	22.9
HCM 7th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	429	282	443	371	57	221	267	348	49	188	30
Future Volume (veh/h)	45	429	282	443	371	57	221	267	348	49	188	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	48	461	303	476	399	61	238	287	374	53	202	32
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	104	550	667	573	636	97	337	434	631	255	247	39
Arrive On Green	0.06	0.30	0.30	0.17	0.41	0.41	0.13	0.24	0.24	0.06	0.16	0.16
Sat Flow, veh/h	1739	1826	1547	3374	1547	236	1739	1826	1547	1739	1538	244
Grp Volume(v), veh/h	48	461	303	476	0	460	238	287	374	53	0	234
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1687	0	1783	1739	1826	1547	1739	0	1782
Q Serve(g_s), s	2.6	22.9	13.5	13.2	0.0	19.9	10.6	13.8	18.3	2.4	0.0	12.3
Cycle Q Clear(g_c), s	2.6	22.9	13.5	13.2	0.0	19.9	10.6	13.8	18.3	2.4	0.0	12.3
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	104	550	667	573	0	733	337	434	631	255	0	286
V/C Ratio(X)	0.46	0.84	0.45	0.83	0.00	0.63	0.71	0.66	0.59	0.21	0.00	0.82
Avail Cap(c_a), veh/h	143	720	811	844	0	1016	342	700	856	290	0	606
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	0.00	1.00
Uniform Delay (d), s/veh	44.1	31.7	19.5	39.0	0.0	22.7	28.1	33.5	22.5	30.5	0.0	39.4
Incr Delay (d2), s/veh	3.2	6.8	0.5	4.6	0.0	0.9	6.4	1.7	0.9	0.4	0.0	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(50%),veh/ln	1.2	10.9	4.6	5.8	0.0	8.2	4.8	6.1	6.4	1.0	0.0	5.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.3	38.5	20.0	43.6	0.0	23.6	34.4	35.2	23.4	30.9	0.0	45.2
LnGrp LOS	D	D	C	D		C	C	D	C	C		D
Approach Vol, veh/h		812			936			899			287	
Approach Delay, s/veh		32.1			33.7			30.1			42.5	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	35.6	18.3	22.0	10.5	46.3	10.8	29.5
Change Period (Y+Rc), s	4.7	6.4	5.7	* 6.4	4.7	* 6.4	4.7	6.4
Max Green Setting (Gmax), s	24.3	38.3	12.9	* 33	8.0	* 55	8.0	37.2
Max Q Clear Time (g_c+I1), s	15.2	25.9	12.6	14.3	4.6	21.9	5.4	20.3
Green Ext Time (p_c), s	1.2	3.3	0.0	1.2	0.0	3.3	0.0	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	33.0
HCM 7th LOS	C

Notes

* HCM 7th 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												
Traffic Volume (veh/h)	71	102	184	70	143	72	141	1008	26	47	933	75
Future Volume (veh/h)	71	102	184	70	143	72	141	1008	26	47	933	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	77	111	200	76	155	78	153	1096	28	51	1014	82
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	230	322	273	246	322	273	194	1684	43	82	1347	109
Arrive On Green	0.00	0.18	0.18	0.00	0.18	0.18	0.11	0.49	0.49	0.05	0.41	0.41
Sat Flow, veh/h	1739	1826	1547	1739	1826	1547	1739	3456	88	1739	3250	263
Grp Volume(v), veh/h	77	111	200	76	155	78	153	550	574	51	541	555
Grp Sat Flow(s),veh/h/ln	1739	1826	1547	1739	1826	1547	1739	1735	1810	1739	1735	1779
Q Serve(g_s), s	0.1	3.3	7.6	0.1	4.8	2.7	5.4	14.9	14.9	1.8	16.6	16.6
Cycle Q Clear(g_c), s	0.1	3.3	7.6	0.1	4.8	2.7	5.4	14.9	14.9	1.8	16.6	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	1.00		0.15
Lane Grp Cap(c), veh/h	230	322	273	246	322	273	194	845	882	82	719	737
V/C Ratio(X)	0.33	0.34	0.73	0.31	0.48	0.29	0.79	0.65	0.65	0.62	0.75	0.75
Avail Cap(c_a), veh/h	508	1258	1066	524	1258	1066	342	1425	1487	183	1253	1285
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	26.9	22.6	24.4	25.7	23.2	22.3	27.1	12.0	12.0	29.3	15.6	15.6
Incr Delay (d2), s/veh	0.8	0.6	3.8	0.7	1.1	0.6	6.9	0.9	0.8	7.6	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(50%),veh/ln	1.1	1.4	3.0	1.0	2.1	1.0	2.4	4.5	4.7	0.9	5.5	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.8	23.2	28.1	26.4	24.3	22.9	34.0	12.9	12.9	36.8	17.2	17.2
LnGrp LOS	C	C	C	C	C	C	C	B	B	D	B	B
Approach Vol, veh/h		388			309			1277			1147	
Approach Delay, s/veh		26.7			24.5			15.4			18.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	37.7	0.0	16.7	12.7	33.1	0.0	16.7
Change Period (Y+Rc), s	5.2	7.2	5.7	5.7	5.7	7.2	5.7	5.7
Max Green Setting (Gmax), s	6.6	51.4	10.1	43.1	12.3	45.2	10.1	43.1
Max Q Clear Time (g_c+I1), s	3.8	16.9	0.0	9.6	7.4	18.6	0.0	6.8
Green Ext Time (p_c), s	0.0	8.0	0.0	1.4	0.2	7.3	0.0	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	18.7
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	244	312	88	213	299	157	95	971	160	161	887	239
Future Volume (veh/h)	244	312	88	213	299	157	95	971	160	161	887	239
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	262	335	95	229	322	169	102	1044	172	173	954	257
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, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	230	499	139	255	417	214	128	1346	601	202	1496	774
Arrive On Green	0.07	0.19	0.19	0.07	0.19	0.19	0.07	0.39	0.39	0.12	0.43	0.43
Sat Flow, veh/h	1739	2678	748	1739	2217	1139	1739	3469	1547	1739	3469	1547
Grp Volume(v), veh/h	262	215	215	229	250	241	102	1044	172	173	954	257
Grp Sat Flow(s),veh/h/ln	1739	1735	1691	1739	1735	1621	1739	1735	1547	1739	1735	1547
Q Serve(g_s), s	7.3	12.1	12.5	7.5	14.4	14.9	6.1	27.8	8.1	10.3	22.7	10.5
Cycle Q Clear(g_c), s	7.3	12.1	12.5	7.5	14.4	14.9	6.1	27.8	8.1	10.3	22.7	10.5
Prop In Lane	1.00		0.44	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	323	315	255	326	305	128	1346	601	202	1496	774
V/C Ratio(X)	1.14	0.67	0.68	0.90	0.77	0.79	0.80	0.78	0.29	0.85	0.64	0.33
Avail Cap(c_a), veh/h	230	704	687	255	708	661	183	1346	601	226	1496	774
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	40.1	39.8	40.0	39.1	40.6	40.8	48.1	28.2	22.2	45.7	23.5	15.8
Incr Delay (d2), s/veh	102.1	2.4	2.6	30.8	3.8	4.6	14.8	4.4	1.2	24.1	2.1	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(50%),veh/ln	9.0	5.2	5.3	4.5	6.3	6.2	3.1	11.5	3.0	5.6	9.1	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	142.2	42.2	42.6	69.9	44.4	45.4	62.9	32.6	23.4	69.8	25.6	16.9
LnGrp LOS	F	D	D	E	D	D	E	C	C	E	C	B
Approach Vol, veh/h		692			720			1318			1384	
Approach Delay, s/veh		80.2			52.8			33.8			29.5	
Approach LOS		F			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	48.1	13.2	26.1	13.4	52.6	13.0	26.3
Change Period (Y+Rc), s	5.7	7.2	5.7	6.5	5.7	7.2	5.7	6.5
Max Green Setting (Gmax), s	12.3	40.9	7.5	42.8	11.1	43.5	7.3	43.0
Max Q Clear Time (g_c+I1), s	12.3	29.8	9.5	14.5	8.1	24.7	9.3	16.9
Green Ext Time (p_c), s	0.1	5.5	0.0	2.5	0.1	6.9	0.0	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	43.5
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	35	0	748	9	266	0	0	1223	103
Future Volume (veh/h)	0	0	0	35	0	748	9	266	0	0	1223	103
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Lane Width Adj.				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1826	1826	1826	1826	1826	0	0	1826	1826
Adj Flow Rate, veh/h				0	0	845	10	286	0	0	1315	111
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				5	5	5	5	5	0	0	5	5
Cap, veh/h				0	423	1076	30	2156	0	0	1858	829
Arrive On Green				0.00	0.00	0.23	0.03	1.00	0.00	0.00	0.54	0.54
Sat Flow, veh/h				0	1826	4642	1739	3561	0	0	3561	1547
Grp Volume(v), veh/h				0	0	845	10	286	0	0	1315	111
Grp Sat Flow(s),veh/h/ln				0	1826	1547	1739	1735	0	0	1735	1547
Q Serve(g_s), s				0.0	0.0	15.4	0.5	0.0	0.0	0.0	25.5	3.2
Cycle Q Clear(g_c), s				0.0	0.0	15.4	0.5	0.0	0.0	0.0	25.5	3.2
Prop In Lane				0.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				0	423	1076	30	2156	0	0	1858	829
V/C Ratio(X)				0.00	0.00	0.79	0.33	0.13	0.00	0.00	0.71	0.13
Avail Cap(c_a), veh/h				0	751	1908	135	2156	0	0	1858	829
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				0.0	0.0	32.5	42.9	0.0	0.0	0.0	15.6	10.5
Incr Delay (d2), s/veh				0.0	0.0	1.3	6.4	0.1	0.0	0.0	2.3	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
%ile BackOfQ(50%),veh/ln				0.0	0.0	5.4	0.3	0.0	0.0	0.0	9.6	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				0.0	0.0	33.8	49.3	0.1	0.0	0.0	17.9	10.8
LnGrp LOS						C	D	A			B	B
Approach Vol, veh/h					845			296			1426	
Approach Delay, s/veh					33.8			1.8			17.4	
Approach LOS					C			A			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	62.0		7.7	54.3		28.0
Change Period (Y+Rc), s	6.1		6.2	6.1		7.1
Max Green Setting (Gmax), s	39.8		7.0	26.6		37.0
Max Q Clear Time (g_c+I1), s	2.0		2.5	27.5		17.4
Green Ext Time (p_c), s	1.9		0.0	0.0		3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	21.0
HCM 7th 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												
Traffic Volume (veh/h)	270	1	46	1211	5	16	21	253	514	8	779	332
Future Volume (veh/h)	270	1	46	1211	5	16	21	253	514	8	779	332
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	278	1	47	1248	5	16	22	261	530	8	803	342
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	306	2	116	1016	769	651	64	647	1094	169	856	654
Arrive On Green	0.17	0.08	0.08	0.51	0.41	0.41	0.04	0.18	0.18	0.10	0.24	0.24
Sat Flow, veh/h	1767	33	1545	1767	1856	1572	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	278	0	48	1248	5	16	22	261	530	8	803	342
Grp Sat Flow(s),veh/h/ln	1767	0	1578	1767	1856	1572	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	22.6	0.0	4.3	75.0	0.2	0.9	1.8	9.6	22.7	0.6	32.7	23.8
Cycle Q Clear(g_c), s	22.6	0.0	4.3	75.0	0.2	0.9	1.8	9.6	22.7	0.6	32.7	23.8
Prop In Lane	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	306	0	118	1016	769	651	64	647	1094	169	856	654
V/C Ratio(X)	0.91	0.00	0.41	1.23	0.01	0.02	0.34	0.40	0.48	0.05	0.94	0.52
Avail Cap(c_a), veh/h	495	0	435	1016	943	799	109	746	1138	169	867	658
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.4	0.0	64.6	28.1	25.2	25.4	68.9	52.7	10.2	60.2	54.4	32.0
Incr Delay (d2), s/veh	13.9	0.0	2.2	111.5	0.0	0.0	3.1	0.4	0.3	0.1	17.4	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(50%),veh/ln	11.3	0.0	1.8	62.9	0.1	0.3	0.9	4.3	7.5	0.3	16.5	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	73.3	0.0	66.8	139.5	25.2	25.4	72.0	53.1	10.6	60.3	71.8	32.7
LnGrp LOS	E		E	F	C	C	E	D	B	E	E	C
Approach Vol, veh/h		326			1269			813			1153	
Approach Delay, s/veh		72.3			137.7			25.9			60.1	
Approach LOS		E			F			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	80.0	16.0	9.9	40.5	30.3	65.7	18.6	31.9
Change Period (Y+Rc), s	5.0	5.0	4.6	5.0	5.0	5.0	4.6	5.0
Max Green Setting (Gmax), s	75.0	40.4	9.0	36.0	41.0	74.4	14.0	31.0
Max Q Clear Time (g_c+I1), s	77.0	6.3	3.8	34.7	24.6	2.9	2.6	24.7
Green Ext Time (p_c), s	0.0	0.2	0.0	0.8	0.7	0.1	0.0	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	81.1
HCM 7th LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	431	119	0	5	32	9	14	5	1	16	6	1091
Future Volume (veh/h)	431	119	0	5	32	9	14	5	1	16	6	1091
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	299	366	0	5	35	10	15	5	1	17	0	1191
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	455	478	0	27	185	51	39	1016	196	43	0	1902
Arrive On Green	0.26	0.26	0.00	0.07	0.07	0.07	0.02	0.34	0.34	0.02	0.00	0.35
Sat Flow, veh/h	1767	1856	0	366	2507	694	1767	2946	570	1767	0	3145
Grp Volume(v), veh/h	299	366	0	25	0	25	15	3	3	17	0	1191
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1837	0	1731	1767	1763	1753	1767	0	1572
Q Serve(g_s), s	9.7	11.7	0.0	0.8	0.0	0.9	0.5	0.1	0.1	0.6	0.0	15.4
Cycle Q Clear(g_c), s	9.7	11.7	0.0	0.8	0.0	0.9	0.5	0.1	0.1	0.6	0.0	15.4
Prop In Lane	1.00		0.00	0.20		0.40	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	455	478	0	135	0	127	39	608	604	43	0	1902
V/C Ratio(X)	0.66	0.77	0.00	0.19	0.00	0.20	0.39	0.00	0.01	0.39	0.00	0.63
Avail Cap(c_a), veh/h	825	866	0	832	0	784	166	851	846	166	0	2327
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	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.3	22.0	0.0	27.9	0.0	27.9	30.9	13.8	13.8	30.8	0.0	8.1
Incr Delay (d2), s/veh	1.6	2.6	0.0	0.7	0.0	0.7	6.2	0.0	0.0	5.7	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(50%),veh/ln	3.8	5.0	0.0	0.4	0.0	0.4	0.3	0.0	0.0	0.3	0.0	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.9	24.6	0.0	28.5	0.0	28.6	37.1	13.8	13.8	36.5	0.0	8.4
LnGrp LOS	C	C		C		C	D	B	B	D		A
Approach Vol, veh/h		665			50			21			1208	
Approach Delay, s/veh		23.8			28.6			30.4			8.8	
Approach LOS		C			C			C			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.3	26.8		21.6	6.1	26.9		9.4				
Change Period (Y+Rc), s	4.7	4.7		5.1	4.7	4.7		4.7				
Max Green Setting (Gmax), s	6.6	30.9		29.9	6.0	30.9		29.0				
Max Q Clear Time (g_c+I1), s	2.6	2.1		13.7	2.5	17.4		2.9				
Green Ext Time (p_c), s	0.0	0.0		2.8	0.0	4.8		0.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	14.7
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

APPENDIX F

SIMTRAFFIC QUEUING ANALYSIS WORKSHEETS WITH RECOMMENDED IMPROVEMENTS

FUTURE YEAR 2035 WITH SPECIFIC PLAN PHASE ONE

Intersection: 3: Highway 111 & Davis Road

Movement	EB	NB	NB	SB	SB
Directions Served	LR	L	T	T	R
Maximum Queue (ft)	80	16	139	157	75
Average Queue (ft)	36	1	43	78	38
95th Queue (ft)	72	7	107	137	65
Link Distance (ft)	1057		1258	1527	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		385			400
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 4: English Road & Highway 111

Movement	EB	EB	EB	WB	NB	SB
Directions Served	L	T	R	TR	LTR	LTR
Maximum Queue (ft)	16	120	58	125	69	31
Average Queue (ft)	1	26	7	15	29	3
95th Queue (ft)	8	81	31	62	59	18
Link Distance (ft)		1136		5805	1181	809
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	400		400			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 6: Highway 111 & Pound Road

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	T	R
Maximum Queue (ft)	72	68	117	102	180	75
Average Queue (ft)	20	21	43	25	61	26
95th Queue (ft)	52	46	93	72	143	62
Link Distance (ft)		1140		14824	6437	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200		400			400
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Highway 111 & Sinclair Road

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	126	39	79	91	49	208	167	62	78	206	102
Average Queue (ft)	48	3	33	27	5	89	55	12	20	76	32
95th Queue (ft)	96	19	68	64	22	157	127	38	52	164	78
Link Distance (ft)		1670			1909		10508			943	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		300	200		400		400	400		400
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 8: Highway 111 & Lindsey Road

Movement	EB	EB	EB	WB	WB	NB	NB	NB	B93	B93	SB	SB
Directions Served	L	T	R	L	TR	L	T	R	T		L	T
Maximum Queue (ft)	47	54	65	72	50	92	271	44	221	79	63	219
Average Queue (ft)	12	19	20	19	16	47	110	10	17	3	23	96
95th Queue (ft)	35	47	45	50	41	84	218	30	103	41	55	188
Link Distance (ft)		1004			1087		1230		907	907		10508
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		400		400			400	
Storage Blk Time (%)							0					
Queuing Penalty (veh)							0					

Intersection: 8: Highway 111 & Lindsey Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	53
Average Queue (ft)	12
95th Queue (ft)	37
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	400
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 9: Highway 111 & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	196	152	79	98	181	100	330	368	347	136	183	175
Average Queue (ft)	80	64	36	39	73	43	186	205	163	51	100	68
95th Queue (ft)	151	111	71	76	141	80	312	335	284	103	169	140
Link Distance (ft)		1443	1443		1392	1392		732	732		907	907
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250			250			250			250		
Storage Blk Time (%)	0	0					10	3			0	
Queuing Penalty (veh)	0	0					44	4			0	

Intersection: 14: Brandt Road & Highway 78

Movement	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB		
Directions Served	T	T	L	T	T	R	LT	R	LT	R		
Maximum Queue (ft)	140	95	48	136	88	66	57	47	93	9		
Average Queue (ft)	57	24	10	48	18	21	21	11	33	0		
95th Queue (ft)	115	67	30	100	57	48	48	31	69	4		
Link Distance (ft)	1779	1779		1490	1490		2041		2013			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			650			650		30		30		
Storage Blk Time (%)							9	1	17	0		
Queuing Penalty (veh)							3	0	0	0		

Intersection: 15: SR 111 & SR 78 WB Ramp/Del Rio Place

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	TR
Maximum Queue (ft)	949	323	93	8	56	31	195	363	11	40	209	204
Average Queue (ft)	603	154	20	0	13	6	91	110	0	7	92	86
95th Queue (ft)	1156	736	97	4	39	22	169	257	5	26	171	166
Link Distance (ft)	1217	1217			492			1262			1183	
Upstream Blk Time (%)	3	2										
Queuing Penalty (veh)	0	0										
Storage Bay Dist (ft)			185	130		130	600		285	225		355
Storage Blk Time (%)								1			0	
Queuing Penalty (veh)								1			0	

Intersection: 18: 1st Street & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	TR	L	T	R	L	TR
Maximum Queue (ft)	133	297	130	186	210	258	259	292	182	165	276
Average Queue (ft)	23	157	45	79	119	137	136	103	85	35	135
95th Queue (ft)	78	253	92	160	188	235	234	209	148	99	234
Link Distance (ft)		1325	1325		1328	1328		1081	1081		863
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	165			185			210			100	
Storage Blk Time (%)		8		0	1		4	0		0	19
Queuing Penalty (veh)		2		0	1		9	1		0	11

Intersection: 20: Imperial Avenue / SR 86 & Barioni Boulevard

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	180	260	196	129	183	116	149	240	217	127	270	257
Average Queue (ft)	79	85	78	44	83	43	71	125	104	50	155	125
95th Queue (ft)	147	171	146	92	145	83	129	205	192	94	242	217
Link Distance (ft)		1397			1255			1319	1319		1064	1064
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		200	245			235		
Storage Blk Time (%)	0	0	0	0	0	0		0			1	
Queuing Penalty (veh)	2	1	0	0	0	0		0			1	

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	308	277	251	219	253	288	162	366	344	83	412	441
Average Queue (ft)	168	110	114	87	139	157	71	220	204	38	146	257
95th Queue (ft)	283	222	204	168	223	254	138	334	313	68	277	380
Link Distance (ft)		1755	1755		1364	1364		1329	1329			1435
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280			145			390			305	340	
Storage Blk Time (%)	3	0		1	7			0	1		0	2
Queuing Penalty (veh)	5	0		2	12			0	1		1	4

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	407	233
Average Queue (ft)	251	81
95th Queue (ft)	363	158
Link Distance (ft)	1435	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		340
Storage Blk Time (%)	2	
Queuing Penalty (veh)	6	

Zone Summary

Zone wide Queuing Penalty: 111

Intersection: 3: Highway 111 & Davis Road

Movement	EB	NB	NB	SB	SB
Directions Served	LR	L	T	T	R
Maximum Queue (ft)	218	6	330	135	67
Average Queue (ft)	101	0	147	64	30
95th Queue (ft)	171	4	270	115	58
Link Distance (ft)	1055		1250	1534	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		385			400
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 4: English Road & Highway 111

Movement	EB	EB	EB	WB	NB	SB
Directions Served	L	T	R	TR	LTR	LTR
Maximum Queue (ft)	2	114	66	208	144	31
Average Queue (ft)	0	30	8	68	78	5
95th Queue (ft)	2	83	33	158	128	19
Link Distance (ft)		1136		5805	1181	809
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	400		400			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 6: Highway 111 & Pound Road

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	T	R
Maximum Queue (ft)	114	112	123	157	170	63
Average Queue (ft)	52	37	44	66	60	22
95th Queue (ft)	93	78	91	141	129	51
Link Distance (ft)		720		14816	6443	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200		400			400
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Highway 111 & Sinclair Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	121	286	200	108	280	151	48	35	336	88
Average Queue (ft)	54	115	79	15	125	56	11	8	169	37
95th Queue (ft)	106	227	164	83	221	123	33	29	293	74
Link Distance (ft)				1909		10522			943	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	200	300	200		400		400	400		400
Storage Blk Time (%)		0	2						0	
Queuing Penalty (veh)		0	1						0	

Intersection: 8: Highway 111 & Lindsey Road

Movement	EB	EB	EB	WB	WB	NB	NB	NB	B93	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	R	T	L	T	R
Maximum Queue (ft)	118	124	213	145	132	167	292	46	122	402	920	488
Average Queue (ft)	28	19	98	68	40	76	119	6	8	34	446	43
95th Queue (ft)	75	69	173	127	94	140	247	24	52	195	881	248
Link Distance (ft)		962			985		1218		749		10522	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		400		400		400		400
Storage Blk Time (%)	0	0	0				0				12	
Queuing Penalty (veh)	0	1	0				0				7	

Intersection: 9: Highway 111 & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	170	141	171	155	155	79	197	284	252	340	517	412
Average Queue (ft)	69	61	67	79	56	37	90	149	118	144	324	241
95th Queue (ft)	133	114	128	137	115	67	165	244	217	334	497	398
Link Distance (ft)		1458	1458		1386	1386		722	722		749	749
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250			250			250			250		
Storage Blk Time (%)							0	0		0	23	
Queuing Penalty (veh)							1	1		0	28	

Intersection: 14: Brandt Road & Highway 78

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	LT	R	LT
Maximum Queue (ft)	10	209	192	7	70	128	89	54	57	41	238
Average Queue (ft)	1	100	75	0	11	66	22	16	13	5	101
95th Queue (ft)	6	170	150	3	41	122	62	40	40	21	182
Link Distance (ft)		1779	1779			1490	1490		2041		2013
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	570			570	650			650		30	
Storage Blk Time (%)									6	0	41
Queuing Penalty (veh)									1	0	0

Intersection: 15: SR 111 & SR 78 WB Ramp/Del Rio Place

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	R	L	T	TR
Maximum Queue (ft)	589	10	46	46	66	43	142	203	7	36	326	340
Average Queue (ft)	252	1	7	8	15	7	53	70	1	5	187	179
95th Queue (ft)	496	6	28	30	45	25	112	163	6	23	312	307
Link Distance (ft)	1217	1217			492			1262			1183	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			185	130		130	600		285	225		355
Storage Blk Time (%)											4	0
Queuing Penalty (veh)											30	2

Intersection: 18: 1st Street & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	TR	L	T	R	L	TR
Maximum Queue (ft)	254	454	230	268	330	336	258	286	216	98	243
Average Queue (ft)	59	231	97	154	181	142	137	126	68	27	116
95th Queue (ft)	180	380	174	245	273	256	235	230	137	67	193
Link Distance (ft)		1325	1325		1328	1328		1081	1081		863
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	165			185			210			100	
Storage Blk Time (%)		21		2	8		2	1		0	18
Queuing Penalty (veh)		8		6	20		5	3		0	7

Intersection: 20: Imperial Avenue / SR 86 & Barioni Boulevard

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	131	134	137	138	174	65	201	225	221	67	304	257
Average Queue (ft)	52	62	61	55	84	32	82	114	99	27	160	129
95th Queue (ft)	101	111	112	114	147	61	153	187	178	58	251	223
Link Distance (ft)		1397			1255			1319	1319		1064	1064
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		200	245			235		
Storage Blk Time (%)					0		0	0			1	
Queuing Penalty (veh)					0		1	0			0	

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	341	355	203	194	228	230	193	445	426	237	301	373
Average Queue (ft)	180	120	102	112	106	112	79	267	245	44	134	213
95th Queue (ft)	323	243	175	178	178	189	157	384	368	119	233	310
Link Distance (ft)		1755	1755		1364	1364		1329	1329			1435
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280			145			390			305	340	
Storage Blk Time (%)	5	0		4	3			1	3		0	0
Queuing Penalty (veh)	8	0		6	5			1	5		1	1

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	325	104
Average Queue (ft)	196	47
95th Queue (ft)	295	86
Link Distance (ft)	1435	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		340
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Zone Summary

Zone wide Queuing Penalty: 148

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE TWO

Intersection: 2: SR 86 & 66th Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	94	298	21	112	209	172	46	468	438	182	604	604
Average Queue (ft)	30	154	3	55	80	80	9	270	225	41	337	158
95th Queue (ft)	69	288	13	100	159	146	30	402	357	108	585	448
Link Distance (ft)		1370			915	915		1076	1076			1409
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	400		490	400			760			300	750	
Storage Blk Time (%)		0							2		1	0
Queuing Penalty (veh)		0							2		3	1

Intersection: 2: SR 86 & 66th Avenue

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	485	49
Average Queue (ft)	152	9
95th Queue (ft)	401	31
Link Distance (ft)	1409	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		260
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 3: Highway 111 & Davis Road

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	R
Maximum Queue (ft)	108	66	10	152	206	94
Average Queue (ft)	45	7	0	48	100	43
95th Queue (ft)	88	34	5	123	172	74
Link Distance (ft)		1060		1252	678	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	300		385			400
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: English Road & Highway 111

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	TR
Maximum Queue (ft)	104	144	105	80	124	94	95	50	99	69
Average Queue (ft)	45	43	18	15	26	18	39	7	33	26
95th Queue (ft)	91	109	60	47	82	58	76	26	73	54
Link Distance (ft)		1129			5798			1177		810
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	400		400	400		400	300		300	
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 6: Highway 111 & Pound Road

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	T	R
Maximum Queue (ft)	65	90	103	176	210	64
Average Queue (ft)	19	34	50	62	92	22
95th Queue (ft)	50	72	88	141	182	52
Link Distance (ft)		1140		14824	6437	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200		400			400
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Highway 111 & Sinclair Road

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	L	T	R	L	T	T
Maximum Queue (ft)	189	35	120	128	38	176	368	561	175	102	121	148
Average Queue (ft)	82	6	45	49	7	80	114	157	20	22	48	58
95th Queue (ft)	144	23	91	99	25	137	237	371	97	67	97	111
Link Distance (ft)		1652	1652		1903			10497	10497		931	931
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			200		400	400			400		
Storage Blk Time (%)	0							1				
Queuing Penalty (veh)	0							3				

Intersection: 7: Highway 111 & Sinclair Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	100
Average Queue (ft)	35
95th Queue (ft)	77
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	400
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Highway 111 & Lindsey Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B73	B73
Directions Served	L	T	R	L	T	R	L	T	T	R	T	T
Maximum Queue (ft)	55	99	66	114	82	57	153	241	250	76	272	281
Average Queue (ft)	19	37	23	45	16	11	68	96	116	27	17	18
95th Queue (ft)	46	76	48	90	48	34	126	197	206	60	163	171
Link Distance (ft)		986			1070			1231	1231		4363	4363
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		200	400			400		
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 8: Highway 111 & Lindsey Road

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	98	155	156	63
Average Queue (ft)	36	62	76	17
95th Queue (ft)	73	129	136	44
Link Distance (ft)		10497	10497	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	400			400
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Highway 111 & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	339	752	149	125	183	199	324	394	437	250	176	260
Average Queue (ft)	241	290	31	43	74	80	148	222	236	74	80	138
95th Queue (ft)	395	803	116	89	141	159	258	341	371	221	149	226
Link Distance (ft)		1431	1431		1380	1380		732	732			907
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250			250			250			250	250	
Storage Blk Time (%)	38	0					1	5	5	0		0
Queuing Penalty (veh)	46	0					4	10	7	1		0

Intersection: 9: Highway 111 & Main Street

Movement	SB	SB	B137	B137
Directions Served	T	R	T	T
Maximum Queue (ft)	213	70	27	43
Average Queue (ft)	91	30	1	2
95th Queue (ft)	180	61	20	27
Link Distance (ft)	907		4363	4363
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		250		
Storage Blk Time (%)	0			
Queuing Penalty (veh)	0			

Intersection: 12: Center Street & Highway 78/86

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	T	R
Maximum Queue (ft)	150	345	338	129	251	277	180	272	181	220	79
Average Queue (ft)	114	160	154	16	148	167	61	103	79	71	32
95th Queue (ft)	175	295	275	62	241	262	130	197	147	155	68
Link Distance (ft)		2520	2520		2361	2361		2300		1747	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	60			60			100		150		150
Storage Blk Time (%)	39	20		0	34		3	11	1	1	
Queuing Penalty (veh)	96	41		1	4		4	8	2	3	

Intersection: 14: Brandt Road & Highway 78

Movement	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	T	T	L	T	T	R	LT	R	LT	R
Maximum Queue (ft)	158	158	66	121	83	105	90	48	116	11
Average Queue (ft)	68	41	14	58	24	37	29	13	50	1
95th Queue (ft)	127	100	41	108	62	80	65	34	99	6
Link Distance (ft)	1779	1779		1490	1490		2041		2013	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			650			650		30		30
Storage Blk Time (%)							13	1	26	0
Queuing Penalty (veh)							5	1	0	0

Intersection: 15: SR 111 & SR 78 WB Ramp/Del Rio Place

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	347	334	227	10	55	47	236	285	283	40	232	220
Average Queue (ft)	218	187	30	1	19	10	99	100	107	5	120	107
95th Queue (ft)	308	287	111	7	48	33	188	215	233	24	209	194
Link Distance (ft)	1217	1217			492			1262	1262		1184	1184
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			185	130		130	600			225		
Storage Blk Time (%)		10									0	
Queuing Penalty (veh)		4									0	

Intersection: 17: Kalin Road & SR 86

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	T	T	T	R	LT	R	L	LT	R
Maximum Queue (ft)	27	55	19	87	42	52	41	23	25	108	86
Average Queue (ft)	3	10	1	20	4	5	7	2	2	35	28
95th Queue (ft)	14	35	10	59	21	23	27	13	13	79	61
Link Distance (ft)		1364	1364	1380	1380		861			896	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	600					600		50	300		50
Storage Blk Time (%)							1			5	1
Queuing Penalty (veh)							0			6	1

Intersection: 18: 1st Street & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	TR	L	T	R	L	TR
Maximum Queue (ft)	188	436	183	234	306	432	299	638	401	189	395
Average Queue (ft)	39	231	56	129	163	229	217	214	139	49	201
95th Queue (ft)	128	366	121	217	247	367	322	496	298	139	339
Link Distance (ft)		1325	1325		1328	1328		1081	1081		863
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	165			185			210			100	
Storage Blk Time (%)		24		2	6		19	3		0	39
Queuing Penalty (veh)		8		3	10		45	11		0	25

Intersection: 20: Imperial Avenue / SR 86 & Barioni Boulevard

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	187	570	191	146	203	116	163	277	281	144	342	284
Average Queue (ft)	128	177	100	47	94	50	82	151	136	57	188	162
95th Queue (ft)	206	666	174	96	157	96	141	243	233	112	292	259
Link Distance (ft)		1397			1255			1319	1319		1064	1064
Upstream Blk Time (%)		3										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	200		200	200		200	245			235		
Storage Blk Time (%)	7	2	0	0	0	0		1			3	
Queuing Penalty (veh)	27	6	1	0	0	0		1			2	

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	337	284	308	206	246	290	186	422	399	224	429	540
Average Queue (ft)	191	113	120	98	141	160	72	262	246	47	166	298
95th Queue (ft)	320	236	226	168	217	254	140	378	358	118	316	446
Link Distance (ft)		1755	1755		1364	1364		1329	1329			1435
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280			145			390			305	340	
Storage Blk Time (%)	3	0		2	9			1	3		0	4
Queuing Penalty (veh)	6	0		3	16			1	4		0	8

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	501	379
Average Queue (ft)	289	104
95th Queue (ft)	431	252
Link Distance (ft)	1435	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		340
Storage Blk Time (%)	4	
Queuing Penalty (veh)	17	

Zone Summary

Zone wide Queuing Penalty: 446

Intersection: 28: Imperial Avenue / SR 86 & I-8 WB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	R	R	L	T	T	T	T	R
Maximum Queue (ft)	282	245	124	98	144	153	809	849	385
Average Queue (ft)	159	121	27	33	70	85	282	464	180
95th Queue (ft)	250	216	87	72	126	145	702	829	481
Link Distance (ft)	884	884			601	601	813	813	
Upstream Blk Time (%)							1	6	
Queuing Penalty (veh)							0	0	
Storage Bay Dist (ft)			310	260					295
Storage Blk Time (%)								34	
Queuing Penalty (veh)								45	

Intersection: 2: SR 86 & 66th Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	241	532	144	177	162	300	32	502	450	143	601	585
Average Queue (ft)	51	252	13	80	77	158	4	297	257	34	351	181
95th Queue (ft)	221	472	126	141	143	272	18	432	401	96	595	449
Link Distance (ft)		1370			915	915		1076	1076			1409
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	400		490	400			760			300	750	
Storage Blk Time (%)		8							4		1	0
Queuing Penalty (veh)		4							4		6	2

Intersection: 2: SR 86 & 66th Avenue

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	518	165
Average Queue (ft)	178	15
95th Queue (ft)	419	99
Link Distance (ft)	1409	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		260
Storage Blk Time (%)	1	
Queuing Penalty (veh)	1	

Intersection: 3: Highway 111 & Davis Road

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	R
Maximum Queue (ft)	263	241	12	378	186	68
Average Queue (ft)	156	115	0	183	75	30
95th Queue (ft)	232	220	4	337	142	57
Link Distance (ft)		1057		1244	700	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	300		385			400
Storage Blk Time (%)	0			0		
Queuing Penalty (veh)	0			0		

Intersection: 4: English Road & Highway 111

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	TR
Maximum Queue (ft)	122	195	44	38	406	54	254	111	187	151
Average Queue (ft)	45	63	10	7	163	10	139	21	97	65
95th Queue (ft)	96	148	34	24	315	36	235	70	169	122
Link Distance (ft)		1129			5798			1177		810
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	400		400	400		400	300		300	
Storage Blk Time (%)					0		0	0		
Queuing Penalty (veh)					0		0	0		

Intersection: 6: Highway 111 & Pound Road

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	T	R
Maximum Queue (ft)	112	164	148	191	426	71
Average Queue (ft)	53	63	68	94	176	19
95th Queue (ft)	96	122	120	170	303	51
Link Distance (ft)		720		14816	6443	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200		400			400
Storage Blk Time (%)		0			0	
Queuing Penalty (veh)		0			0	

Intersection: 7: Highway 111 & Sinclair Road

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	L	T	R	L	T	T
Maximum Queue (ft)	192	43	284	139	62	206	218	255	149	32	250	295
Average Queue (ft)	94	5	129	65	17	96	109	83	26	9	129	134
95th Queue (ft)	163	23	238	116	45	167	179	173	82	27	207	229
Link Distance (ft)		1652	1652		1903			10510	10510		931	931
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			200		400	400			400		
Storage Blk Time (%)	0											
Queuing Penalty (veh)	0											

Intersection: 7: Highway 111 & Sinclair Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	120
Average Queue (ft)	56
95th Queue (ft)	98
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	400
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: Highway 111 & Lindsey Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B73	B73
Directions Served	L	T	R	L	T	R	L	T	T	R	T	T
Maximum Queue (ft)	159	224	249	264	244	147	184	237	216	82	46	41
Average Queue (ft)	70	48	117	157	79	33	90	101	103	25	2	2
95th Queue (ft)	138	121	210	251	193	87	161	199	187	59	21	21
Link Distance (ft)		944			968			1218	1218		4363	4363
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		200	400			400		
Storage Blk Time (%)		0	1	7	0							
Queuing Penalty (veh)		0	2	14	1							

Intersection: 8: Highway 111 & Lindsey Road

Movement	B137	SB	SB	SB	SB
Directions Served	T	L	T	T	R
Maximum Queue (ft)	8	254	495	459	227
Average Queue (ft)	0	46	279	281	24
95th Queue (ft)	0	163	435	433	120
Link Distance (ft)	1762		10510	10510	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		400			400
Storage Blk Time (%)			2	2	
Queuing Penalty (veh)			1	1	

Intersection: 9: Highway 111 & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	312	498	440	237	196	120	275	351	328	70	340	641
Average Queue (ft)	184	172	130	92	65	50	132	177	167	19	215	337
95th Queue (ft)	328	629	341	190	147	98	231	278	268	53	355	591
Link Distance (ft)		1446	1446		1374	1374		722	722			749
Upstream Blk Time (%)												0
Queuing Penalty (veh)												2
Storage Bay Dist (ft)	250			250			250			250	250	
Storage Blk Time (%)	16	0		1			0	2	2		3	14
Queuing Penalty (veh)	15	0		1			1	3	1		20	39

Intersection: 9: Highway 111 & Main Street

Movement	SB	SB	B93	B137	B137	B73
Directions Served	T	R	T	T	T	T
Maximum Queue (ft)	664	340	12	73	72	8
Average Queue (ft)	352	140	0	3	3	0
95th Queue (ft)	612	367	0	42	43	5
Link Distance (ft)	749		1762	4363	4363	1218
Upstream Blk Time (%)	1					
Queuing Penalty (veh)	5					
Storage Bay Dist (ft)		250				
Storage Blk Time (%)	16					
Queuing Penalty (veh)	45					

Intersection: 12: Center Street & Highway 78/86

Movement	EB	EB	EB	B44	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	T	L	T	TR	L	TR	L	T	R
Maximum Queue (ft)	150	412	413	21	134	338	326	147	174	225	324	171
Average Queue (ft)	94	200	212	1	29	165	177	56	75	143	106	72
95th Queue (ft)	164	356	354	15	84	278	287	113	136	217	212	129
Link Distance (ft)		2520	2520	5195		2361	2361		2300		1747	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	60				60			100		150		150
Storage Blk Time (%)	26	31			2	36		2	7	10	2	0
Queuing Penalty (veh)	84	38			5	9		2	5	39	7	1

Intersection: 14: Brandt Road & Highway 78

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	LT	R	LT
Maximum Queue (ft)	10	268	236	9	72	213	148	64	69	40	318
Average Queue (ft)	0	136	112	0	17	98	48	23	15	6	154
95th Queue (ft)	4	230	212	4	48	171	116	48	44	23	254
Link Distance (ft)		1779	1779			1490	1490		2041		2013
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	570			570	650			650		30	
Storage Blk Time (%)									7	0	52
Queuing Penalty (veh)									1	0	0

Intersection: 15: SR 111 & SR 78 WB Ramp/Del Rio Place

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	333	296	46	62	88	52	168	166	178	146	574	603
Average Queue (ft)	189	158	11	14	23	11	70	69	69	9	326	323
95th Queue (ft)	290	264	36	45	63	37	138	144	152	72	529	520
Link Distance (ft)	1217	1217			492			1262	1262		1184	1184
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			185	130		130	600			225		
Storage Blk Time (%)		7			0						16	
Queuing Penalty (veh)		1			0						1	

Intersection: 17: Kalin Road & SR 86

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	T	L	T	T	R	LT	R	L	LT	R
Maximum Queue (ft)	42	118	47	1	120	90	42	49	25	179	234	131
Average Queue (ft)	7	40	5	0	44	8	3	13	2	30	100	31
95th Queue (ft)	26	94	23	1	98	40	19	37	14	105	177	83
Link Distance (ft)		1364	1364		1380	1380		861			896	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	600			620			600		50	300		50
Storage Blk Time (%)								1			30	1
Queuing Penalty (veh)								0			69	2

Intersection: 18: 1st Street & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	TR	L	T	R	L	TR
Maximum Queue (ft)	255	770	492	275	706	486	300	622	375	189	373
Average Queue (ft)	82	428	183	247	388	230	219	275	107	46	164
95th Queue (ft)	230	710	372	315	651	405	333	574	282	126	308
Link Distance (ft)		1325	1325		1328	1328		1081	1081		863
Upstream Blk Time (%)								0			
Queuing Penalty (veh)								0			
Storage Bay Dist (ft)	165			185			210			100	
Storage Blk Time (%)	0	47		23	40		20	11		1	33
Queuing Penalty (veh)	0	21		78	133		53	35		2	16

Intersection: 20: Imperial Avenue / SR 86 & Barioni Boulevard

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	161	162	168	106	186	89	193	278	262	110	362	360
Average Queue (ft)	74	72	76	57	90	37	98	149	134	37	214	191
95th Queue (ft)	135	133	137	102	159	71	172	249	236	82	319	303
Link Distance (ft)		1397			1255			1319	1319		1064	1064
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		200	245			235		
Storage Blk Time (%)	0	0	0		0		0	1			4	
Queuing Penalty (veh)	0	0	0		1		0	1			2	

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	344	386	292	223	279	250	383	556	502	334	386	516
Average Queue (ft)	206	152	132	124	133	132	117	339	314	78	166	314
95th Queue (ft)	358	352	284	207	231	219	294	514	488	261	314	483
Link Distance (ft)		1755	1755		1364	1364		1329	1329			1435
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280			145			390			305	340	
Storage Blk Time (%)	13	0		11	4		0	6	11		0	6
Queuing Penalty (veh)	21	0		17	8		0	6	18		0	9

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	507	240
Average Queue (ft)	299	74
95th Queue (ft)	477	235
Link Distance (ft)	1435	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		340
Storage Blk Time (%)	5	
Queuing Penalty (veh)	14	

Zone Summary

Zone wide Queuing Penalty: 865

Intersection: 28: Imperial Avenue / SR 86 & I-8 WB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	R	R	L	T	T	T	T	R
Maximum Queue (ft)	269	232	70	50	117	140	856	888	385
Average Queue (ft)	152	110	15	8	52	61	614	739	300
95th Queue (ft)	252	211	50	31	98	121	1062	1096	552
Link Distance (ft)	884	884			601	601	832	832	
Upstream Blk Time (%)							6	47	
Queuing Penalty (veh)							0	0	
Storage Bay Dist (ft)			310	260					295
Storage Blk Time (%)		0						56	0
Queuing Penalty (veh)		0						98	0

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE

Intersection: 1: SR 111 & Lincoln Street

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	R	L	L	T	T	R
Maximum Queue (ft)	248	247	206	230	191	729	207
Average Queue (ft)	76	30	98	136	47	323	57
95th Queue (ft)	223	226	175	208	120	860	198
Link Distance (ft)	617	617			985	1289	
Upstream Blk Time (%)	0	1				1	
Queuing Penalty (veh)	0	0				0	
Storage Bay Dist (ft)			475	475			210
Storage Blk Time (%)						15	
Queuing Penalty (veh)						14	

Intersection: 2: SR 86 & 66th Avenue

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	R	R	L	T	T	R	L
Maximum Queue (ft)	103	242	12	113	206	205	216	48	491	454	231	522
Average Queue (ft)	36	109	2	49	90	98	38	9	281	251	47	259
95th Queue (ft)	78	201	10	93	164	176	131	31	443	406	141	412
Link Distance (ft)		1364			909	909			1074	1074		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	400		490	400			400	760			300	750
Storage Blk Time (%)										5		
Queuing Penalty (veh)										5		

Intersection: 2: SR 86 & 66th Avenue

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	514	373	308	91
Average Queue (ft)	300	120	126	7
95th Queue (ft)	437	262	240	56
Link Distance (ft)		1397	1397	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	750			260
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 3: Highway 111 & Davis Road

Movement	EB	EB	NB	NB	NB	SB	SB
Directions Served	L	LR	L	T	T	T	R
Maximum Queue (ft)	114	84	10	97	94	253	87
Average Queue (ft)	53	20	1	24	7	109	43
95th Queue (ft)	93	57	6	73	40	200	75
Link Distance (ft)		1333		1071	1071	1047	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	300		385				400
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 4: English Road & Highway 111

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	LTR	L	R
Maximum Queue (ft)	155	186	64	91	129	113	106	74	90	57
Average Queue (ft)	63	64	16	24	39	43	41	18	30	24
95th Queue (ft)	122	141	47	61	96	95	83	51	72	47
Link Distance (ft)		827			5798			1177		
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	400		400	400		400	400		400	400
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 5: Highway 111 & Main Street

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	89	276	108	167
Average Queue (ft)	32	104	49	46
95th Queue (ft)	70	217	86	142
Link Distance (ft)	1854	758		566
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			150	
Storage Blk Time (%)				0
Queuing Penalty (veh)				0

Intersection: 6: Highway 111 & Pound Road

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	T	R
Maximum Queue (ft)	81	110	128	179	319	80
Average Queue (ft)	29	40	65	81	127	33
95th Queue (ft)	67	83	110	162	240	67
Link Distance (ft)		1140		14067	6437	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200		400			400
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Highway 111 & Sinclair Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	R	L	TR	L	L	T	R	L	T
Maximum Queue (ft)	188	64	103	73	145	60	262	478	684	183	92	162
Average Queue (ft)	99	13	41	15	69	11	125	178	299	32	29	61
95th Queue (ft)	169	41	81	46	131	38	215	363	535	112	72	128
Link Distance (ft)		1652	1652			1903			9187	9187		1687
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			300	200		400	400			400	
Storage Blk Time (%)	0							0	3			
Queuing Penalty (veh)	0							0	15			

Intersection: 7: Highway 111 & Sinclair Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	178	90
Average Queue (ft)	84	36
95th Queue (ft)	151	71
Link Distance (ft)	1687	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		400
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Highway 111 & Lindsey Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	81	104	81	128	65	62	174	372	359	90	118	142
Average Queue (ft)	20	41	30	48	18	15	86	166	149	24	42	61
95th Queue (ft)	53	84	60	97	50	43	152	300	280	57	86	115
Link Distance (ft)		979			1075			1318	1318			1241
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		200	400			400	400	
Storage Blk Time (%)								0	0			
Queuing Penalty (veh)								0	0			

Intersection: 8: Highway 111 & Lindsey Road

Movement	SB	SB	SB	B129	B129
Directions Served	T	T	R	T	T
Maximum Queue (ft)	136	146	66	11	54
Average Queue (ft)	66	55	15	0	2
95th Queue (ft)	119	116	38	8	40
Link Distance (ft)	1241	1241		9187	9187
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			400		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: Lack Road & Highway 78/86

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	LT	R	LT	R
Maximum Queue (ft)	146	176	193	17	17	229	225	33	48	12	44	50
Average Queue (ft)	59	77	84	1	2	90	102	6	12	1	9	13
95th Queue (ft)	116	144	159	8	10	183	187	22	35	6	29	35
Link Distance (ft)		2940	2940			5195	5195		1719		1409	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	665			590	665			575		30		30
Storage Blk Time (%)									8	0	6	2
Queuing Penalty (veh)									0	0	2	0

Intersection: 9: Highway 111 & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	490	906	612	117	228	325	489	762	745	405	284	355
Average Queue (ft)	423	499	214	49	104	135	268	387	370	40	135	184
95th Queue (ft)	586	1092	813	99	187	247	453	626	601	199	307	343
Link Distance (ft)		956	956		893	893		1005	1005			781
Upstream Blk Time (%)		17	8					0				
Queuing Penalty (veh)		0	0					0				
Storage Bay Dist (ft)	400			400			400			400	400	
Storage Blk Time (%)	56	1					1	7	5		4	0
Queuing Penalty (veh)	67	1					5	21	7		13	0

Intersection: 9: Highway 111 & Main Street

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	333	88
Average Queue (ft)	140	32
95th Queue (ft)	275	73
Link Distance (ft)	781	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		400
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 12: Center Street & Highway 78/86

Movement	EB	EB	EB	B44	B44	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	TR	T	T	L	T	T	R	L	TR	L
Maximum Queue (ft)	150	641	581	80	63	111	223	276	229	154	230	161
Average Queue (ft)	144	323	223	3	2	16	130	133	91	47	110	75
95th Queue (ft)	167	605	473	36	29	62	199	220	172	101	187	137
Link Distance (ft)		2520	2520	5195	5195		2361	2361			2300	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	60					60			300	100		150
Storage Blk Time (%)	62	14				0	36	0	0	1	15	1
Queuing Penalty (veh)	154	50				0	5	0	0	1	10	2

Intersection: 12: Center Street & Highway 78/86

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	165	99
Average Queue (ft)	59	32
95th Queue (ft)	126	71
Link Distance (ft)	1736	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		150
Storage Blk Time (%)	1	
Queuing Penalty (veh)	2	

Intersection: 14: Brandt Road & Highway 78

Movement	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	T	T	L	T	T	R	LT	R	L	LT	R
Maximum Queue (ft)	178	154	55	166	140	131	100	79	57	130	10
Average Queue (ft)	92	50	14	72	44	51	42	19	13	60	1
95th Queue (ft)	160	125	38	133	103	96	84	54	41	108	6
Link Distance (ft)	1773	1773		1484	1484		2041			2014	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)			650			650		30	300		30
Storage Blk Time (%)							13	1		23	0
Queuing Penalty (veh)							5	1		14	0

Intersection: 15: SR 111 & SR 78 WB Ramp/Del Rio Place

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	R	L	T	TR	L	T	T
Maximum Queue (ft)	498	464	274	11	74	45	290	474	501	36	224	244
Average Queue (ft)	328	293	38	0	18	9	128	248	269	6	125	108
95th Queue (ft)	457	427	159	5	53	32	228	417	444	25	209	211
Link Distance (ft)	1205	1205			492			1262	1262		1184	1184
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			185	130		130	600			225		
Storage Blk Time (%)		27									0	
Queuing Penalty (veh)		9									0	

Intersection: 15: SR 111 & SR 78 WB Ramp/Del Rio Place

Movement	SB
Directions Served	TR
Maximum Queue (ft)	262
Average Queue (ft)	131
95th Queue (ft)	226
Link Distance (ft)	1184
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: SR 111 & SR 78 EB Ramp/Shank Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	LT	R	L	T	R	L	T	T	R
Maximum Queue (ft)	53	52	59	23	357	833	337	19	215	195	183
Average Queue (ft)	10	16	15	1	65	516	23	1	72	73	55
95th Queue (ft)	35	37	48	11	289	920	188	10	187	185	147
Link Distance (ft)	947	947	257			786			1262	1262	1262
Upstream Blk Time (%)						10					
Queuing Penalty (veh)						0					
Storage Bay Dist (ft)				50	455		455	450			
Storage Blk Time (%)			6			13					
Queuing Penalty (veh)			0			7					

Intersection: 17: Kalin Road & SR 86

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	T	R	T	T	R	LT	R	L	LT	R
Maximum Queue (ft)	37	73	15	6	68	31	68	38	17	38	120	93
Average Queue (ft)	7	13	1	0	18	3	15	5	1	6	51	30
95th Queue (ft)	25	45	8	3	50	15	49	21	10	23	97	67
Link Distance (ft)		1364	1364		1380	1380		861			896	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	600			650			600		50	300		50
Storage Blk Time (%)								0			11	1
Queuing Penalty (veh)								0			15	1

Intersection: 18: 1st Street & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	
Directions Served	L	T	R	L	L	TR	L	T	R	L	TR	
Maximum Queue (ft)	254	632	212	274	516	646	300	1128	1122	190	529	
Average Queue (ft)	61	340	64	175	220	362	292	887	726	69	281	
95th Queue (ft)	193	627	140	271	399	623	330	1411	1427	182	476	
Link Distance (ft)		1325	1325		1328	1328		1081	1081		863	
Upstream Blk Time (%)								28	13			
Queuing Penalty (veh)								0	0			
Storage Bay Dist (ft)	165			185			210			100		
Storage Blk Time (%)	0	41		7	16		61	3		1	52	
Queuing Penalty (veh)	0	13		14	32		144	14		2	34	

Intersection: 20: Imperial Avenue / SR 86 & Barioni Boulevard

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	199	765	200	131	217	194	184	349	314	185	326	295
Average Queue (ft)	135	299	99	50	102	59	85	183	169	65	184	159
95th Queue (ft)	222	996	185	103	181	124	153	299	286	137	283	266
Link Distance (ft)		1397			1255			1319	1319		1064	1064
Upstream Blk Time (%)		5										
Queuing Penalty (veh)		0										
Storage Bay Dist (ft)	200		200	200		200	245			235		
Storage Blk Time (%)	13	8	1	0	0	0	0	2			3	
Queuing Penalty (veh)	53	32	4	0	1	0	0	3			2	

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	356	399	332	218	304	310	210	514	493	335	378	512
Average Queue (ft)	216	138	132	98	156	169	71	319	302	60	158	298
95th Queue (ft)	360	333	277	177	250	266	155	455	438	189	283	426
Link Distance (ft)		1755	1755		1364	1364		1329	1329			1435
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280			145			390			305	340	
Storage Blk Time (%)	12	0		3	9			4	8		0	5
Queuing Penalty (veh)	20	0		5	17			3	10		0	8

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	480	287
Average Queue (ft)	292	102
95th Queue (ft)	419	240
Link Distance (ft)	1435	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		340
Storage Blk Time (%)	4	
Queuing Penalty (veh)	16	

Intersection: 28: Imperial Avenue / SR 86 & I-8 WB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	R	R	L	T	T	T	T	R
Maximum Queue (ft)	261	241	153	78	132	155	742	818	385
Average Queue (ft)	147	111	38	28	64	78	314	501	186
95th Queue (ft)	222	197	103	65	117	138	744	882	491
Link Distance (ft)	1242	1242			604	604	812	812	
Upstream Blk Time (%)							1	12	
Queuing Penalty (veh)							0	0	
Storage Bay Dist (ft)			310	260					295
Storage Blk Time (%)								38	
Queuing Penalty (veh)								48	

Zone Summary

Zone wide Queuing Penalty: 792

Intersection: 1: SR 111 & Lincoln Street

Movement	EB	NB	NB	NB	SB	SB
Directions Served	L	L	L	T	T	R
Maximum Queue (ft)	220	308	301	184	771	300
Average Queue (ft)	99	191	212	87	369	141
95th Queue (ft)	184	269	280	163	803	330
Link Distance (ft)	617			992	1289	
Upstream Blk Time (%)					2	
Queuing Penalty (veh)					0	
Storage Bay Dist (ft)		475	475			210
Storage Blk Time (%)					24	0
Queuing Penalty (veh)					40	0

Intersection: 2: SR 86 & 66th Avenue

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	T	R	L	T	R	R	L	T	T	R	L
Maximum Queue (ft)	278	616	146	159	184	376	319	35	609	564	330	555
Average Queue (ft)	67	296	9	75	82	234	187	5	328	300	63	342
95th Queue (ft)	248	582	90	130	161	334	291	22	538	483	224	597
Link Distance (ft)		1364			909	909			1074	1074		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	400		490	400			400	760			300	750
Storage Blk Time (%)		13				0			0	9		
Queuing Penalty (veh)		7				0			0	9		

Intersection: 2: SR 86 & 66th Avenue

Movement	SB	SB	SB	SB
Directions Served	L	T	T	R
Maximum Queue (ft)	609	452	408	45
Average Queue (ft)	383	203	188	5
95th Queue (ft)	651	478	425	26
Link Distance (ft)		1397	1397	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	750			260
Storage Blk Time (%)	0		0	
Queuing Penalty (veh)	0		0	

Intersection: 3: Highway 111 & Davis Road

Movement	EB	EB	NB	NB	NB	B108	B108	SB	SB
Directions Served	L	LR	L	T	T	T		T	R
Maximum Queue (ft)	228	212	16	266	250	260	158	267	59
Average Queue (ft)	126	104	1	131	143	22	2	136	14
95th Queue (ft)	194	185	7	226	225	144	24	237	42
Link Distance (ft)	1356	1356		7695	7695	798	798	1738	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)			385						400
Storage Blk Time (%)				0					
Queuing Penalty (veh)				0					

Intersection: 4: English Road & Highway 111

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	LTR	L	R
Maximum Queue (ft)	170	268	72	148	777	403	230	181	294	156
Average Queue (ft)	67	79	14	16	294	46	130	90	137	61
95th Queue (ft)	139	194	45	87	641	240	206	165	239	112
Link Distance (ft)		798			5798			1177		
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	400		400	400		400	400		400	400
Storage Blk Time (%)					5				0	
Queuing Penalty (veh)					9				0	

Intersection: 5: Highway 111 & Main Street

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	200	511	153	346
Average Queue (ft)	89	189	48	134
95th Queue (ft)	155	391	109	285
Link Distance (ft)	1854	758		566
Upstream Blk Time (%)		0		
Queuing Penalty (veh)		1		
Storage Bay Dist (ft)			150	
Storage Blk Time (%)			0	5
Queuing Penalty (veh)			0	3

Intersection: 6: Highway 111 & Pound Road

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	T	R
Maximum Queue (ft)	212	246	203	277	534	147
Average Queue (ft)	102	116	95	121	263	25
95th Queue (ft)	181	212	167	240	448	97
Link Distance (ft)		720		12680	6443	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200		400			400
Storage Blk Time (%)	0	2			1	
Queuing Penalty (veh)	1	3			1	

Intersection: 7: Highway 111 & Sinclair Road

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	R	L	TR	L	L	T	R	L	T
Maximum Queue (ft)	190	37	234	200	657	104	408	415	456	139	49	499
Average Queue (ft)	91	5	129	87	342	27	222	226	178	19	13	286
95th Queue (ft)	163	23	203	175	658	72	415	417	362	73	41	446
Link Distance (ft)		1652	1652		1903	1903			8923	8923		3068
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	1000			1000			1000	1000			1000	
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 7: Highway 111 & Sinclair Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	510	135
Average Queue (ft)	301	60
95th Queue (ft)	466	110
Link Distance (ft)	3068	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		1000
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Highway 111 & Lindsey Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	150	164	245	263	438	99	252	261	268	67	188	424
Average Queue (ft)	74	45	134	171	107	35	116	142	121	22	42	239
95th Queue (ft)	130	114	223	265	350	73	206	238	221	50	116	378
Link Distance (ft)		938			974			1621	1621			1518
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		200	400			400	400	
Storage Blk Time (%)		0	2	11	0							1
Queuing Penalty (veh)		0	3	24	1							1

Intersection: 8: Highway 111 & Lindsey Road

Movement	SB	SB	SB	B129	B129
Directions Served	T	T	R	T	T
Maximum Queue (ft)	464	474	143	504	503
Average Queue (ft)	264	270	20	51	52
95th Queue (ft)	406	427	90	571	577
Link Distance (ft)	1518	1518		8923	8923
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			400		
Storage Blk Time (%)		1			
Queuing Penalty (veh)		1			

Intersection: 9: Highway 111 & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	490	1244	1164	264	157	189	490	1004	928	149	490	1217
Average Queue (ft)	396	549	448	114	64	75	406	572	502	18	350	853
95th Queue (ft)	611	1347	1101	217	130	148	587	1111	1027	91	587	1403
Link Distance (ft)		1385	1385		1318	1318		1156	1156			1172
Upstream Blk Time (%)		6	5					1				10
Queuing Penalty (veh)		0	0					0				0
Storage Bay Dist (ft)	400			400			400			400	400	
Storage Blk Time (%)	55	1		0			55	0	1		0	24
Queuing Penalty (veh)	54	2		0			268	1	0		3	70

Intersection: 9: Highway 111 & Main Street

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	1227	490
Average Queue (ft)	858	299
95th Queue (ft)	1425	662
Link Distance (ft)	1172	
Upstream Blk Time (%)	11	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		400
Storage Blk Time (%)	25	0
Queuing Penalty (veh)	74	0

Intersection: 11: Lack Road & Highway 78/86

Movement	EB	EB	EB	EB	WB	WB	WB	B44	NB	SB	SB
Directions Served	L	T	T	R	T	T	R	T	LT	LT	R
Maximum Queue (ft)	99	200	218	19	371	362	24	12	19	118	113
Average Queue (ft)	37	87	85	1	146	147	3	0	2	19	44
95th Queue (ft)	79	163	179	8	284	286	14	9	11	71	88
Link Distance (ft)		2940	2940		5195	5195		2520	1719	1409	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	665			590			575				30
Storage Blk Time (%)						0			2	9	12
Queuing Penalty (veh)						0			0	12	3

Intersection: 12: Center Street & Highway 78/86

Movement	EB	EB	EB	B44	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	T	L	T	T	R	L	TR	L	T
Maximum Queue (ft)	150	416	446	4	130	284	276	115	125	177	236	427
Average Queue (ft)	121	206	210	0	28	154	152	50	47	85	150	131
95th Queue (ft)	181	360	369	3	86	244	247	90	94	149	234	289
Link Distance (ft)		2520	2520	5195		2361	2361			2300		1736
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	60				60			300	100		150	
Storage Blk Time (%)	43	27			3	36	0		1	9	11	3
Queuing Penalty (veh)	139	54			6	9	0		1	7	69	25

Intersection: 12: Center Street & Highway 78/86

Movement	SB
Directions Served	R
Maximum Queue (ft)	231
Average Queue (ft)	118
95th Queue (ft)	212
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	150
Storage Blk Time (%)	4
Queuing Penalty (veh)	17

Intersection: 14: Brandt Road & Highway 78

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	LT	R	L	LT
Maximum Queue (ft)	3	301	278	7	60	217	170	82	100	58	235	267
Average Queue (ft)	0	175	142	0	17	109	67	28	36	9	121	168
95th Queue (ft)	3	274	239	3	46	179	143	59	76	34	217	251
Link Distance (ft)		1773	1773			1484	1484		2041			2014
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	570			570	650			650		30	300	
Storage Blk Time (%)									17	1	0	54
Queuing Penalty (veh)									2	1	0	129

Intersection: 15: SR 111 & SR 78 WB Ramp/Del Rio Place

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	LT	R	L	T	R	L	T	TR	L	T	T
Maximum Queue (ft)	370	339	87	58	60	56	241	214	223	98	602	691
Average Queue (ft)	243	209	12	13	21	11	112	96	98	11	345	391
95th Queue (ft)	346	312	55	43	54	39	220	183	187	58	562	626
Link Distance (ft)	1205	1205			492			1262	1262		1184	1184
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			185	130		130	600			225		
Storage Blk Time (%)		15									18	
Queuing Penalty (veh)		2									1	

Intersection: 15: SR 111 & SR 78 WB Ramp/Del Rio Place

Movement	SB
Directions Served	TR
Maximum Queue (ft)	725
Average Queue (ft)	427
95th Queue (ft)	679
Link Distance (ft)	1184
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: SR 111 & SR 78 EB Ramp/Shank Road

Movement	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LT	R	LT	R	L	T	R	T	T	R
Maximum Queue (ft)	86	175	118	24	68	401	20	542	599	852
Average Queue (ft)	19	74	41	1	15	134	2	195	243	336
95th Queue (ft)	58	153	93	11	50	298	10	457	548	728
Link Distance (ft)	947	947	257			781		1262	1262	1262
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)				50	455		455			
Storage Blk Time (%)			20	0		0		0		
Queuing Penalty (veh)			0	0		0		0		

Intersection: 17: Kalin Road & SR 86

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	LT	R	L	LT
Maximum Queue (ft)	53	172	111	13	1	141	113	51	72	25	266	329
Average Queue (ft)	8	61	15	1	0	59	22	7	16	2	76	151
95th Queue (ft)	30	132	64	6	1	119	75	29	48	12	194	262
Link Distance (ft)		1364	1364			1380	1380		861			896
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	600			650	620			600		50	300	
Storage Blk Time (%)									1		0	45
Queuing Penalty (veh)									0		0	146

Intersection: 17: Kalin Road & SR 86

Movement	SB
Directions Served	R
Maximum Queue (ft)	138
Average Queue (ft)	41
95th Queue (ft)	123
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	1
Queuing Penalty (veh)	4

Intersection: 18: 1st Street & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	TR	L	T	R	L	TR
Maximum Queue (ft)	254	1284	1229	275	1386	1377	300	1124	1124	190	372
Average Queue (ft)	87	914	798	266	1330	1307	292	965	855	60	192
95th Queue (ft)	248	1520	1556	315	1467	1541	335	1436	1541	162	317
Link Distance (ft)		1325	1325		1328	1328		1081	1081		863
Upstream Blk Time (%)		21	20		66	65		49	30		
Queuing Penalty (veh)		0	0		0	0		0	0		
Storage Bay Dist (ft)	165			185			210			100	
Storage Blk Time (%)	0	65		51	64		73	5		1	39
Queuing Penalty (veh)	1	29		214	269		196	20		2	19

Intersection: 20: Imperial Avenue / SR 86 & Barioni Boulevard

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	248	369	190	128	201	95	230	304	303	278	488	456
Average Queue (ft)	111	91	92	58	107	40	111	163	147	47	282	260
95th Queue (ft)	225	242	163	110	180	76	203	264	257	146	439	415
Link Distance (ft)		1397			1255			1319	1319		1064	1064
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		200	245			235		
Storage Blk Time (%)	8	0	0		0		0	1			12	
Queuing Penalty (veh)	22	0	1		0		2	1			6	

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	348	394	323	222	279	318	322	582	491	336	430	678
Average Queue (ft)	193	145	135	131	141	150	99	345	317	55	213	386
95th Queue (ft)	331	290	237	211	239	243	225	498	449	181	393	572
Link Distance (ft)		1755	1755		1364	1364		1329	1329			1435
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280			145			390			305	340	
Storage Blk Time (%)	8	0		9	7			5	8		2	14
Queuing Penalty (veh)	12	0		13	15			5	13		10	22

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	671	430
Average Queue (ft)	368	110
95th Queue (ft)	557	344
Link Distance (ft)	1435	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		340
Storage Blk Time (%)	11	0
Queuing Penalty (veh)	31	0

Intersection: 28: Imperial Avenue / SR 86 & I-8 WB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	R	R	L	T	T	T	T	R
Maximum Queue (ft)	251	216	82	43	123	154	1028	1039	385
Average Queue (ft)	134	98	23	7	49	63	725	840	292
95th Queue (ft)	223	187	59	29	100	124	1276	1244	557
Link Distance (ft)	1287	1287			604	604	980	980	
Upstream Blk Time (%)							9	44	
Queuing Penalty (veh)							0	0	
Storage Bay Dist (ft)			310	260					295
Storage Blk Time (%)								55	0
Queuing Penalty (veh)								83	0

Zone Summary

Zone wide Queuing Penalty: 2191

FUTURE YEAR 2050 WITH SPECIFIC PLAN PHASE THREE WITH REDUCED ALTERNATIVE

Intersection: 2: SR 86 & 66th Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	83	206	17	142	179	166	55	337	316	68	262	192
Average Queue (ft)	32	95	2	58	83	59	9	224	180	26	153	105
95th Queue (ft)	69	172	11	112	153	120	32	317	285	51	242	176
Link Distance (ft)		1370			915	915		1076	1076			1409
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300		490	300			760			300	750	
Storage Blk Time (%)									0			
Queuing Penalty (veh)									0			

Intersection: 2: SR 86 & 66th Avenue

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	190	55
Average Queue (ft)	85	12
95th Queue (ft)	157	34
Link Distance (ft)	1409	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		260
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 3: Highway 111 & Davis Road

Movement	EB	NB	NB	SB	SB
Directions Served	LR	L	T	T	R
Maximum Queue (ft)	99	15	120	146	61
Average Queue (ft)	23	1	28	67	27
95th Queue (ft)	63	7	85	129	52
Link Distance (ft)	1057		1258	1527	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		385			400
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 4: English Road & Highway 111

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	TR
Maximum Queue (ft)	72	122	32	34	57	44	58	39	69	51
Average Queue (ft)	16	19	3	5	7	6	16	4	16	14
95th Queue (ft)	47	65	17	21	33	27	41	22	45	39
Link Distance (ft)		1129			5798			1177		810
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	400		400	400		400	200		200	
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 6: Highway 111 & Pound Road

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	T	R
Maximum Queue (ft)	31	70	74	140	144	53
Average Queue (ft)	7	19	22	28	43	8
95th Queue (ft)	24	46	57	90	111	31
Link Distance (ft)		1140		14824	6437	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200		400			400
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Highway 111 & Sinclair Road

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	83	52	67	67	18	113	153	40	58	167	66
Average Queue (ft)	32	8	22	19	3	46	50	5	13	52	19
95th Queue (ft)	67	30	48	50	12	95	121	22	40	133	51
Link Distance (ft)		1670			1909		10508			943	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		300	200		400		400	400		400
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 8: Highway 111 & Lindsey Road

Movement	EB	EB	EB	WB	WB	NB	NB	NB	B93	B93	SB	SB
Directions Served	L	T	R	L	TR	L	T	R	T		L	T
Maximum Queue (ft)	32	46	55	51	47	88	170	46	26	16	55	175
Average Queue (ft)	7	15	13	18	10	31	63	10	1	1	15	59
95th Queue (ft)	25	38	36	42	31	65	140	30	15	12	44	134
Link Distance (ft)		1004			1087		1230		907	907		10508
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		400		400			400	
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 8: Highway 111 & Lindsey Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	35
Average Queue (ft)	8
95th Queue (ft)	29
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	400
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 9: Highway 111 & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	138	153	80	85	130	86	208	239	208	136	159	145
Average Queue (ft)	67	70	33	41	67	38	89	130	103	42	76	42
95th Queue (ft)	119	131	66	78	117	72	167	199	176	91	135	103
Link Distance (ft)		1443	1443		1392	1392		732	732		907	907
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250			250			250			250		
Storage Blk Time (%)							0	0				
Queuing Penalty (veh)							0	0				

Intersection: 18: 1st Street & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	TR	L	T	R	L	TR
Maximum Queue (ft)	146	343	144	191	224	361	238	285	143	190	336
Average Queue (ft)	28	170	42	87	123	171	114	119	78	42	162
95th Queue (ft)	84	267	93	168	191	292	198	226	132	124	280
Link Distance (ft)		1325	1325		1328	1328		1081	1081		863
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	165			185			210			100	
Storage Blk Time (%)		10		0	1		0	1		0	25
Queuing Penalty (veh)		3		0	1		1	2		0	16

Intersection: 20: Imperial Avenue / SR 86 & Barioni Boulevard

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	170	300	184	132	169	129	151	227	208	143	278	270
Average Queue (ft)	76	106	83	50	89	43	73	123	100	61	174	150
95th Queue (ft)	149	260	152	97	146	74	130	198	181	115	256	242
Link Distance (ft)		1397			1255			1319	1319		1064	1064
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		200	245			235		
Storage Blk Time (%)	2	2	0		0	0		0			1	
Queuing Penalty (veh)	8	6	0		0	0		0			1	

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	306	229	211	233	308	305	237	344	330	84	375	451
Average Queue (ft)	158	109	113	102	143	160	94	205	189	39	149	268
95th Queue (ft)	254	189	187	191	239	257	208	299	287	71	273	393
Link Distance (ft)		1755	1755		1364	1364		1329	1329			1435
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280			145			390			305	340	
Storage Blk Time (%)	1			2	9				0		0	2
Queuing Penalty (veh)	1			4	17				0		0	4

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	430	227
Average Queue (ft)	262	98
95th Queue (ft)	378	186
Link Distance (ft)	1435	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		340
Storage Blk Time (%)	2	
Queuing Penalty (veh)	7	

Intersection: 28: Imperial Avenue / SR 86 & I-8 WB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	R	R	L	T	T	T	T	R
Maximum Queue (ft)	254	228	124	79	130	145	669	710	385
Average Queue (ft)	146	104	25	30	59	65	216	376	87
95th Queue (ft)	222	194	77	66	107	121	581	709	328
Link Distance (ft)	884	884			601	601	853	853	
Upstream Blk Time (%)							0	2	
Queuing Penalty (veh)							0	0	
Storage Bay Dist (ft)			310	260					295
Storage Blk Time (%)								23	0
Queuing Penalty (veh)								26	0

Zone Summary

Zone wide Queuing Penalty: 100

Intersection: 2: SR 86 & 66th Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	90	294	38	189	217	187	26	366	343	85	299	256
Average Queue (ft)	28	159	5	101	90	78	3	221	177	31	156	145
95th Queue (ft)	68	273	23	173	172	156	16	335	291	65	261	230
Link Distance (ft)		1370			915	915		1076	1076			1409
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300		490	300			760			300	750	
Storage Blk Time (%)		1							0			
Queuing Penalty (veh)		1							0			

Intersection: 2: SR 86 & 66th Avenue

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	249	41
Average Queue (ft)	125	10
95th Queue (ft)	215	29
Link Distance (ft)	1409	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		260
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 3: Highway 111 & Davis Road

Movement	EB	NB	NB	SB	SB
Directions Served	LR	L	T	T	R
Maximum Queue (ft)	148	15	223	128	51
Average Queue (ft)	60	0	90	44	20
95th Queue (ft)	116	6	186	97	44
Link Distance (ft)	1055		1250	1534	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		385			400
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 4: English Road & Highway 111

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	TR
Maximum Queue (ft)	77	112	23	26	148	23	116	56	107	84
Average Queue (ft)	17	20	2	3	49	2	49	10	41	33
95th Queue (ft)	47	67	12	14	116	13	95	33	82	63
Link Distance (ft)		1129			5798			1177		810
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	400		400	400		400	300		300	
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 6: Highway 111 & Pound Road

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	T	R
Maximum Queue (ft)	81	67	94	137	174	35
Average Queue (ft)	26	26	30	44	64	8
95th Queue (ft)	60	55	72	115	141	30
Link Distance (ft)		720		14816	6443	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	200		400			400
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 7: Highway 111 & Sinclair Road

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	R	L	T	R
Maximum Queue (ft)	115	16	122	89	37	117	154	50	32	332	73
Average Queue (ft)	44	1	46	34	9	56	42	8	2	126	26
95th Queue (ft)	93	8	92	73	27	106	107	28	16	247	59
Link Distance (ft)		1670			1909		10522			943	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	200		300	200		400		400	400		400
Storage Blk Time (%)											
Queuing Penalty (veh)											

Intersection: 8: Highway 111 & Lindsey Road

Movement	EB	EB	EB	WB	WB	NB	NB	NB	B93	B93	SB	SB
Directions Served	L	T	R	L	TR	L	T	R	T		L	T
Maximum Queue (ft)	72	65	111	127	84	90	184	43	48	11	74	398
Average Queue (ft)	25	17	43	52	26	36	58	12	2	0	16	182
95th Queue (ft)	56	47	91	102	61	70	133	32	29	8	47	307
Link Distance (ft)		962			985		1218		749	749		10522
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		400		400			400	
Storage Blk Time (%)												0
Queuing Penalty (veh)												0

Intersection: 8: Highway 111 & Lindsey Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	40
Average Queue (ft)	9
95th Queue (ft)	32
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	400
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 9: Highway 111 & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	129	136	107	148	124	94	160	179	170	239	338	319
Average Queue (ft)	56	58	49	67	53	36	71	95	65	94	198	138
95th Queue (ft)	105	107	86	120	104	67	130	155	133	184	314	255
Link Distance (ft)		1458	1458		1386	1386		722	722		749	749
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250			250			250			250		
Storage Blk Time (%)										1	3	
Queuing Penalty (veh)										2	4	

Intersection: 18: 1st Street & Main Street

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	TR	L	T	R	L	TR
Maximum Queue (ft)	254	506	276	258	324	353	290	293	166	189	308
Average Queue (ft)	68	259	85	133	162	169	128	151	70	47	142
95th Queue (ft)	205	422	188	221	249	296	218	247	123	127	254
Link Distance (ft)		1325	1325		1328	1328		1081	1081		863
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	165			185			210			100	
Storage Blk Time (%)	0	28		1	4		2	2		0	24
Queuing Penalty (veh)	0	13		2	9		4	5		0	12

Intersection: 20: Imperial Avenue / SR 86 & Barioni Boulevard

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (ft)	147	162	135	136	180	89	163	219	220	94	235	223
Average Queue (ft)	62	66	66	53	87	40	78	118	105	32	155	121
95th Queue (ft)	124	126	112	104	151	73	138	186	184	72	223	205
Link Distance (ft)		1397			1255			1319	1319		1064	1064
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200		200	200		200	245			235		
Storage Blk Time (%)		0		0	0			0			0	
Queuing Penalty (veh)		0		0	0			0			0	

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	T	T	R	L	T
Maximum Queue (ft)	360	384	308	214	256	266	202	411	385	152	302	373
Average Queue (ft)	193	125	112	122	123	122	86	270	246	48	155	233
95th Queue (ft)	335	277	208	204	229	213	167	383	359	124	268	336
Link Distance (ft)		1755	1755		1364	1364		1329	1329			1435
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	280			145			390			305	340	
Storage Blk Time (%)	7	0		10	3		0	0	3		0	1
Queuing Penalty (veh)	11	0		16	7		0	0	5		0	1

Intersection: 22: Imperial Avenue / SR 86 & Aten Road

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	350	112
Average Queue (ft)	216	48
95th Queue (ft)	315	84
Link Distance (ft)	1435	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		340
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 28: Imperial Avenue / SR 86 & I-8 WB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	R	R	L	T	T	T	T	R
Maximum Queue (ft)	247	191	46	41	113	120	883	904	385
Average Queue (ft)	119	74	7	8	40	45	672	784	285
95th Queue (ft)	203	152	32	31	87	99	1095	1094	555
Link Distance (ft)	884	884			601	601	848	848	
Upstream Blk Time (%)							8	55	
Queuing Penalty (veh)							0	0	
Storage Bay Dist (ft)			310	260					295
Storage Blk Time (%)								64	
Queuing Penalty (veh)								65	

Zone Summary

Zone wide Queuing Penalty: 159

APPENDIX G

BRIDGE LOCATIONS AND DATA IN SPECIFIC PLAN STUDY AREA

Bridge_No_	Location	Inspection_Date	Structure_Name	Year_Built	Length_m_	Permit_Rating	Operational_Rating_	Type_3	Type_3S2	Type_3_3	Width_m_	No__of_Lanes	Vertical_Clearanc	Latitude	Longitude
58C0223	1.4 MI N OF RTE 111	12/7/2021	"Z" DRAIN	1950	18.3	P5	0	N/A	N/A	N/A	7.3	2	Unimpared	33.278293	-115.544939
58C0216	3.3 MI W OF ROUTE 111	12/7/2021	ALAMO RIVER	1994	43.9	P5	54.1	Legal	Legal	Legal	7.5	2	Unimpared	33.176634	-115.576086
58C0222	.9 MI S RUEGGER RD	11/17/2015	NEW RIVER	2002	40.8	P5	54.1	Legal	Legal	Legal	11.6	2	Unimpared	33.084449	-115.562371
58C0145	1.5 MI WEST ROUTE 111	12/7/2021	ALAMO RIVER	1967	30.5	P5	61.6	Legal	Legal	Legal	9.8	2	Unimpared	33.10136	-115.5404
58C0077	3.3 MI W OF SR 111	12/8/2020	ALAMO RIVER	1990	29.6	P5	54.1	Legal	Legal	Legal	9.8	2	Unimpared	33.125763	-115.570832
58C0006	1.3 MI S OF VAIL RD	12/7/2021	NEW RIVER	1978	40.5	P5	89.7	Legal	Legal	Legal	9.8	2	Unimpared	33.08558	-115.6144
58C0100	0.5 NI S RUEGGER RD	12/7/2021	NEW RIVER	1940	27.7	O5	33	Legal	Legal	Legal	7.5	2	Unimpared	33.08958	-115.5798
58C0165	0.4 MI S OF EDDINS RD	12/7/2021	ALAMO RIVER	1950	46	O5	33.4	Legal	Legal	Legal	7.5	2	Unimpared	33.118	-115.5626
58C0007	100' S OF VAIL RD	12/7/2021	VAIL CANAL	1936	7.6	O5	28.5	Legal	Legal	Legal	7.6	2	Unimpared	33.10404	-115.6143
58C0101	4.2 MI N/O SR-86	12/7/2021	NEW RIVER	1940	32.3	X5	33	0	0	0	7.5	2	Unimpared	33.09982	-115.6488