Memorandum

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

To: Charlie Ream
City of Oakland, Department of Transportation (OakDOT)

From: Mario Tambellini, PE, TE
Nicole Scappaticci, PE

Date: June 9, 2025

Subject: **Grand Avenue Complete Streets Project – Traffic Operations Analysis**

INTRODUCTION

This memorandum has been prepared to present the findings of a Traffic Operations Analysis (TOA) for the Grand Avenue Complete Streets Project (Project). The (Project) proposes a road diet along portions of the Grand Avenue corridor between Broadway and Mandana Boulevard in the City of Oakland (City). In addition to decreasing vehicular lanes, the Project would provide improved bicycle, pedestrian, and transit facilities along the corridor in order to improve the experience and safety of all road users. The Project location is shown in **Figure 1**.

The purpose of this TOA is to evaluate potential effects on vehicle and transit operations along the study corridor with construction of the Project, and to recommend potential additional improvements at study facilities to optimize operations with the Project. This TOA evaluates and compares operations of nine (9) total project alternatives. This TOA contains the following sections:

- Project Description
- Study Facilities and Analysis Scenarios
- Traffic Operations Analysis
- Transit Delay Analysis
- Two-Way El Embarcadero Alternatives
- Conclusion

Project Location And Study Facilities
Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

FIGURE 1

WOOD RODGERS

PROJECT DESCRIPTION

A No Build scenario and two Build versions of the Project were studied. Each Build version of the project was studied with three alternatives. Note that the signal timing and intersection alternative improvements included in this section were developed using an iterative process during the operations analysis to ensure optimized traffic operations of each alternative.

NO BUILD SCENARIO

The No Build alternative is described as follows:

- **Alternative 1 Existing No Build** – Existing conditions with geometrics changes included that will be constructed by the Lakeside Family Streets and 27th Street/Bay Place projects, which are planned to be completed before the Grand Avenue Complete Streets Project. These Lakeside Family Streets and 27th Street/Bay Place projects include reducing the southbound approach of the Bay Place & Grand Avenue intersection to one lane, removal of the channelized westbound right-turn lane at Santa Clara Avenue/Lake Park Avenue & Grand Avenue, and restricting right-turn on red for the following movements:
    - MacArthur Boulevard & Grand Avenue: southbound right
    - Santa Clara Avenue/Lake Park Avenue & Grand Avenue: northbound, southbound, and westbound right

VERSION 1 BUILD ALTERNATIVES

VERSION 1 of the Project assumed that a road diet would be implemented along all three main segments of the Project corridor: Broadway to Valdez Street, Park View Terrace to Euclid Avenue, and Stanta Clara Avenue to Mandana Boulevard. The three alternatives studied under **VERSION 1** of the Project are as follows:

- **Alternative 2 (WB Diet) VERSION 1** –Remove one westbound lane on Grand Avenue between Park View Terrace and Euclid Avenue (5 lanes to 4 lanes).
- **Alternative 3 (EB Diet) VERSION 1** –Remove one eastbound lane on Grand Avenue between Park View Terrace and Euclid Avenue (5 lanes to 4 lanes).
- **Alternative 4 (3-Lane Diet) VERSION 1** –Remove one eastbound and one westbound lane on Grand Avenue between Park View Terrace and Euclid Avenue (5 lanes to 3 lanes).

In addition to the above changes, all alternatives studied under **VERSION 1** of the Project included the following changes from No Build conditions:

Geometry Changes:

- Remove one eastbound lane on Grand Avenue from west of Broadway to Webster Street.
- Change the westbound approach striping to consist of one westbound left-turn trap lane and one shared through/right-turn lane at the Broadway & Grand Avenue intersection.
- Remove the eastbound left-turn lane at the Valdez Street & Grand Avenue intersection.
- Remove the westbound left turn lane at the Valdez Street & Grand Avenue intersection.
- Remove one eastbound lane between Lake Park Avenue/Santa Clara Avenue and Mandana Boulevard.
- Remove one westbound lane between Mandana Boulevard and just west of the Mid-Block Pedestrian Crossing between Elwood Avenue and Lake Park Avenue/Santa Clara Avenue.
- Convert El Embarcadero to one-way northbound at the El Embarcadero & Grand Avenue intersection and remove the westbound left-turn lane on Grand Avenue at El Embarcadero.
- Construct a 100-foot eastbound left-turn lane at the Elwood Avenue and Grand Avenue intersection. The permissive left-turn phasing would be maintained.

- Extend the westbound left-turn lane to have 300 feet of storage at the at the Mandana Boulevard & Grand Avenue intersection.
- It is recommended to continue allowing westbound right-turn on red and maintain the de-facto westbound right-turn lane at the Santa Clara Avenue/Lake Park Avenue & Grand Avenue to ensure westbound queues remain low.

Signal Timing Changes:

- Change eastbound and westbound signal phasing from split left-turn phasing to protected/permissive left-turn phasing at the Broadway & Grand Avenue intersection. Adjust the Webster Street and Valdez Street signals to be in sync or coordinated with the Broadway signal, including 100 second cycle lengths.

No Right-Turn On Red Restrictions:

- Place no right-turn on red restrictions for the following movements:
    - Webster Street & Grand Avenue: northbound, southbound, and eastbound right
    - Park View Terrace/Bellevue Avenue & Grand Avenue: southbound right

VERSION 2 BUILD ALTERNATIVES

VERSION 2 of the Project assumed that a road diet would primarily be implemented along the middle segment of the Project corridor (Park View Terrace to Euclid Avenue), with a partial road diet implemented on the eastern segment of the Project corridor (Santa Clara Avenue to Mandana Boulevard). The three alternatives studied under **VERSION 2** of the Project are as follows:

- **Alternative 2 (WB Diet) VERSION 2** –Remove one westbound lane on Grand Avenue between Park View Terrace and Euclid Avenue (5 lanes to 4 lanes). Alternative 2 (WB Diet) VERSION 2 represents the City's preferred alternative for the Project.
- **Alternative 3 (EB Diet) VERSION 2** –Remove one eastbound lane on Grand Avenue between Park View Terrace and Euclid Avenue (5 lanes to 4 lanes).
- **Alternative 4 (3-Lane Diet) VERSION 2** –Remove one eastbound and one westbound lane on Grand Avenue between Park View Terrace and Euclid Avenue (5 lanes to 3 lanes).

In addition to the above changes, all alternatives studied under **VERSION 2** of the Project included the following changes from No Build conditions:

Geometry Changes:

- Remove one eastbound lane between Lake Park Avenue/Santa Clara Avenue and Mandana Boulevard.
- Convert El Embarcadero to one-way northbound at the El Embarcadero & Grand Avenue intersection and remove the westbound left-turn lane on Grand Avenue and El Embarcadero.
- Remove the eastbound and westbound left-turn lanes at the Valdez Street & Grand Avenue intersection.
- It is recommended to continue allowing westbound right-turn on red and maintain the de-facto westbound right-turn lane at the Santa Clara Avenue/Lake Park Avenue & Grand Avenue to ensure westbound queues remain low.

No Right-Turn On Red Restrictions:

- Place no right-turn on red restrictions for the following movements:
    - Webster Street & Grand Avenue: northbound, southbound, and eastbound right
    - Park View Terrace/Bellevue Avenue & Grand Avenue: southbound right

STUDY FACILITIES AND ANALYSIS SCENARIOS

This TOA includes the following study intersections:

1. Broadway & Grand Avenue
2. Webster Street & Grand Avenue
3. Valdez Street & Grand Avenue
4. Harrison Street & Grand Avenue
5. Bay Place & Grand Avenue
6. Park View Terrace/Bellevue Avenue & Grand Avenue
7. Lennox Avenue & Grand Avenue
8. Lee Street & Grand Avenue
9. Perkins Street & Grand Avenue
10. Ellita Avenue & Grand Avenue
11. Staten Avenue & Grand Avenue
12. Bellevue Avenue & Grand Avenue
13. Euclid Avenue & Grand Avenue
14. El Embarcadero & Grand Avenue
15. MacArthur Boulevard & Grand Avenue
16. Santa Clara Avenue/Lake Park Avenue & Grand Avenue
17. Mid-Block Ped Crossing & Grand Avenue
18. Elwood Avenue & Grand Avenue
19. Mandana Boulevard & Grand Avenue

Study facilities are shown in **Figure 1**. Lane geometrics and control for Alternative 1: No Build are shown in **Figure 2**. Lane geometrics and control for Alternatives 2, 3, and 4 VERSION 1 are shown in **Figure 3**, **Figure 4**, and **Figure 5**, respectively. Lane geometrics and control for Alternatives 2, 3, and 4 VERSION 2 are shown in **Figure 6**, **Figure 7**, and **Figure 8**, respectively.

This study analyzes all alternatives under Existing (year 2024) conditions traffic volumes.

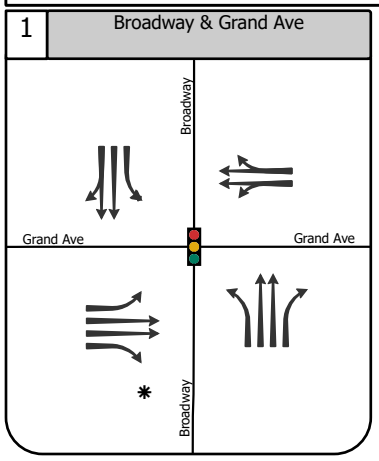
TRAFFIC OPERATIONS ANALYSIS

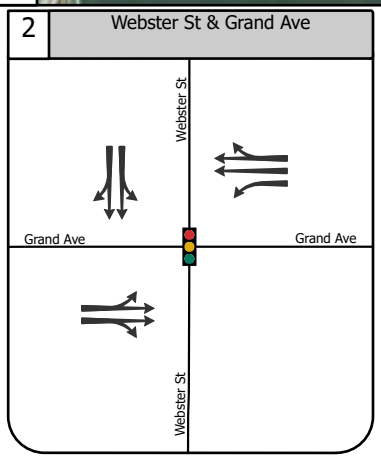
METHODOLOGY

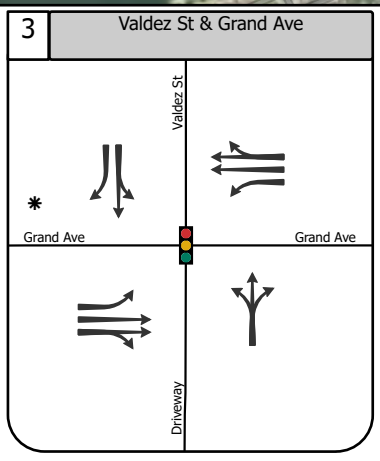
Model Parameters

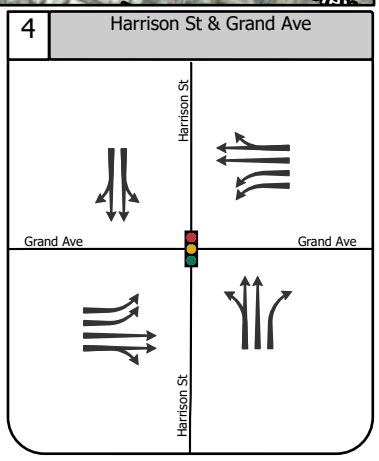
A model of the study network was built in *Synchro 12* using signal timing inputs consistent with timing sheets provided by the City. Highway Capacity Manual (HCM) 7th Edition methodology was used to determine intersection delay and LOS for all study intersections.

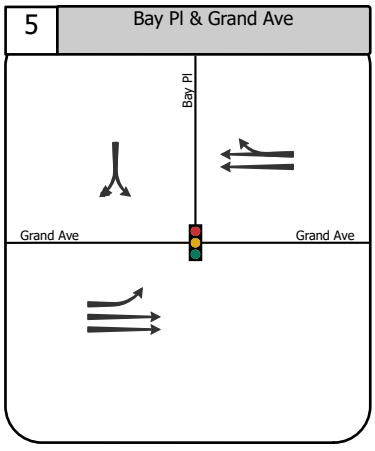
The Synchro model was utilized to run microsimulation models of the study network using *SimTraffic 12*. Ten (10) 1-hour model runs (with a 10-minute warm-up period) were run and averaged to obtain 95th percentile queueing results, as well as intersection movement delays used for transit delay analysis. SimTraffic was used to evaluate queueing and transit delays as SimTraffic can best account for interaction between intersections, merging, potential queue spillback, and travel times through a corridor.

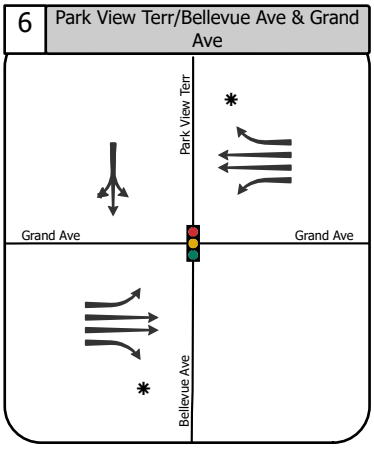


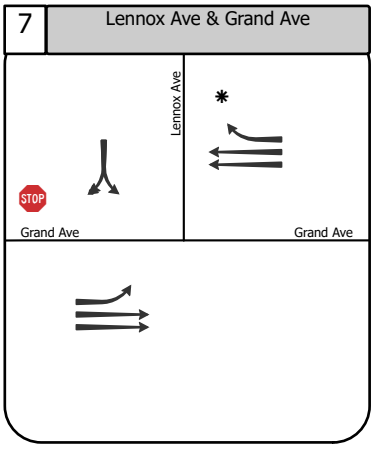


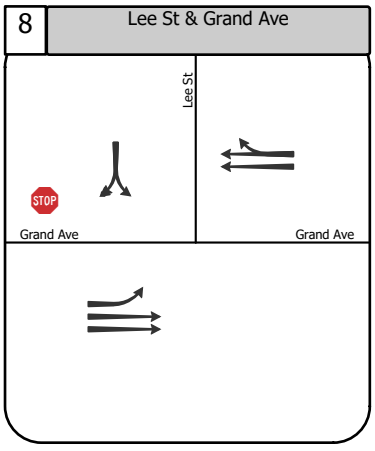












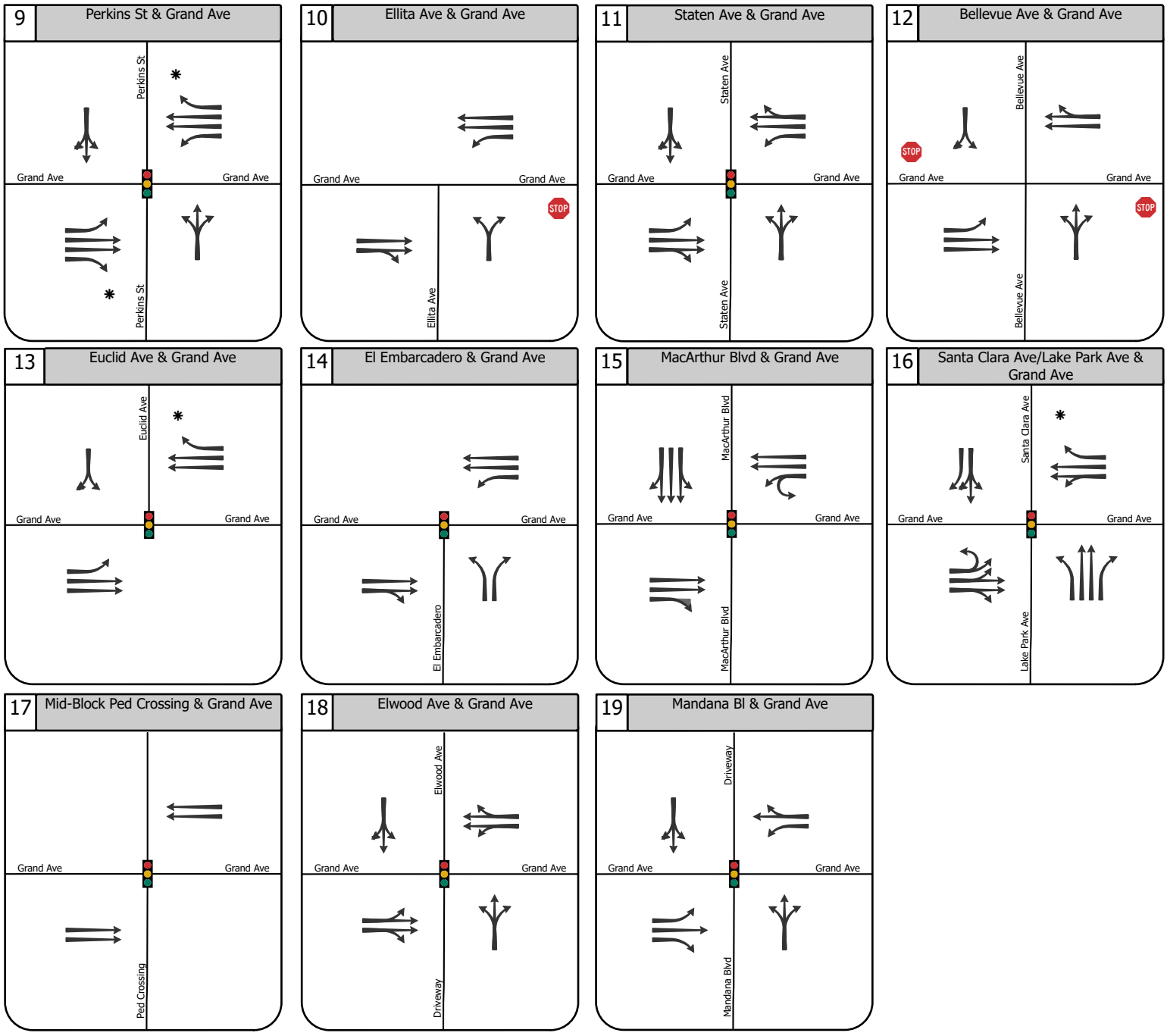
Alternative 1 Existing No Build Lane Geometrics and Control

Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

0 225 450 900
Feet

Figure 2

WOOD RODGERS



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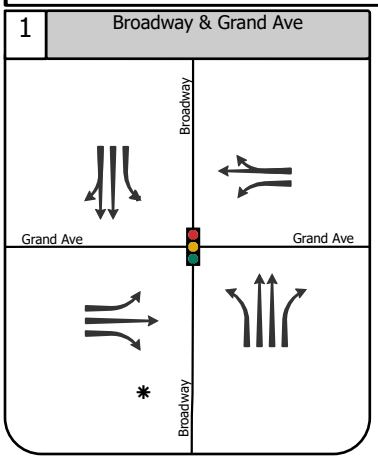

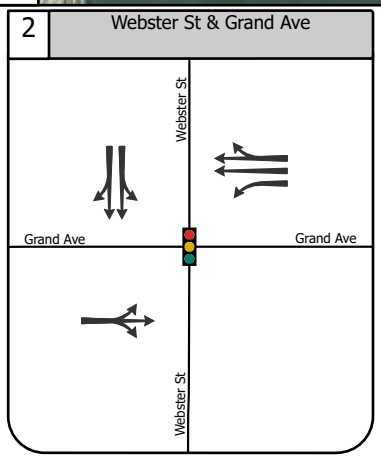

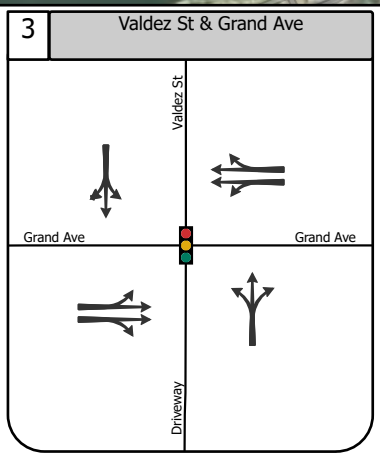

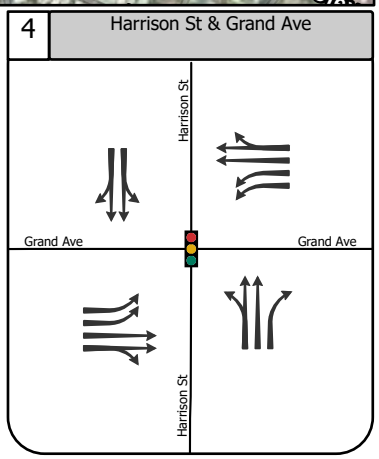

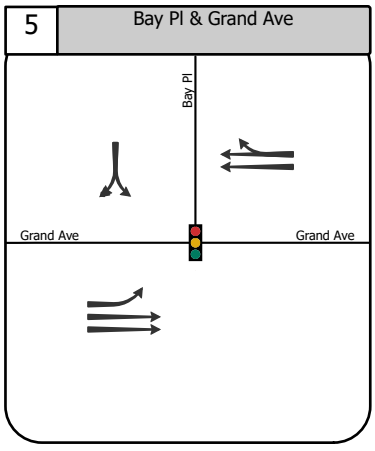

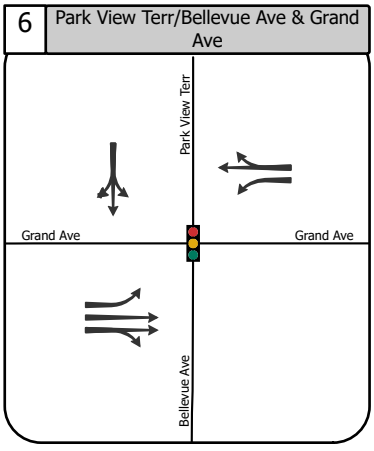

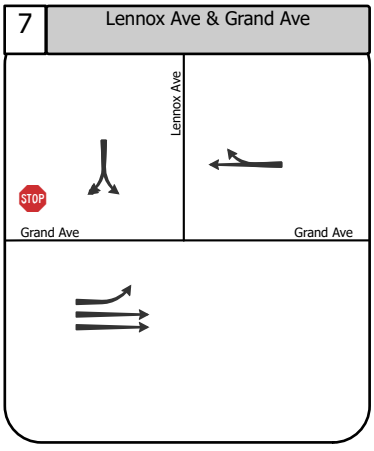

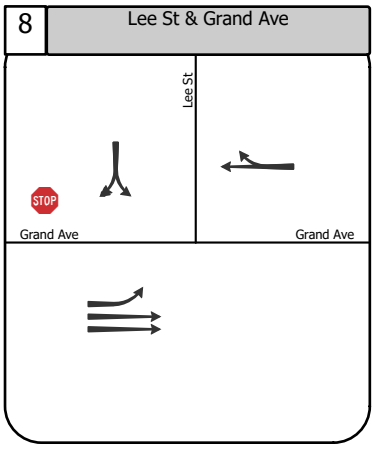

Alternative 2 (WB Diet) VERSION 1 Lane Geometrics and Control

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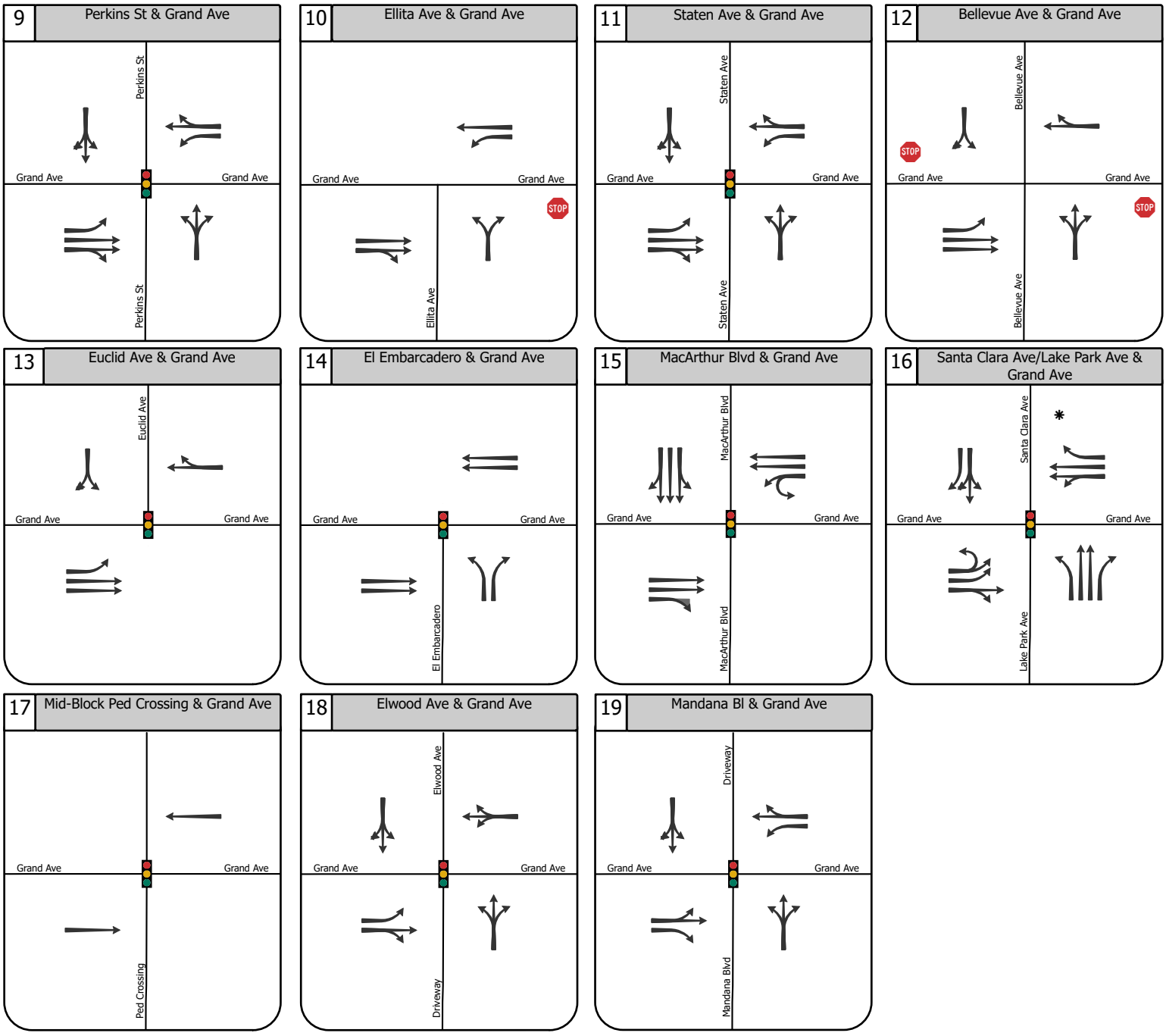
Feet

Figure 3

WOOD RODGERS



Alternative 2 (WB Diet) VERSION 1 Lane Geometrics and Control

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Figure 3

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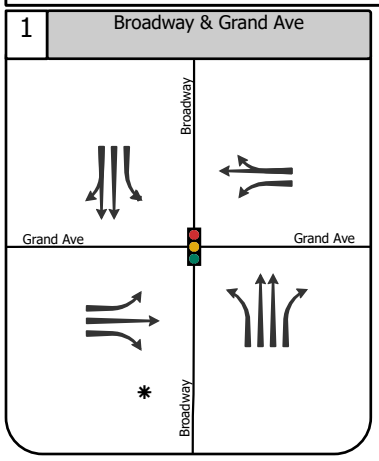

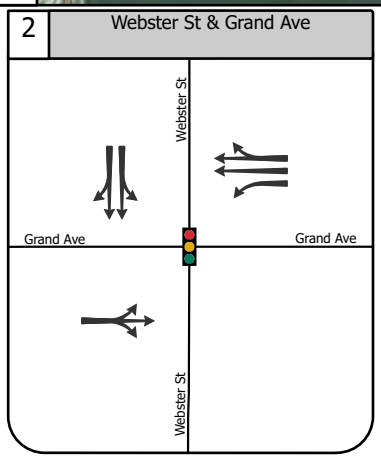

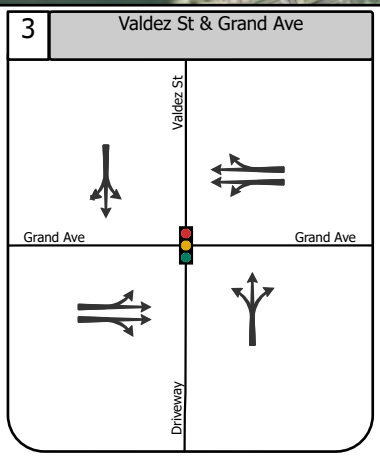

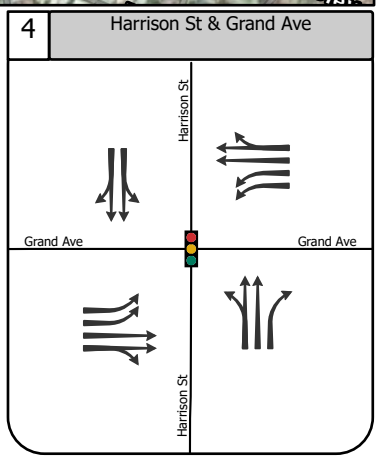

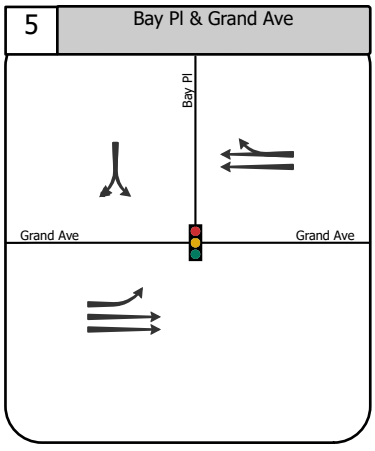

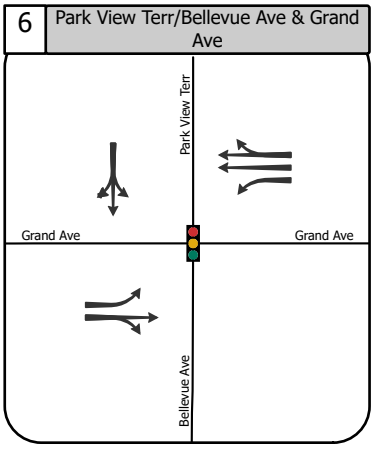

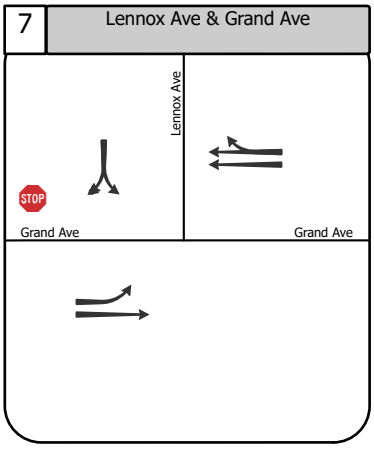

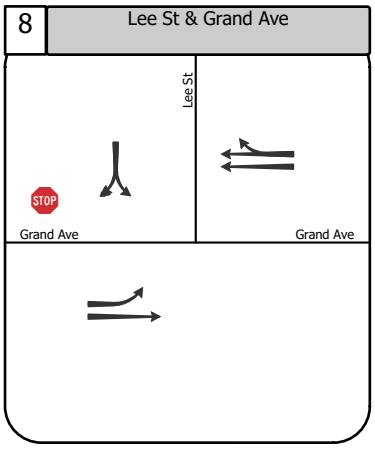

Alternative 3 (EB Diet) VERSION 1 Lane Geometrics and Control

Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

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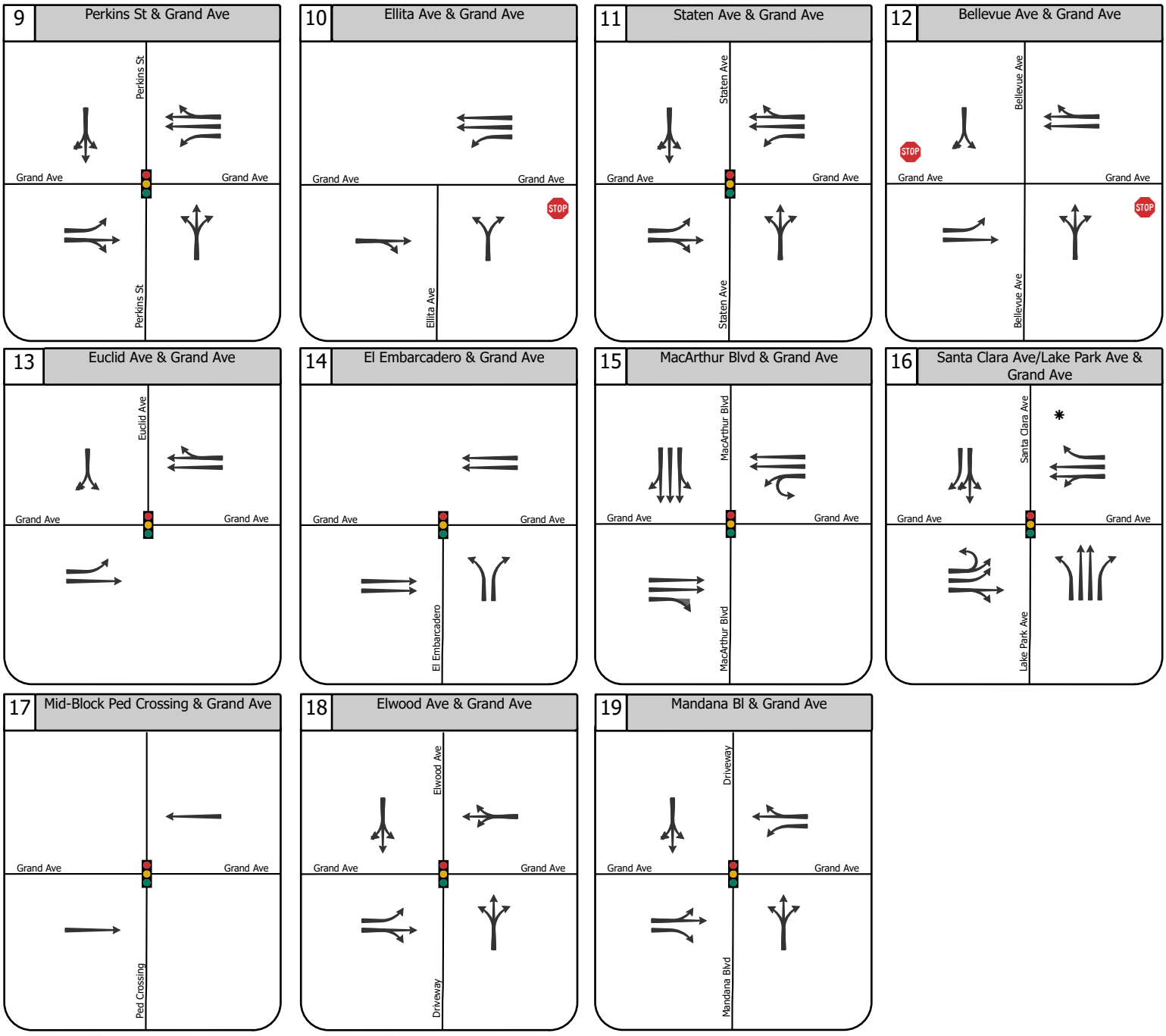
Feet

Figure 4

WOOD RODGERS



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June 2025

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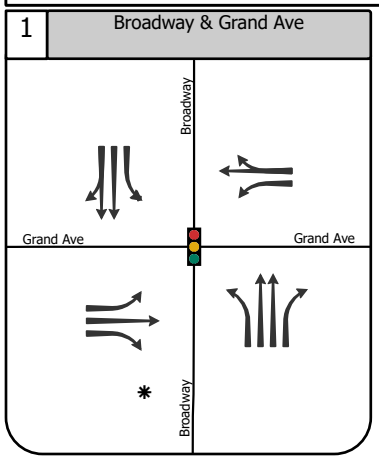

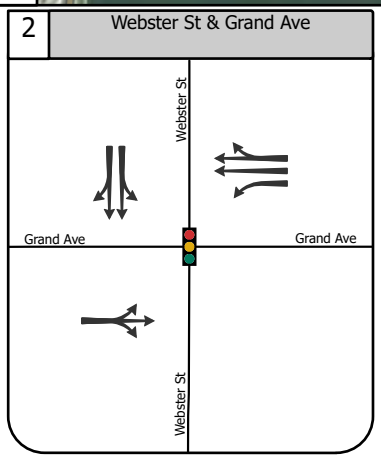

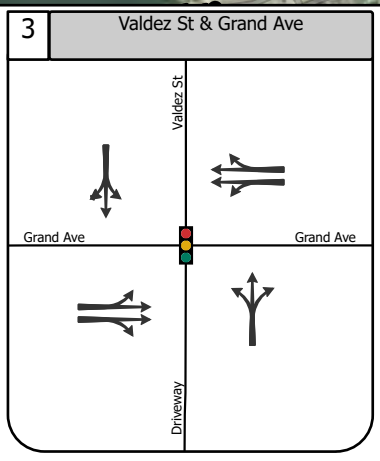

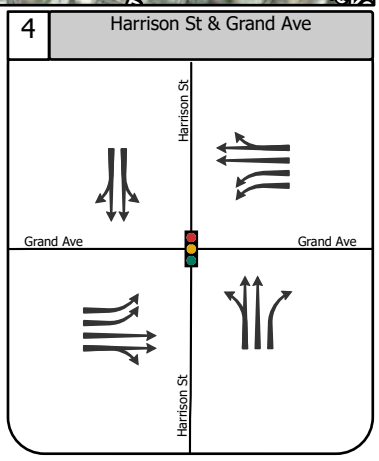

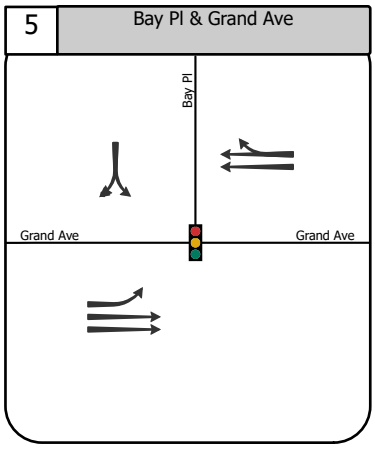

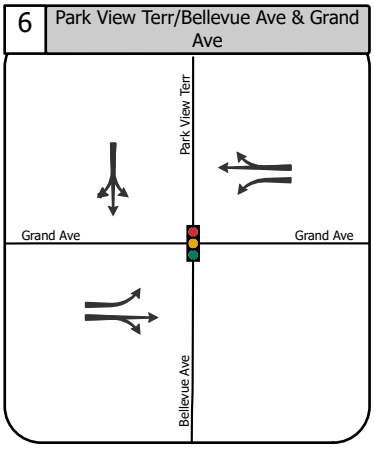

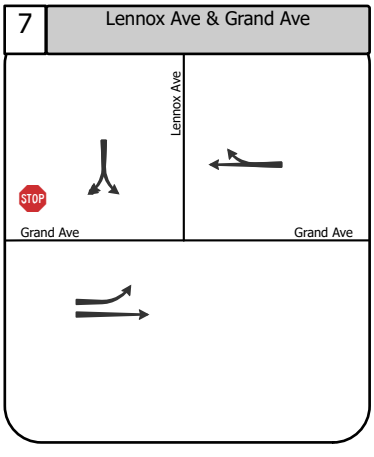

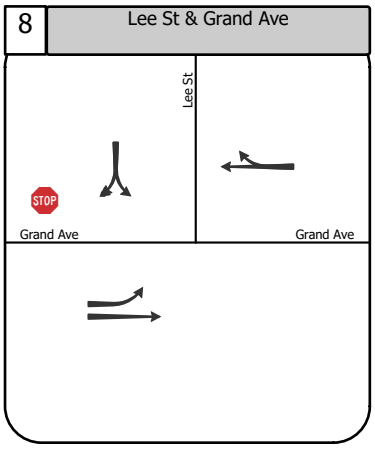

Alternative 4 (3-Lane Diet) VERSION 1 Lane Geometrics and Control

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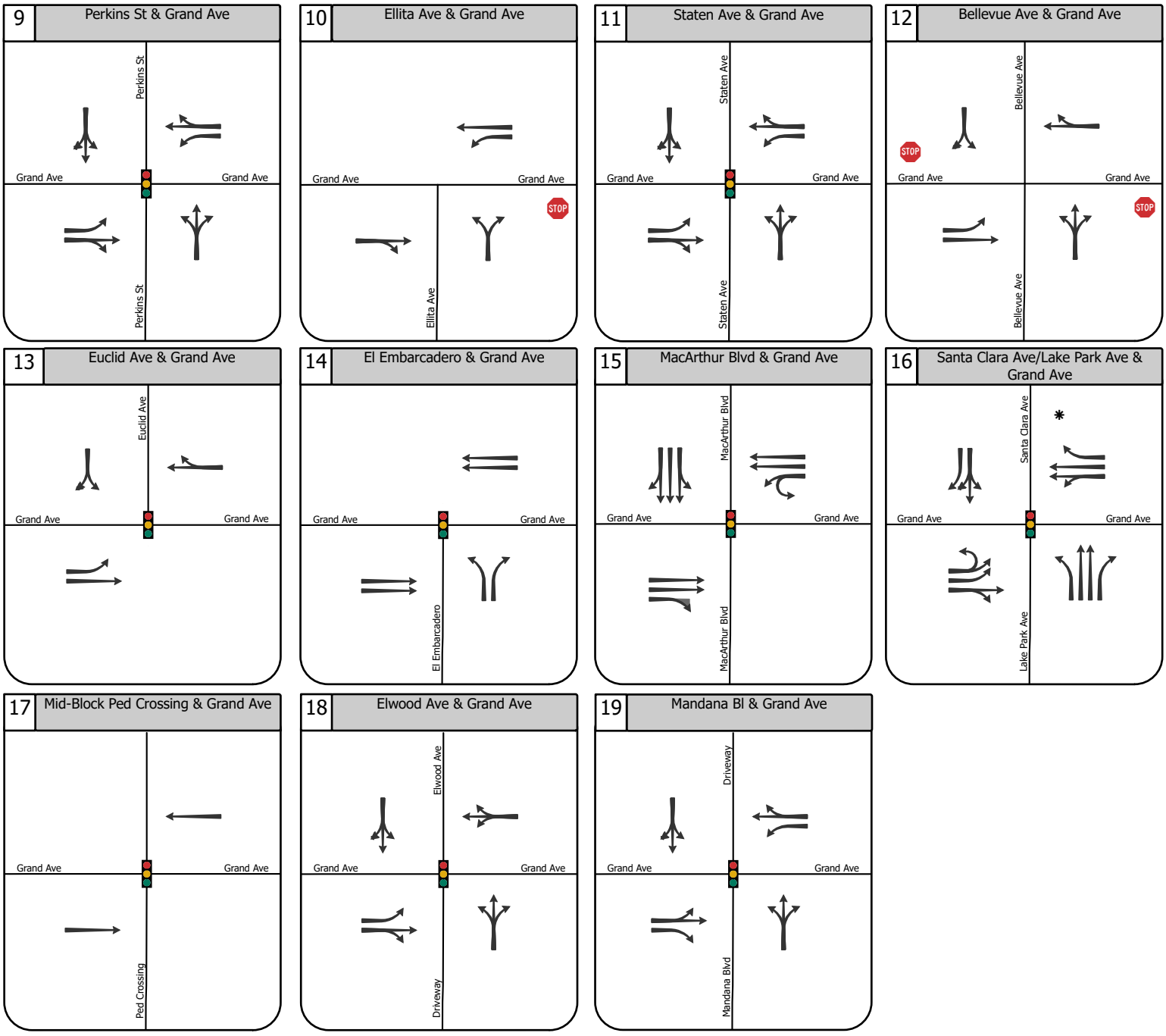
Figure 5

WOOD RODGERS



Alternative 4 (3-Lane Diet) VERSION 1 Lane Geometrics and Control

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June 2025

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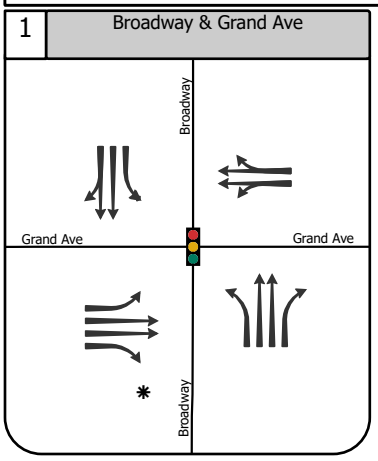
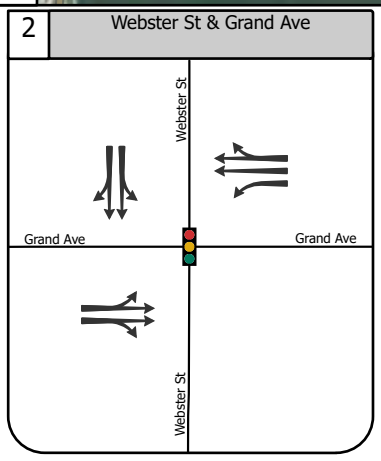
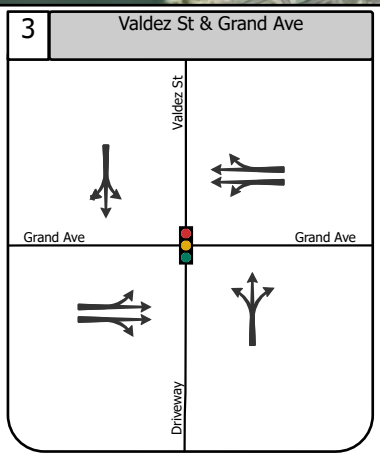
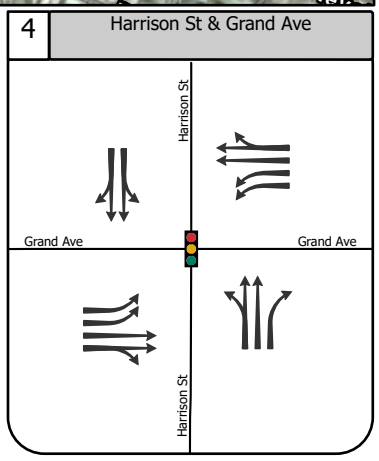
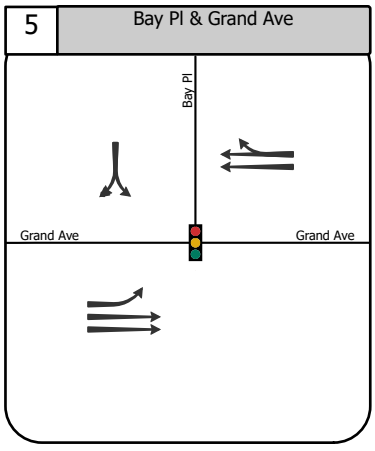
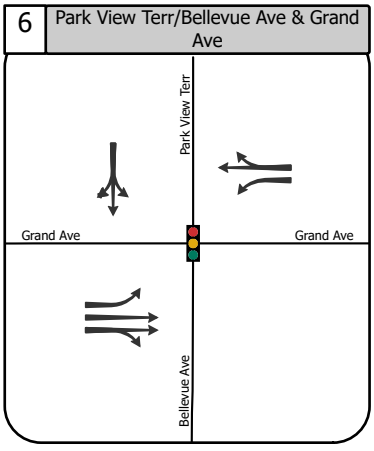


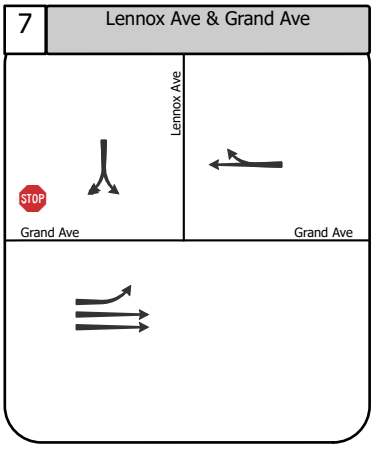


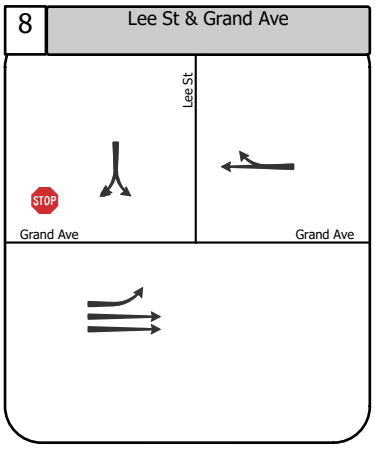












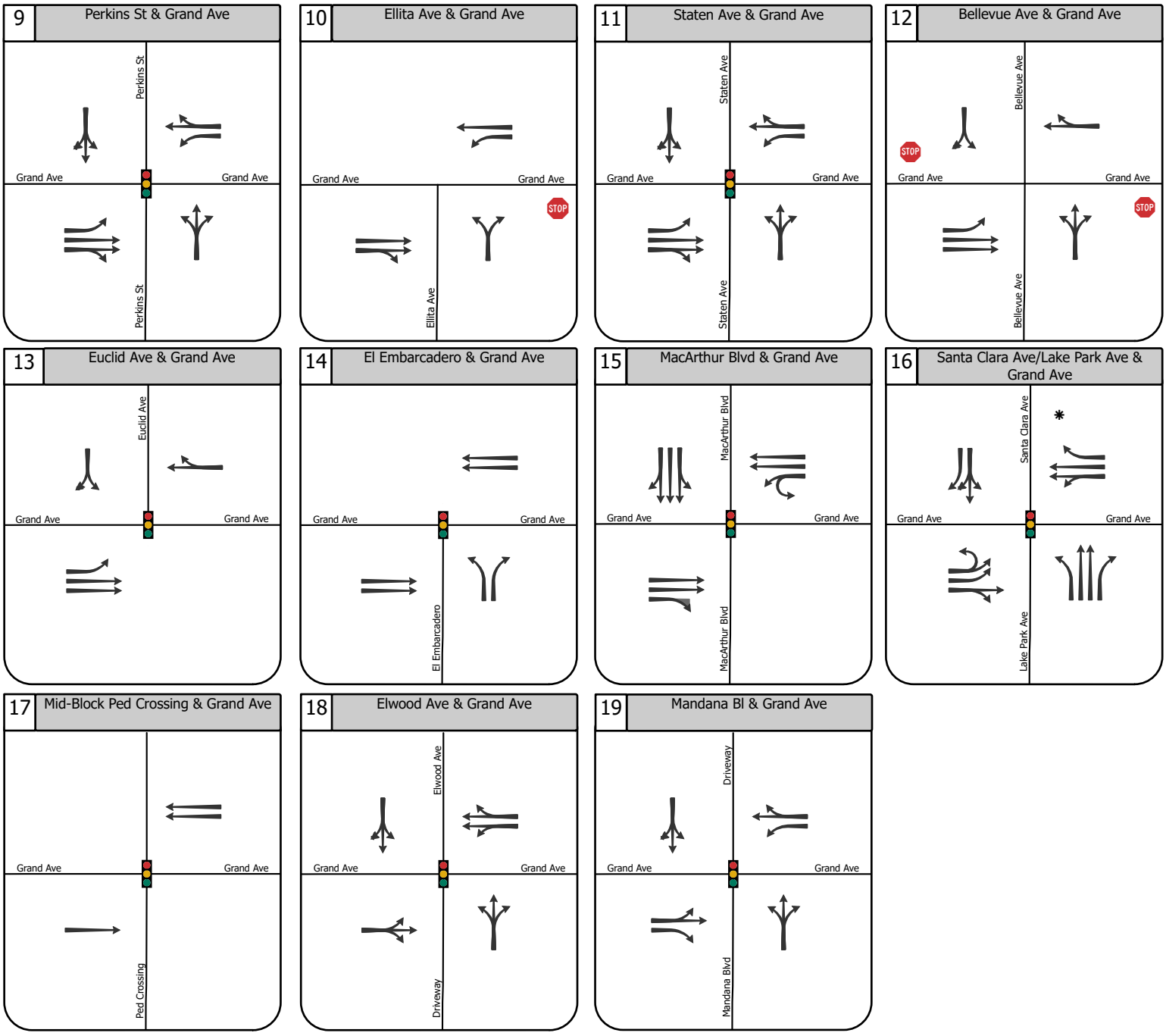
Alternative 2 (WB Diet) VERSION 2 Lane Geometrics and Control

Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

0 225 450 900
Feet

Figure 6

WOOD RODGERS

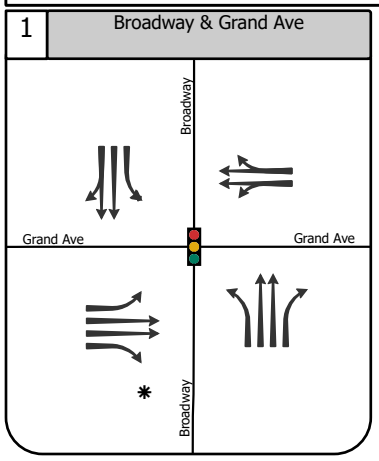


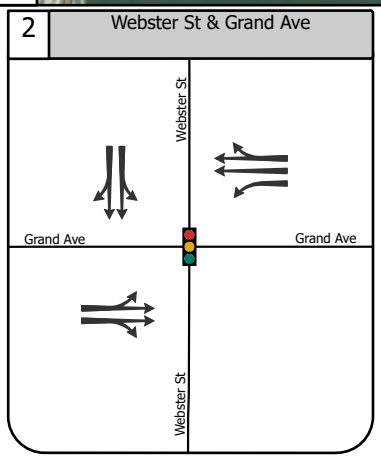
Alternative 2 (WB Diet) VERSION 2 Lane Geometrics and Control

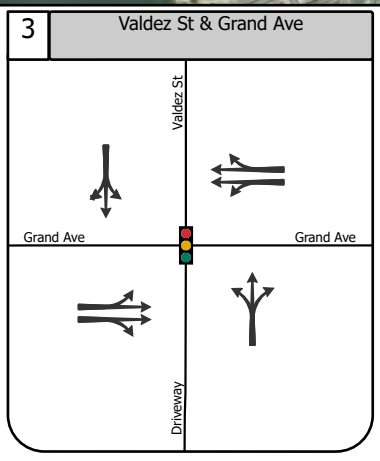
Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

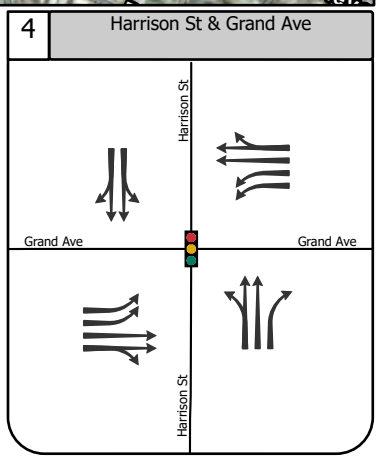
Figure 6

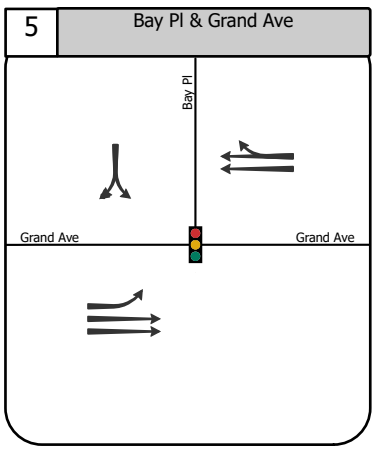
WOOD RODGERS

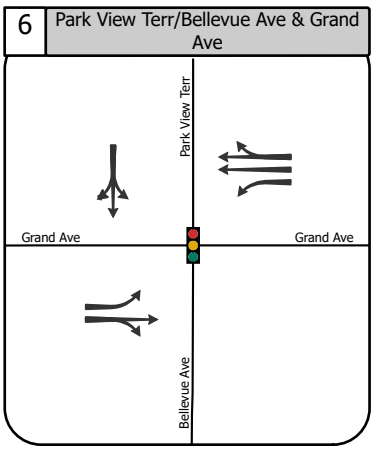


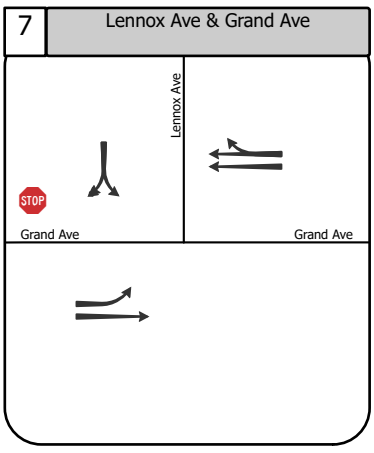


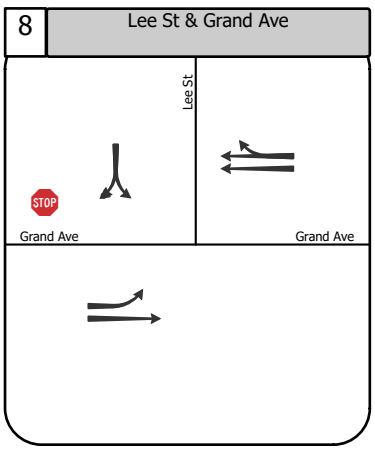












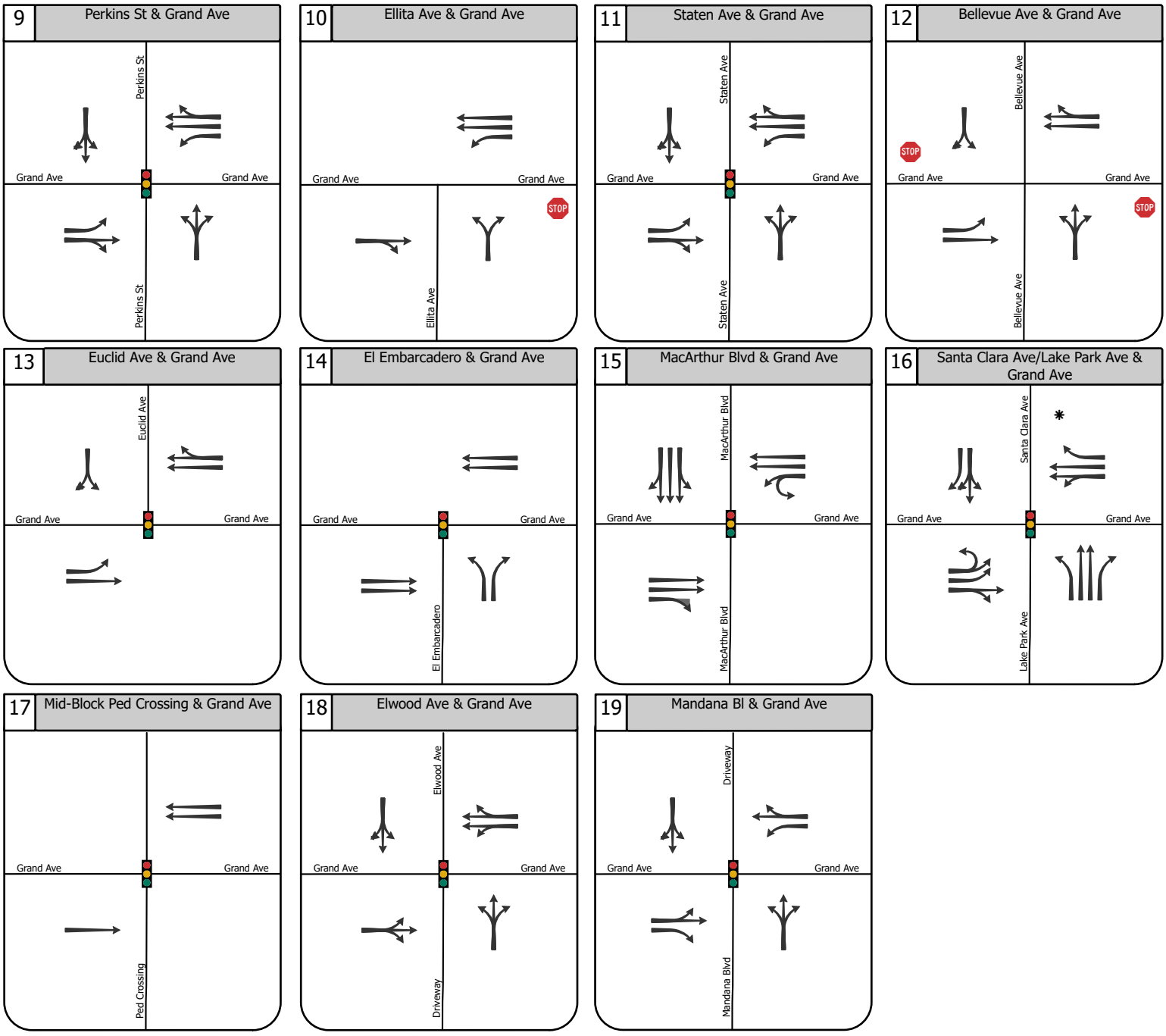
Alternative 3 (EB Diet) VERSION 2 Lane Geometrics and Control

Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

0 225 450 900
Feet

Figure 7

WOOD RODGERS



Alternative 3 (EB Diet) VERSION 2 Lane Geometrics and Control

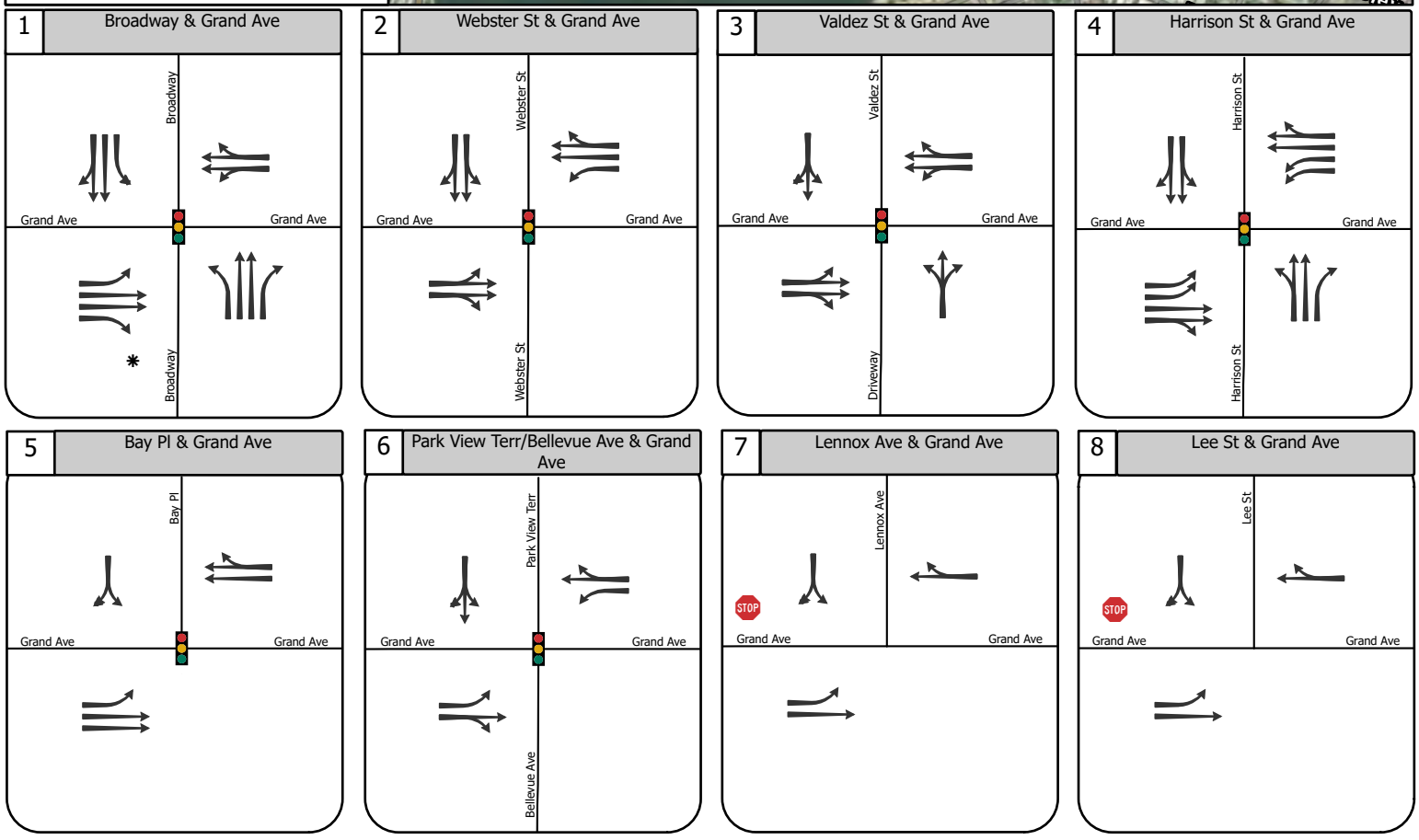
Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

Figure 7

WOOD RODGERS

Legend

- Stoplight
- Stop
- * De Facto Right Turn Lane
- (#) Intersection Location
- Turning Movement



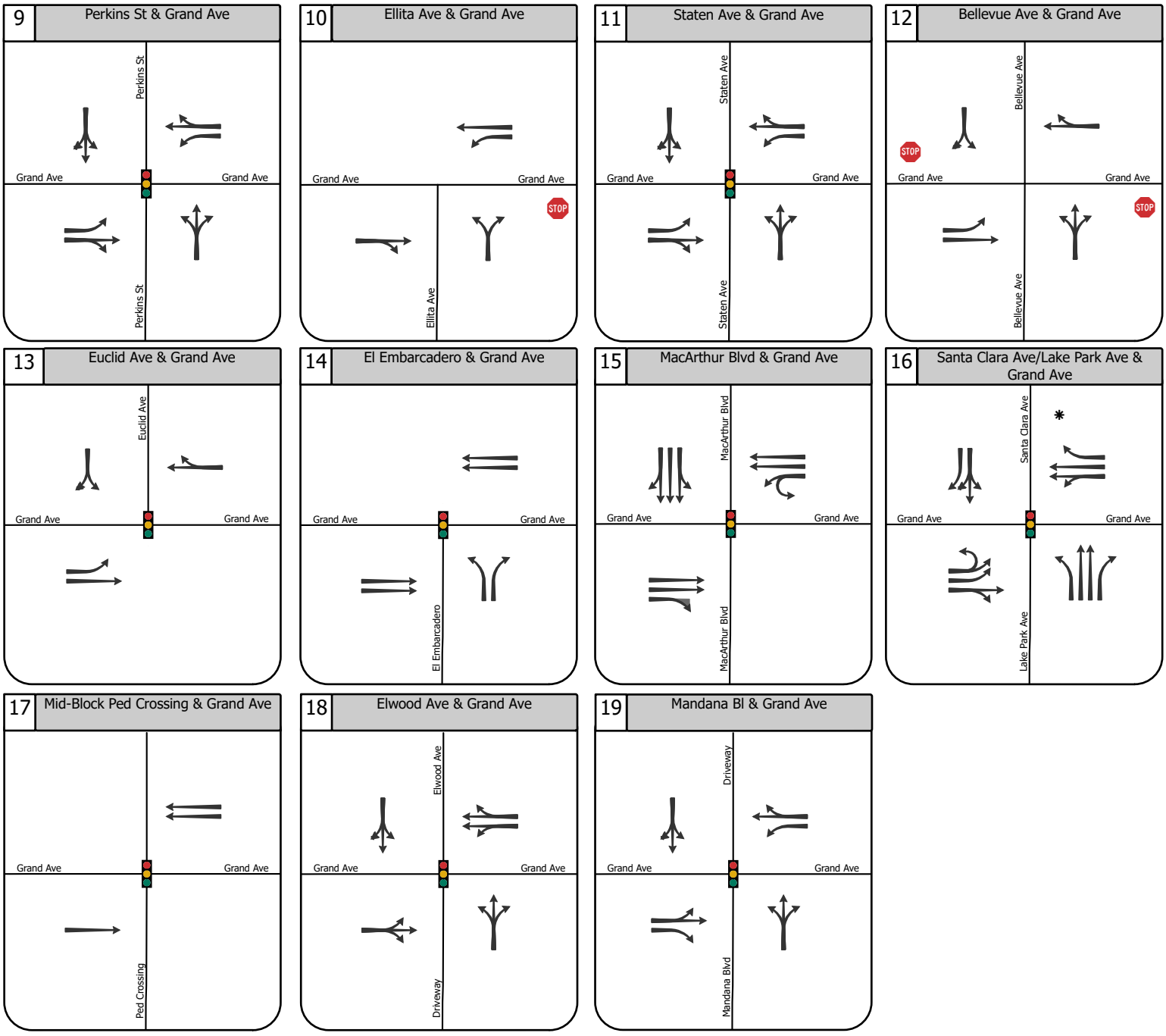
Alternative 4 (3-Lane Diet) VERSION 2 Lane Geometrics and Control

Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

0 225 450 900
Feet

Figure 8

WOOD RODGERS



Alternative 4 (3-Lane Diet) VERSION 2 Lane Geometrics and Control

Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

Figure 8

WOOD RODGERS

Level of Service Thresholds

For signalized intersections, delays and LOS reported are the "average" values for the whole intersection. For two-way stop-controlled (TWSC) and one-way stop-controlled (OWSC) intersections, delay and LOS reported are for the worst-case movement. The delay based HCM 7th Edition LOS criteria for different types of intersection controls are outlined in **Table 1.**

Table 1. HCM 7th Edition Intersection LOS Thresholds

Level of Service	Description	Intersection Control Delay (seconds/vehicle)	
		Unsignalized	Signalized
A	Free-flow conditions with negligible to minimal delays.	delay ≤ 10.0	delay ≤ 10.0
B	Good progression with slight delays.	10.0 < delay ≤ 15.0	10.0 < delay ≤ 20.0
C	Relatively higher delays.	15.0 < delay ≤ 25.0	20.0 < delay ≤ 35.0
D	Somewhat congested conditions with longer but tolerable delays.	25.0 < delay ≤ 35.0	35.0 < delay ≤ 55.0
E	Congested conditions with significant delays.	35.0 < delay ≤ 50.0	55.0 < delay ≤ 80.0
F	Jammed or grid-lock type operating conditions.	delay > 50.0	delay > 80.0
Source: HCM 7th Edition Exhibit 19-8 and 20-2.			

Signal Warrant Analysis

California Manual on Uniform Traffic Control Devices (CA MUTCD) (2014 Edition revised March 30, 2021) Figure 4C-4, Peak Hour Signal Warrant #3 was used to determine if a traffic signal is warranted at the unsignalized study intersections.

City LOS Criteria

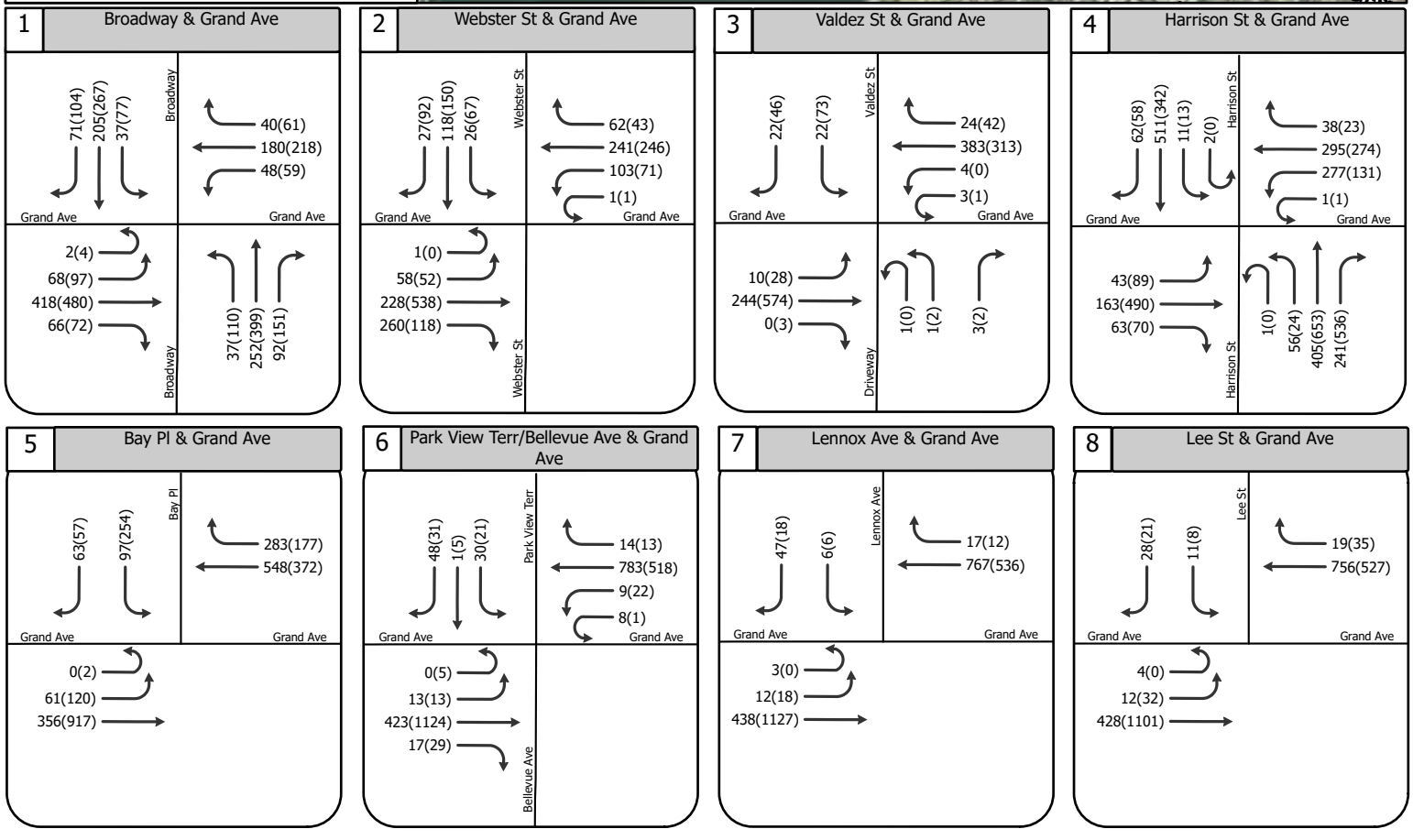
This analysis adheres to the *City of Oakland Transportation Impact Review Guidelines for Land Use Development Projects (April 14, 2017)*, which uses the industry standard of LOS D as the acceptable threshold.

ANALYSIS VOLUMES

Car, heavy vehicle, bicycle, and pedestrian counts were collected at all study intersections during weekday AM (7AM-9AM) and PM (4PM-6PM) peak hours on Tuesday, November 19, 2024. These counts were used to evaluate Existing peak hour conditions at the 19 study intersections.

Network-wide weighted average peak hour factors and heavy vehicle percentages were calculated, and the traffic counts were balanced in order to effectively model the corridor in SimTraffic. Additionally, for the microsimulation model to run successfully, minor U-turns were eliminated from the model volumes. However, U-turns were modeled at the MacArthur Boulevard & Grand Avenue and Santa Clara Avenue/Lake Park Avenue & Grand Avenue intersections in order to capture the effect of the high U-turn volumes traveling to/from the Lakeview Elementary School driveway located on the north side of Grand Avenue between MacArthur Boulevard and Santa Clara Avenue/Lake Park Avenue.

Alternative 1 No Build Existing conditions volumes are shown in **Figure 9**. Note that **Figure 9** shows the minor U-turn movements throughout the corridor for informational purposes. Existing conditions volumes for the Project alternatives (VERSIONS 1 and 2) were modified to reflect the conversion of El Embarcadero to one-way northbound traffic. The southbound El Embarcadero volumes were assumed to be rerouted to the adjacent MacArthur Boulevard & Grand Avenue intersection. Rerouted Existing conditions volumes for all Project Build Alternatives (Alternatives 2, 3, and 4) are shown in **Figure 10**. Existing traffic volume count sheets are included in **Attachment A**.



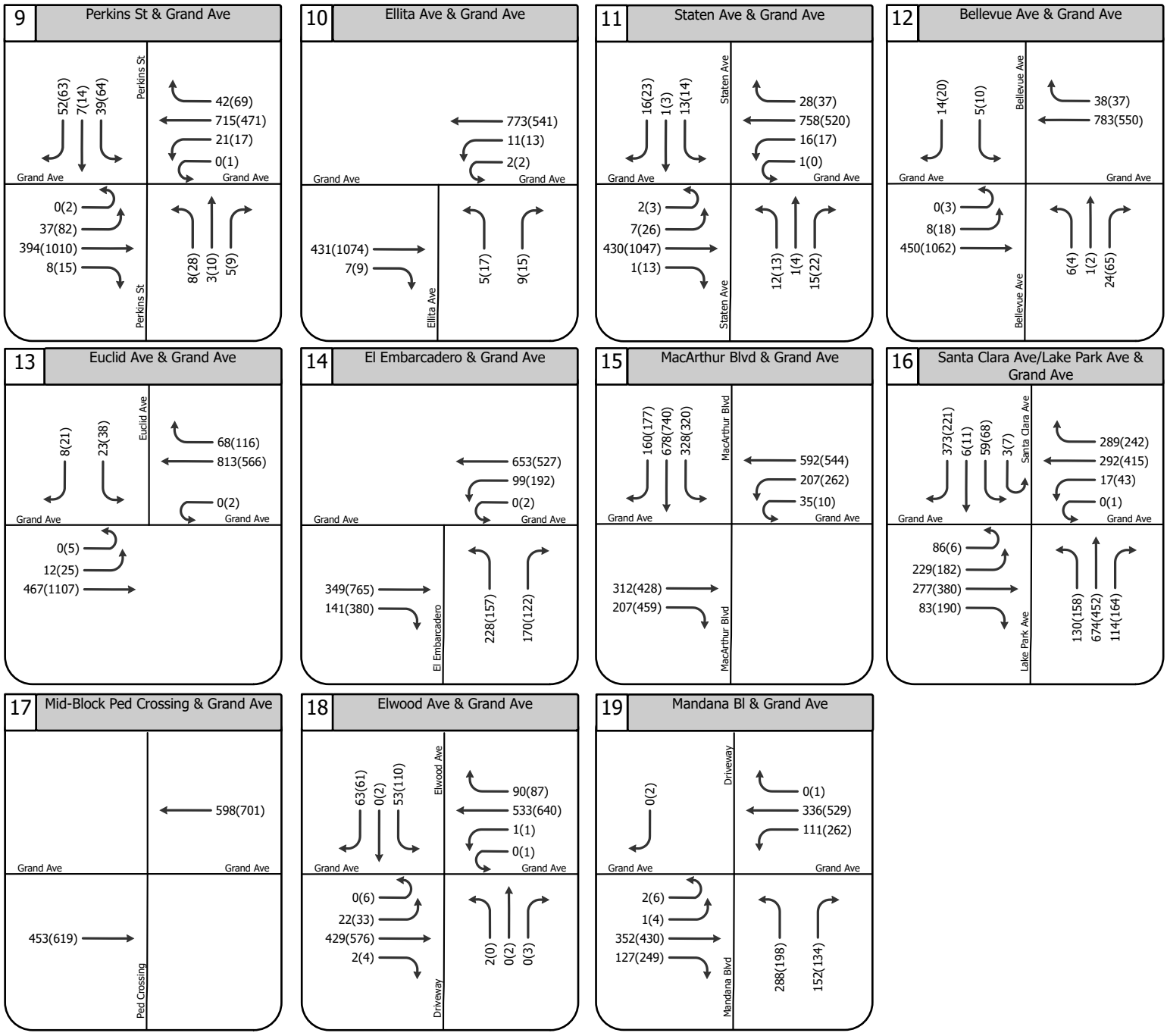
No Build Existing Conditions Traffic Volumes

Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

0 225 450 900
Feet

Figure 9

WOOD RODGERS

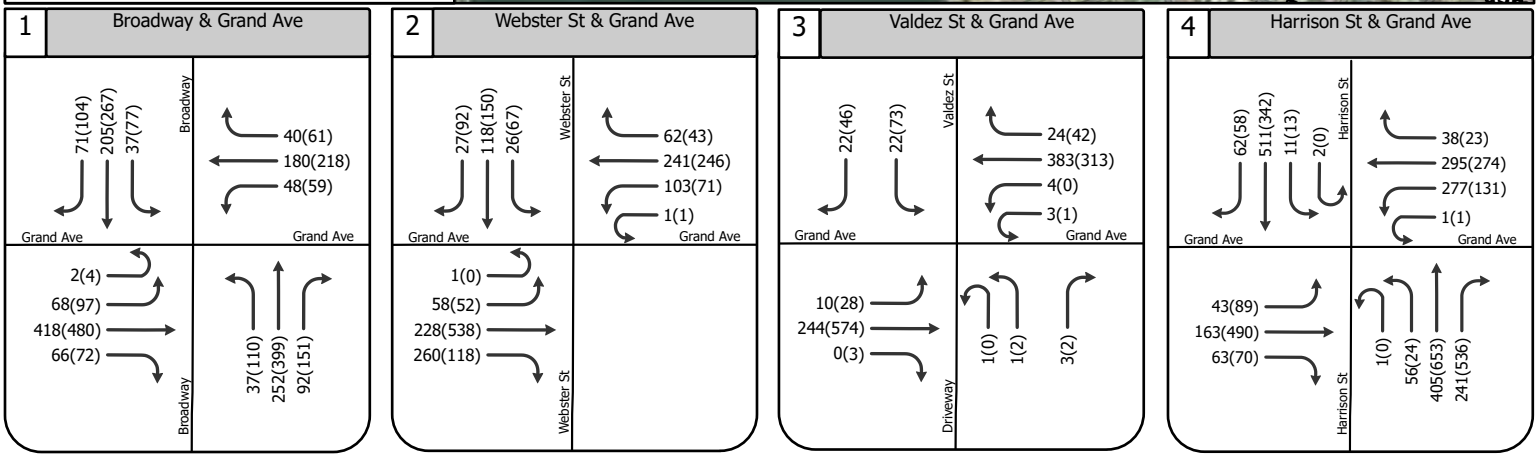


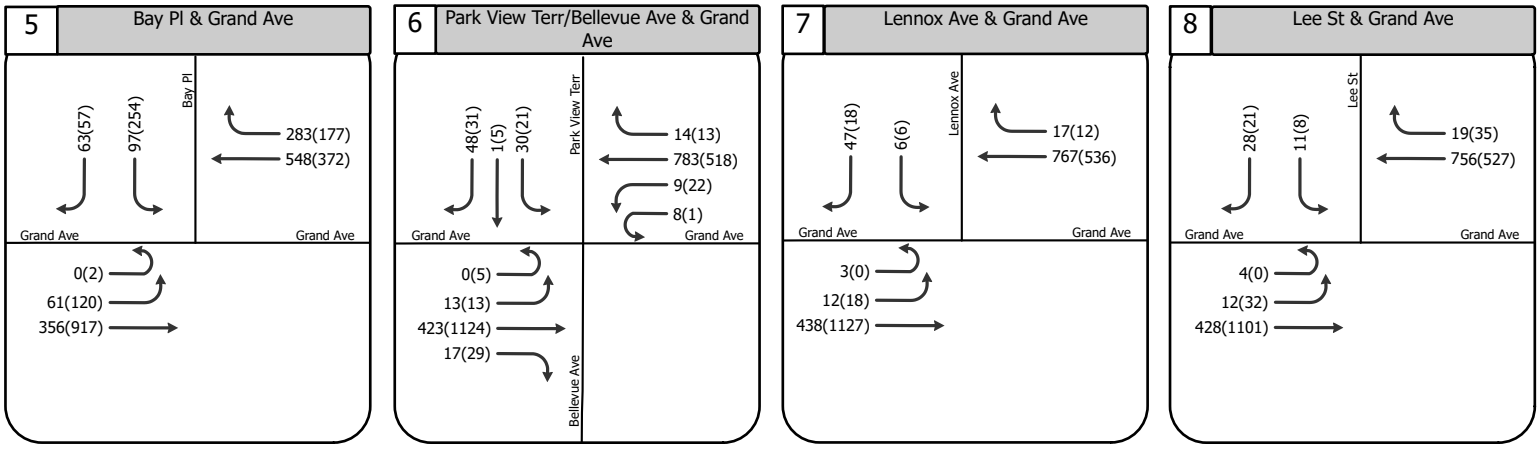
No Build Existing Conditions Traffic Volumes

Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

Figure 9

WOOD RODGERS





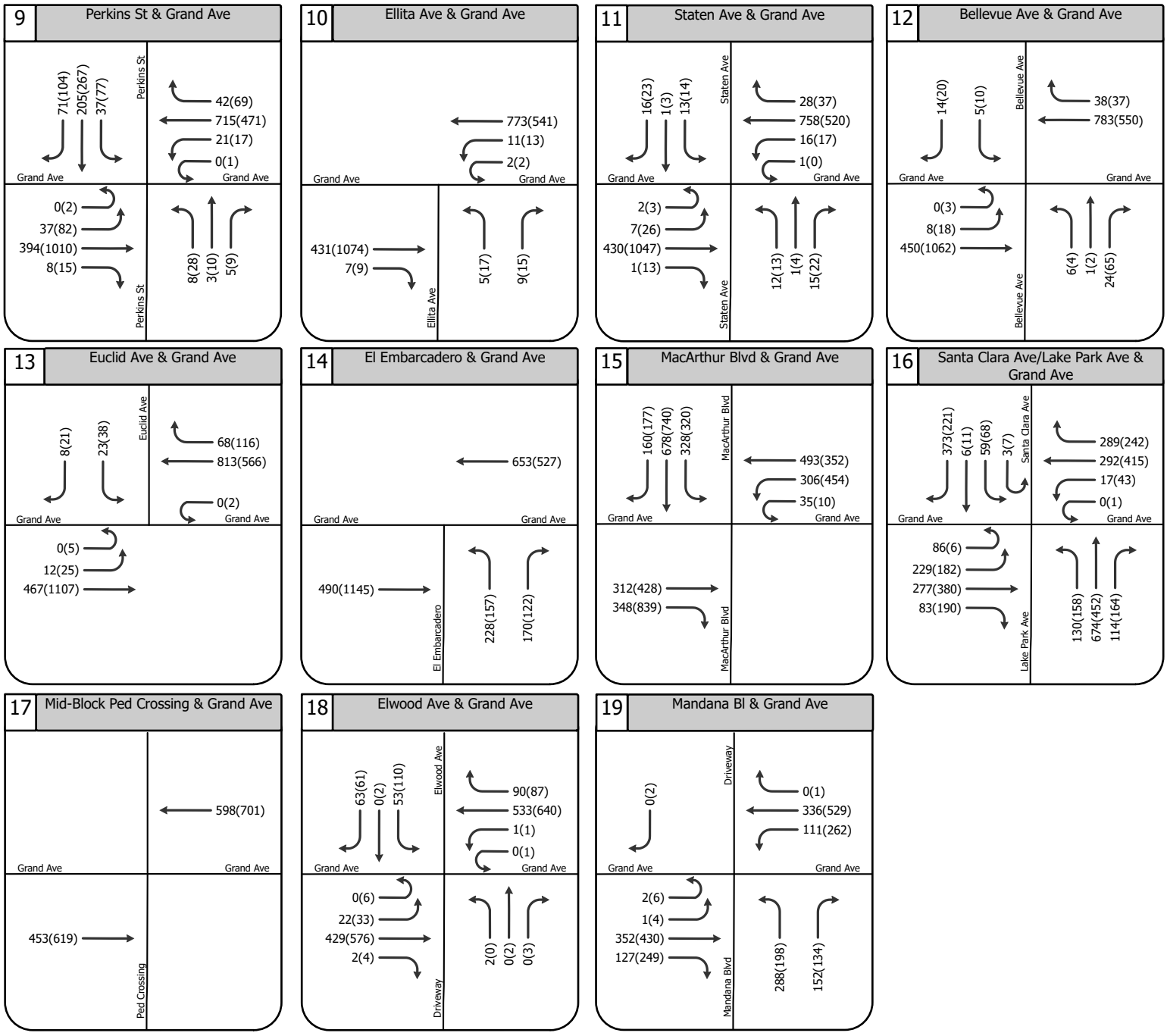
Project Alternatives 2, 3, 4 Existing Conditions Traffic Volumes

Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

0 225 450 900
Feet

Figure 10

WOOD RODGERS



Project Alternatives 2, 3, 4 Existing Conditions Traffic Volumes

Grand Avenue Complete Streets Traffic Analysis
Oakland, CA
June 2025

Figure 10

WOOD RODGERS

Average Daily Traffic and Speeds on Grand Avenue

A speed survey and 24-hour average daily traffic (ADT) counts were collected on Grand Avenue between Lennox Avenue and Lee Street and between Bellevue Avenue and Euclid Avenue on Tuesday, November 19, 2024. ADT and 85th percentile speeds for the two locations are shown in **Table 2**.

Table 2. Grand Avenue ADT and 85th Percentile Speeds

Location	ADT	85th Percentile Speed (mph)	
		EB	WB
Grand Avenue between Lennox Avenue and Lee Street	16,717	34	34
Grand Avenue between Bellevue Avenue and Euclid Avenue	18,266	36	38

As shown in **Table 2**, average 85th percentile speeds on Grand Avenue exceed the posted speed limit of 30 miles per hour by four (4) to eight (8) miles per hour. ADT and speed data sheets are included in **Attachment A**.

Intersection Level Of Service

Intersection LOS and delay for all Project alternatives under Existing (2024) conditions volumes are shown in **Table 3** and **Table 4**.

As shown in **Tables 3** and **4**, the intersection of Ellita Avenue & Grand Avenue currently operates at unacceptable LOS E and is projected to operate at unacceptable LOS E or F under all Project alternatives. The intersection of Bellevue Avenue & Grand Avenue is projected to operate at unacceptable LOS under Alternative 3 (EB Diet) VERSION 1, Alternative 4 (3-Lane Diet) VERSION 1, Alternative 3 (EB Diet) VERSION 2, and Alternative 4 (3-Lane Diet) VERSION 2. All remaining study intersections are currently operating at acceptable LOS and are projected to operate at acceptable LOS with the Project alternatives in place.

Synchro intersection LOS reports are contained in **Attachment B**.

Table 3. Existing Conditions Intersection LOS – No Build, Alt 2, Alt 3, Alt 4 VERSION 1

#	Intersection	Control Type[1]	LOS Criteria	Peak Hour	Alt 1 No Build		Alt 2 (WB Diet) VERSION 1		Alt 3 (EB Diet) VERSION 1		Alt 4 (3-Lane Diet) VERSION 1	
					Delay $(S/V)^2$	LOS	Delay $(S/V)^2$	LOS	Delay $(S/V)^2$	LOS	Delay $(S/V)^2$	LOS
1	Broadway Avenue & Grand Avenue	Signal	D	AM	22.3	C	36.3	D	36.3	D	36.3	D
				PM	25.5	C	22.1	C	22.1	C	22.1	C
2	Webster Street & Grand Avenue	Signal	D	AM	25.7	C	21.3	C	21.3	C	21.3	C
				PM	27.9	C	15.5	B	15.5	B	20.0	B
3	Valdez Street & Grand Avenue	Signal	D	AM	10.8	B	11.2	B	11.2	B	11.2	B
				PM	14.7	B	5.9	A	5.9	A	16.1	B
4	Harrison Street & Grand Avenue	Signal	D	AM	22.2	C	22.2	C	22.2	C	22.2	C
				PM	23.8	C	29.5	C	23.8	C	23.8	C
5	Bay Place & Grand Avenue	Signal	D	AM	6.0	A	17.1	B	9.4	A	9.4	A
				PM	10.9	B	11.0	B	12.7	B	12.7	B
6	Park View Terrace/Bellevue Avenue & Grand Avenue	Signal	D	AM	2.3	A	3.6	A	4.2	A	5.2	A
				PM	1.6	A	3.4	A	13.0	B	13.2	B
7	Lenox Avenue & Grand Avenue	OWSC	D	AM	17.8	C	24.5	C	19.6	C	26.1	D
				PM	18.1	C	19.6	C	29.7	D	29.7	D
8	Lee Street & Grand Avenue	OWSC	D	AM	19.9	C	23.8	C	23.1	C	26.8	D
				PM	20.0	C	21.2	C	34.3	D	33.7	D
9	Perkins Street & Grand Avenue	Signal	D	AM	5.5	A	4.5	A	7.4	A	5.8	A
				PM	3.7	A	10.6	B	13.4	B	13.7	B
10	Ellita Avenue & Grand Avenue	OWSC	D	AM	15.1	C	20.2	C	15.8	C	20.4	C
				PM	**40.8**	**E**	**57.8**	**F**	**44.4**	**E**	**59.4**	**F**
11	Staten Avenue & Grand Avenue	Signal	D	AM	3.5	A	2.9	A	2.2	A	3.0	A
				PM	2.3	A	9.5	A	4.2	A	4.4	A
12	Bellevue Avenue & Grand Avenue	TWSC	D	AM	19.5	C	22.9	C	23.3	C	26.4	D
				PM	26.2	D	27.0	D	**68.5**	**F**	**63.7**	**F**
13	Euclid Avenue & Grand Avenue	Signal	D	AM	28.5	C	7.2	A	6.6	A	7.4	A
				PM	17.6	C	5.0	A	19.8	B	23.2	C

#	Intersection	Control Type[1]	LOS Criteria	Peak Hour	Alt 1 No Build		Alt 2 (WB Diet) VERSION 1		Alt 3 (EB Diet) VERSION 1		Alt 4 (3-Lane Diet) VERSION 1	
					Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS
14	El Embarcadero & Grand Avenue	Signal	D	AM	26.7	C	13.8	B	13.8	B	13.8	B
				PM	31.0	C	9.9	A	9.7	A	9.9	A
15	MacArthur Boulevard & Grand Avenue	Signal	D	AM	28.1	C	29.1	C	29.1	C	29.1	C
				PM	39.0	D	37.1	D	37.1	D	37.1	D
16	Santa Clara Avenue/Lake Park Avenue & Grand Avenue	Signal	D	AM	28.6	C	27.6	C	27.6	C	27.6	C
				PM	31.6	C	34.2	C	34.2	C	34.2	C
17	Signalized Mid-Block Ped Crossing & Grand Avenue	Signal	D	AM	-	-	-	-	-	-	-	-
				PM	-	-	-	-	-	-	-	-
18	Elwood Avenue & Grand Avenue	Signal	D	AM	11.4	B	5.5	A	5.5	A	5.5	A
				PM	6.8	A	7.3	A	7.3	A	7.3	A
19	Mandana Boulevard & Grand Avenue	Signal	D	AM	17.8	B	21.6	C	21.6	C	21.6	C
				PM	10.9	B	10.9	B	10.9	B	10.9	B

Notes:

[1] OWSC = One-Way Stop-Controlled, TWSC= Two-Way Stop Controlled, AWSC = All-Way Stop-Controlled

[2] "Average" control delays (in seconds/vehicle) are indicated for All-way Stop-Control (AWSC) and Signal controlled intersections. "Worst-movement delay" (in seconds/vehicle) is indicated for One-Way Stop-Controlled (OWSC) and Two-Way Stop-Controlled (TWSC) intersections.

Table 4. Existing Conditions Intersection LOS – No Build, Alt 2, Alt 3, Alt 4 VERSION 2

#	Intersection	Control Type[1]	LOS Criteria	Peak Hour	Alt 1 No Build		Alt 2 (WB Diet) VERSION 2 (Preferred Alternative)		Alt 3 (EB Diet) VERSION 2		Alt 4 (3-Lane Diet) VERSION 2	
					Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS
1	Broadway Avenue & Grand Avenue	Signal	D	AM	22.3	C	21.6	C	21.6	C	21.6	C
				PM	25.5	C	24.6	C	24.6	C	24.6	C
2	Webster Street & Grand Avenue	Signal	D	AM	25.7	C	25.1	C	25.1	C	25.1	C
				PM	27.9	C	27.7	C	27.7	C	27.7	C
3	Valdez Street & Grand Avenue	Signal	D	AM	10.8	B	10.9	B	10.9	B	10.9	B
				PM	14.7	B	15.1	B	15.1	B	15.1	B
4	Harrison Street & Grand Avenue	Signal	D	AM	22.2	C	22.2	C	22.2	C	22.2	C
				PM	23.8	C	23.2	C	23.8	C	23.8	C
5	Bay Place & Grand Avenue	Signal	D	AM	6.0	A	17.1	B	9.4	A	9.4	A
				PM	10.9	B	10.9	B	12.7	B	12.7	B
6	Park View Terrace/Bellevue Avenue & Grand Avenue	Signal	D	AM	2.3	A	3.6	A	4.2	A	5.2	A
				PM	1.6	A	2.0	A	13.0	B	13.2	B
7	Lenox Avenue & Grand Avenue	OWSC	D	AM	17.8	C	24.5	C	19.6	C	26.1	D
				PM	18.1	C	19.6	C	29.7	D	29.7	D
8	Lee Street & Grand Avenue	OWSC	D	AM	19.9	C	23.8	C	23.1	C	26.8	D
				PM	20.0	C	21.2	C	34.3	D	33.7	D
9	Perkins Street & Grand Avenue	Signal	D	AM	5.5	A	4.4	A	4.9	A	5.8	A
				PM	3.7	A	11.0	B	13.4	B	13.7	B
10	Ellita Avenue & Grand Avenue	OWSC	D	AM	15.1	C	20.2	C	15.8	C	20.4	C
				PM	**40.8**	**E**	**57.8**	**F**	**44.4**	**E**	**59.4**	**F**
11	Staten Avenue & Grand Avenue	Signal	D	AM	3.5	A	2.9	A	3.7	A	3.0	A
				PM	2.3	A	9.6	A	4.2	A	4.4	A
12	Bellevue Avenue & Grand Avenue	TWSC	D	AM	19.5	C	22.9	C	23.3	C	26.4	D
				PM	26.2	D	27.0	D	**68.5**	**F**	**63.7**	**F**
13	Euclid Avenue & Grand Avenue	Signal	D	AM	28.5	C	7.2	A	24.7	C	7.4	A
				PM	17.6	C	6.9	A	19.8	B	19.6	B

#	Intersection	Control Type[1]	LOS Criteria	Peak Hour	Alt 1 No Build		Alt 2 (WB Diet) VERSION 2 (Preferred Alternative)		Alt 3 (EB Diet) VERSION 2		Alt 4 (3-Lane Diet) VERSION 2	
					Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS
14	El Embarcadero & Grand Avenue	Signal	D	AM	26.7	C	13.8	B	13.8	B	13.8	B
				PM	31.0	C	9.9	A	9.7	A	9.9	A
15	MacArthur Boulevard & Grand Avenue	Signal	D	AM	28.1	C	37.9	D	37.9	D	37.9	D
				PM	39.0	D	34.7	C	34.7	C	34.7	C
16	Santa Clara Avenue/Lake Park Avenue & Grand Avenue	Signal	D	AM	28.6	C	32.7	C	32.7	C	32.7	C
				PM	31.6	C	31.7	C	31.7	C	31.7	C
17	Signalized Mid-Block Ped Crossing & Grand Avenue	Signal	D	AM	-	-	-	-	-	-	-	-
				PM	-	-	-	-	-	-	-	-
18	Elwood Avenue & Grand Avenue	Signal	D	AM	11.4	B	5.2	A	5.2	A	5.2	A
				PM	6.8	A	6.9	A	6.9	A	6.9	A
19	Mandana Boulevard & Grand Avenue	Signal	D	AM	17.8	B	13.6	B	13.6	B	13.6	B
				PM	10.9	B	11.0	B	11.0	B	11.0	B

Notes:
1 OWSC = One-Way Stop-Controlled, TWSC= Two-Way Stop Controlled, AWSC = All-Way Stop-Controlled
2 "Average" control delays (in seconds/vehicle) are indicated for All-way Stop-Control (AWSC) and Signal controlled intersections. "Worst-movement delay" (in seconds/vehicle) is indicated for One-Way Stop-Controlled (OWSC) and Two-Way Stop-Controlled (TWSC) intersections.

INTERSECTION QUEUEING

95th percentile intersection queues were obtained using SimTraffic software. Queue summaries are contained in **Attachment C** and SimTraffic queueing reports are contained in **Attachment D**. As shown in the summary tables in **Attachment C**, Alternative 1 No Build, all VERSION 1 Alternatives, and all VERSION 2 Alternatives are generally projected to experience relatively low queueing, with longer queues only being observed at a few locations in some of the alternatives as discussed below.

Under Alternative 1 No Build, the northbound through movement at the Santa Clara Avenue/Lake Park Avenue & Grand Avenue intersection currently experiences 608 feet of queueing during the AM peak hour. The eastbound through movements at the El Embarcadero & Grand Avenue intersection currently experience up to 706 feet of queuing during the PM peak hour.

Under Alternatives 2, 3, and 4 VERSION 1, eastbound through movement queues at the Broadway & Grand Avenue intersection are projected to be relatively long. Under AM and PM peak hours, eastbound queues at this intersection are projected to be between 587 and 722 feet, which would reach beyond the Telegraph Avenue signal. This queue would occur due to the eastbound lane reduction of Grand Avenue between Broadway and Webster Street included as part of the VERSION 1 changes.

Under Alternative 3 (EB Diet) VERSION 1 and Alternative 4 (3-Lane Diet) VERSION 1, during the PM peak hour, queues for the southbound left/right-turn movement at Bay Place & Grand Avenue are projected to reach up to 705 feet, which would spill back on Bay Place beyond Vernon Street. This is due to the proposed eastbound lane drop on Grand Avenue between Bay Place and Park View Terrace/Bellevue Avenue.

Under Alternative 3 (EB Diet) VERSION 2 and Alternative 4 (3-Lane Diet) VERSION 2, during the PM peak hour, queues for the southbound left/right-turn movement at Bay Place & Grand Avenue are projected to reach up to 653 feet, which would spill back on Bay Place beyond Vernon Street. This is due to the proposed eastbound lane drop on Grand Avenue between Bay Place and Park View Terrace/Bellevue Avenue.

Alternative 2 (WB Diet) VERSION 2 is projected to experience the lowest queues of all alternatives analyzed, and no excessively long queues were identified. Alternative 2 (WB Diet) VERSION 2 represents the City's preferred alternative for the Project.

TRANSIT DELAY ANALYSIS

Transit delay analysis was performed for two Alameda-Contra Costa Transit District (AC Transit) bus routes that utilize the Grand Avenue corridor study area. Line 12 runs the length of the study corridor in both the eastbound and westbound directions from Broadway to Mandana Boulevard. Line NL runs along the study corridor from Broadway to MacArthur Boulevard in the eastbound direction and from Lake Park Avenue to Broadway in the westbound direction. Transit delay for the following study alternatives was estimated using SimTraffic:

- Alternative 1 No Build
- Alternative 2 (WB Diet) VERSION 1
- Alternative 4 (3-Lane Diet) VERSION 1
- Alternative 2 (WB Diet) VERSION 2
- Alternative 4 (3-Lane Diet) VERSION 2

Alternative 3 (EB Diet) was not analyzed for transit delays as it did not perform as well as Alternative 2 (WB Diet) from an LOS/queueing perspective. Delays for each intersection movement that a bus would make along the corridor were summed for both lines in the eastbound and westbound directions. For Alternative 1 No Build, additional re-entry delays were added for each bus stop encountered along the study corridor based on the traffic volumes in the adjacent lane. Re-entry delay represents the time required to merge back into traffic after a stop at the curb. Re-entry delay was not included under Project Alternative 2 and 4 conditions as the Project alternatives would include bus boarding islands which would allow buses to stop

within the travel lanes, thus eliminating re-entry delay. SimTraffic delay reports used for the transit analysis are contained in **Attachment E**. Tables containing detailed transit delays by intersection for Line 12 and Line NL are contained in **Attachment F**. Peak hour transit delay in the eastbound and westbound directions are summarized for Line 12 in **Tables 5** through **8** and for Line NL in **Tables 9** through **12**. Transit delay summaries are shown for a scenario where a bus would stop at all stops along the corridor and a scenario where a bus would stop at no stops along the corridor.

Table 5. Line 12 – AM Peak Hour Delay – Stopping At All Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1		Alt 4 (3-Lane Diet): VERSION 1		Alt 2 (WB Diet): VERSION 2 (Preferred Alt)		Alt 4 (3-Lane Diet): VERSION 2	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	177	216	+39	235	+58	160	-17	166	-11
Westbound - Mandana Blvd to Broadway	190	214	+24	199	+9	208	+18	187	-3

Table 6. Line 12 – AM Peak Hour Delay – Stopping At 0 Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1		Alt 4 (3-Lane Diet): VERSION 1		Alt 2 (WB Diet): VERSION 2 (Preferred Alt)		Alt 4 (3-Lane Diet): VERSION 2	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	163	216	+53	235	+72	160	-3	166	+3
Westbound - Mandana Blvd to Broadway	165	214	+49	199	+34	208	+43	187	+22

Table 7. Line 12 – PM Peak Hour Delay – Stopping At All Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1		Alt 4 (3-Lane Diet): VERSION 1		Alt 2 (WB Diet): VERSION 2 (Preferred Alt)		Alt 4 (3-Lane Diet): VERSION 2	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	279	252	-27	311	+32	240	-39	287	+8
Westbound - Mandana Blvd to Broadway	224	230	+6	228	+4	233	+9	243	+19

Table 8. Line 12 – PM Peak Hour Delay – Stopping At 0 Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1		Alt 4 (3-Lane Diet): VERSION 1		Alt 2 (WB Diet): VERSION 2 (Preferred Alt)		Alt 4 (3-Lane Diet): VERSION 2	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	246	252	+6	311	+65	240	-6	287	+41
Westbound - Mandana Blvd to Broadway	204	230	+26	228	+24	233	+29	243	+39

Table 9. Line NL – AM Peak Hour Delay – Stopping At All Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1		Alt 4 (3-Lane Diet): VERSION 1		Alt 2 (WB Diet): VERSION 2 (Preferred Alt)		Alt 4 (3-Lane Diet): VERSION 2	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	103	143	+40	162	+59	99	-4	107	+4
Westbound - Mandana Blvd to Broadway	334	195	-139	193	-141	230	-104	195	-139

Table 10. Line NL – AM Peak Hour Delay – Stopping At 0 Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1		Alt 4 (3-Lane Diet): VERSION 1		Alt 2 (WB Diet): VERSION 2 (Preferred Alt)		Alt 4 (3-Lane Diet): VERSION 2	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	100	143	+43	162	+62	99	-1	107	+7
Westbound - Mandana Blvd to Broadway	327	195	-132	193	-134	230	-97	195	-132

Table 11. Line NL – PM Peak Hour Delay – Stopping At All Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1		Alt 4 (3-Lane Diet): VERSION 1		Alt 2 (WB Diet): VERSION 2 (Preferred Alt)		Alt 4 (3-Lane Diet): VERSION 2	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	185	171	-14	233	+48	146	-39	204	+19
Westbound - Mandana Blvd to Broadway	195	201	6	194	-1	204	+9	205	+10

Table 12. Line NL – PM Peak Hour Delay – Stopping At 0 Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1		Alt 4 (3-Lane Diet): VERSION 1		Alt 2 (WB Diet): VERSION 2 (Preferred Alt)		Alt 4 (3-Lane Diet): VERSION 2	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	178	171	-7	233	+55	146	-32	204	+26
Westbound - Mandana Blvd to Broadway	191	201	+10	194	+3	204	+13	205	+14

As shown in **Tables 6** and **8** above, transit delays are projected to increase by 65 to 72 seconds compared to Alternative 1 No Build conditions for Eastbound Line 12 under Alternative 4 (3-Lane Diet) VERSION 1 AM and PM peak hour conditions when there are no stops made.

As shown in **Tables 9** and **10** above, transit delay is projected to decrease by over one minute compared to Alternative 1 No Build conditions for Westbound Line NL during the AM peak hour under all Project build alternatives, stopping at all stops and stopping at no stops.

Transit delays are projected to be within one minute of Alternative 1 No Build conditions for all other scenarios. In general, VERSION 2 alternatives result in less transit delay than VERSION 1 alternatives. Alternative 2 (WB Diet) VERSION 2 results in the least transit delay overall. Alternative 2 (WB Diet) VERSION 2 represents the City's preferred alternative for the Project.

TWO-WAY EL EMBARCADERO ALTERNATIVES

All Project build alternatives assume El Embarcadero is converted to one-way northbound operations. With this change in place, vehicles exiting I-580 at MacArthur Boulevard or Santa Clara Avenue would be required to immediately travel southbound on MacArthur Boulevard or Lake Park Avenue to reach the neighborhoods southeast of Lake Merritt. In particular, if a vehicle exited I-580 southbound and took a southbound right turn onto Grand Avenue, they would no longer have the chance to make a westbound left-turn on El Embarcadero and would be required to travel 10 blocks down Grand Avenue for the next available left turn at Harrison Street and circle Lake Merritt to reach their destination. To avoid this potential out-of-direction travel, the following two additional scenarios based on Alternative 2 (WB Diet) VERSION 2 were analyzed with El Embarcadero maintaining two-way operations:

Alternative 2B (WB Diet) VERSION 2 – The westbound approach at the El Embarcadero & Grand Avenue intersection would contain one through lane and one shared through-left turn lane with permissive westbound left-turn phasing. The westbound road diet on Grand Avenue would begin approximately mid-block between El Embarcadero and Euclid Avenue. El Embarcadero would maintain two-way traffic.

Alternative 2C (WB Diet) VERSION 2 – The westbound approach at the El Embarcadero & Grand Avenue intersection would contain one through lane and one dedicated left turn lane (trap lane) with protected westbound left-turn phasing. The westbound road diet on Grand Avenue would begin immediately west of El Embarcadero. El Embarcadero would maintain two-way traffic. Alternative 2C (WB Diet) VERSION 2 is the City's preferred alternative for this project.

These additional scenarios were only analyzed for Alternative 2 (WB Diet) VERSION 2 as that scenario generally had the best LOS and queuing. Traffic volumes for these scenarios reflect the existing two-way operations of El Embarcadero & Grand Avenue and are the same as the Alternative 1 No Build Existing conditions volumes shown in **Figure 9**. This section includes LOS, queueing, and transit delay for two-way El Embarcadero alternatives. **Figure 11** shows a comparison of the proposed lane geometrics for Alternatives 2, 2B, and 2C VERSION 2. Alternative 2C (WB Diet with 2-Way El Embarcadero and Protected WBL Trap Lane) VERSION 2 is the City's preferred alternative for this Project.

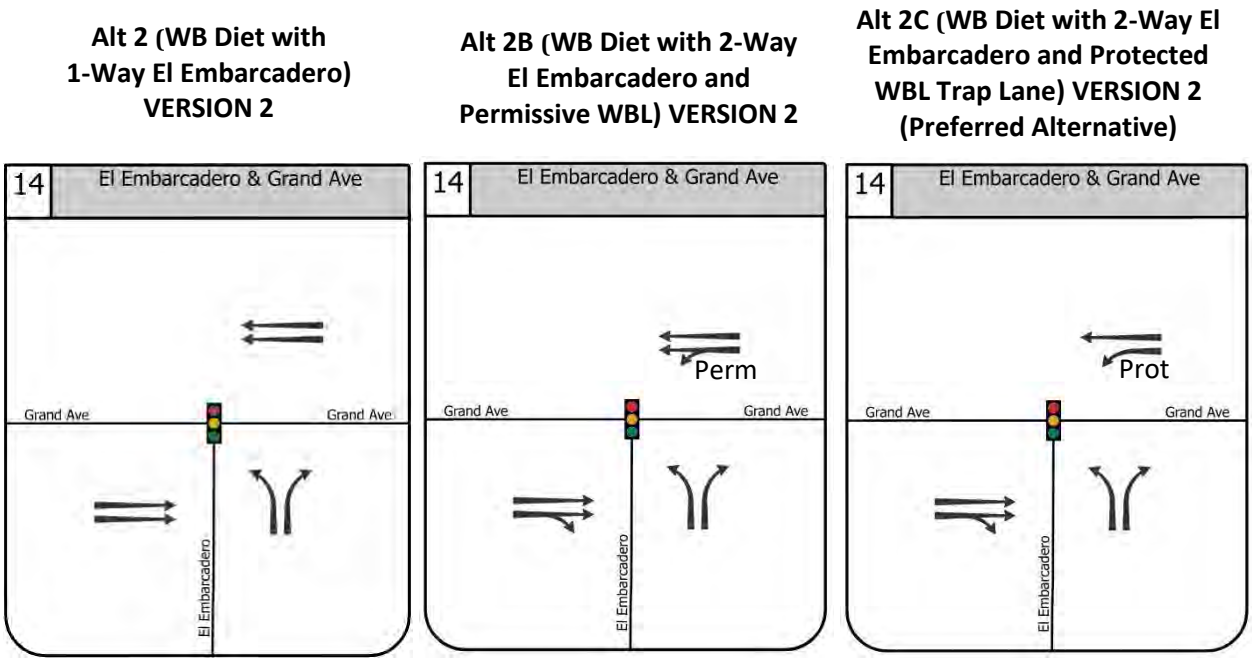


Figure 11: Alternatives 2, 2B, and 2C VERSION 2 Comparison

TRAFFIC OPERATIONS

Intersection Level of Service

Intersection LOS and delay for Alternative 2 (WB Diet) VERSION 2, Alternative 2B (WB Diet) VERSION 2, Alternative 2C (WB Diet) VERSION 2 are shown in **Table 13**.

As shown in **Table 13**, the intersection of Ellita Avenue & Grand Avenue, (side-street stop controlled), is projected to continue to operate at unacceptable LOS F under Alternatives 2B and 2C (WB Diet) VERSION 2. All remaining study intersections are projected to operate at acceptable LOS. Alternative 2C (WB Diet) VERSION 2 is the City's preferred alternative for this Project.

Synchro intersection LOS reports for Alternatives 2B and 2C (WB Diet) VERSION 2 are contained in **Attachment G**.

Table 13. Existing Conditions Intersection LOS –Alt 2, Alt 2B, Alt 2C VERSION 2

#	Intersection	Control Type[1]	LOS Criteria	Peak Hour	Alt 2 (WB Diet with 1-Way El Embarcadero) VERSION 2		Alt 2B (WB Diet with 2-Way El Embarcadero and Permissive WBL) VERSION 2		Alt 2C (WB Diet with 2-Way El Embarcadero and Protected WBL Trap Lane) VERSION 2 (Preferred Alternative)	
					Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS
1	Broadway Avenue & Grand Avenue	Signal	D	AM	21.6	C	21.6	C	21.6	C
				PM	24.6	C	24.6	C	24.6	C
2	Webster Street & Grand Avenue	Signal	D	AM	25.1	C	25.1	C	25.1	C
				PM	27.7	C	27.7	C	27.7	C
3	Valdez Street & Grand Avenue	Signal	D	AM	10.9	B	10.9	B	10.9	B
				PM	15.1	B	15.1	B	15.1	B
4	Harrison Street & Grand Avenue	Signal	D	AM	22.2	C	22.2	C	22.2	C
				PM	23.2	C	23.2	C	23.2	C
5	Bay Place & Grand Avenue	Signal	D	AM	17.1	B	17.1	B	17.1	B
				PM	10.9	B	10.9	B	10.9	B
6	Park View Terrace/Bellevue Avenue & Grand Avenue	Signal	D	AM	3.6	A	3.6	A	3.6	A
				PM	2.0	A	2.0	A	2.0	A
7	Lenox Avenue & Grand Avenue	OWSC	D	AM	24.5	C	24.5	C	24.5	C
				PM	19.6	C	19.6	C	19.6	C
8	Lee Street & Grand Avenue	OWSC	D	AM	23.8	C	23.8	C	23.8	C
				PM	21.2	C	21.2	C	21.2	C
9	Perkins Street & Grand Avenue	Signal	D	AM	4.4	A	4.4	A	4.4	A
				PM	11.0	B	11.0	B	11.0	B
10	Ellita Avenue & Grand Avenue	OWSC	D	AM	20.2	C	20.2	C	20.2	C
				PM	**57.8**	**F**	**57.8**	**F**	**57.8**	**F**
11	Staten Avenue & Grand Avenue	Signal	D	AM	2.9	A	2.9	A	2.9	A
				PM	9.6	A	9.6	A	9.6	A
12	Bellevue Avenue & Grand Avenue	TWSC	D	AM	22.9	C	22.9	C	22.9	C
				PM	27.0	D	27.0	D	27.0	D

#	Intersection	Control Type[1]	LOS Criteria	Peak Hour	Alt 2 (WB Diet with 1-Way El Embarcadero) VERSION 2		Alt 2B (WB Diet with 2-Way El Embarcadero and Permissive WBL) VERSION 2		Alt 2C (WB Diet with 2-Way El Embarcadero and Protected WBL Trap Lane) VERSION 2 (Preferred Alternative)	
					Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS	Delay (S/V)[2]	LOS
13	Euclid Avenue & Grand Avenue	Signal	D	AM	7.2	A	7.2	A	7.2	A
				PM	6.9	A	6.9	A	6.9	A
14	El Embarcadero & Grand Avenue	Signal	D	AM	13.8	B	13.6	B	28.8	C
				PM	9.9	A	10.3	B	31.7	C
15	MacArthur Boulevard & Grand Avenue	Signal	D	AM	37.9	D	28.8	C	27.2	C
				PM	34.7	C	35.2	D	37.9	D
16	Santa Clara Avenue/Lake Park Avenue & Grand Avenue	Signal	D	AM	32.7	C	27.3	C	27.3	C
				PM	31.7	C	35.8	D	35.8	D
17	Signalized Mid-Block Ped Crossing & Grand Avenue	Signal	D	AM	-	-	-	-	-	-
				PM	-	-	-	-	-	-
18	Elwood Avenue & Grand Avenue	Signal	D	AM	5.2	A	5.2	A	5.2	A
				PM	6.9	A	6.9	A	6.9	A
19	Mandana Boulevard & Grand Avenue	Signal	D	AM	13.6	B	13.6	B	13.6	B
				PM	11.0	B	11.0	B	11.0	B

Notes:
1 OWSC = One-Way Stop-Controlled, TWSC= Two-Way Stop Controlled, AWSC = All-Way Stop-Controlled
2 "Average" control delays (in seconds/vehicle) are indicated for All-way Stop-Control (AWSC) and Signal controlled intersections. "Worst-movement delay" (in seconds/vehicle) is indicated for One-Way Stop-Controlled (OWSC) and Two-Way Stop-Controlled (TWSC) intersections.

Intersection Queueing

95th percentile intersection queues for Alternative 2 (WB Diet) VERSION 2, Alternative 2B (WB Diet) VERSION 2, Alternative 2C (WB Diet) VERSION 2 are shown in the queue summary tables in **Attachment G**.

As shown in the summary tables in **Attachment G**, Alternative 2B (WB Diet) VERSION 2 is projected to experience excessive PM queues (over 600 ft) for the northbound through movements at Santa Clara Avenue/Lake Park Avenue & Grand Avenue and Mandana Boulevard & Grand Avenue, and a queue over 1,000 feet for the westbound through movement at Mandana Boulevard & Grand Avenue. The excessive queues are caused by the permissive westbound left-turn at El Embarcadero & Grand Avenue, where vehicles turning left would not be able to make a left-turn easily due to high volumes of conflicting eastbound traffic.

Alternative 2C (WB Diet) VERSION 2 is not projected to experience excessive queueing during the AM/PM peak hours. Alternative 2C (WB Diet) VERSION 2 improves queuing compared to Alternative 2B by implementing a dedicated westbound left-turn lane with protected phasing at El Embarcadero & Grand Avenue. Alternative 2C (WB Diet) VERSION 2 is the City's preferred alternative for this Project.

SimTraffic queueing reports are contained in **Attachment G**.

Transit Delay

Transit delays for Line 12 and Line NL were analyzed for Alternatives 2B and 2C (WB Diet) VERSION 2. Peak hour transit delay in the eastbound and westbound directions are summarized for Line 12 in **Tables 14** through **17** and for Line NL in **Tables 18** through **21**. For comparison purposes, the tables include transit delay for Alternative 1 Existing No Build, Alternative 2 (WB Diet) VERSION 2, Alternative 2B (WB Diet) VERSION 2, and Alternative 2C (WB Diet) VERSION 2.

SimTraffic delay reports used for the transit analysis and tables containing detailed transit delays by intersection for Alternative 2B and 2C (WB Diet) VERSION 2 are contained in **Attachment G**.

Table 14. Line 12 – AM Peak Hour Delay – Stopping At All Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2		Alt 2B (WB Diet): VERSION 2		Alt 2C (WB Diet): VERSION 2 (Preferred Alt)	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	177	160	-17	171	-6	185	+8
Westbound - Mandana Blvd to Broadway	190	208	+18	198	+8	209	+19

Table 15. Line 12 – AM Peak Hour Delay – Stopping At 0 Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2		Alt 2B (WB Diet): VERSION 2		Alt 2C (WB Diet): VERSION 2 (Preferred Alt)	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	163	160	-3	171	+8	185	+22
Westbound - Mandana Blvd to Broadway	165	208	+43	198	+33	209	+44

Table 16. Line 12 – PM Peak Hour Delay – Stopping At All Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2		Alt 2B (WB Diet): VERSION 2		Alt 2C (WB Diet): VERSION 2 (Preferred Alt)	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	279	240	-39	220	-59	226	-53
Westbound - Mandana Blvd to Broadway	224	233	+9	329	+105	241	+17

Table 17. Line 12 – PM Peak Hour Delay – Stopping At 0 Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2		Alt 2B (WB Diet): VERSION 2		Alt 2C (WB Diet): VERSION 2 (Preferred Alt)	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	246	240	-6	220	-26	226	-20
Westbound - Mandana Blvd to Broadway	204	233	+29	329	+125	241	+37

Table 18. Line NL – AM Peak Hour Delay – Stopping At All Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2		Alt 2B (WB Diet): VERSION 2		Alt 2C (WB Diet): VERSION 2 (Preferred Alt)	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	103	99	-4	100	-3	111	+8
Westbound - Mandana Blvd to Broadway	334	230	-104	204	-130	227	-107

Table 19. Line NL – AM Peak Hour Delay – Stopping At 0 Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2		Alt 2B (WB Diet): VERSION 2		Alt 2C (WB Diet): VERSION 2 (Preferred Alt)	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	100	99	-1	100	0	111	+11
Westbound - Mandana Blvd to Broadway	327	230	-97	204	-123	227	-100

Table 20. Line NL – PM Peak Hour Delay – Stopping At All Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2		Alt 2B (WB Diet): VERSION 2		Alt 2C (WB Diet): VERSION 2 (Preferred Alt)	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	185	146	-39	138	-47	157	-28
Westbound - Mandana Blvd to Broadway	195	204	+9	343	+148	221	+26

Table 21. Line NL – PM Peak Hour Delay – Stopping At 0 Stops

Direction	Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2		Alt 2B (WB Diet): VERSION 2		Alt 2C (WB Diet): VERSION 2 (Preferred Alt)	
	Delay (s)	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build	Delay (s)	Diff from No Build
Eastbound -Broadway to Mandana Blvd	178	146	-32	138	-40	157	-21
Westbound - Mandana Blvd to Broadway	191	204	+13	343	+152	221	+30

As shown in **Tables 16**, **17**, **20**, and **21** above, PM transit delays are projected to increase by 105 to 152 seconds compared to Alternative 1 No Build conditions for westbound Line 12 and westbound Line NL under Alternative 2B (WB Diet) VERSION 2 for stopping at all stops and stopping at no stops.

As shown in **Table 18** and **19**, transit delay is projected to decrease by over one minute compared to Alternative 1 No Build conditions for Westbound Line NL during the AM peak hour under both Alternative 2B and 2C (WB Diet) VERSION 2, stopping at all stops and stopping at no stops.

Transit delays are projected to be within one minute of Alternative 1 No Build conditions for all other scenarios. Alternative 2C (WB Diet) VERSION 2 results in similar transit delays as Alternative 2 (WB Diet) VERSION 2, which generally has the least transit delay overall. Alternative 2C (WB Diet) VERSION 2 represents the City's preferred alternative for the Project.

CONCLUSION

INTERSECTION LEVEL OF SERVICE

The intersection of Ellita Avenue & Grand Avenue currently operates at unacceptable LOS E and is projected to operate at unacceptable LOS E or F under all Project alternatives. The intersection of Bellevue Avenue & Grand Avenue is projected to operate at unacceptable LOS under Alternative 3 (EB Diet) VERSION 1, Alternative 4 (3-Lane Diet) VERSION 1, Alternative 3 (EB Diet) VERSION 2, and Alternative 4 (3-Lane Diet) VERSION 2. All remaining study intersections are currently operating at acceptable LOS and are projected to operate at acceptable LOS with the Project alternatives in place.

INTERSECTION QUEUEING

Current and projected movements with excessive queuing are listed below by alternative.

Alternative 1 No Build:

- Northbound through movement at Santa Clara Avenue/Lake Park Avenue & Grand Avenue (AM)
- Eastbound through movements at El Embarcadero & Grand Avenue (PM)

Alternative 2 (WB Diet) VERSION 1:

- Eastbound through movement at Broadway & Grand Avenue (AM and PM)

Alternative 3 (EB Diet) and 4 (3-Lane Diet) VERSION 1:

- Eastbound through movement at Broadway & Grand Avenue (AM and PM)
- Southbound left/right-turn movement at Bay Place & Grand Avenue (PM)

Alternative 2 (WB Diet) VERSION 2:

- No excessive queueing

Alternatives 3 (EB Diet) and 4 (3-Lane Diet) VERSION 2:

- Southbound left/right-turn movement at Bay Place & Grand Avenue (PM)

TRANSIT DELAY ANALYSIS

Transit delays were analyzed for AC Transit Lines 12 and NL. Transit delays are projected to increase by over one minute compared to Alternative 1 No Build conditions for Eastbound Line 12 under Alternative 4 (3-Lane Diet) VERSION 1 AM and PM peak hour conditions when there are no stops made. Transit delay is projected to decrease by over one minute compared to Alternative 1 No Build conditions for Westbound Line NL during the AM peak hour under all Project build alternatives, stopping at all stops and stopping at no stops. Transit delays are projected to be within one minute of Alternative 1 No Build conditions for all other scenarios. In general, VERSION 2 alternatives result in less transit delay than VERSION 1 alternatives. Alternative 2 VERSION 2 results in the least transit delay overall.

TWO-WAY EL EMBARCADERO ALTERNATIVES

Two additional scenarios based on Alternative 2 (WB Diet) VERSION 2 were analyzed with El Embarcadero maintaining two-way operations:

- Alternative 2B (WB Diet) VERSION 2: Assumes a permissive westbound left-turn at El Embarcadero & Grand Avenue.
- Alternative 2C (WB Diet) VERSION 2: Assumes a protected westbound left-turn and a westbound left-turn trap lane at El Embarcadero a& Grand Avenue.

Level of Service

The intersection of Ellita Avenue & Grand Avenue is projected to continue to operate at unacceptable LOS F under Alternatives 2B and 2C (WB Diet) VERSION 2. All remaining study intersections are projected to operate at acceptable LOS.

Queueing

Projected movements with excessive queuing are listed below by alternative.

Alternative 2B (WB Diet) VERSION 2:

- Northbound through movements at Santa Clara Avenue/Lake Park Avenue & Grand Avenue and Mandana Boulevard & Grand Avenue (PM)
- Westbound through movement at Mandana Boulevard & Grand Avenue (PM)

Alternative 2C (WB Diet) VERSION 2:

- No excessive queueing

Transit Delay

PM transit delays are projected to increase by over one minute compared to Alternative 1 No Build conditions for westbound Line 12 and westbound Line NL under Alternative 2B (WB Diet) VERSION 2 for stopping at all stops and stopping at no stops. Transit delay is projected to decrease by over one minute compared to Alternative 1 No Build conditions for Westbound Line NL during the AM peak hour under both Alternative 2B and 2C (WB Diet) VERSION 2, stopping at all stops and stopping at no stops. Transit delays are projected to be within one minute of Alternative 1 No Build conditions for all other scenarios. Alternative 2C (WB Diet) VERSION 2 results in similar transit delays as Alternative 2 (WB Diet) VERSION 2, which generally has the least transit delay overall.

CITY'S PREFERRED ALTERNATIVE

Alternative 2 (WB Diet) VERSION 2 is the City's preferred alternative for this Project as it results in the most study intersections operating at acceptable LOS, no excessive queuing on the corridor, and the least transit delay of all alternatives. Alternative 2C (WB Diet) VERSION 2 is another configuration of the City's preferred alternative which maintains two-way operations on El Embarcadero while resulting in similar LOS, queuing, and transit delay.

ATTACHMENTS:

Attachment A: Traffic Count Data

Attachment B: Synchro HCM 7th Edition LOS Reports

Attachment C: 95th Percentile Queue Summary Tables

Attachment D: SimTraffic Queueing Reports

Attachment E: SimTraffic Intersection Delay Reports

Attachment F: Transit Delay Summaries

Attachment G: Two-Way El Embarcadero Scenario Attachments (Alternatives 2B and 2C (WB Diet) VERSION 2)

Attachment A:
Traffic Count Data

National Data & Surveying Services

Intersection Turning Movement Count

Location: Broadway & Grand Ave/W Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-001
Date: 11/19/2024

Data - Total

NS/EW Streets:	Broadway				Broadway				Grand Ave/W Grand Ave				Grand Ave/W Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	8	37	13	0	5	22	9	0	11	53	6	0	5	31	2	0	202
7:15 AM	5	28	15	0	5	20	12	0	11	39	5	0	5	26	2	0	173
7:30 AM	9	35	12	0	2	27	15	0	14	78	6	1	11	32	8	0	250
7:45 AM	8	53	14	0	8	28	13	0	15	95	13	1	13	43	3	0	307
8:00 AM	9	53	23	0	10	48	18	0	17	101	10	0	9	34	11	0	343
8:15 AM	12	68	25	0	7	45	14	0	23	84	21	0	11	55	9	0	374
8:30 AM	8	64	24	0	14	48	18	0	9	119	19	2	14	51	10	0	400
8:45 AM	8	67	20	0	6	64	21	0	19	109	16	0	13	35	9	0	387
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	67	405	146	0	57	302	120	0	119	678	96	4	81	307	54	0	2436
APPROACH %'s :	10.84%	65.53%	23.62%	0.00%	11.90%	63.05%	25.05%	0.00%	13.27%	75.59%	10.70%	0.45%	18.33%	69.46%	12.22%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	37	252	92	0	37	205	71	0	68	413	66	2	47	175	39	0	1504
PEAK HR FACTOR :	0.771	0.926	0.920	0.000	0.661	0.801	0.845	0.000	0.739	0.868	0.786	0.250	0.839	0.795	0.886	0.000	0.940
	0.907				0.860				0.921				0.870				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	32	83	38	0	17	66	26	0	20	76	10	0	16	56	8	0	448
4:15 PM	35	90	31	2	16	56	24	0	18	85	15	3	9	39	10	1	434
4:30 PM	29	83	33	0	14	52	15	0	28	86	11	0	12	58	6	0	427
4:45 PM	30	105	37	0	14	69	30	0	30	104	13	1	18	62	7	0	520
5:00 PM	32	98	41	0	21	76	22	0	16	101	12	0	14	59	11	0	503
5:15 PM	31	110	40	0	19	64	29	0	29	118	20	1	16	52	11	0	540
5:30 PM	29	83	29	0	13	70	19	0	21	122	20	2	13	60	19	0	500
5:45 PM	18	108	39	0	23	57	34	0	31	137	20	1	16	40	19	0	543
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	236	760	288	2	137	510	199	0	193	829	121	8	114	426	91	1	3915
APPROACH %'s :	18.35%	59.10%	22.40%	0.16%	16.19%	60.28%	23.52%	0.00%	16.77%	72.02%	10.51%	0.70%	18.04%	67.41%	14.40%	0.16%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	110	399	149	0	76	267	104	0	97	478	72	4	59	211	60	0	2086
PEAK HR FACTOR :	0.859	0.907	0.909	0.000	0.826	0.878	0.765	0.000	0.782	0.872	0.900	0.500	0.922	0.879	0.789	0.000	0.960
	0.909				0.939				0.861				0.897				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Broadway & Grand Ave/W Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-001
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Broadway				Broadway				Grand Ave/W Grand Ave				Grand Ave/W Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	8	33	10	0	5	20	9	0	9	53	6	0	3	28	2	0	186
7:15 AM	5	25	12	0	5	18	10	0	11	39	5	0	4	26	2	0	162
7:30 AM	9	31	11	0	2	25	14	0	13	78	5	1	8	31	7	0	235
7:45 AM	8	50	11	0	8	25	12	0	14	92	13	1	10	41	3	0	288
8:00 AM	8	51	20	0	9	44	17	0	16	94	8	0	5	34	11	0	317
8:15 AM	11	67	20	0	7	42	14	0	22	82	21	0	10	53	8	0	357
8:30 AM	8	63	19	0	14	46	16	0	9	119	19	2	9	49	10	0	383
8:45 AM	8	65	18	0	6	63	21	0	18	104	16	0	12	35	9	0	375
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	65	385	121	0	56	283	113	0	112	661	93	4	61	297	52	0	2303
APPROACH %'s :	11.38%	67.43%	21.19%	0.00%	12.39%	62.61%	25.00%	0.00%	12.87%	75.98%	10.69%	0.46%	14.88%	72.44%	12.68%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	35	246	77	0	36	195	68	0	65	399	64	2	36	171	38	0	1432
PEAK HR FACTOR :	0.795	0.918	0.963	0.000	0.643	0.774	0.810	0.000	0.739	0.838	0.762	0.250	0.750	0.807	0.864	0.000	0.935
	0.913				0.831				0.889				0.863				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	32	82	36	0	17	63	25	0	19	75	10	0	13	56	7	0	435
4:15 PM	35	88	22	2	16	55	23	0	18	85	15	3	8	39	10	1	420
4:30 PM	29	82	21	0	14	50	14	0	28	86	10	0	10	57	6	0	407
4:45 PM	30	103	34	0	14	67	30	0	30	102	13	1	15	61	7	0	507
5:00 PM	31	97	38	0	21	74	22	0	16	101	12	0	12	59	11	0	494
5:15 PM	31	108	37	0	19	62	29	0	29	118	20	1	12	52	11	0	529
5:30 PM	29	83	27	0	13	69	19	0	21	120	20	2	10	59	19	0	491
5:45 PM	18	104	37	0	23	56	33	0	31	137	20	1	14	40	19	0	533
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	235	747	252	2	137	496	195	0	192	824	120	8	94	423	90	1	3816
APPROACH %'s :	19.01%	60.44%	20.39%	0.16%	16.55%	59.90%	23.55%	0.00%	16.78%	72.03%	10.49%	0.70%	15.46%	69.57%	14.80%	0.16%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	109	392	139	0	76	261	103	0	97	476	72	4	48	210	60	0	2047
PEAK HR FACTOR :	0.879	0.907	0.914	0.000	0.826	0.882	0.780	0.000	0.782	0.869	0.900	0.500	0.857	0.890	0.789	0.000	0.960
	0.909				0.940				0.858				0.903				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Broadway & Grand Ave/W Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-001
Date: 11/19/2024

Data - HT

NS/EW Streets:	Broadway				Broadway				Grand Ave/W Grand Ave				Grand Ave/W Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	4	3	0	0	2	0	0	2	0	0	0	2	3	0	0	16
7:15 AM	0	3	3	0	0	2	2	0	0	0	0	0	1	0	0	0	11
7:30 AM	0	4	1	0	0	2	1	0	1	0	1	0	3	1	1	0	15
7:45 AM	0	3	3	0	0	3	1	0	1	3	0	0	3	2	0	0	19
8:00 AM	1	2	3	0	1	4	1	0	1	7	2	0	4	0	0	0	26
8:15 AM	1	1	5	0	0	3	0	0	1	2	0	0	1	2	1	0	17
8:30 AM	0	1	5	0	0	2	2	0	0	0	0	0	5	2	0	0	17
8:45 AM	0	2	2	0	0	1	0	0	1	5	0	0	1	0	0	0	12
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	20	25	0	1	19	7	0	7	17	3	0	20	10	2	0	133
APPROACH %'s :	4.26%	42.55%	53.19%	0.00%	3.70%	70.37%	25.93%	0.00%	25.93%	62.96%	11.11%	0.00%	62.50%	31.25%	6.25%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	2	6	15	0	1	10	3	0	3	14	2	0	11	4	1	0	72
PEAK HR FACTOR :	0.500	0.750	0.750	0.000	0.250	0.625	0.375	0.000	0.750	0.500	0.250	0.000	0.550	0.500	0.250	0.000	0.692
		0.821				0.583				0.475				0.571			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	2	0	0	3	1	0	1	1	0	0	3	0	1	0	13
4:15 PM	0	2	9	0	0	1	1	0	0	0	0	0	1	0	0	0	14
4:30 PM	0	1	12	0	0	2	1	0	0	0	1	0	2	1	0	0	20
4:45 PM	0	2	3	0	0	2	0	0	0	2	0	0	3	1	0	0	13
5:00 PM	1	1	3	0	0	2	0	0	0	0	0	0	2	0	0	0	9
5:15 PM	0	2	3	0	0	2	0	0	0	0	0	0	4	0	0	0	11
5:30 PM	0	0	2	0	0	1	0	0	0	2	0	0	3	1	0	0	9
5:45 PM	0	4	2	0	0	1	1	0	0	0	0	0	2	0	0	0	10
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	13	36	0	0	14	4	0	1	5	1	0	20	3	1	0	99
APPROACH %'s :	2.00%	26.00%	72.00%	0.00%	0.00%	77.78%	22.22%	0.00%	14.29%	71.43%	14.29%	0.00%	83.33%	12.50%	4.17%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	7	10	0	0	6	1	0	0	2	0	0	11	1	0	0	39
PEAK HR FACTOR :	0.250	0.438	0.833	0.000	0.000	0.750	0.250	0.000	0.000	0.250	0.000	0.000	0.688	0.250	0.000	0.000	0.886
		0.750				0.875				0.250				0.750			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Broadway & Grand Ave/W Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-001
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Broadway				Broadway				Grand Ave/W Grand Ave				Grand Ave/W Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	5
7:15 AM	0	1	0	0	0	3	0	0	1	0	0	0	0	1	0	0	6
7:30 AM	0	1	0	0	0	2	0	0	0	3	0	0	0	3	0	0	9
7:45 AM	0	1	0	0	0	5	1	0	1	0	0	0	1	1	0	0	10
8:00 AM	0	1	0	0	0	6	1	0	0	2	0	0	3	0	0	0	13
8:15 AM	1	0	0	0	0	1	2	0	0	7	2	0	2	3	0	0	18
8:30 AM	2	2	1	0	0	7	0	0	1	4	0	0	1	2	0	0	20
8:45 AM	0	1	0	0	0	6	1	0	0	2	1	0	0	3	0	0	14
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	7	1	0	0	31	5	0	3	20	3	0	7	15	0	0	95
APPROACH %'s :	27.27%	63.64%	9.09%	0.00%	0.00%	86.11%	13.89%	0.00%	11.54%	76.92%	11.54%	0.00%	31.82%	68.18%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	3	4	1	0	0	20	4	0	1	15	3	0	6	8	0	0	65
PEAK HR FACTOR :	0.375	0.500	0.250	0.000	0.000	0.714	0.500	0.000	0.250	0.536	0.375	0.000	0.500	0.667	0.000	0.000	0.813
	0.400				0.857				0.528				0.700				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	1	2	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	4	4	0	1	0	0	0	0	2	0	0	2	2	0	0	15
4:15 PM	0	4	1	0	0	3	0	0	0	3	0	0	1	3	0	0	15
4:30 PM	2	7	1	0	2	2	0	0	0	5	0	0	0	1	0	0	20
4:45 PM	0	8	2	0	0	2	0	0	2	4	0	0	1	4	0	0	23
5:00 PM	3	11	0	0	0	2	2	0	0	4	0	0	0	6	0	0	28
5:15 PM	0	11	3	0	0	2	0	0	0	1	0	0	1	4	0	0	22
5:30 PM	0	3	2	0	0	0	0	0	1	1	0	0	0	2	1	0	10
5:45 PM	1	6	0	0	0	2	0	0	0	1	1	0	0	2	0	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	54	13	0	3	13	2	0	3	21	1	0	5	24	1	0	146
APPROACH %'s :	8.22%	73.97%	17.81%	0.00%	16.67%	72.22%	11.11%	0.00%	12.00%	84.00%	4.00%	0.00%	16.67%	80.00%	3.33%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	4	31	5	0	0	6	2	0	1	7	1	0	1	14	1	0	73
PEAK HR FACTOR :	0.333	0.705	0.417	0.000	0.000	0.750	0.250	0.000	0.250	0.438	0.250	0.000	0.250	0.583	0.250	0.000	0.652
	0.714				0.500				0.563				0.667				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Broadway & Grand Ave/W Grand Ave
City: Oakland
Project ID: 24-080355-001
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Broadway		Broadway		Grand Ave/W Grand Ave		Grand Ave/W Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	2	0	3	1	6	9	5	15	41
7:15 AM	1	2	6	0	4	10	5	23	51
7:30 AM	3	3	5	8	7	16	7	12	61
7:45 AM	3	4	8	5	15	14	10	22	81
8:00 AM	3	5	11	4	8	27	10	29	97
8:15 AM	11	8	3	10	12	40	15	34	133
8:30 AM	8	8	9	9	11	30	9	32	116
8:45 AM	6	8	8	9	12	20	14	25	102
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	37	38	53	46	75	166	75	192	682
APPROACH %'s :	49.33%	50.67%	53.54%	46.46%	31.12%	68.88%	28.09%	71.91%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	28	29	31	32	43	117	48	120	448
PEAK HR FACTOR :	0.636	0.906	0.705	0.800	0.896	0.731	0.800	0.882	0.842
	0.750		0.875		0.769		0.857		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	4	6	6	5	17	9	22	18	87
4:15 PM	3	12	9	9	27	12	20	13	105
4:30 PM	12	8	8	5	33	14	34	16	130
4:45 PM	6	9	4	6	35	10	35	15	120
5:00 PM	14	12	5	6	28	16	24	22	127
5:15 PM	15	10	16	8	28	16	19	15	127
5:30 PM	6	11	17	15	36	15	29	22	151
5:45 PM	8	18	9	3	37	13	27	16	131
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	68	86	74	57	241	105	210	137	978
APPROACH %'s :	44.16%	55.84%	56.49%	43.51%	69.65%	30.35%	60.52%	39.48%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	43	51	47	32	129	60	99	75	536
PEAK HR FACTOR :	0.717	0.708	0.691	0.533	0.872	0.938	0.853	0.852	0.887
	0.904		0.617		0.926		0.853		

Prepared by National Data & Surveying Services

Broadway & Grand Ave/W Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-001
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	1504	0	2086
PHF	0.94		0.96

SOUTHBOUND (Broadway)

	Left	Thru	Right	U-Turn	
AM	71	205	37	0	359
NOON	0	0	0	0	0
PM	104	267	76	0	556

EASTBOUND (Grand Ave/W Grand Ave)

	Left	Thru	Right	U-Turn
AM	2	68	413	66
NOON	0	0	0	0
PM	4	97	478	72
	0	1	2	0

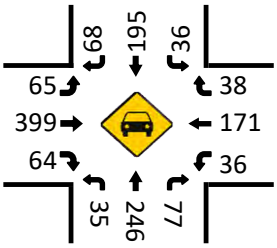
WESTBOUND (Grand Ave/W Grand Ave)

	Left	Thru	Right	U-Turn
PM	60	211	59	0
NOON	0	0	0	0
AM	39	175	47	0
	0	2	0	0

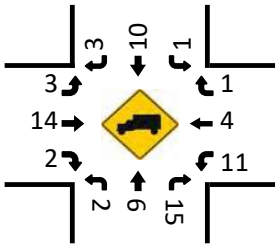
NORTHBOUND (Broadway)

	Left	Thru	Right	U-Turn	
PM	398	0	110	399	149
NOON	0	0	0	0	0
AM	318	0	37	252	92
	0	1	2	1	

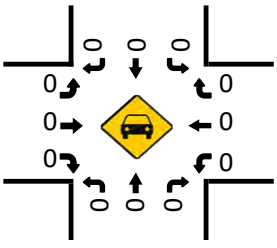
Cars (AM)



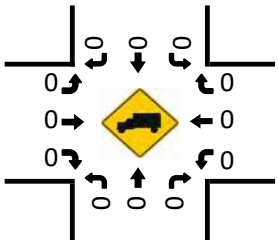
HT (AM)



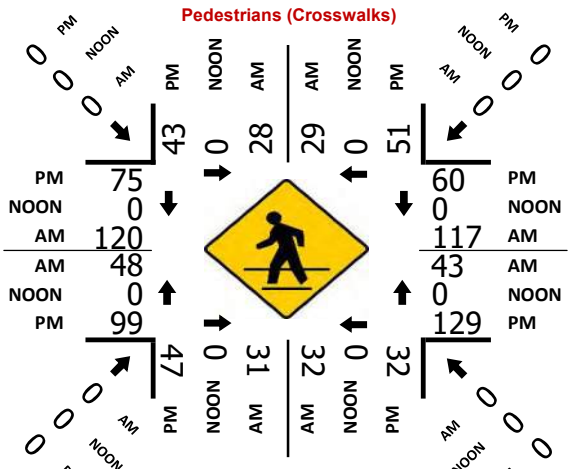
Cars (NOON)



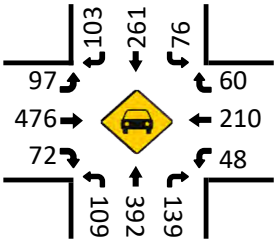
HT (NOON)



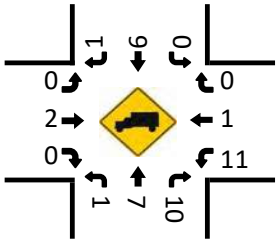
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Webster St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-002
Date: 11/19/2024

Data - Total

NS/EW Streets:	Webster St				Webster St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	4	11	4	0	3	34	34	0	12	33	5	0	140
7:15 AM	0	0	0	0	3	12	6	0	8	26	24	0	9	25	8	0	121
7:30 AM	0	0	0	0	5	18	4	0	10	32	47	1	15	48	13	0	193
7:45 AM	0	0	0	0	8	16	8	0	11	51	49	0	17	51	5	0	216
8:00 AM	0	0	0	0	7	25	7	0	15	52	57	1	22	41	12	0	239
8:15 AM	0	0	0	0	5	32	7	0	13	60	56	0	23	62	16	1	275
8:30 AM	0	0	0	0	5	41	8	0	13	53	86	0	29	68	16	0	319
8:45 AM	0	0	0	0	5	20	5	0	17	63	61	0	22	51	13	0	257
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	42	175	49	0	90	371	414	2	149	379	88	1	1760
APPROACH %'s :					15.79%	65.79%	18.42%	0.00%	10.26%	42.30%	47.21%	0.23%	24.15%	61.43%	14.26%	0.16%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	22	118	27	0	58	228	260	1	96	222	57	1	1090
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.786	0.720	0.844	0.000	0.853	0.905	0.756	0.250	0.828	0.816	0.891	0.250	0.854
						0.773				0.900				0.832			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	17	30	18	0	8	96	28	2	20	63	9	1	292
4:15 PM	0	0	0	0	17	37	15	0	7	106	23	0	14	48	12	0	279
4:30 PM	0	0	0	0	16	30	22	0	10	103	18	1	21	54	7	0	282
4:45 PM	0	0	0	0	10	38	17	0	14	119	27	0	23	69	5	0	322
5:00 PM	0	0	0	0	13	41	26	0	6	137	22	0	23	57	11	1	337
5:15 PM	0	0	0	0	19	42	24	0	16	105	46	0	18	58	16	0	344
5:30 PM	0	0	0	0	16	41	21	0	11	137	23	0	9	67	6	0	331
5:45 PM	0	0	0	0	16	26	20	0	17	137	24	0	20	54	9	0	323
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	124	285	163	0	89	940	211	3	148	470	75	2	2510
APPROACH %'s :					21.68%	49.83%	28.50%	0.00%	7.16%	75.62%	16.98%	0.24%	21.29%	67.63%	10.79%	0.29%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	64	150	91	0	50	516	115	0	70	236	42	1	1335
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.842	0.893	0.875	0.000	0.735	0.942	0.625	0.000	0.761	0.881	0.656	0.250	0.970
						0.897				0.956				0.948			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Webster St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-002
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Webster St				Webster St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	4	10	4	0	3	31	34	0	12	30	5	0	133
7:15 AM	0	0	0	0	3	10	6	0	8	23	24	0	9	24	8	0	115
7:30 AM	0	0	0	0	5	18	4	0	10	31	47	1	15	42	13	0	186
7:45 AM	0	0	0	0	8	16	8	0	11	46	48	0	17	46	5	0	205
8:00 AM	0	0	0	0	7	25	7	0	15	45	56	1	22	38	12	0	228
8:15 AM	0	0	0	0	5	31	7	0	11	53	56	0	23	58	16	1	261
8:30 AM	0	0	0	0	5	41	8	0	13	48	85	0	29	61	16	0	306
8:45 AM	0	0	0	0	5	20	5	0	17	58	60	0	22	50	13	0	250
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	42	171	49	0	88	335	410	2	149	349	88	1	1684
APPROACH %'s :					16.03%	65.27%	18.70%	0.00%	10.54%	40.12%	49.10%	0.24%	25.38%	59.45%	14.99%	0.17%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	22	117	27	0	56	204	257	1	96	207	57	1	1045
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.786	0.713	0.844	0.000	0.824	0.879	0.756	0.250	0.828	0.848	0.891	0.250	0.854
						0.769				0.887				0.851			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	17	30	18	0	8	94	28	2	19	59	9	1	285
4:15 PM	0	0	0	0	17	37	15	0	7	97	22	0	14	47	11	0	267
4:30 PM	0	0	0	0	16	30	22	0	10	91	18	1	21	51	7	0	267
4:45 PM	0	0	0	0	10	38	17	0	14	114	27	0	22	65	5	0	312
5:00 PM	0	0	0	0	13	41	26	0	6	134	22	0	23	55	11	1	332
5:15 PM	0	0	0	0	19	41	24	0	16	102	46	0	17	54	16	0	335
5:30 PM	0	0	0	0	16	41	21	0	11	134	22	0	9	63	6	0	323
5:45 PM	0	0	0	0	16	26	20	0	17	135	24	0	20	52	9	0	319
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	124	284	163	0	89	901	209	3	145	446	74	2	2440
APPROACH %'s :					21.72%	49.74%	28.55%	0.00%	7.40%	74.96%	17.39%	0.25%	21.74%	66.87%	11.09%	0.30%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	64	149	91	0	50	505	114	0	69	224	42	1	1309
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.842	0.909	0.875	0.000	0.735	0.935	0.620	0.000	0.750	0.889	0.656	0.250	0.977
						0.905				0.950				0.933			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Webster St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-002
Date: 11/19/2024

Data - HT

NS/EW Streets:	Webster St				Webster St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	0	3	0	0	0	3	0	0	7
7:15 AM	0	0	0	0	0	2	0	0	0	3	0	0	0	1	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	6	0	0	7
7:45 AM	0	0	0	0	0	0	0	0	0	5	1	0	0	5	0	0	11
8:00 AM	0	0	0	0	0	0	0	0	0	7	1	0	0	3	0	0	11
8:15 AM	0	0	0	0	0	1	0	0	2	7	0	0	0	4	0	0	14
8:30 AM	0	0	0	0	0	0	0	0	0	5	1	0	0	7	0	0	13
8:45 AM	0	0	0	0	0	0	0	0	0	5	1	0	0	1	0	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	4	0	0	2	36	4	0	0	30	0	0	76
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%	4.76%	85.71%	9.52%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	2	24	3	0	0	15	0	0	45
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.857	0.750	0.000	0.000	0.536	0.000	0.000	0.804
					0.250				0.806				0.536				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	4	0	0	7
4:15 PM	0	0	0	0	0	0	0	0	0	9	1	0	0	1	1	0	12
4:30 PM	0	0	0	0	0	0	0	0	0	12	0	0	0	3	0	0	15
4:45 PM	0	0	0	0	0	0	0	0	0	5	0	0	1	4	0	0	10
5:00 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
5:15 PM	0	0	0	0	0	1	0	0	0	3	0	0	1	4	0	0	9
5:30 PM	0	0	0	0	0	0	0	0	0	3	1	0	0	4	0	0	8
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	1	0	0	0	39	2	0	3	24	1	0	70
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%	0.00%	95.12%	4.88%	0.00%	10.71%	85.71%	3.57%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	11	1	0	1	12	0	0	26
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.917	0.250	0.000	0.250	0.750	0.000	0.000	0.722
					0.250				0.750				0.650				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Webster St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-002
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Webster St				Webster St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	0	1	1	0	1	2	2	0	8
7:15 AM	0	0	0	0	0	4	0	0	0	0	0	0	1	1	0	0	6
7:30 AM	0	0	1	0	1	0	0	0	0	2	0	0	2	3	0	0	9
7:45 AM	0	0	0	0	1	3	0	0	0	0	1	0	3	1	1	0	10
8:00 AM	0	0	0	0	0	5	0	0	0	2	0	0	2	4	0	0	13
8:15 AM	0	1	0	0	1	5	0	0	0	4	2	0	2	6	1	0	22
8:30 AM	0	0	0	0	0	7	0	0	0	2	2	0	3	3	0	0	17
8:45 AM	0	1	0	0	0	10	0	0	0	2	1	0	2	4	0	0	20
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	1	0	3	35	0	0	0	13	7	0	16	24	4	0	105
APPROACH %'s :	0.00%	66.67%	33.33%	0.00%	7.89%	92.11%	0.00%	0.00%	0.00%	65.00%	35.00%	0.00%	36.36%	54.55%	9.09%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	2	0	0	1	27	0	0	0	10	5	0	9	17	1	0	72
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.250	0.675	0.000	0.000	0.000	0.625	0.625	0.000	0.750	0.708	0.250	0.000	0.818
		0.500				0.700				0.625				0.750			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	1	4	0	0	0	4	0	0	0	5	0	0	14
4:15 PM	0	0	0	0	1	2	1	0	0	3	0	0	0	3	0	0	10
4:30 PM	0	2	0	0	0	1	0	0	0	5	1	0	0	0	0	0	9
4:45 PM	0	1	0	0	0	4	1	0	0	4	0	0	0	2	0	0	12
5:00 PM	1	0	0	0	0	2	0	0	0	4	1	0	1	5	0	0	14
5:15 PM	0	1	0	0	0	4	0	0	0	5	0	0	1	4	0	0	15
5:30 PM	0	2	0	0	1	1	0	0	0	3	0	0	1	3	1	0	12
5:45 PM	0	1	0	0	0	0	0	0	0	1	0	0	1	1	3	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	7	0	0	3	18	2	0	0	29	2	0	4	23	4	0	93
APPROACH %'s :	12.50%	87.50%	0.00%	0.00%	13.04%	78.26%	8.70%	0.00%	0.00%	93.55%	6.45%	0.00%	12.90%	74.19%	12.90%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	4	0	0	1	7	0	0	0	13	1	0	4	13	4	0	48
PEAK HR FACTOR :	0.250	0.500	0.000	0.000	0.250	0.438	0.000	0.000	0.000	0.650	0.250	0.000	1.000	0.650	0.333	0.000	0.800
		0.625				0.500				0.700				0.875			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Webster St & Grand Ave
City: Oakland

Project ID: 24-080355-002
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Webster St		Webster St		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	3	8	3	1	5	1	12	34
7:15 AM	3	6	12	6	2	6	6	12	53
7:30 AM	2	6	10	11	5	10	1	25	70
7:45 AM	3	11	18	5	3	14	4	29	87
8:00 AM	3	19	28	7	4	17	5	30	113
8:15 AM	4	18	17	19	9	13	4	37	121
8:30 AM	6	13	16	11	5	16	4	36	107
8:45 AM	7	13	14	16	2	19	8	30	109
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	29	89	123	78	31	100	33	211	694
APPROACH %'s :	24.58%	75.42%	61.19%	38.81%	23.66%	76.34%	13.52%	86.48%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	20	63	75	53	20	65	21	133	450
PEAK HR FACTOR :	0.714	0.829	0.670	0.697	0.556	0.855	0.656	0.899	0.930
	0.943		0.889		0.966		0.939		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	5	9	3	14	17	7	30	3	88
4:15 PM	2	7	9	11	10	3	28	5	75
4:30 PM	9	8	11	9	14	4	33	8	96
4:45 PM	8	4	7	9	10	3	17	12	70
5:00 PM	4	8	6	12	15	8	33	4	90
5:15 PM	9	4	8	16	11	6	32	8	94
5:30 PM	4	12	13	8	25	6	14	5	87
5:45 PM	11	12	12	5	27	3	15	3	88
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	52	64	69	84	129	40	202	48	688
APPROACH %'s :	44.83%	55.17%	45.10%	54.90%	76.33%	23.67%	80.80%	19.20%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	28	36	39	41	78	23	94	20	359
PEAK HR FACTOR :	0.636	0.750	0.750	0.641	0.722	0.719	0.712	0.625	0.955
	0.696		0.833		0.815		0.713		

Prepared by National Data & Surveying Services

Webster St & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-002
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS

AM: 08:00 AM - 09:00 AM
NOON: NONE
PM: 05:00 PM - 06:00 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	1090	0	1335
PHF	0.85		0.97

SOUTHBOUND (Webster St)

	Left	Thru	Right	U-Turn	Total
AM	27	118	22	0	115
NOON	0	0	0	0	0
PM	91	150	64	0	92

EASTBOUND (Grand Ave)

	Left	Thru	Right	U-Turn
AM	250	1	58	228	260	0
NOON	0	0	0	0	0	0
PM	327	0	50	516	115	0

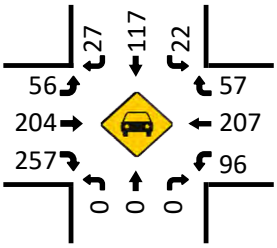
WESTBOUND (Grand Ave)

	Left	Thru	Right	U-Turn
AM	0	2	1	0	581
NOON	0	0	0	0	0
PM	57	222	96	1	251

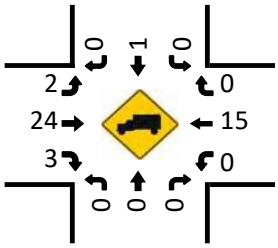
NORTHBOUND (Webster St)

	Left	Thru	Right	U-Turn	Total
AM	474	0	0	0	0
NOON	0	0	0	0	0
PM	335	0	0	0	0

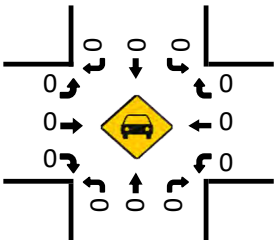
Cars (AM)



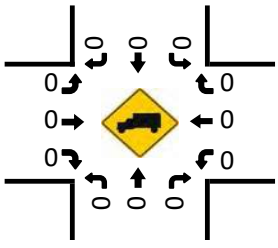
HT (AM)



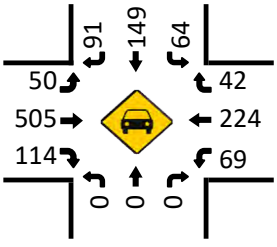
Cars (NOON)



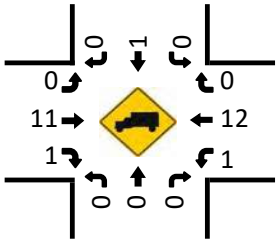
HT (NOON)



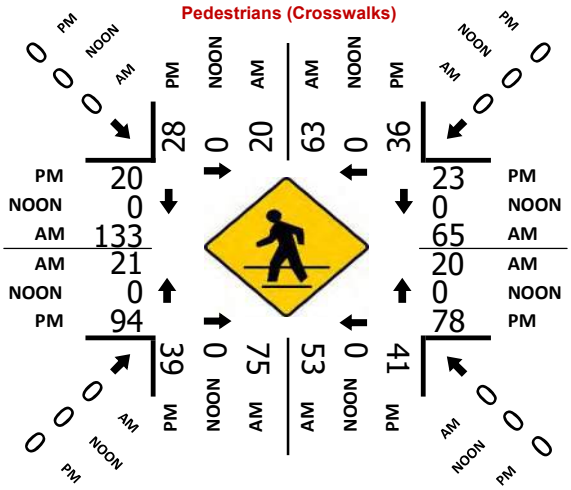
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Valdez St/155 Grand Lake Merritt Tower Dwy & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-003
Date: 11/19/2024

Data - Total

NS/EW Streets:	Valdez St/155 Grand Lake Merritt Tower Dwy				Valdez St/155 Grand Lake Merritt Tower Dwy				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	6	0	4	0	2	34	0	1	0	45	1	0	93
7:15 AM	0	0	1	0	1	0	1	0	4	23	0	1	1	43	3	1	79
7:30 AM	0	0	0	0	2	0	7	0	4	31	0	4	0	67	4	0	119
7:45 AM	1	0	2	0	12	0	4	0	3	55	1	0	3	75	3	0	159
8:00 AM	1	0	0	0	5	0	6	0	2	60	0	0	1	73	3	1	152
8:15 AM	0	0	1	0	3	0	6	0	4	58	0	0	0	94	4	1	171
8:30 AM	0	0	2	1	5	0	6	0	3	59	0	0	2	103	5	1	187
8:45 AM	0	0	0	0	9	0	4	0	1	67	0	0	0	83	10	0	174
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	6	1	43	0	38	0	23	387	1	6	7	583	33	4	1134
APPROACH %'s :	22.22%	0.00%	66.67%	11.11%	53.09%	0.00%	46.91%	0.00%	5.52%	92.81%	0.24%	1.44%	1.12%	92.98%	5.26%	0.64%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	3	1	22	0	22	0	10	244	0	0	3	353	22	3	684
PEAK HR FACTOR :	0.250	0.000	0.375	0.250	0.611	0.000	0.917	0.000	0.625	0.910	0.000	0.000	0.375	0.857	0.550	0.750	0.914
	0.417				0.846				0.934				0.858				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	4	0	13	0	7	115	0	1	1	74	7	0	223
4:15 PM	0	0	1	0	12	0	6	0	5	113	1	0	0	75	3	1	217
4:30 PM	0	0	1	0	10	0	10	0	3	112	1	0	0	66	5	1	209
4:45 PM	0	0	0	0	13	0	14	0	6	122	0	0	0	84	11	0	250
5:00 PM	0	0	1	0	25	0	10	0	10	137	1	0	0	76	10	1	271
5:15 PM	2	0	0	0	14	0	9	0	6	126	2	0	0	77	6	0	242
5:30 PM	0	0	0	0	18	0	13	0	4	149	0	0	0	72	15	0	271
5:45 PM	0	0	1	0	8	0	9	0	5	141	1	1	0	72	8	0	246
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	5	0	104	0	84	0	46	1015	6	2	1	596	65	3	1929
APPROACH %'s :	28.57%	0.00%	71.43%	0.00%	55.32%	0.00%	44.68%	0.00%	4.30%	94.95%	0.56%	0.19%	0.15%	89.62%	9.77%	0.45%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	2	0	1	0	70	0	46	0	26	534	3	0	0	309	42	1	1034
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.700	0.000	0.821	0.000	0.650	0.896	0.375	0.000	0.000	0.920	0.700	0.250	0.954
	0.375				0.829				0.920				0.926				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Valdez St/155 Grand Lake Merritt Tower Dwy & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-003
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Valdez St/155 Grand Lake Merritt Tower Dwy				Valdez St/155 Grand Lake Merritt Tower Dwy				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	6	0	4	0	2	31	0	1	0	42	1	0	87
7:15 AM	0	0	1	0	1	0	1	0	4	21	0	1	1	42	3	1	76
7:30 AM	0	0	0	0	2	0	7	0	4	30	0	4	0	61	4	0	112
7:45 AM	1	0	2	0	12	0	4	0	3	49	1	0	3	70	3	0	148
8:00 AM	1	0	0	0	5	0	6	0	2	53	0	0	1	69	3	1	141
8:15 AM	0	0	1	0	3	0	6	0	4	53	0	0	0	91	4	1	163
8:30 AM	0	0	2	1	5	0	6	0	3	52	0	0	2	96	5	1	173
8:45 AM	0	0	0	0	8	0	4	0	1	63	0	0	0	82	9	0	167
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	6	1	42	0	38	0	23	352	1	6	7	553	32	4	1067
APPROACH %'s :	22.22%	0.00%	66.67%	11.11%	52.50%	0.00%	47.50%	0.00%	6.02%	92.15%	0.26%	1.57%	1.17%	92.79%	5.37%	0.67%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	3	1	21	0	22	0	10	221	0	0	3	338	21	3	644
PEAK HR FACTOR :	0.250	0.000	0.375	0.250	0.656	0.000	0.917	0.000	0.625	0.877	0.000	0.000	0.375	0.880	0.583	0.750	0.931
	0.417				0.896				0.902				0.877				

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
PM	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	3	0	13	0	7	113	0	1	1	71	7	0	217
4:15 PM	0	0	1	0	12	0	6	0	5	105	1	0	0	73	3	1	207
4:30 PM	0	0	1	0	10	0	10	0	3	101	1	0	0	63	5	1	195
4:45 PM	0	0	0	0	13	0	13	0	6	115	0	0	0	80	11	0	238
5:00 PM	0	0	1	0	25	0	10	0	10	134	1	0	0	74	10	1	266
5:15 PM	2	0	0	0	14	0	9	0	6	123	2	0	0	72	6	0	234
5:30 PM	0	0	0	0	18	0	13	0	4	146	0	0	0	68	15	0	264
5:45 PM	0	0	1	0	8	0	9	0	5	139	1	1	0	70	8	0	242
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	5	0	103	0	83	0	46	976	6	2	1	571	65	3	1863
APPROACH %'s :	28.57%	0.00%	71.43%	0.00%	55.38%	0.00%	44.62%	0.00%	4.47%	94.76%	0.58%	0.19%	0.16%	89.22%	10.16%	0.47%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	2	0	1	0	70	0	45	0	26	518	3	0	0	294	42	1	1002
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.700	0.000	0.865	0.000	0.650	0.887	0.375	0.000	0.000	0.919	0.700	0.250	0.942
	0.375				0.821				0.912				0.926				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Valdez St/155 Grand Lake Merritt Tower Dwy & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-003
Date: 11/19/2024

Data - HT

NS/EW Streets:	Valdez St/155 Grand Lake Merritt Tower Dwy				Valdez St/155 Grand Lake Merritt Tower Dwy				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	6	0	0	7
7:45 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	5	0	0	11
8:00 AM	0	0	0	0	0	0	0	0	0	7	0	0	0	4	0	0	11
8:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	0	8
8:30 AM	0	0	0	0	0	0	0	0	0	7	0	0	0	7	0	0	14
8:45 AM	0	0	0	0	1	0	0	0	0	4	0	0	0	1	1	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	0	35	0	0	0	30	1	0	67
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	96.77%	3.23%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	23	0	0	0	15	1	0	40
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.821	0.000	0.000	0.000	0.536	0.250	0.000	0.714
					0.250				0.821				0.571				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	2	0	0	0	3	0	0	6
4:15 PM	0	0	0	0	0	0	0	0	0	8	0	0	0	2	0	0	10
4:30 PM	0	0	0	0	0	0	0	0	0	11	0	0	0	3	0	0	14
4:45 PM	0	0	0	0	0	0	1	0	0	7	0	0	0	4	0	0	12
5:00 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0	0	8
5:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	1	0	0	39	0	0	0	25	0	0	66
APPROACH %'s :					50.00%	0.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	16	0	0	0	15	0	0	32
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.571	0.000	0.000	0.000	0.750	0.000	0.000	0.667
					0.250				0.571				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Valdez St/155 Grand Lake Merritt Tower Dwy & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-003
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Valdez St/155 Grand Lake Merritt Tower Dwy				Valdez St/155 Grand Lake Merritt Tower Dwy				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	1	0	0	1	0	0	1	3	0	0	7
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7
7:45 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	5	0	0	7
8:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7
8:15 AM	1	0	0	0	1	1	0	0	0	2	0	0	0	9	0	0	14
8:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	5	1	0	8
8:45 AM	0	0	0	0	0	0	1	0	0	2	0	0	1	8	0	0	12
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	1	0	2	1	3	0	0	12	0	0	2	43	1	0	66
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%	33.33%	16.67%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	4.35%	93.48%	2.17%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	0	0	1	1	2	0	0	7	0	0	1	27	1	0	41
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.250	0.250	0.500	0.000	0.000	0.875	0.000	0.000	0.250	0.750	0.250	0.000	0.732
	0.250				0.500				0.875				0.806				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	1	1	0	0	0	1	0	0	5	0	0	0	6	0	0	15
4:15 PM	0	2	2	0	0	0	0	0	0	7	0	0	0	4	0	0	15
4:30 PM	0	0	1	0	1	0	0	0	1	7	0	0	1	2	1	0	14
4:45 PM	0	0	0	0	0	0	0	0	0	7	0	0	0	3	1	0	11
5:00 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	5	1	0	10
5:15 PM	0	3	2	0	0	0	1	0	0	5	0	0	0	7	0	0	18
5:30 PM	0	1	0	0	0	0	0	0	0	5	0	0	0	5	1	0	12
5:45 PM	0	2	0	0	1	0	0	0	0	2	0	0	1	6	2	0	14
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	9	6	0	2	0	2	0	1	42	0	0	2	38	6	0	109
APPROACH %'s :	6.25%	56.25%	37.50%	0.00%	50.00%	0.00%	50.00%	0.00%	2.33%	97.67%	0.00%	0.00%	4.35%	82.61%	13.04%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	4	2	0	0	0	1	0	0	21	0	0	0	20	3	0	51
PEAK HR FACTOR :	0.000	0.333	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.750	0.000	0.000	0.000	0.714	0.750	0.000	0.708
	0.300				0.250				0.750				0.821				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Valdez St/155 Grand Lake Merritt Tower Dwy & Grand Ave **Project ID:** 24-080355-003
City: Oakland **Date:** 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Valdez St/155 Grand Lake Merritt Tower Dwy		Valdez St/155 Grand Lake Merritt Tower Dwy		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	2	4	6	0	4	0	11	27
7:15 AM	1	3	4	9	1	4	0	4	26
7:30 AM	2	8	6	17	1	4	1	10	49
7:45 AM	3	11	7	7	3	7	0	4	42
8:00 AM	3	13	13	11	4	4	0	10	58
8:15 AM	7	15	13	13	8	8	2	13	79
8:30 AM	6	7	9	18	6	4	0	7	57
8:45 AM	3	1	9	10	5	9	1	6	44
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	25	60	65	91	28	44	4	65	382
APPROACH %'s :	29.41%	70.59%	41.67%	58.33%	38.89%	61.11%	5.80%	94.20%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	19	36	44	52	23	25	3	36	238
PEAK HR FACTOR :	0.679	0.600	0.846	0.722	0.719	0.694	0.375	0.692	0.753
	0.625		0.889		0.750		0.650		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	5	9	22	9	6	2	4	5	62
4:15 PM	6	2	12	3	4	1	4	1	33
4:30 PM	5	5	24	11	4	4	4	4	61
4:45 PM	6	7	6	11	5	3	9	2	49
5:00 PM	4	5	6	9	5	3	5	1	38
5:15 PM	5	12	10	6	8	5	5	3	54
5:30 PM	6	11	5	3	5	3	11	0	44
5:45 PM	4	4	7	6	4	0	5	1	31
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	41	55	92	58	41	21	47	17	372
APPROACH %'s :	42.71%	57.29%	61.33%	38.67%	66.13%	33.87%	73.44%	26.56%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	21	35	27	29	23	14	30	6	185
PEAK HR FACTOR :	0.875	0.729	0.675	0.659	0.719	0.700	0.682	0.500	0.856
	0.824		0.824		0.712		0.818		

Prepared by National Data & Surveying Services

Valdez St/155 Grand Lake Merritt Tower Dwy & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-003
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND — Valdez St/155 Grand Lake Merritt Tower Dwy

	Left	Thru	Right	U-Turn	
AM	22	0	22	0	32 AM
NOON	0	0	0	0	0 NOON
PM	46	0	70	0	68 PM

EASTBOUND — Grand Ave

	AM	NOON	PM
Thru	376	0	357
U-Turn	0	0	0
Left	10	0	26
Right	244	0	534
Peds	0	0	3

WESTBOUND — Grand Ave

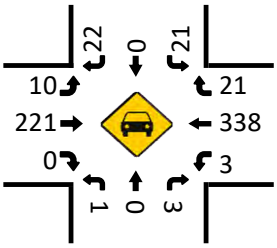
	PM	NOON	AM
U-Turn	42	0	22
Left	309	0	353
Right	0	0	3
Thru	1	0	3
Peds	606	0	272

NORTHBOUND — Valdez St/155 Grand Lake Merritt Tower Dwy

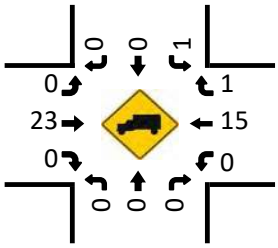
	Left	Thru	Right	U-Turn	
PM	3	0	2	0	1 PM
NOON	0	0	0	0	0 NOON
AM	4	1	1	0	3 AM

CONTROL			
Signalized			
TEV	684 AM	0 NOON	1034 PM
PHF	0.91		0.95

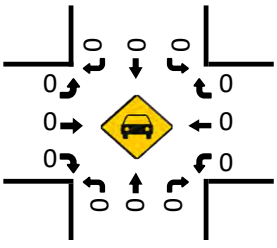
Cars (AM)



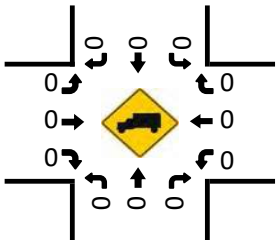
HT (AM)



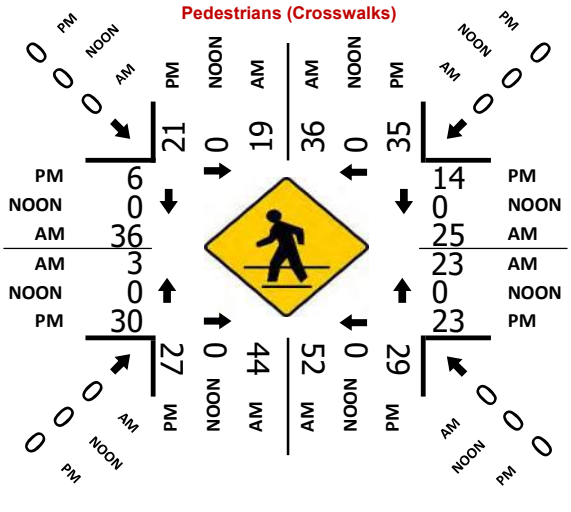
Cars (NOON)



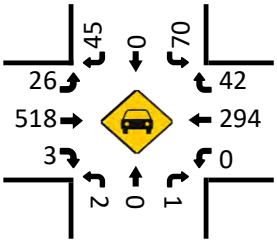
HT (NOON)



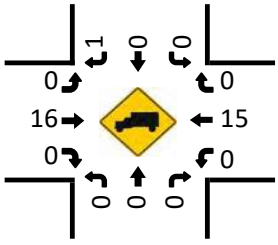
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Harrison St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-004
Date: 11/19/2024

Data - Total

NS/EW Streets:	Harrison St				Harrison St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	0	2	0	0	2	2	0	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	33	19	0	0	51	10	0	8	25	8	0	19	41	2	0	220
7:15 AM	5	46	32	0	1	71	7	0	9	15	4	0	39	39	2	0	270
7:30 AM	9	72	34	0	0	67	18	0	3	22	5	0	41	60	5	0	336
7:45 AM	5	73	44	2	0	108	8	0	7	35	17	0	52	66	2	0	419
8:00 AM	9	103	54	0	3	120	12	0	8	32	12	0	63	61	7	0	484
8:15 AM	10	132	69	0	2	129	16	0	10	37	14	0	75	72	13	0	579
8:30 AM	15	88	66	1	3	129	21	1	6	31	16	0	56	78	11	1	523
8:45 AM	22	82	52	0	3	133	13	1	12	36	11	0	64	65	4	0	498
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	79	629	370	3	12	808	105	2	63	233	87	0	409	482	46	1	3329
APPROACH %'s :	7.31%	58.19%	34.23%	0.28%	1.29%	87.16%	11.33%	0.22%	16.45%	60.84%	22.72%	0.00%	43.60%	51.39%	4.90%	0.11%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	56	405	241	1	11	511	62	2	36	136	53	0	258	276	35	1	2084
PEAK HR FACTOR :	0.636	0.767	0.873	0.250	0.917	0.961	0.738	0.500	0.750	0.919	0.828	0.000	0.860	0.885	0.673	0.250	0.900
		0.833				0.951				0.922				0.891			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	0	2	0	0	2	2	0	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	6	133	114	0	3	65	18	2	28	76	19	0	42	57	4	0	567
4:15 PM	2	127	108	0	4	87	10	0	13	91	24	0	35	57	8	2	568
4:30 PM	1	160	121	0	5	96	14	1	22	94	20	0	32	49	5	0	620
4:45 PM	3	149	144	0	2	90	14	0	28	100	18	0	34	76	5	0	663
5:00 PM	4	183	149	0	1	84	15	0	24	133	21	0	31	60	5	0	710
5:15 PM	9	171	132	0	5	91	13	0	19	114	10	0	27	66	6	0	663
5:30 PM	7	150	106	0	5	77	13	0	18	142	21	0	39	59	7	1	645
5:45 PM	7	135	95	0	8	90	18	1	27	114	22	0	35	55	6	1	614
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	39	1208	969	0	33	680	115	4	179	864	155	0	275	479	46	4	5050
APPROACH %'s :	1.76%	54.51%	43.73%	0.00%	3.97%	81.73%	13.82%	0.48%	14.94%	72.12%	12.94%	0.00%	34.20%	59.58%	5.72%	0.50%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	23	653	531	0	13	342	55	0	89	489	70	0	131	261	23	1	2681
PEAK HR FACTOR :	0.639	0.892	0.891	0.000	0.650	0.940	0.917	0.000	0.795	0.861	0.833	0.000	0.840	0.859	0.821	0.250	0.944
		0.898				0.940				0.895				0.904			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Harrison St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-004
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Harrison St				Harrison St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	0	2	0	0	2	2	0	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	33	18	0	0	51	9	0	7	23	8	0	19	39	2	0	213
7:15 AM	5	46	32	0	1	71	6	0	8	13	4	0	38	38	1	0	263
7:30 AM	9	72	33	0	0	66	17	0	2	22	5	0	39	54	5	0	324
7:45 AM	5	72	43	2	0	107	8	0	5	32	17	0	52	64	2	0	409
8:00 AM	8	102	53	0	3	120	10	0	7	29	10	0	62	60	7	0	471
8:15 AM	10	131	67	0	2	128	15	0	9	35	12	0	72	71	13	0	565
8:30 AM	15	86	63	1	3	129	19	1	5	29	14	0	55	74	11	1	506
8:45 AM	21	81	52	0	2	133	12	1	9	34	11	0	63	63	4	0	486
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	77	623	361	3	11	805	96	2	52	217	81	0	400	463	45	1	3237
APPROACH %'s :	7.24%	58.55%	33.93%	0.28%	1.20%	88.07%	10.50%	0.22%	14.86%	62.00%	23.14%	0.00%	44.00%	50.94%	4.95%	0.11%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	54	400	235	1	10	510	56	2	30	127	47	0	252	268	35	1	2028
PEAK HR FACTOR :	0.643	0.763	0.877	0.250	0.833	0.959	0.737	0.500	0.833	0.907	0.839	0.000	0.875	0.905	0.673	0.250	0.897
	0.829				0.951				0.911				0.891				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	0	2	0	0	2	2	0	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	6	131	114	0	3	65	17	2	27	75	19	0	42	55	4	0	560
4:15 PM	2	126	107	0	4	85	10	0	12	89	20	0	35	56	8	2	556
4:30 PM	1	160	121	0	5	96	14	1	21	92	13	0	32	46	5	0	607
4:45 PM	3	149	144	0	2	90	13	0	27	97	14	0	34	73	5	0	651
5:00 PM	4	183	149	0	1	83	14	0	23	131	20	0	30	58	5	0	701
5:15 PM	9	171	129	0	5	91	12	0	18	113	10	0	27	63	6	0	654
5:30 PM	7	146	106	0	5	76	12	0	18	139	21	0	39	56	6	1	632
5:45 PM	7	135	95	0	8	90	17	1	26	112	22	0	35	54	6	1	609
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	39	1201	965	0	33	676	109	4	172	848	139	0	274	461	45	4	4970
APPROACH %'s :	1.77%	54.47%	43.76%	0.00%	4.01%	82.24%	13.26%	0.49%	14.84%	73.17%	11.99%	0.00%	34.95%	58.80%	5.74%	0.51%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	23	649	528	0	13	340	51	0	86	480	65	0	130	250	22	1	2638
PEAK HR FACTOR :	0.639	0.887	0.886	0.000	0.650	0.934	0.911	0.000	0.796	0.863	0.774	0.000	0.833	0.856	0.917	0.250	0.941
	0.893				0.935				0.886				0.900				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Harrison St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-004
Date: 11/19/2024

Data - HT

NS/EW Streets:	Harrison St				Harrison St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	0	2	0	0	2	2	0	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	1	0	1	2	0	0	0	2	0	0	7
7:15 AM	0	0	0	0	0	0	1	0	1	2	0	0	1	1	1	0	7
7:30 AM	0	0	1	0	0	1	1	0	1	0	0	0	2	6	0	0	12
7:45 AM	0	1	1	0	0	1	0	0	2	3	0	0	0	2	0	0	10
8:00 AM	1	1	1	0	0	0	2	0	1	3	2	0	1	1	0	0	13
8:15 AM	0	1	2	0	0	1	1	0	1	2	2	0	3	1	0	0	14
8:30 AM	0	2	3	0	0	0	2	0	1	2	2	0	1	4	0	0	17
8:45 AM	1	1	0	0	1	0	1	0	3	2	0	0	1	2	0	0	12
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	6	9	0	1	3	9	0	11	16	6	0	9	19	1	0	92
APPROACH %'s :	11.76%	35.29%	52.94%	0.00%	7.69%	23.08%	69.23%	0.00%	33.33%	48.48%	18.18%	0.00%	31.03%	65.52%	3.45%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	2	5	6	0	1	1	6	0	6	9	6	0	6	8	0	0	56
PEAK HR FACTOR :	0.500	0.625	0.500	0.000	0.250	0.250	0.750	0.000	0.500	0.750	0.750	0.000	0.500	0.500	0.000	0.000	0.824
	0.650				1.000				0.875				0.700				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	0	2	0	0	2	2	0	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	2	0	0	0	0	1	0	1	1	0	0	0	2	0	0	7
4:15 PM	0	1	1	0	0	2	0	0	1	2	4	0	0	1	0	0	12
4:30 PM	0	0	0	0	0	0	0	0	1	2	7	0	0	3	0	0	13
4:45 PM	0	0	0	0	0	0	1	0	1	3	4	0	0	3	0	0	12
5:00 PM	0	0	0	0	0	1	1	0	1	2	1	0	1	2	0	0	9
5:15 PM	0	0	3	0	0	0	1	0	1	1	0	0	0	3	0	0	9
5:30 PM	0	4	0	0	0	1	1	0	0	3	0	0	0	3	1	0	13
5:45 PM	0	0	0	0	0	0	1	0	1	2	0	0	0	1	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	7	4	0	0	4	6	0	7	16	16	0	1	18	1	0	80
APPROACH %'s :	0.00%	63.64%	36.36%	0.00%	0.00%	40.00%	60.00%	0.00%	17.95%	41.03%	41.03%	0.00%	5.00%	90.00%	5.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	4	3	0	0	2	4	0	3	9	5	0	1	11	1	0	43
PEAK HR FACTOR :	0.000	0.250	0.250	0.000	0.000	0.500	1.000	0.000	0.750	0.750	0.313	0.000	0.250	0.917	0.250	0.000	0.827
	0.438				0.750				0.531				0.813				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Harrison St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-004
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Harrison St				Harrison St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	0	2	0	0	2	2	0	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	2	2	0	0	2	1	0	0	1	0	0	4	2	1	0	16
7:15 AM	1	2	2	0	0	3	0	0	0	0	0	0	3	2	0	0	13
7:30 AM	1	1	3	0	1	4	0	0	0	3	0	0	8	8	0	0	29
7:45 AM	0	1	4	0	1	6	1	0	0	0	1	0	4	5	0	0	23
8:00 AM	0	6	6	0	1	5	4	0	0	2	0	0	16	3	1	0	44
8:15 AM	1	1	5	0	0	13	0	0	0	2	1	0	8	9	0	0	40
8:30 AM	2	4	3	0	0	7	0	0	0	1	0	0	14	4	0	0	35
8:45 AM	1	1	5	0	2	12	1	0	0	1	0	0	5	8	0	0	36
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	18	30	0	5	52	7	0	0	10	2	0	62	41	2	0	236
APPROACH %'s :	12.73%	32.73%	54.55%	0.00%	7.81%	81.25%	10.94%	0.00%	0.00%	83.33%	16.67%	0.00%	59.05%	39.05%	1.90%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	4	12	19	0	3	37	5	0	0	6	1	0	43	24	1	0	155
PEAK HR FACTOR :	0.500	0.500	0.792	0.000	0.375	0.712	0.313	0.000	0.000	0.750	0.250	0.000	0.672	0.667	0.250	0.000	0.881
			0.729				0.750				0.583				0.850		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	0	2	0	0	2	2	0	0	2	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	4	8	0	1	1	2	0	0	7	0	0	1	4	0	0	28
4:15 PM	0	6	5	0	0	3	1	0	0	9	0	0	1	4	0	0	29
4:30 PM	0	7	12	0	0	4	0	0	0	7	0	0	4	3	1	0	38
4:45 PM	1	9	9	0	0	0	0	0	1	6	0	0	3	3	0	0	32
5:00 PM	1	10	15	0	0	3	0	0	0	4	0	0	3	4	0	0	40
5:15 PM	1	9	14	0	1	3	0	0	0	6	0	0	1	3	0	0	38
5:30 PM	1	5	8	0	1	2	2	0	0	4	3	0	2	6	0	0	34
5:45 PM	1	6	7	0	1	0	1	0	1	3	0	0	5	3	0	0	28
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	56	78	0	4	16	6	0	2	46	3	0	20	30	1	0	267
APPROACH %'s :	3.60%	40.29%	56.12%	0.00%	15.38%	61.54%	23.08%	0.00%	3.92%	90.20%	5.88%	0.00%	39.22%	58.82%	1.96%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	4	33	46	0	2	8	2	0	1	20	3	0	9	16	0	0	144
PEAK HR FACTOR :	1.000	0.825	0.767	0.000	0.500	0.667	0.250	0.000	0.250	0.833	0.250	0.000	0.750	0.667	0.000	0.000	0.900
			0.798				0.600				0.857				0.781		

National Data & Surveying Services

Intersection Turning Movement Count

Location: Harrison St & Grand Ave
City: Oakland

Project ID: 24-080355-004
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Harrison St		Harrison St		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	5	1	5	1	1	1	6	20
7:15 AM	0	13	3	10	1	3	0	13	43
7:30 AM	2	8	4	11	7	10	1	15	58
7:45 AM	1	20	1	8	4	9	3	14	60
8:00 AM	1	27	8	10	4	11	6	9	76
8:15 AM	6	15	4	16	8	10	6	14	79
8:30 AM	3	14	5	22	9	14	3	15	85
8:45 AM	3	11	9	17	1	7	5	13	66
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	16	113	35	99	35	65	25	99	487
APPROACH %'s :	12.40%	87.60%	26.12%	73.88%	35.00%	65.00%	20.16%	79.84%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	13	67	26	65	22	42	20	51	306
PEAK HR FACTOR :	0.542	0.620	0.722	0.739	0.611	0.750	0.833	0.850	0.900
	0.714		0.843		0.696		0.888		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	10	4	13	10	13	17	5	8	80
4:15 PM	10	4	8	6	6	11	8	8	61
4:30 PM	8	7	11	11	17	19	5	1	79
4:45 PM	5	11	12	23	12	13	5	6	87
5:00 PM	13	7	8	10	15	11	15	6	85
5:15 PM	16	14	15	11	15	11	10	10	102
5:30 PM	5	14	10	5	13	6	7	5	65
5:45 PM	8	5	7	8	17	8	9	5	67
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	75	66	84	84	108	96	64	49	626
APPROACH %'s :	53.19%	46.81%	50.00%	50.00%	52.94%	47.06%	56.64%	43.36%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	39	46	45	49	55	41	37	27	339
PEAK HR FACTOR :	0.609	0.821	0.750	0.533	0.917	0.788	0.617	0.675	0.831
	0.708		0.671		0.923		0.762		

Prepared by National Data & Surveying Services

Harrison St & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-004
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	2084	0	2681
PHF	0.90		0.94

SOUTHBOUND (Harrison St)

	Left	Thru	Thru	Right		
AM	62	511	11	2	478	AM
NOON	0	0	0	0	0	NOON
PM	55	342	13	0	765	PM
	0	2	0	0		

EASTBOUND (Grand Ave)

AM	NOON	PM	
394	0	339	
0	0	0	0
36	0	89	2
136	0	489	2
53	0	70	0

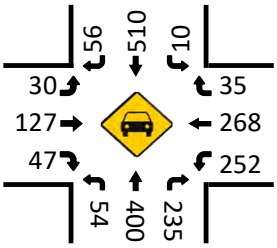
WESTBOUND (Grand Ave)

	PM	NOON	AM
0	23	0	35
2	261	0	276
2	131	0	258
0	1	0	1
	1034	0	389

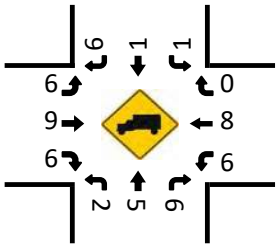
NORTHBOUND (Harrison St)

	Left	Thru	Thru	Right		
PM	543	0	23	653	531	PM
NOON	0	0	0	0	0	NOON
AM	823	1	56	405	241	AM
		0	0	2	1	

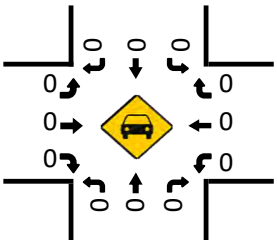
Cars (AM)



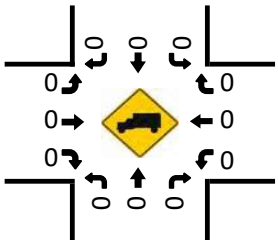
HT (AM)



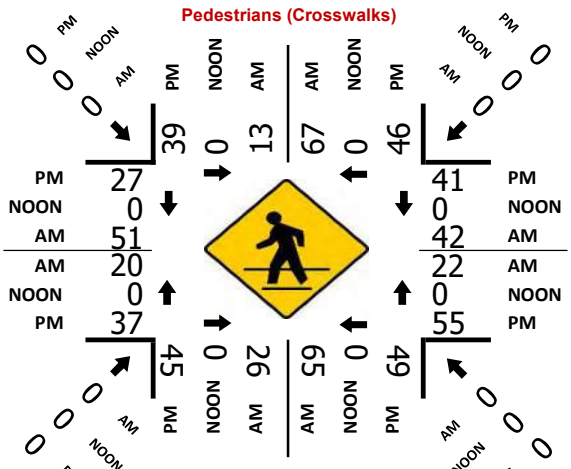
Cars (NOON)



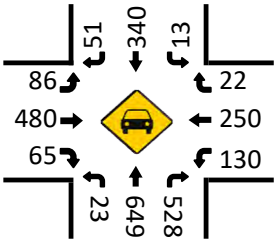
HT (NOON)



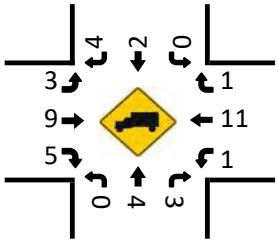
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Bay Pl & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-005
Date: 11/19/2024

Data - Total

NS/EW Streets:	Bay Pl				Bay Pl				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0	0.5	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	11	0	5	0	9	38	0	0	0	53	20	0	136
7:15 AM	0	0	0	0	9	0	8	0	8	40	0	0	0	72	26	0	163
7:30 AM	0	0	0	0	7	0	8	0	6	50	0	0	0	100	30	0	201
7:45 AM	0	0	0	0	13	0	10	1	12	63	0	1	0	106	34	0	240
8:00 AM	0	0	0	0	12	0	20	0	11	82	0	0	0	122	73	0	320
8:15 AM	0	0	0	0	26	0	15	0	17	92	0	0	0	144	83	0	377
8:30 AM	0	0	0	0	37	0	14	0	15	83	0	0	0	121	62	0	332
8:45 AM	0	0	0	0	22	0	14	0	14	78	0	0	0	130	50	1	309
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	137	0	94	1	92	526	0	1	0	848	378	1	2078
APPROACH %'s :					59.05%	0.00%	40.52%	0.43%	14.86%	84.98%	0.00%	0.16%	0.00%	69.11%	30.81%	0.08%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	97	0	63	0	57	335	0	0	0	517	268	1	1338
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.655	0.000	0.788	0.000	0.838	0.910	0.000	0.000	0.000	0.898	0.807	0.250	0.887
					0.784				0.899				0.866				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0	0.5	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	46	0	9	0	20	171	0	0	0	89	54	0	389
4:15 PM	0	0	0	0	53	0	15	0	23	184	0	0	0	92	63	0	430
4:30 PM	0	0	0	0	68	0	13	0	27	193	0	0	0	71	49	1	422
4:45 PM	0	0	0	0	58	0	14	0	23	219	0	1	0	93	40	0	448
5:00 PM	0	0	0	0	66	0	11	0	30	243	0	1	0	83	44	0	478
5:15 PM	0	0	0	0	67	0	13	0	34	224	0	0	0	95	61	1	495
5:30 PM	0	0	0	0	61	0	16	0	33	226	0	0	0	84	32	0	452
5:45 PM	0	0	0	0	68	0	14	0	28	187	0	0	0	88	29	0	414
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	487	0	105	0	218	1647	0	2	0	695	372	2	3528
APPROACH %'s :					82.26%	0.00%	17.74%	0.00%	11.68%	88.22%	0.00%	0.11%	0.00%	65.01%	34.80%	0.19%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	252	0	54	0	120	912	0	2	0	355	177	1	1873
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.940	0.000	0.844	0.000	0.882	0.938	0.000	0.500	0.000	0.934	0.725	0.250	0.946
					0.956				0.943				0.849				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bay Pl & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-005
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Bay Pl				Bay Pl				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0	0.5	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	11	0	5	0	9	35	0	0	0	51	20	0	131
7:15 AM	0	0	0	0	8	0	8	0	8	38	0	0	0	69	26	0	157
7:30 AM	0	0	0	0	7	0	8	0	6	49	0	0	0	92	28	0	190
7:45 AM	0	0	0	0	12	0	9	1	12	59	0	1	0	104	34	0	232
8:00 AM	0	0	0	0	12	0	19	0	11	77	0	0	0	121	73	0	313
8:15 AM	0	0	0	0	26	0	13	0	17	87	0	0	0	138	83	0	364
8:30 AM	0	0	0	0	34	0	14	0	15	81	0	0	0	117	61	0	322
8:45 AM	0	0	0	0	20	0	14	0	14	72	0	0	0	127	48	1	296
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	130	0	90	1	92	498	0	1	0	819	373	1	2005
APPROACH %'s :					58.82%	0.00%	40.72%	0.45%	15.57%	84.26%	0.00%	0.17%	0.00%	68.65%	31.27%	0.08%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	92	0	60	0	57	317	0	0	0	503	265	1	1295
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.676	0.000	0.789	0.000	0.838	0.911	0.000	0.000	0.000	0.911	0.798	0.250	0.889
					0.792				0.899				0.870				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0	0.5	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	46	0	9	0	20	170	0	0	0	87	54	0	386
4:15 PM	0	0	0	0	53	0	15	0	23	181	0	0	0	90	63	0	425
4:30 PM	0	0	0	0	66	0	13	0	27	191	0	0	0	68	49	1	415
4:45 PM	0	0	0	0	58	0	14	0	23	216	0	1	0	91	40	0	443
5:00 PM	0	0	0	0	66	0	11	0	30	241	0	1	0	80	44	0	473
5:15 PM	0	0	0	0	66	0	12	0	33	221	0	0	0	92	61	1	486
5:30 PM	0	0	0	0	61	0	16	0	33	223	0	0	0	81	32	0	446
5:45 PM	0	0	0	0	68	0	14	0	28	185	0	0	0	87	29	0	411
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	484	0	104	0	217	1628	0	2	0	676	372	2	3485
APPROACH %'s :					82.31%	0.00%	17.69%	0.00%	11.75%	88.14%	0.00%	0.11%	0.00%	64.38%	35.43%	0.19%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	251	0	53	0	119	901	0	2	0	344	177	1	1848
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.951	0.000	0.828	0.000	0.902	0.935	0.000	0.500	0.000	0.935	0.725	0.250	0.951
					0.974				0.939				0.847				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bay Pl & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-005
Date: 11/19/2024

Data - HT

NS/EW Streets:	Bay Pl				Bay Pl				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0	0.5	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
7:15 AM	0	0	0	0	1	0	0	0	0	2	0	0	0	3	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	8	2	0	11
7:45 AM	0	0	0	0	1	0	1	0	0	4	0	0	0	2	0	0	8
8:00 AM	0	0	0	0	0	0	1	0	0	5	0	0	0	1	0	0	7
8:15 AM	0	0	0	0	0	0	2	0	0	5	0	0	0	6	0	0	13
8:30 AM	0	0	0	0	3	0	0	0	0	2	0	0	0	4	1	0	10
8:45 AM	0	0	0	0	2	0	0	0	0	6	0	0	0	3	2	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	7	0	4	0	0	28	0	0	0	29	5	0	73
APPROACH %'s :					63.64%	0.00%	36.36%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	85.29%	14.71%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	5	0	3	0	0	18	0	0	0	14	3	0	43
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.417	0.000	0.375	0.000	0.000	0.750	0.000	0.000	0.000	0.583	0.375	0.000	0.827
					0.667				0.750				0.708				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0	0.5	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
4:30 PM	0	0	0	0	2	0	0	0	0	2	0	0	0	3	0	0	7
4:45 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
5:15 PM	0	0	0	0	1	0	1	0	1	3	0	0	0	3	0	0	9
5:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	3	0	1	0	1	19	0	0	0	19	0	0	43
APPROACH %'s :					75.00%	0.00%	25.00%	0.00%	5.00%	95.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	1	0	1	11	0	0	0	11	0	0	25
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.917	0.000	0.000	0.000	0.917	0.000	0.000	0.694
					0.250				0.750				0.917				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bay Pl & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-005
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Bay Pl				Bay Pl				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0	0.5	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	3	0	0	0	7	4	0	15
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
7:30 AM	0	0	0	0	1	0	0	0	0	7	0	0	0	13	2	0	23
7:45 AM	0	0	0	0	1	0	3	0	0	4	0	0	0	7	4	0	19
8:00 AM	0	0	0	0	2	0	5	0	0	8	0	0	0	18	0	0	33
8:15 AM	0	0	0	0	1	0	1	0	3	6	0	0	0	14	1	0	26
8:30 AM	0	0	0	0	0	0	1	0	0	4	0	0	0	17	7	0	29
8:45 AM	0	0	0	0	0	0	1	0	1	5	0	0	0	11	2	0	20
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	6	0	11	0	4	39	0	0	0	91	20	0	171
APPROACH %'s :					35.29%	0.00%	64.71%	0.00%	9.30%	90.70%	0.00%	0.00%	0.00%	81.98%	18.02%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	3	0	8	0	4	23	0	0	0	60	10	0	108
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.375	0.000	0.400	0.000	0.333	0.719	0.000	0.000	0.000	0.833	0.357	0.000	0.818
					0.393				0.750				0.729				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1.5	0	0.5	0	1	2	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	1	0	1	0	0	16	0	0	0	3	2	0	23
4:15 PM	0	0	0	0	6	0	0	0	0	13	0	0	0	5	0	0	24
4:30 PM	0	0	0	0	7	0	0	0	1	17	0	0	0	7	1	0	33
4:45 PM	0	0	0	0	3	0	2	0	0	14	0	0	0	4	2	0	25
5:00 PM	0	0	0	0	3	0	0	0	1	19	0	0	0	6	1	0	30
5:15 PM	0	0	0	0	0	0	0	0	2	20	0	0	0	5	3	0	30
5:30 PM	0	0	0	0	4	0	0	0	0	12	0	0	0	7	5	0	28
5:45 PM	0	0	0	0	8	0	0	0	0	12	0	0	0	6	2	0	28
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	32	0	3	0	4	123	0	0	0	43	16	0	221
APPROACH %'s :					91.43%	0.00%	8.57%	0.00%	3.15%	96.85%	0.00%	0.00%	0.00%	72.88%	27.12%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	10	0	2	0	3	65	0	0	0	22	11	0	113
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.625	0.000	0.250	0.000	0.375	0.813	0.000	0.000	0.000	0.786	0.550	0.000	0.942
					0.600				0.773				0.688				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bay Pl & Grand Ave
City: Oakland

Project ID: 24-080355-005
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Bay Pl		Bay Pl		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	2	4	0	0	0	0	3	2	11
7:15 AM	1	6	0	0	0	0	5	12	24
7:30 AM	1	7	0	0	0	0	4	11	23
7:45 AM	1	9	0	0	0	0	3	6	19
8:00 AM	0	3	0	0	0	0	5	6	14
8:15 AM	3	12	0	0	0	0	3	12	30
8:30 AM	4	9	0	0	0	0	6	5	24
8:45 AM	0	6	0	0	0	0	4	4	14
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	12	56	0	0	0	0	33	58	159
APPROACH %'s :	17.65%	82.35%					36.26%	63.74%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	7	30	0	0	0	0	18	27	82
PEAK HR FACTOR :	0.438	0.625					0.750	0.563	0.683
	0.617						0.750		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	6	3	0	0	0	0	6	11	26
4:15 PM	3	7	0	0	0	1	8	9	28
4:30 PM	4	6	0	0	0	0	6	10	26
4:45 PM	5	4	0	0	0	0	15	4	28
5:00 PM	6	5	0	0	0	0	12	6	29
5:15 PM	4	9	0	0	0	0	12	4	29
5:30 PM	6	5	0	0	0	0	9	8	28
5:45 PM	5	5	0	0	0	0	15	1	26
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	39	44	0	0	0	1	83	53	220
APPROACH %'s :	46.99%	53.01%			0.00%	100.00%	61.03%	38.97%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	21	23	0	0	0	0	48	22	114
PEAK HR FACTOR :	0.875	0.639					0.800	0.688	0.983
	0.846						0.921		

Prepared by National Data & Surveying Services

Bay Pl & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-005
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Bay Pl)

AM	63	0	97	0	325	AM
NOON	0	0	0	0	0	NOON
PM	54	0	252	0	297	PM
	0.5	0	1.5	0		

EASTBOUND (Grand Ave)

AM	NOON	PM	
580	0	411	
0	0	2	0
57	0	120	1
335	0	912	2
0	0	0	0
AM	NOON	PM	

WESTBOUND (Grand Ave)

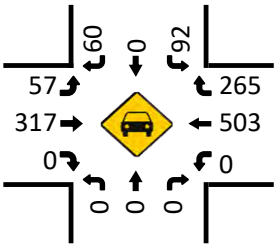
PM	NOON	AM	
177	0	268	1
355	0	517	2
0	0	0	0
1	0	1	0
1165	0	433	
PM	NOON	AM	

NORTHBOUND (Bay Pl)

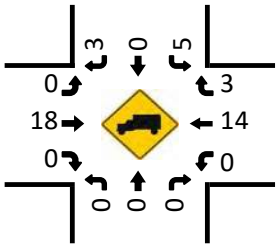
	0	0	0	0		
PM	0	0	0	0	PM	
NOON	0	0	0	0	NOON	
AM	0	0	0	0	AM	

CONTROL			
Signalized			
TEV	1338 AM	0 NOON	1873 PM
PHF	0.89		0.95

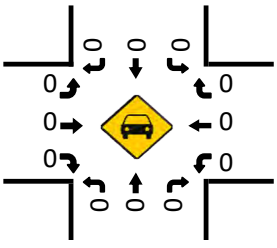
Cars (AM)



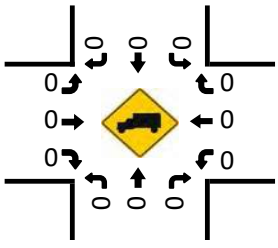
HT (AM)



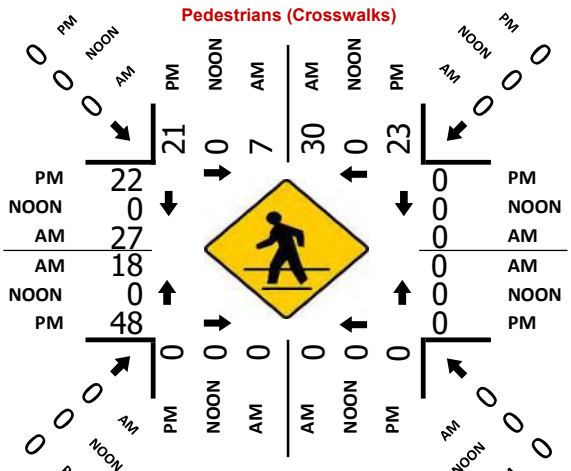
Cars (NOON)



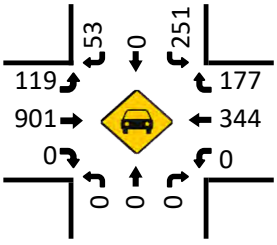
HT (NOON)



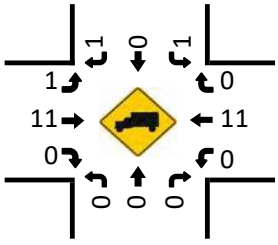
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Park View Terrace/Bellevue Ave W & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-006
Date: 11/19/2024

Data - Total

NS/EW Streets:	Park View Terrace/Bellevue Ave W				Park View Terrace/Bellevue Ave W				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	1	0	0	43	3	0	6	71	1	0	126
7:15 AM	0	0	0	0	1	0	10	0	2	47	3	0	2	91	3	0	159
7:30 AM	0	0	0	0	3	0	10	0	1	50	3	0	2	121	1	0	191
7:45 AM	0	0	0	0	2	0	5	0	1	71	6	0	5	133	7	0	230
8:00 AM	0	0	0	0	5	0	14	0	4	85	5	0	1	179	4	0	297
8:15 AM	0	0	0	0	10	0	17	0	3	109	3	0	1	211	5	3	362
8:30 AM	0	0	0	0	11	0	13	0	5	107	4	0	1	168	2	5	316
8:45 AM	0	0	0	0	4	1	4	0	0	89	4	0	5	177	2	0	286
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	37	1	74	0	16	601	31	0	23	1151	25	8	1967
APPROACH %'s :					33.04%	0.89%	66.07%	0.00%	2.47%	92.75%	4.78%	0.00%	1.91%	95.36%	2.07%	0.66%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	30	1	48	0	12	390	16	0	8	735	13	8	1261
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.682	0.250	0.706	0.000	0.600	0.894	0.800	0.000	0.400	0.871	0.650	0.400	0.871
					0.731				0.901				0.868				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	2	0	5	0	6	195	11	0	6	131	3	0	359
4:15 PM	0	0	0	0	7	0	7	0	4	227	11	0	1	149	1	0	407
4:30 PM	0	0	0	0	7	0	5	0	3	242	10	1	8	113	1	0	390
4:45 PM	0	0	0	0	5	0	8	0	3	262	8	1	9	122	3	0	421
5:00 PM	0	0	0	0	8	3	7	0	2	288	11	3	5	119	3	0	449
5:15 PM	0	0	0	0	6	0	12	0	5	285	7	0	6	138	3	0	462
5:30 PM	0	0	0	0	1	2	4	0	3	271	3	1	2	112	4	1	404
5:45 PM	0	0	0	0	1	0	1	0	1	252	4	1	3	116	2	1	382
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	37	5	49	0	27	2022	65	7	40	1000	20	2	3274
APPROACH %'s :					40.66%	5.49%	53.85%	0.00%	1.27%	95.33%	3.06%	0.33%	3.77%	94.16%	1.88%	0.19%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	20	5	31	0	13	1106	29	5	22	491	13	1	1736
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.625	0.417	0.646	0.000	0.650	0.960	0.659	0.417	0.611	0.889	0.813	0.250	0.939
					0.778				0.948				0.896				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Park View Terrace/Bellevue Ave W & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-006
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Park View Terrace/Bellevue Ave W				Park View Terrace/Bellevue Ave W				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	1	0	0	40	3	0	6	69	1	0	121
7:15 AM	0	0	0	0	1	0	10	0	1	45	3	0	2	88	3	0	153
7:30 AM	0	0	0	0	3	0	10	0	1	49	3	0	2	111	1	0	180
7:45 AM	0	0	0	0	2	0	5	0	1	68	4	0	5	131	7	0	223
8:00 AM	0	0	0	0	5	0	14	0	3	82	4	0	1	178	3	0	290
8:15 AM	0	0	0	0	9	0	17	0	3	105	2	0	1	205	5	3	350
8:30 AM	0	0	0	0	11	0	13	0	5	104	2	0	0	163	2	5	305
8:45 AM	0	0	0	0	4	1	4	0	0	83	2	0	5	172	2	0	273
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	36	1	74	0	14	576	23	0	22	1117	24	8	1895
APPROACH %'s :					32.43%	0.90%	66.67%	0.00%	2.28%	93.96%	3.75%	0.00%	1.88%	95.39%	2.05%	0.68%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	29	1	48	0	11	374	10	0	7	718	12	8	1218
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.659	0.250	0.706	0.000	0.550	0.890	0.625	0.000	0.350	0.876	0.600	0.400	0.870
					0.750				0.890				0.870				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	2	0	5	0	6	194	11	0	6	129	3	0	356
4:15 PM	0	0	0	0	7	0	7	0	4	224	11	0	1	147	1	0	402
4:30 PM	0	0	0	0	7	0	5	0	3	238	10	1	7	110	1	0	382
4:45 PM	0	0	0	0	5	0	8	0	3	259	8	1	9	120	3	0	416
5:00 PM	0	0	0	0	8	3	7	0	2	286	11	3	5	116	3	0	444
5:15 PM	0	0	0	0	6	0	12	0	5	281	7	0	6	135	3	0	455
5:30 PM	0	0	0	0	1	2	4	0	3	268	3	1	2	109	4	1	398
5:45 PM	0	0	0	0	1	0	1	0	1	250	4	1	3	115	2	1	379
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	37	5	49	0	27	2000	65	7	39	981	20	2	3232
APPROACH %'s :					40.66%	5.49%	53.85%	0.00%	1.29%	95.28%	3.10%	0.33%	3.74%	94.15%	1.92%	0.19%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	20	5	31	0	13	1094	29	5	22	480	13	1	1713
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.625	0.417	0.646	0.000	0.650	0.956	0.659	0.417	0.611	0.889	0.813	0.250	0.941
					0.778				0.945				0.896				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Park View Terrace/Bellevue Ave W & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-006
Date: 11/19/2024

Data - HT

NS/EW Streets:	Park View Terrace/Bellevue Ave W				Park View Terrace/Bellevue Ave W				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
7:15 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	10	0	0	11
7:45 AM	0	0	0	0	0	0	0	0	0	3	2	0	0	2	0	0	7
8:00 AM	0	0	0	0	0	0	0	0	1	3	1	0	0	1	1	0	7
8:15 AM	0	0	0	0	1	0	0	0	0	4	1	0	0	6	0	0	12
8:30 AM	0	0	0	0	0	0	0	0	0	3	2	0	1	5	0	0	11
8:45 AM	0	0	0	0	0	0	0	0	0	6	2	0	0	5	0	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	2	25	8	0	1	34	1	0	72
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	5.71%	71.43%	22.86%	0.00%	2.78%	94.44%	2.78%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	1	16	6	0	1	17	1	0	43
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.667	0.750	0.000	0.250	0.708	0.250	0.000	0.827
					0.250				0.719				0.792				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
4:30 PM	0	0	0	0	0	0	0	0	0	4	0	0	1	3	0	0	8
4:45 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7
5:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	22	0	0	1	19	0	0	42
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	5.00%	95.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	12	0	0	0	11	0	0	23
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.917	0.000	0.000	0.821
									0.750				0.917				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Park View Terrace/Bellevue Ave W & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-006
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Park View Terrace/Bellevue Ave W				Park View Terrace/Bellevue Ave W				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	2	1	0	0	11	0	0	14
7:15 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	4	0	0	6
7:30 AM	0	0	0	0	0	0	2	0	0	7	1	0	0	12	0	0	22
7:45 AM	0	0	0	0	0	0	1	0	0	3	2	0	0	8	0	0	14
8:00 AM	0	0	0	0	0	0	0	0	0	7	3	0	0	18	0	1	29
8:15 AM	0	0	0	0	0	0	0	0	0	5	2	0	0	14	0	0	21
8:30 AM	0	0	0	0	0	0	0	0	0	1	3	0	0	25	0	0	29
8:45 AM	0	0	0	0	0	0	0	0	0	5	1	0	0	13	0	0	19
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	3	0	0	31	14	0	0	105	0	1	154
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	68.89%	31.11%	0.00%	0.00%	99.06%	0.00%	0.94%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	18	9	0	0	70	0	1	98
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.643	0.750	0.000	0.000	0.700	0.000	0.250	0.845
										0.675				0.710			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	0	0	0	0	0	0	0	0	13	3	0	0	4	0	0	21
4:15 PM	0	0	0	0	0	0	0	0	0	17	3	0	0	6	0	0	26
4:30 PM	0	0	0	0	0	1	0	0	0	24	0	0	0	10	0	0	35
4:45 PM	0	0	1	0	0	0	0	0	0	17	0	0	0	7	0	0	25
5:00 PM	0	0	0	0	0	0	0	0	0	17	4	0	0	6	0	0	27
5:15 PM	1	1	0	0	0	0	1	0	0	17	2	0	0	7	0	0	29
5:30 PM	1	0	0	0	0	0	0	0	0	14	1	0	0	7	0	0	23
5:45 PM	0	0	0	0	0	0	0	0	2	18	3	0	0	8	0	0	31
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	1	1	0	0	1	1	0	2	137	16	0	0	55	0	0	217
APPROACH %'s :	60.00%	20.00%	20.00%	0.00%	0.00%	50.00%	50.00%	0.00%	1.29%	88.39%	10.32%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	2	1	1	0	0	0	1	0	0	65	7	0	0	27	0	0	104
PEAK HR FACTOR :	0.500	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.956	0.438	0.000	0.000	0.964	0.000	0.000	0.897
		0.500				0.250				0.857				0.964			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Park View Terrace/Bellevue Ave W & Grand Ave
City: Oakland
Project ID: 24-080355-006
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Park View Terrace/Bellevue Ave W		Park View Terrace/Bellevue Ave W		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	6	14	9	12	0	0	1	3	45
7:15 AM	6	12	6	11	0	0	7	2	44
7:30 AM	5	11	8	10	0	0	4	7	45
7:45 AM	8	19	13	10	0	0	8	6	64
8:00 AM	4	15	5	14	0	1	2	9	50
8:15 AM	10	23	4	16	0	0	7	10	70
8:30 AM	11	22	10	18	0	1	7	2	71
8:45 AM	4	14	16	16	0	1	2	6	59
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	54	130	71	107	0	3	38	45	448
APPROACH %'s :	29.35%	70.65%	39.89%	60.11%	0.00%	100.00%	45.78%	54.22%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	29	74	35	64	0	3	18	27	250
PEAK HR FACTOR :	0.659	0.804	0.547	0.889		0.750	0.643	0.675	0.880
	0.780		0.773		0.750		0.662		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	19	6	9	6	0	0	4	4	48
4:15 PM	12	13	12	7	0	0	8	5	57
4:30 PM	11	12	10	9	0	0	7	7	56
4:45 PM	13	11	18	10	0	0	4	11	67
5:00 PM	10	10	13	8	0	0	15	1	57
5:15 PM	17	15	9	4	0	0	7	3	55
5:30 PM	17	13	13	7	0	0	12	5	67
5:45 PM	9	7	16	5	0	0	7	0	44
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	108	87	100	56	0	0	64	36	451
APPROACH %'s :	55.38%	44.62%	64.10%	35.90%			64.00%	36.00%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	57	49	53	29	0	0	38	20	246
PEAK HR FACTOR :	0.838	0.817	0.736	0.725			0.633	0.455	0.918
	0.828		0.732				0.853		

Prepared by National Data & Surveying Services

Park View Terrace/Bellevue Ave W & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-006
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS

AM: 08:00 AM - 09:00 AM
NOON: NONE
PM: 04:45 PM - 05:45 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND — Park View Terrace/Bellevue Ave W

AM	48	1	30	0	25	AM
NOON	0	0	0	0	0	NOON
PM	31	5	20	0	26	PM
	0	1	0	0		

EASTBOUND — Grand Ave

AM	NOON	PM	
783	0	527	
0	0	5	0
12	0	13	1
390	0	1106	2
16	0	29	0
AM	NOON	PM	

WESTBOUND — Grand Ave

PM	NOON	AM	
13	0	13	0
491	0	735	2
22	0	8	1
1	0	8	0
1127	0	428	
PM	NOON	AM	

CONTROL

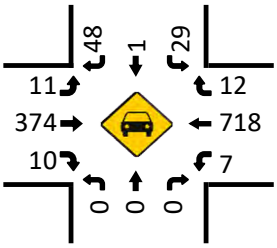
Signalized

	AM	NOON	PM
TEV	1261	0	1736
PHF	0.87		0.94

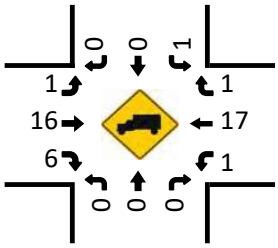
NORTHBOUND — Park View Terrace/Bellevue Ave W

	0	0	0	0		
PM	56	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	25	0	0	0	0	AM

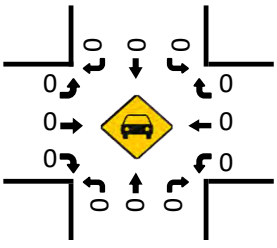
Cars (AM)



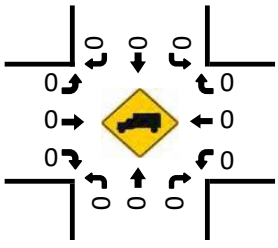
HT (AM)



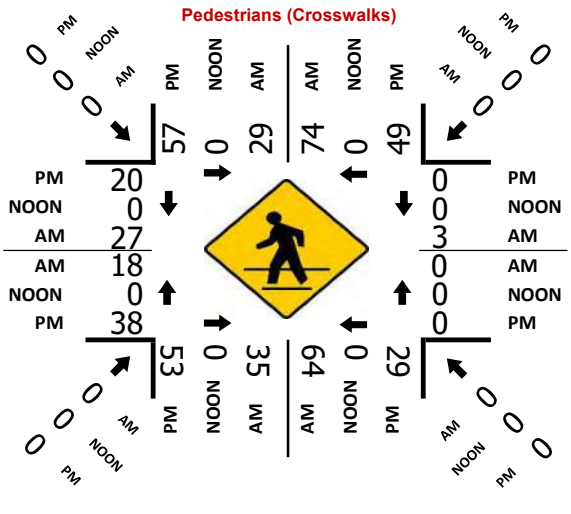
Cars (NOON)



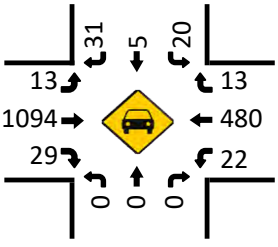
HT (NOON)



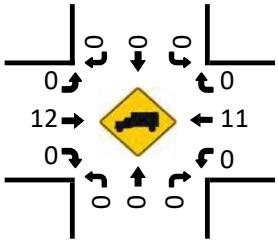
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Lenox Ave & Grand Ave
City: Oakland
Control: 1-Way Stop(SB) with Signalized Crosswalk

Project ID: 24-080355-007
Date: 11/19/2024

Data - Total

NS/EW Streets:	Lenox Ave				Lenox Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	3	0	0	42	0	0	0	77	1	0	123
7:15 AM	0	0	0	0	0	0	1	0	1	49	0	0	0	93	3	0	147
7:30 AM	0	0	0	0	1	0	1	0	0	55	0	0	0	123	3	0	183
7:45 AM	0	0	0	0	1	0	4	0	4	71	0	0	0	141	1	0	222
8:00 AM	0	0	0	0	2	0	16	0	2	88	0	1	0	171	3	0	283
8:15 AM	0	0	0	0	1	0	22	0	5	118	0	0	0	203	5	1	355
8:30 AM	0	0	0	0	1	0	3	0	1	117	0	1	0	172	6	0	301
8:45 AM	0	0	0	0	2	0	6	0	3	90	0	1	0	177	2	0	281
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	8	0	56	0	16	630	0	3	0	1157	24	1	1895
APPROACH %'s :					12.50%	0.00%	87.50%	0.00%	2.47%	97.07%	0.00%	0.46%	0.00%	97.88%	2.03%	0.08%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	6	0	47	0	11	413	0	3	0	723	16	1	1220
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.750	0.000	0.534	0.000	0.550	0.875	0.000	0.750	0.000	0.890	0.667	0.250	0.859
					0.576				0.868				0.885				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	5	0	6	190	0	1	0	144	2	0	348
4:15 PM	0	0	0	0	1	0	4	0	4	227	0	0	0	140	4	0	380
4:30 PM	0	0	0	0	1	0	5	0	4	251	0	0	0	119	2	0	382
4:45 PM	0	0	0	0	4	0	4	0	3	261	0	0	0	126	6	1	405
5:00 PM	0	0	0	0	0	0	2	0	4	295	0	0	0	133	1	0	435
5:15 PM	0	0	0	0	0	0	4	0	5	281	0	0	0	138	3	0	431
5:30 PM	0	0	0	0	1	0	7	0	6	269	0	0	0	109	2	0	394
5:45 PM	0	0	0	0	2	0	4	0	2	251	0	0	0	116	7	0	382
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	9	0	35	0	34	2025	0	1	0	1025	27	1	3157
APPROACH %'s :					20.45%	0.00%	79.55%	0.00%	1.65%	98.30%	0.00%	0.05%	0.00%	97.34%	2.56%	0.09%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	5	0	17	0	18	1106	0	0	0	506	12	1	1665
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.313	0.000	0.607	0.000	0.750	0.937	0.000	0.000	0.000	0.917	0.500	0.250	0.957
					0.688				0.940				0.920				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lenox Ave & Grand Ave
City: Oakland
Control: 1-Way Stop(SB) with Signalized Crosswalk

Project ID: 24-080355-007
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Lenox Ave				Lenox Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	3	0	0	39	0	0	0	75	1	0	118
7:15 AM	0	0	0	0	0	0	1	0	1	47	0	0	0	90	3	0	142
7:30 AM	0	0	0	0	0	0	1	0	0	54	0	0	0	113	3	0	171
7:45 AM	0	0	0	0	1	0	4	0	4	68	0	0	0	139	1	0	217
8:00 AM	0	0	0	0	2	0	15	0	2	85	0	1	0	170	3	0	278
8:15 AM	0	0	0	0	1	0	22	0	3	115	0	0	0	197	5	1	344
8:30 AM	0	0	0	0	1	0	3	0	1	114	0	1	0	166	6	0	292
8:45 AM	0	0	0	0	2	0	6	0	3	84	0	1	0	171	2	0	269
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	7	0	55	0	14	606	0	3	0	1121	24	1	1831
APPROACH %'s :					11.29%	0.00%	88.71%	0.00%	2.25%	97.27%	0.00%	0.48%	0.00%	97.82%	2.09%	0.09%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	6	0	46	0	9	398	0	3	0	704	16	1	1183
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.750	0.000	0.523	0.000	0.750	0.865	0.000	0.750	0.000	0.893	0.667	0.250	0.860
					0.565				0.869				0.888				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	5	0	6	189	0	1	0	142	2	0	345
4:15 PM	0	0	0	0	1	0	4	0	4	224	0	0	0	138	4	0	375
4:30 PM	0	0	0	0	1	0	5	0	4	247	0	0	0	115	2	0	374
4:45 PM	0	0	0	0	4	0	4	0	3	258	0	0	0	124	6	1	400
5:00 PM	0	0	0	0	0	0	2	0	4	293	0	0	0	130	1	0	430
5:15 PM	0	0	0	0	0	0	4	0	5	277	0	0	0	135	3	0	424
5:30 PM	0	0	0	0	1	0	7	0	6	266	0	0	0	106	2	0	388
5:45 PM	0	0	0	0	2	0	4	0	2	249	0	0	0	115	7	0	379
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	9	0	35	0	34	2003	0	1	0	1005	27	1	3115
APPROACH %'s :					20.45%	0.00%	79.55%	0.00%	1.67%	98.28%	0.00%	0.05%	0.00%	97.29%	2.61%	0.10%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	5	0	17	0	18	1094	0	0	0	495	12	1	1642
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.313	0.000	0.607	0.000	0.750	0.933	0.000	0.000	0.000	0.917	0.500	0.250	0.955
					0.688				0.936				0.920				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lenox Ave & Grand Ave
City: Oakland
Control: 1-Way Stop(SB) with Signalized Crosswalk

Project ID: 24-080355-007
Date: 11/19/2024

Data - HT

NS/EW Streets:	Lenox Ave				Lenox Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
7:30 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	10	0	0	12
7:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
8:00 AM	0	0	0	0	0	0	1	0	0	3	0	0	0	1	0	0	5
8:15 AM	0	0	0	0	0	0	0	0	2	3	0	0	0	6	0	0	11
8:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	6	0	0	9
8:45 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	6	0	0	12
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	1	0	2	24	0	0	0	36	0	0	64
APPROACH %'s :					50.00%	0.00%	50.00%	0.00%	7.69%	92.31%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	2	15	0	0	0	19	0	0	37
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.625	0.000	0.000	0.000	0.792	0.000	0.000	0.771
					0.250				0.708				0.792				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
4:30 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8
4:45 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7
5:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	22	0	0	0	20	0	0	42
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	12	0	0	0	11	0	0	23
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.917	0.000	0.000	0.821
									0.750				0.917				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lenox Ave & Grand Ave
City: Oakland
Control: 1-Way Stop(SB) with Signalized Crosswalk

Project ID: 24-080355-007
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Lenox Ave				Lenox Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	11	0	0	13
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5
7:30 AM	0	0	0	0	0	0	1	0	0	7	0	0	0	13	0	0	21
7:45 AM	0	0	0	0	0	0	1	0	0	3	0	0	0	7	0	0	11
8:00 AM	0	0	0	0	0	0	0	0	1	6	0	0	0	20	0	0	27
8:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	15	0	0	20
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	24	0	0	25
8:45 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	11	0	0	17
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	2	0	1	31	0	0	0	105	0	0	139
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	3.13%	96.88%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	18	0	0	0	70	0	0	89
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.750	0.000	0.000	0.000	0.729	0.000	0.000	0.824
										0.679				0.729			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	12	0	0	0	3	0	0	15
4:15 PM	0	0	0	0	0	0	0	0	1	18	0	0	0	6	0	0	25
4:30 PM	0	0	0	0	0	0	0	0	1	22	0	0	0	10	0	0	33
4:45 PM	0	0	0	0	0	0	0	0	0	17	0	0	0	6	0	0	23
5:00 PM	0	0	0	0	0	0	0	0	0	19	0	0	0	6	0	0	25
5:15 PM	0	0	0	0	0	0	0	0	1	16	0	0	0	7	0	0	24
5:30 PM	0	0	0	0	0	0	0	0	0	13	0	0	0	6	0	0	19
5:45 PM	0	0	0	0	0	0	0	0	0	17	0	0	0	8	0	0	25
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	3	134	0	0	0	52	0	0	189
APPROACH %'s :									2.19%	97.81%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	65	0	0	0	25	0	0	91
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.855	0.000	0.000	0.000	0.893	0.000	0.000	0.910
										0.868				0.893			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lenox Ave & Grand Ave
City: Oakland

Project ID: 24-080355-007
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lenox Ave		Lenox Ave		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	4	12	0	0	0	1	0	0	17
7:15 AM	4	8	0	0	1	1	0	0	14
7:30 AM	6	9	0	0	0	0	1	0	16
7:45 AM	2	14	0	0	0	0	1	0	17
8:00 AM	3	17	0	0	2	1	1	4	28
8:15 AM	4	38	0	0	1	1	4	4	52
8:30 AM	11	19	0	0	3	4	3	3	43
8:45 AM	6	14	0	0	1	1	1	2	25
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	40	131	0	0	8	9	11	13	212
APPROACH %'s :	23.39%	76.61%			47.06%	52.94%	45.83%	54.17%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	24	88	0	0	7	7	9	13	148
PEAK HR FACTOR :	0.545	0.579			0.583	0.438	0.563	0.813	0.712
	0.667				0.500		0.688		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	21	6	0	0	0	1	1	1	30
4:15 PM	14	7	0	0	1	1	7	3	33
4:30 PM	9	12	0	0	2	1	2	0	26
4:45 PM	10	13	0	0	3	3	2	1	32
5:00 PM	10	12	0	0	1	1	1	3	28
5:15 PM	11	10	0	0	3	0	0	1	25
5:30 PM	15	14	0	0	2	0	1	0	32
5:45 PM	5	9	0	0	2	0	4	2	22
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	95	83	0	0	14	7	18	11	228
APPROACH %'s :	53.37%	46.63%			66.67%	33.33%	62.07%	37.93%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	46	49	0	0	9	4	4	5	117
PEAK HR FACTOR :	0.767	0.875			0.750	0.333	0.500	0.417	0.914
	0.819				0.542		0.563		

Prepared by National Data & Surveying Services

Lenox Ave & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-007
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS		COUNT PERIODS
AM	08:00 AM - 09:00 AM	AM 7:00 AM - 09:00 AM
NOON	NONE	NOON NONE
PM	04:45 PM - 05:45 PM	PM 4:00 PM - 06:00 PM

SOUTHBOUND (Lenox Ave)

AM	47	0	6	0	27	AM
NOON	0	0	0	0	0	NOON
PM	17	0	5	0	30	PM

EASTBOUND (Grand Ave)

AM	NOON	PM	
773	0	523	
3	0	0	0
11	0	18	1
413	0	1106	2
0	0	0	0

WESTBOUND (Grand Ave)

PM	NOON	AM	
12	0	16	0
506	0	723	2
0	0	0	0
1	0	1	0
1112	0	420	

NORTHBOUND (Lenox Ave)

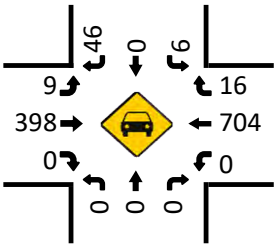
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

CONTROL: 1-Way Stop(SB) with Signalized Crosswalk

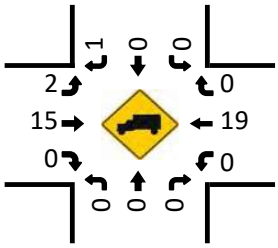
	AM	NOON	PM
TEV	1220	0	1665
PHF	0.86		0.96

Turning movements: 0 1 0 0 | 0 0 0 0

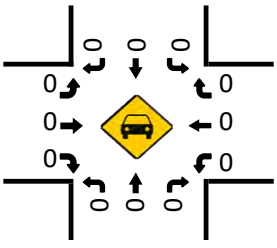
Cars (AM)



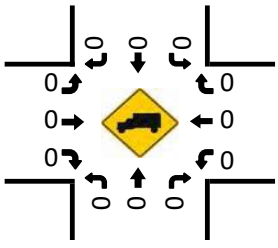
HT (AM)



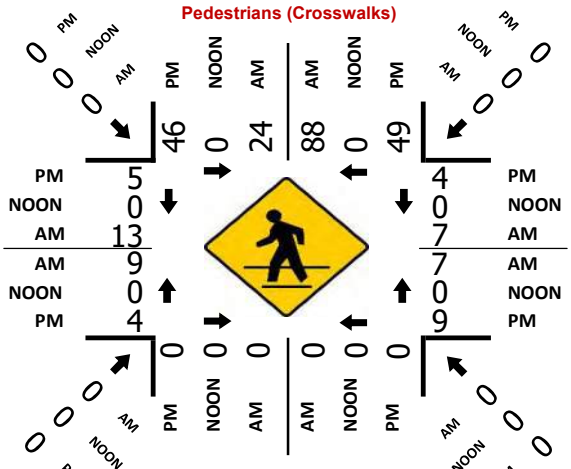
Cars (NOON)



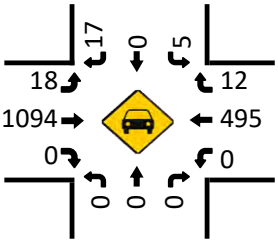
HT (NOON)



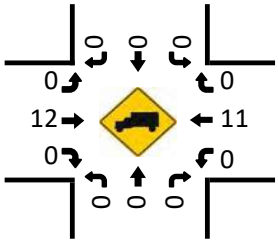
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Lee St & Grand Ave
City: Oakland
Control: 1-Way Stop(SB)

Project ID: 24-080355-008
Date: 11/19/2024

Data - Total

NS/EW Streets:	Lee St				Lee St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	3	0	0	41	0	0	0	78	2	0	125
7:15 AM	0	0	0	0	4	0	5	0	2	46	0	0	0	91	2	0	150
7:30 AM	0	0	0	0	4	0	6	0	1	53	0	0	0	117	5	0	186
7:45 AM	0	0	0	0	4	0	5	1	0	74	0	0	0	137	9	0	230
8:00 AM	0	0	0	0	1	0	10	0	4	85	0	0	0	169	4	0	273
8:15 AM	0	0	0	0	2	0	8	0	4	110	0	3	0	193	3	0	323
8:30 AM	0	0	0	0	3	0	5	0	2	116	0	1	0	177	3	0	307
8:45 AM	0	0	0	0	5	0	5	0	1	91	0	0	0	175	8	0	285
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	24	0	47	1	14	616	0	4	0	1137	36	0	1879
APPROACH %'s :					33.33%	0.00%	65.28%	1.39%	2.21%	97.16%	0.00%	0.63%	0.00%	96.93%	3.07%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	11	0	28	0	11	402	0	4	0	714	18	0	1188
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.550	0.000	0.700	0.000	0.688	0.866	0.000	0.333	0.000	0.925	0.563	0.000	0.920
					0.886				0.876				0.934				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	2	0	5	1	9	188	0	0	0	141	3	1	350
4:15 PM	0	0	0	0	1	0	6	0	4	209	0	1	0	140	3	0	364
4:30 PM	0	0	0	0	1	0	5	0	3	253	0	0	0	118	9	1	390
4:45 PM	0	0	0	0	0	0	5	0	12	245	0	0	0	127	7	1	397
5:00 PM	0	0	0	0	3	0	4	0	3	300	0	0	0	128	11	0	449
5:15 PM	0	0	0	0	1	0	6	0	11	273	0	0	0	133	6	1	431
5:30 PM	0	0	0	0	3	0	4	0	6	260	0	0	0	108	11	1	393
5:45 PM	0	0	0	0	2	0	6	0	10	247	0	0	0	116	11	0	392
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	13	0	41	1	58	1975	0	1	0	1011	61	5	3166
APPROACH %'s :					23.64%	0.00%	74.55%	1.82%	2.85%	97.10%	0.00%	0.05%	0.00%	93.87%	5.66%	0.46%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	7	0	19	0	32	1078	0	0	0	496	35	3	1670
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.583	0.000	0.792	0.000	0.667	0.898	0.000	0.000	0.000	0.932	0.795	0.750	0.930
					0.929				0.916				0.954				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lee St & Grand Ave
City: Oakland
Control: 1-Way Stop(SB)

Project ID: 24-080355-008
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Lee St				Lee St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	3	0	0	38	0	0	0	77	2	0	121
7:15 AM	0	0	0	0	4	0	5	0	2	44	0	0	0	87	2	0	144
7:30 AM	0	0	0	0	4	0	6	0	1	51	0	0	0	108	5	0	175
7:45 AM	0	0	0	0	4	0	5	1	0	71	0	0	0	135	9	0	225
8:00 AM	0	0	0	0	1	0	10	0	4	82	0	0	0	167	3	0	267
8:15 AM	0	0	0	0	2	0	8	0	4	107	0	3	0	188	3	0	315
8:30 AM	0	0	0	0	3	0	3	0	2	113	0	1	0	173	3	0	298
8:45 AM	0	0	0	0	5	0	4	0	1	85	0	0	0	170	7	0	272
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	24	0	44	1	14	591	0	4	0	1105	34	0	1817
APPROACH %'s :					34.78%	0.00%	63.77%	1.45%	2.30%	97.04%	0.00%	0.66%	0.00%	97.01%	2.99%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	11	0	25	0	11	387	0	4	0	698	16	0	1152
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.550	0.000	0.625	0.000	0.688	0.856	0.000	0.333	0.000	0.928	0.571	0.000	0.914
					0.818				0.866				0.935				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	2	0	5	1	9	187	0	0	0	139	3	1	347
4:15 PM	0	0	0	0	1	0	6	0	4	206	0	1	0	137	3	0	358
4:30 PM	0	0	0	0	1	0	5	0	3	249	0	0	0	115	9	1	383
4:45 PM	0	0	0	0	0	0	5	0	12	242	0	0	0	125	7	0	391
5:00 PM	0	0	0	0	3	0	4	0	3	298	0	0	0	125	11	0	444
5:15 PM	0	0	0	0	1	0	6	0	10	270	0	0	0	130	6	1	424
5:30 PM	0	0	0	0	3	0	4	0	6	257	0	0	0	105	11	1	387
5:45 PM	0	0	0	0	2	0	6	0	10	245	0	0	0	115	11	0	389
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	13	0	41	1	57	1954	0	1	0	991	61	4	3123
APPROACH %'s :					23.64%	0.00%	74.55%	1.82%	2.83%	97.12%	0.00%	0.05%	0.00%	93.84%	5.78%	0.38%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	7	0	19	0	31	1067	0	0	0	485	35	2	1646
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.583	0.000	0.792	0.000	0.646	0.895	0.000	0.000	0.000	0.933	0.795	0.500	0.927
					0.929				0.912				0.953				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lee St & Grand Ave
City: Oakland
Control: 1-Way Stop(SB)

Project ID: 24-080355-008
Date: 11/19/2024

Data - HT

NS/EW Streets:	Lee St				Lee St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	9	0	0	11
7:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
8:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	1	0	6
8:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0	0	8
8:30 AM	0	0	0	0	0	0	2	0	0	3	0	0	0	4	0	0	9
8:45 AM	0	0	0	0	0	0	1	0	0	6	0	0	0	5	1	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	3	0	0	25	0	0	0	32	2	0	62
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	94.12%	5.88%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	3	0	0	15	0	0	0	16	2	0	36
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.625	0.000	0.000	0.000	0.800	0.500	0.000	0.692
					0.375				0.625				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
4:30 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7
4:45 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	1	6
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	1	3	0	0	0	3	0	0	7
5:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	1	21	0	0	0	20	0	1	43
APPROACH %'s :									4.55%	95.45%	0.00%	0.00%	0.00%	95.24%	0.00%	4.76%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	11	0	0	0	11	0	1	24
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.917	0.000	0.000	0.000	0.917	0.000	0.250	0.857
									0.750				1.000				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lee St & Grand Ave
City: Oakland
Control: 1-Way Stop(SB)

Project ID: 24-080355-008
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Lee St				Lee St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	1	0	0	3	0	0	0	9	0	0	13
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5
7:30 AM	0	0	0	0	1	0	0	0	0	7	0	0	0	13	0	0	21
7:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	6	0	0	9
8:00 AM	0	0	0	0	0	0	3	0	1	5	0	0	0	19	0	0	28
8:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	11	0	0	16
8:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	25	1	0	28
8:45 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	11	0	0	15
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	5	0	1	29	0	0	0	98	1	0	135
APPROACH %'s :					16.67%	0.00%	83.33%	0.00%	3.33%	96.67%	0.00%	0.00%	0.00%	98.99%	1.01%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	4	0	1	15	0	0	0	66	1	0	87
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.333	0.000	0.250	0.750	0.000	0.000	0.000	0.660	0.250	0.000	0.777
					0.333				0.667				0.644				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	2	11	0	0	0	3	0	0	16
4:15 PM	0	0	0	0	0	0	0	0	0	17	0	0	0	5	0	0	22
4:30 PM	0	0	0	0	0	0	0	0	1	20	0	0	0	9	0	0	30
4:45 PM	0	0	0	0	1	0	1	0	0	17	0	0	0	6	0	0	25
5:00 PM	0	0	0	0	0	0	0	0	0	19	0	0	0	6	0	0	25
5:15 PM	0	0	0	0	0	0	0	0	1	15	0	0	0	7	0	0	23
5:30 PM	0	0	0	0	0	0	0	0	0	12	0	0	0	6	0	0	18
5:45 PM	0	0	0	0	0	0	0	0	0	18	0	0	0	8	0	0	26
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	1	0	4	129	0	0	0	50	0	0	185
APPROACH %'s :					50.00%	0.00%	50.00%	0.00%	3.01%	96.99%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	1	0	1	63	0	0	0	25	0	0	91
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.829	0.000	0.000	0.000	0.893	0.000	0.000	0.910
					0.250				0.842				0.893				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Lee St & Grand Ave
City: Oakland

Project ID: 24-080355-008
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Lee St		Lee St		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	13	0	0	3	1	0	1	19
7:15 AM	4	9	0	0	0	1	0	0	14
7:30 AM	8	5	0	0	1	1	0	0	15
7:45 AM	3	12	0	0	1	5	0	1	22
8:00 AM	4	17	0	0	3	3	0	0	27
8:15 AM	3	20	0	0	0	5	0	0	28
8:30 AM	7	15	0	0	1	4	0	1	28
8:45 AM	5	8	0	0	2	1	0	0	16
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	35	99	0	0	11	21	0	3	169
APPROACH %'s :	26.12%	73.88%			34.38%	65.63%	0.00%	100.00%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	19	60	0	0	6	13	0	1	99
PEAK HR FACTOR :	0.679	0.750			0.500	0.650		0.250	0.884
	0.859				0.792		0.250		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	15	6	0	0	3	3	0	0	27
4:15 PM	10	8	0	0	2	6	0	0	26
4:30 PM	12	13	0	0	3	5	0	0	33
4:45 PM	12	10	0	0	2	1	0	0	25
5:00 PM	9	12	0	0	5	1	0	0	27
5:15 PM	13	10	0	0	3	4	0	0	30
5:30 PM	17	13	0	0	6	2	0	0	38
5:45 PM	7	8	0	0	2	0	0	0	17
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	95	80	0	0	26	22	0	0	223
APPROACH %'s :	54.29%	45.71%			54.17%	45.83%			
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	51	45	0	0	16	8	0	0	120
PEAK HR FACTOR :	0.750	0.865			0.667	0.500			0.789
	0.800				0.750				

Prepared by National Data & Surveying Services

Lee St & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-008
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

CONTROL: 1-Way Stop(SB)

	AM	NOON	PM
TEV	1188	0	1670
PHF	0.92		0.93

SOUTHBOUND (Lee St)

	L	T	R	U		
AM	28	0	11	0	29	AM
NOON	0	0	0	0	0	NOON
PM	19	0	7	0	67	PM

EASTBOUND (Grand Ave)

	L	T	R	U		
AM	4	0	0	0	0	AM
NOON	11	0	32	0	1	NOON
PM	402	0	1078	0	2	PM
	746	0	515			

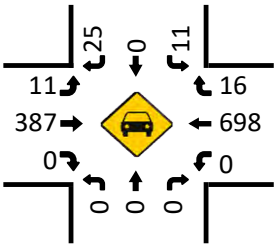
WESTBOUND (Grand Ave)

	L	T	R	U		
PM	35	0	18	0	0	PM
NOON	496	0	714	0	2	NOON
AM	0	0	0	0	0	AM
	3	0	0		0	
	1088	0	413			

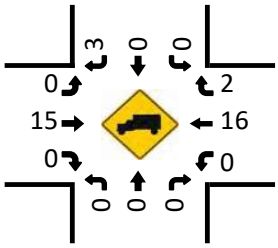
NORTHBOUND (Lee St)

	L	T	R	U		
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

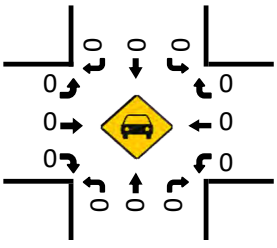
Cars (AM)



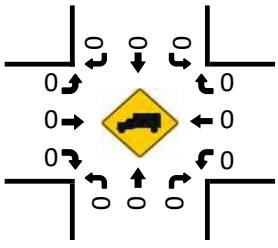
HT (AM)



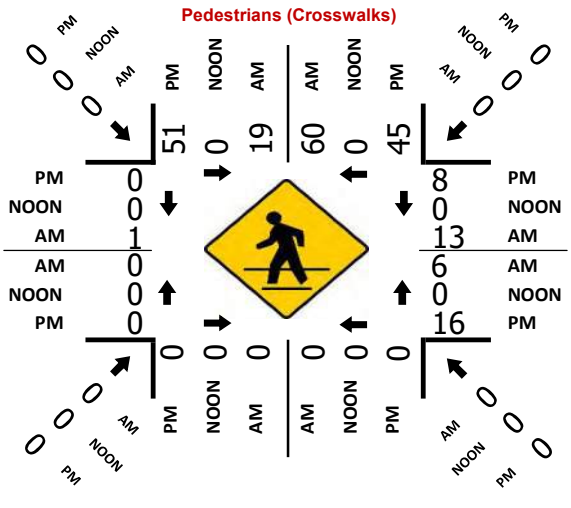
Cars (NOON)



HT (NOON)



Pedestrians (Crosswalks)


51
19
60
45
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13
6
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16
1
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0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Perkins St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-009
Date: 11/19/2024

Data - Total

NS/EW Streets:	Perkins St				Perkins St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	3	0	4	0	4	0	6	37	0	0	3	78	2	0	139
7:15 AM	6	1	3	0	6	0	14	0	5	42	3	0	1	74	2	0	157
7:30 AM	4	2	2	0	7	0	14	0	5	48	1	0	1	103	7	0	194
7:45 AM	4	1	0	0	8	1	10	0	4	68	5	1	5	131	3	0	241
8:00 AM	0	1	0	0	12	2	11	0	11	78	2	0	1	163	10	0	291
8:15 AM	1	0	3	0	8	2	13	0	3	107	0	0	6	181	10	0	334
8:30 AM	3	0	0	0	9	2	12	0	15	104	2	0	11	163	8	0	329
8:45 AM	4	2	2	0	10	1	16	0	6	90	4	0	1	167	11	0	314
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	24	7	13	0	64	8	94	0	55	574	17	1	29	1060	53	0	1999
APPROACH %'s :	54.55%	15.91%	29.55%	0.00%	38.55%	4.82%	56.63%	0.00%	8.50%	88.72%	2.63%	0.15%	2.54%	92.82%	4.64%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	8	3	5	0	39	7	52	0	35	379	8	0	19	674	39	0	1268
PEAK HR FACTOR :	0.500	0.375	0.417	0.000	0.813	0.875	0.813	0.000	0.583	0.886	0.500	0.000	0.432	0.931	0.886	0.000	0.949
	0.500				0.907				0.872				0.929				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	7	1	4	0	13	1	18	0	10	179	8	0	9	115	14	1	380
4:15 PM	7	1	2	0	12	1	16	0	14	191	3	1	6	123	10	1	388
4:30 PM	9	1	7	0	14	3	13	0	18	235	4	0	1	101	15	1	422
4:45 PM	8	1	5	0	16	1	10	0	15	225	5	0	4	117	12	0	419
5:00 PM	9	1	2	0	16	4	16	0	20	277	5	0	5	116	19	0	490
5:15 PM	7	3	2	0	11	3	19	0	27	246	4	0	3	115	16	0	456
5:30 PM	5	5	1	0	15	4	7	0	18	238	3	0	5	107	20	0	428
5:45 PM	5	1	3	0	20	3	18	0	16	224	3	2	4	105	14	1	419
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	57	14	26	0	117	20	117	0	138	1815	35	3	37	899	120	4	3402
APPROACH %'s :	58.76%	14.43%	26.80%	0.00%	46.06%	7.87%	46.06%	0.00%	6.93%	91.16%	1.76%	0.15%	3.49%	84.81%	11.32%	0.38%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	26	10	8	0	62	14	60	0	81	985	15	2	17	443	69	1	1793
PEAK HR FACTOR :	0.722	0.500	0.667	0.000	0.775	0.875	0.789	0.000	0.750	0.889	0.750	0.250	0.850	0.955	0.863	0.250	0.915
	0.917				0.829				0.897				0.946				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Perkins St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-009
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Perkins St				Perkins St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	2	0	4	0	4	0	6	34	0	0	3	76	2	0	133
7:15 AM	5	1	3	0	6	0	14	0	5	40	3	0	1	71	1	0	150
7:30 AM	3	2	2	0	7	0	12	0	5	46	1	0	1	98	7	0	184
7:45 AM	4	1	0	0	8	1	10	0	4	67	5	1	4	129	2	0	236
8:00 AM	0	1	0	0	12	1	11	0	11	73	2	0	1	160	10	0	282
8:15 AM	1	0	3	0	8	2	12	0	2	105	0	0	6	176	10	0	325
8:30 AM	3	0	0	0	9	2	12	0	15	101	2	0	11	160	7	0	322
8:45 AM	3	2	2	0	10	1	16	0	6	84	4	0	1	162	11	0	302
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	21	7	12	0	64	7	91	0	54	550	17	1	28	1032	50	0	1934
APPROACH %'s :	52.50%	17.50%	30.00%	0.00%	39.51%	4.32%	56.17%	0.00%	8.68%	88.42%	2.73%	0.16%	2.52%	92.97%	4.50%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	7	3	5	0	39	6	51	0	34	363	8	0	19	658	38	0	1231
PEAK HR FACTOR :	0.583	0.375	0.417	0.000	0.813	0.750	0.797	0.000	0.567	0.864	0.500	0.000	0.432	0.935	0.864	0.000	0.947
	0.536				0.889				0.858				0.931				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	7	1	4	0	13	1	18	0	10	178	8	0	9	113	13	1	376
4:15 PM	7	1	2	0	12	1	15	0	14	188	3	0	6	121	10	1	381
4:30 PM	9	1	7	0	14	3	13	0	18	231	4	0	1	99	14	1	415
4:45 PM	8	1	5	0	16	1	9	0	13	224	5	0	4	115	11	0	412
5:00 PM	9	1	2	0	16	4	16	0	20	274	5	0	5	113	19	0	484
5:15 PM	7	3	2	0	10	3	19	0	27	243	4	0	2	112	16	0	448
5:30 PM	4	5	1	0	15	4	7	0	17	236	3	0	5	105	20	0	422
5:45 PM	5	1	3	0	20	3	18	0	16	222	3	2	4	104	14	1	416
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	56	14	26	0	116	20	115	0	135	1796	35	2	36	882	117	4	3354
APPROACH %'s :	58.33%	14.58%	27.08%	0.00%	46.22%	7.97%	45.82%	0.00%	6.86%	91.26%	1.78%	0.10%	3.46%	84.89%	11.26%	0.38%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	25	10	8	0	61	14	60	0	80	975	15	2	16	434	69	1	1770
PEAK HR FACTOR :	0.694	0.500	0.667	0.000	0.763	0.875	0.789	0.000	0.741	0.890	0.750	0.250	0.800	0.960	0.863	0.250	0.914
	0.896				0.823				0.896				0.949				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Perkins St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-009
Date: 11/19/2024

Data - HT

NS/EW Streets:	Perkins St				Perkins St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	0	3	0	0	0	2	0	0	6
7:15 AM	1	0	0	0	0	0	0	0	0	2	0	0	0	3	1	0	7
7:30 AM	1	0	0	0	0	0	2	0	0	2	0	0	0	5	0	0	10
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	2	1	0	5
8:00 AM	0	0	0	0	0	1	0	0	0	5	0	0	0	3	0	0	9
8:15 AM	0	0	0	0	0	0	1	0	1	2	0	0	0	5	0	0	9
8:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	1	0	7
8:45 AM	1	0	0	0	0	0	0	0	0	6	0	0	0	5	0	0	12
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	0	1	0	0	1	3	0	1	24	0	0	1	28	3	0	65
APPROACH %'s :	75.00%	0.00%	25.00%	0.00%	0.00%	25.00%	75.00%	0.00%	4.00%	96.00%	0.00%	0.00%	3.13%	87.50%	9.38%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	0	0	0	1	1	0	1	16	0	0	0	16	1	0	37
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.250	0.667	0.000	0.000	0.000	0.800	0.250	0.000	0.771
	0.250				0.500				0.708				0.850				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	1	0	4
4:15 PM	0	0	0	0	0	0	1	0	0	3	0	1	0	2	0	0	7
4:30 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	1	0	7
4:45 PM	0	0	0	0	0	0	1	0	2	1	0	0	0	2	1	0	7
5:00 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
5:15 PM	0	0	0	0	1	0	0	0	0	3	0	0	1	3	0	0	8
5:30 PM	1	0	0	0	0	0	0	0	1	2	0	0	0	2	0	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	1	0	2	0	3	19	0	1	1	17	3	0	48
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	33.33%	0.00%	66.67%	0.00%	13.04%	82.61%	0.00%	4.35%	4.76%	80.95%	14.29%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	0	0	0	1	0	0	0	1	10	0	0	1	9	0	0	23
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.833	0.000	0.000	0.250	0.750	0.000	0.000	0.719
	0.250				0.250				0.917				0.625				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Perkins St & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-009
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Perkins St				Perkins St				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	1	2	0	0	1	9	0	0	13
7:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	3	0	0	5
7:30 AM	0	0	0	0	0	0	1	0	0	7	0	1	0	11	0	0	20
7:45 AM	0	0	0	0	0	0	1	0	0	3	0	0	0	4	0	0	8
8:00 AM	0	0	0	0	1	0	6	0	1	4	0	0	0	13	0	0	25
8:15 AM	1	0	0	0	1	0	1	0	1	4	0	0	0	8	0	0	16
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	24	0	0	25
8:45 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	6	0	0	14
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	2	0	14	0	3	26	0	1	1	78	0	0	126
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	12.50%	0.00%	87.50%	0.00%	10.00%	86.67%	0.00%	3.33%	1.27%	98.73%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	0	0	2	0	11	0	2	13	0	0	0	51	0	0	80
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.500	0.000	0.458	0.000	0.500	0.813	0.000	0.000	0.000	0.531	0.000	0.000	0.800
	0.250				0.464				0.750				0.531				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	1	9	1	0	0	4	0	0	15
4:15 PM	1	0	0	0	0	0	0	0	1	15	0	0	0	3	0	0	20
4:30 PM	1	0	1	0	0	1	2	0	1	15	0	0	0	6	0	0	27
4:45 PM	0	0	0	0	0	0	0	0	1	16	0	0	0	6	0	0	23
5:00 PM	1	0	0	0	0	0	0	0	2	17	0	0	0	5	0	0	25
5:15 PM	1	1	0	0	0	0	0	0	3	9	1	0	0	5	0	0	20
5:30 PM	0	1	0	0	0	0	0	0	1	12	0	1	0	5	0	0	20
5:45 PM	1	1	0	0	0	0	1	0	1	13	0	0	0	6	0	0	23
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	3	1	0	0	1	3	0	11	106	2	1	0	40	0	0	173
APPROACH %'s :	55.56%	33.33%	11.11%	0.00%	0.00%	25.00%	75.00%	0.00%	9.17%	88.33%	1.67%	0.83%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	3	3	0	0	0	0	1	0	7	51	1	1	0	21	0	0	88
PEAK HR FACTOR :	0.750	0.750	0.000	0.000	0.000	0.000	0.250	0.000	0.583	0.750	0.250	0.250	0.000	0.875	0.000	0.000	0.880
	0.750				0.250				0.789				0.875				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Perkins St & Grand Ave
City: Oakland

Project ID: 24-080355-009
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Perkins St		Perkins St		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	7	6	11	2	2	0	1	29
7:15 AM	4	9	5	5	2	2	4	7	38
7:30 AM	6	6	5	9	1	3	0	3	33
7:45 AM	5	6	10	11	2	7	2	1	44
8:00 AM	3	14	9	14	5	0	1	2	48
8:15 AM	4	16	6	6	3	1	1	2	39
8:30 AM	5	11	2	10	3	1	3	2	37
8:45 AM	7	10	8	6	5	1	2	6	45
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	34	79	51	72	23	17	13	24	313
APPROACH %'s :	30.09%	69.91%	41.46%	58.54%	57.50%	42.50%	35.14%	64.86%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	19	51	25	36	16	3	7	12	169
PEAK HR FACTOR :	0.679	0.797	0.694	0.643	0.800	0.750	0.583	0.500	0.880
	0.875		0.663		0.792		0.594		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	10	5	11	8	3	3	1	6	47
4:15 PM	8	8	16	10	6	2	7	3	60
4:30 PM	20	20	14	8	5	1	10	4	82
4:45 PM	8	8	7	11	5	4	7	4	54
5:00 PM	17	17	14	11	4	2	7	3	75
5:15 PM	19	12	13	7	3	2	17	7	80
5:30 PM	11	17	17	6	13	4	13	4	85
5:45 PM	17	8	15	7	8	1	9	2	67
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	110	95	107	68	47	19	71	33	550
APPROACH %'s :	53.66%	46.34%	61.14%	38.86%	71.21%	28.79%	68.27%	31.73%	
PEAK HR :	05:00 PM - 06:00 PM								TOTAL
PEAK HR VOL :	64	54	59	31	28	9	46	16	307
PEAK HR FACTOR :	0.842	0.794	0.868	0.705	0.538	0.563	0.676	0.571	0.903
	0.868		0.900		0.544		0.646		

Prepared by National Data & Surveying Services

Perkins St & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-009
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	1268	0	1793
PHF	0.95		0.91

SOUTHBOUND (Perkins St)

	Left	Thru	Right	U-Turn	Total	
AM	52	7	39	0	77	AM
NOON	0	0	0	0	0	NOON
PM	60	14	62	0	160	PM

EASTBOUND (Grand Ave)

	Left	Thru	Right	U-Turn	
AM	734	0	531	0	
NOON	0	0	0	1	
PM	379	0	985	0	

	Left	Thru	Right	U-Turn	
AM	0	0	2	0	
NOON	35	0	81	1	
PM	8	0	15	0	

WESTBOUND (Grand Ave)

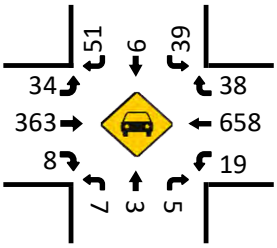
	Left	Thru	Right	U-Turn	
AM	39	0	423	0	
NOON	69	0	674	2	
PM	17	0	1056	1	

	Left	Thru	Right	U-Turn	
AM	0	0	0	0	
NOON	1	0	19	0	
PM	443	0	69	0	

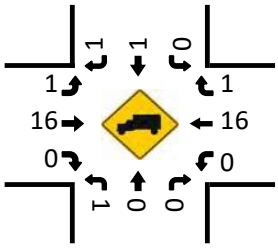
NORTHBOUND (Perkins St)

	Left	Thru	Right	U-Turn	Total	
AM	34	0	8	3	5	AM
NOON	0	0	0	0	0	NOON
PM	46	0	26	10	8	PM

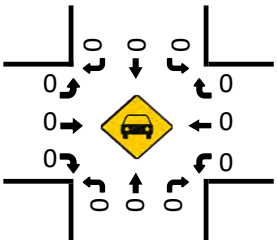
Cars (AM)



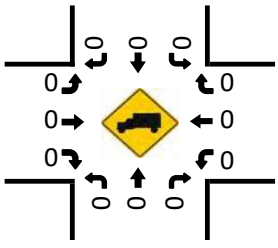
HT (AM)



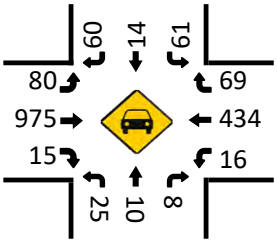
Cars (NOON)



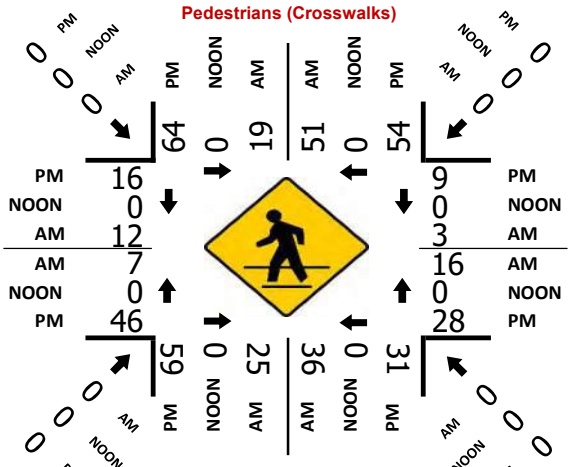
HT (NOON)



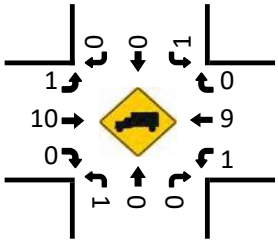
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Ellita Ave & Grand Ave
City: Oakland
Control: 1-Way Stop(NB)

Project ID: 24-080355-010
Date: 11/19/2024

Data - Total

NS/EW Streets:	Ellita Ave				Ellita Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	2	0	0	0	0	0	0	39	1	1	1	86	0	0	130
7:15 AM	0	0	0	0	1	0	0	0	0	53	0	0	3	88	0	0	145
7:30 AM	1	0	0	0	0	0	1	0	0	56	2	0	4	114	0	1	179
7:45 AM	1	0	4	0	0	0	0	0	0	74	1	0	0	137	0	1	218
8:00 AM	0	0	3	0	0	0	0	0	0	90	1	1	1	172	0	0	268
8:15 AM	2	0	3	0	0	0	0	0	0	118	1	1	3	199	0	1	328
8:30 AM	1	0	0	0	0	0	1	0	0	114	1	0	3	185	1	1	307
8:45 AM	2	0	1	0	0	0	1	0	0	96	2	1	3	176	0	0	282
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	0	13	0	1	0	3	0	0	640	9	4	18	1157	1	4	1857
APPROACH %'s :	35.00%	0.00%	65.00%	0.00%	25.00%	0.00%	75.00%	0.00%	0.00%	98.01%	1.38%	0.61%	1.53%	98.05%	0.08%	0.34%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	5	0	7	0	0	0	2	0	0	418	5	3	10	732	1	2	1185
PEAK HR FACTOR :	0.625	0.000	0.583	0.000	0.000	0.000	0.500	0.000	0.000	0.886	0.625	0.750	0.833	0.920	0.250	0.500	0.903
	0.600				0.500				0.888				0.917				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	0	6	0	0	0	0	0	0	193	1	1	1	133	0	2	340
4:15 PM	4	0	1	0	0	0	0	0	0	204	0	3	5	139	1	2	359
4:30 PM	4	0	1	0	0	0	0	0	0	253	5	0	1	121	0	1	386
4:45 PM	5	0	1	0	0	0	0	0	0	246	2	0	2	135	0	0	391
5:00 PM	6	0	5	0	0	0	1	0	0	294	4	0	1	129	0	2	442
5:15 PM	3	0	5	0	0	0	0	0	0	246	1	1	2	145	0	0	403
5:30 PM	3	0	3	0	0	0	0	0	1	254	2	1	8	124	0	0	396
5:45 PM	3	0	3	0	0	0	0	0	0	241	4	0	5	124	0	5	385
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	31	0	25	0	0	0	1	0	1	1931	19	6	25	1050	1	12	3102
APPROACH %'s :	55.36%	0.00%	44.64%	0.00%	0.00%	0.00%	100.00%	0.00%	0.05%	98.67%	0.97%	0.31%	2.30%	96.51%	0.09%	1.10%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	17	0	14	0	0	0	1	0	1	1040	9	2	13	533	0	2	1632
PEAK HR FACTOR :	0.708	0.000	0.700	0.000	0.000	0.000	0.250	0.000	0.250	0.884	0.563	0.500	0.406	0.919	0.000	0.250	0.923
	0.705				0.250				0.883				0.932				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Ellita Ave & Grand Ave
City: Oakland
Control: 1-Way Stop(NB)

Project ID: 24-080355-010
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Ellita Ave				Ellita Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	0	36	0	1	1	84	0	0	123
7:15 AM	0	0	0	0	1	0	0	0	0	51	0	0	3	84	0	0	139
7:30 AM	1	0	0	0	0	0	1	0	0	54	2	0	4	109	0	1	172
7:45 AM	1	0	3	0	0	0	0	0	0	73	1	0	0	133	0	1	212
8:00 AM	0	0	2	0	0	0	0	0	0	85	1	1	1	170	0	0	260
8:15 AM	2	0	3	0	0	0	0	0	0	116	1	1	2	194	0	1	320
8:30 AM	1	0	0	0	0	0	1	0	0	111	1	0	3	181	1	1	300
8:45 AM	2	0	1	0	0	0	1	0	0	91	2	1	3	172	0	0	273
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	0	10	0	1	0	3	0	0	617	8	4	17	1127	1	4	1799
APPROACH %'s :	41.18%	0.00%	58.82%	0.00%	25.00%	0.00%	75.00%	0.00%	0.00%	98.09%	1.27%	0.64%	1.48%	98.09%	0.09%	0.35%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	5	0	6	0	0	0	2	0	0	403	5	3	9	717	1	2	1153
PEAK HR FACTOR :	0.625	0.000	0.500	0.000	0.000	0.000	0.500	0.000	0.000	0.869	0.625	0.750	0.750	0.924	0.250	0.500	0.901
	0.550				0.500				0.871				0.925				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	0	6	0	0	0	0	0	0	192	1	1	1	131	0	2	337
4:15 PM	4	0	1	0	0	0	0	0	0	201	0	3	5	136	1	2	353
4:30 PM	4	0	1	0	0	0	0	0	0	249	5	0	1	118	0	1	379
4:45 PM	5	0	1	0	0	0	0	0	0	245	2	0	2	132	0	0	387
5:00 PM	6	0	5	0	0	0	1	0	0	291	4	0	1	125	0	2	435
5:15 PM	3	0	5	0	0	0	0	0	0	242	1	1	2	142	0	0	396
5:30 PM	3	0	3	0	0	0	0	0	1	252	2	1	8	121	0	0	391
5:45 PM	3	0	3	0	0	0	0	0	0	239	4	0	5	123	0	5	382
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	31	0	25	0	0	0	1	0	1	1911	19	6	25	1028	1	12	3060
APPROACH %'s :	55.36%	0.00%	44.64%	0.00%	0.00%	0.00%	100.00%	0.00%	0.05%	98.66%	0.98%	0.31%	2.35%	96.44%	0.09%	1.13%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	17	0	14	0	0	0	1	0	1	1030	9	2	13	520	0	2	1609
PEAK HR FACTOR :	0.708	0.000	0.700	0.000	0.000	0.000	0.250	0.000	0.250	0.885	0.563	0.500	0.406	0.915	0.000	0.250	0.925
	0.705				0.250				0.883				0.929				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Ellita Ave & Grand Ave
City: Oakland
Control: 1-Way Stop(NB)

Project ID: 24-080355-010
Date: 11/19/2024

Data - HT

NS/EW Streets:	Ellita Ave				Ellita Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	0	3	1	0	0	2	0	0	7
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7
7:45 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	4	0	0	6
8:00 AM	0	0	1	0	0	0	0	0	0	5	0	0	0	2	0	0	8
8:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	1	5	0	0	8
8:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7
8:45 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	4	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	3	0	0	0	0	0	0	23	1	0	1	30	0	0	58
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	95.83%	4.17%	0.00%	3.23%	96.77%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	15	0	0	1	15	0	0	32
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.250	0.750	0.000	0.000	0.889
			0.250							0.750				0.667			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	0	6
4:30 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7
5:15 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	20	0	0	0	22	0	0	42
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	10	0	0	0	13	0	0	23
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.813	0.000	0.000	0.821
										0.625				0.813			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Ellita Ave & Grand Ave
City: Oakland
Control: 1-Way Stop(NB)

Project ID: 24-080355-010
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Ellita Ave				Ellita Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	11	0	0	13
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5
7:30 AM	0	0	0	0	0	0	0	0	0	8	0	0	0	10	0	0	18
7:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7
8:00 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	14	0	0	19
8:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	8	0	0	13
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	24	0	0	25
8:45 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	0	10
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	30	0	0	0	80	0	0	110
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	16	0	0	0	51	0	0	67
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.800	0.000	0.000	0.000	0.531	0.000	0.000	0.670
									0.800				0.531				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	4	0	0	13
4:15 PM	0	0	0	0	0	0	0	0	0	15	0	0	0	3	0	0	18
4:30 PM	0	0	0	0	0	0	0	0	0	16	0	0	0	9	0	0	25
4:45 PM	0	0	0	0	0	0	0	0	0	16	0	0	0	4	0	0	20
5:00 PM	0	0	0	0	0	0	0	0	0	17	0	0	0	5	0	0	22
5:15 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	6	0	0	15
5:30 PM	0	0	0	0	0	0	0	0	0	11	0	0	0	4	0	0	15
5:45 PM	0	0	0	0	0	0	0	0	0	12	0	0	0	7	0	0	19
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	105	0	0	0	42	0	0	147
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	53	0	0	0	19	0	0	72
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.779	0.000	0.000	0.000	0.792	0.000	0.000	0.818
									0.779				0.792				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Ellita Ave & Grand Ave
City: Oakland

Project ID: 24-080355-010
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Ellita Ave		Ellita Ave		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	2	9	8	12	0	0	3	0	34
7:15 AM	5	5	10	7	0	0	2	1	30
7:30 AM	0	7	7	11	0	0	1	2	28
7:45 AM	1	11	9	7	1	0	1	0	30
8:00 AM	4	12	11	7	0	0	0	2	36
8:15 AM	5	19	5	9	0	0	1	0	39
8:30 AM	6	7	6	11	0	0	0	1	31
8:45 AM	8	11	13	7	0	0	1	1	41
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	31	81	69	71	1	0	9	7	269
APPROACH %'s :	27.68%	72.32%	49.29%	50.71%	100.00%	0.00%	56.25%	43.75%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	23	49	35	34	0	0	2	4	147
PEAK HR FACTOR :	0.719	0.645	0.673	0.773			0.500	0.500	0.896
	0.750		0.863				0.750		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	14	15	18	6	0	0	4	8	65
4:15 PM	10	10	21	4	0	0	1	2	48
4:30 PM	16	12	13	11	0	0	6	2	60
4:45 PM	10	8	9	5	0	0	2	4	38
5:00 PM	16	22	10	13	0	0	5	1	67
5:15 PM	19	16	12	7	3	0	11	5	73
5:30 PM	10	20	14	21	0	0	12	1	78
5:45 PM	13	8	15	5	0	0	7	1	49
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	108	111	112	72	3	0	48	24	478
APPROACH %'s :	49.32%	50.68%	60.87%	39.13%	100.00%	0.00%	66.67%	33.33%	
PEAK HR :	04:45 PM - 05:45 PM								TOTAL
PEAK HR VOL :	55	66	45	46	3	0	30	11	256
PEAK HR FACTOR :	0.724	0.750	0.804	0.548	0.250		0.625	0.550	0.821
	0.796		0.650		0.250		0.641		

Prepared by National Data & Surveying Services

Ellita Ave & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-010
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Ellita Ave)

AM	2	0	0	0	1	AM
NOON	0	0	0	0	0	NOON
PM	1	0	0	0	1	PM
	0	0	0	0		

EASTBOUND (Grand Ave)

AM	NOON	PM	
742	0	553	⇦
3	0	2	↰ 0
0	0	1	↱ 0
418	0	1040	→ 2
5	0	9	↳ 0
AM	NOON	PM	

WESTBOUND (Grand Ave)

PM	NOON	AM	
0	0	1	↰ 0
533	0	732	← 2
13	0	10	↱ 1
2	0	2	↳ 0
1056	0	427	⇨
PM	NOON	AM	

NORTHBOUND (Ellita Ave)

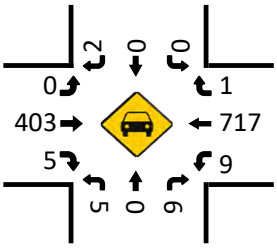
PM	22	0	17	0	14	PM
NOON	0	0	0	0	0	NOON
AM	15	0	5	0	7	AM
		0	0	1	0	

CONTROL

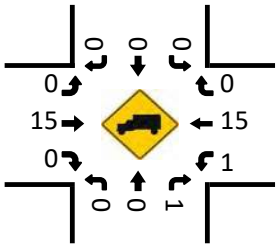
1-Way Stop(NB)

	AM	NOON	PM
TEV	1185	0	1632
PHF	0.90		0.92

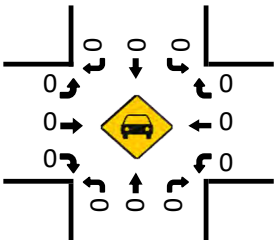
Cars (AM)



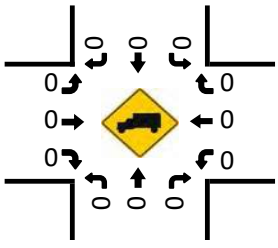
HT (AM)



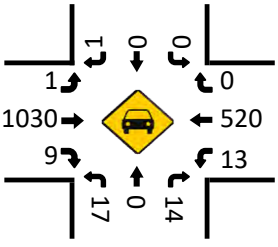
Cars (NOON)



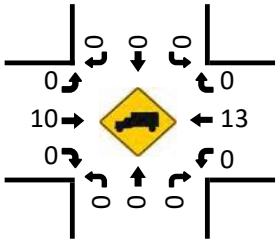
HT (NOON)



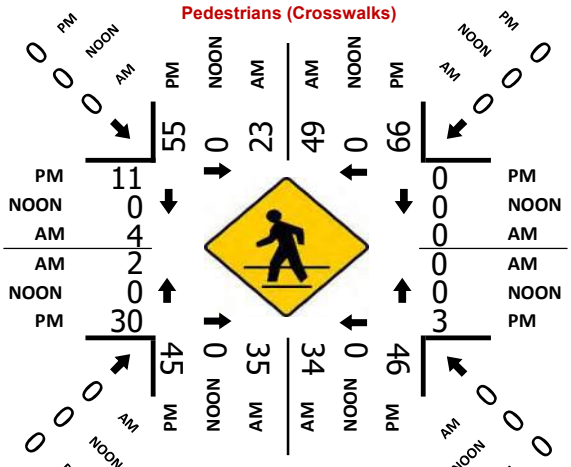
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Staten Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-011
Date: 11/19/2024

Data - Total

NS/EW Streets:	Staten Ave				Staten Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	3	0	2	0	1	0	2	40	1	0	5	88	1	0	143
7:15 AM	0	0	0	0	0	0	4	0	2	52	2	0	2	85	4	1	152
7:30 AM	1	0	1	0	3	0	4	0	5	51	0	0	3	114	5	0	187
7:45 AM	0	0	2	0	3	0	4	0	0	78	1	0	4	132	0	0	224
8:00 AM	4	0	3	0	3	0	6	0	1	91	0	1	1	161	6	0	277
8:15 AM	3	0	6	0	3	0	3	0	3	124	0	0	2	196	2	1	343
8:30 AM	1	1	5	0	5	0	2	0	1	110	1	1	7	185	10	0	329
8:45 AM	4	0	1	0	2	1	5	0	2	95	0	0	5	179	8	0	302
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	13	1	21	0	21	1	29	0	16	641	5	2	29	1140	36	2	1957
APPROACH %'s :	37.14%	2.86%	60.00%	0.00%	41.18%	1.96%	56.86%	0.00%	2.41%	96.54%	0.75%	0.30%	2.40%	94.45%	2.98%	0.17%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	12	1	15	0	13	1	16	0	7	420	1	2	15	721	26	1	1251
PEAK HR FACTOR :	0.750	0.250	0.625	0.000	0.650	0.250	0.667	0.000	0.583	0.847	0.250	0.500	0.536	0.920	0.650	0.250	0.912
	0.778				0.833				0.846				0.944				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	1	3	0	2	0	6	0	3	199	2	0	3	126	9	0	357
4:15 PM	1	1	7	0	7	0	4	0	2	192	1	1	8	141	4	1	370
4:30 PM	1	1	6	0	2	0	10	0	4	261	3	1	4	115	5	0	413
4:45 PM	3	0	3	0	7	1	5	0	4	237	2	1	6	124	11	0	404
5:00 PM	4	3	5	0	2	2	4	0	6	288	5	0	2	122	6	0	449
5:15 PM	4	0	7	0	2	0	3	0	12	237	3	1	5	138	15	0	427
5:30 PM	0	0	8	0	2	0	10	0	8	237	6	3	4	121	6	0	405
5:45 PM	2	0	1	0	3	0	8	0	6	238	8	2	2	123	7	0	400
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	18	6	40	0	27	3	50	0	45	1889	30	9	34	1010	63	1	3225
APPROACH %'s :	28.13%	9.38%	62.50%	0.00%	33.75%	3.75%	62.50%	0.00%	2.28%	95.74%	1.52%	0.46%	3.07%	91.16%	5.69%	0.09%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	12	4	21	0	13	3	22	0	26	1023	13	3	17	499	37	0	1693
PEAK HR FACTOR :	0.750	0.333	0.750	0.000	0.464	0.375	0.550	0.000	0.542	0.888	0.650	0.750	0.708	0.904	0.617	0.000	0.943
	0.771				0.731				0.890				0.875				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Staten Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-011
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Staten Ave				Staten Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	3	0	2	0	1	0	2	37	0	0	5	86	0	0	136
7:15 AM	0	0	0	0	0	0	3	0	2	50	2	0	2	82	4	1	146
7:30 AM	1	0	1	0	3	0	4	0	5	49	0	0	3	109	5	0	180
7:45 AM	0	0	2	0	3	0	4	0	0	76	1	0	4	128	0	0	218
8:00 AM	4	0	3	0	3	0	6	0	1	85	0	1	1	159	5	0	268
8:15 AM	3	0	6	0	3	0	2	0	3	122	0	0	2	191	2	1	335
8:30 AM	0	1	5	0	5	0	2	0	1	108	1	1	7	182	9	0	322
8:45 AM	4	0	1	0	2	1	5	0	2	89	0	0	5	174	8	0	291
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	12	1	21	0	21	1	27	0	16	616	4	2	29	1111	33	2	1896
APPROACH %'s :	35.29%	2.94%	61.76%	0.00%	42.86%	2.04%	55.10%	0.00%	2.51%	96.55%	0.63%	0.31%	2.47%	94.55%	2.81%	0.17%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	11	1	15	0	13	1	15	0	7	404	1	2	15	706	24	1	1216
PEAK HR FACTOR :	0.688	0.250	0.625	0.000	0.650	0.250	0.625	0.000	0.583	0.828	0.250	0.500	0.536	0.924	0.667	0.250	0.907
	0.750				0.806				0.828				0.942				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	1	3	0	2	0	5	0	3	198	2	0	3	124	9	0	353
4:15 PM	1	1	7	0	7	0	4	0	2	189	1	1	8	138	4	0	363
4:30 PM	1	1	6	0	2	0	10	0	4	257	3	1	4	112	5	0	406
4:45 PM	3	0	3	0	7	1	4	0	4	236	2	1	6	122	11	0	400
5:00 PM	4	3	5	0	2	2	4	0	6	285	5	0	2	118	6	0	442
5:15 PM	4	0	7	0	2	0	3	0	12	233	3	1	5	136	15	0	421
5:30 PM	0	0	8	0	2	0	10	0	8	235	6	3	4	118	6	0	400
5:45 PM	2	0	1	0	3	0	8	0	6	236	8	2	2	121	7	0	396
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	18	6	40	0	27	3	48	0	45	1869	30	9	34	989	63	0	3181
APPROACH %'s :	28.13%	9.38%	62.50%	0.00%	34.62%	3.85%	61.54%	0.00%	2.30%	95.70%	1.54%	0.46%	3.13%	91.07%	5.80%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	12	4	21	0	13	3	21	0	26	1011	13	3	17	488	37	0	1669
PEAK HR FACTOR :	0.750	0.333	0.750	0.000	0.464	0.375	0.525	0.000	0.542	0.887	0.650	0.750	0.708	0.897	0.617	0.000	0.944
	0.771				0.771				0.889				0.869				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Staten Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-011
Date: 11/19/2024

Data - HT

NS/EW Streets:	Staten Ave				Staten Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	3	1	0	0	2	1	0	7
7:15 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	3	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	2	1	0	9
8:15 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	5	0	0	8
8:30 AM	1	0	0	0	0	0	0	0	0	2	0	0	0	3	1	0	7
8:45 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	5	0	0	11
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	2	0	0	25	1	0	0	29	3	0	61
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	96.15%	3.85%	0.00%	0.00%	90.63%	9.38%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	1	0	0	16	0	0	0	15	2	0	35
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.667	0.000	0.000	0.000	0.750	0.500	0.000	0.795
	0.250				0.250				0.667				0.850				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	1	7
4:30 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7
4:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7
5:15 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	6
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	2	0	0	20	0	0	0	21	0	1	44
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	95.45%	0.00%	4.55%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	12	0	0	0	11	0	0	24
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.750	0.000	0.000	0.000	0.688	0.000	0.000	0.857
					0.250				0.750				0.688				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Staten Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-011
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Staten Ave				Staten Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	10	0	0	12
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5
7:30 AM	0	0	0	0	0	0	1	0	0	8	0	0	0	10	0	0	19
7:45 AM	0	0	0	0	0	0	1	0	0	3	0	0	0	4	0	0	8
8:00 AM	0	0	0	0	1	0	0	0	0	5	0	0	0	13	0	0	19
8:15 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	8	0	0	13
8:30 AM	0	0	0	0	0	0	3	0	0	1	0	0	0	21	0	0	25
8:45 AM	0	0	0	0	0	0	0	0	0	5	0	0	1	7	0	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	5	0	0	30	0	0	1	77	0	0	114
APPROACH %'s :					16.67%	0.00%	83.33%	0.00%	0.00%	100.00%	0.00%	0.00%	1.28%	98.72%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	3	0	0	16	0	0	1	49	0	0	70
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.800	0.000	0.000	0.250	0.583	0.000	0.000	0.700
					0.333				0.800				0.595				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	9	0	0	0	4	0	0	13
4:15 PM	0	0	0	0	0	0	1	0	0	16	0	0	0	2	0	0	19
4:30 PM	0	0	0	0	0	0	0	0	0	15	0	0	0	8	0	0	23
4:45 PM	0	0	0	0	0	0	0	0	0	16	0	0	0	4	1	0	21
5:00 PM	0	0	0	0	0	0	0	0	0	15	0	0	0	5	0	0	20
5:15 PM	1	0	0	0	0	0	1	0	0	7	1	0	0	3	0	0	13
5:30 PM	1	0	0	0	0	0	0	0	1	10	0	0	0	3	0	0	15
5:45 PM	0	0	0	0	0	0	0	0	0	13	1	0	0	8	0	0	22
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	0	0	0	0	2	0	1	101	2	0	0	37	1	0	146
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.96%	97.12%	1.92%	0.00%	0.00%	97.37%	2.63%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	1	0	0	53	1	0	0	20	1	0	77
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.828	0.250	0.000	0.000	0.625	0.250	0.000	0.837
		0.250				0.250				0.844				0.656			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Staten Ave & Grand Ave
City: Oakland

Project ID: 24-080355-011
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Staten Ave		Staten Ave		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	2	5	8	10	1	0	0	0	26
7:15 AM	5	4	10	5	0	1	0	1	26
7:30 AM	1	5	9	7	0	1	0	0	23
7:45 AM	3	9	8	7	0	1	0	0	28
8:00 AM	3	12	12	9	1	0	1	2	40
8:15 AM	4	9	7	10	0	2	3	1	36
8:30 AM	3	2	7	7	1	1	3	0	24
8:45 AM	10	10	14	8	2	0	0	1	45
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	31	56	75	63	5	6	7	5	248
APPROACH %'s :	35.63%	64.37%	54.35%	45.65%	45.45%	54.55%	58.33%	41.67%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	20	33	40	34	4	3	7	4	145
PEAK HR FACTOR :	0.500	0.688	0.714	0.850	0.500	0.375	0.583	0.500	0.806
	0.663		0.841		0.875		0.688		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	15	12	9	11	2	2	5	1	57
4:15 PM	13	13	15	14	4	1	5	1	66
4:30 PM	11	13	14	10	2	2	2	3	57
4:45 PM	12	5	8	7	0	2	3	3	40
5:00 PM	9	16	10	13	1	2	0	2	53
5:15 PM	18	9	12	12	0	3	8	5	67
5:30 PM	11	16	11	13	0	0	6	4	61
5:45 PM	11	9	18	8	2	0	10	1	59
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	100	93	97	88	11	12	39	20	460
APPROACH %'s :	51.81%	48.19%	52.43%	47.57%	47.83%	52.17%	66.10%	33.90%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	50	43	44	42	3	9	13	13	217
PEAK HR FACTOR :	0.694	0.672	0.786	0.808	0.375	0.750	0.406	0.650	0.810
	0.861		0.896		0.750		0.500		

Prepared by National Data & Surveying Services

Staten Ave & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-011
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Staten Ave)

AM	16	1	13	0	34	AM
NOON	0	0	0	0	0	NOON
PM	22	3	13	0	67	PM

EASTBOUND (Grand Ave)

AM	NOON	PM	
751	0	536	
2	0	3	0
7	0	26	1
420	0	1023	2
1	0	13	0

WESTBOUND (Grand Ave)

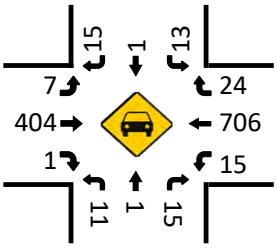
PM	NOON	AM	
37	0	26	0
499	0	721	2
17	0	15	1
0	0	1	0
1057	0	449	

NORTHBOUND (Staten Ave)

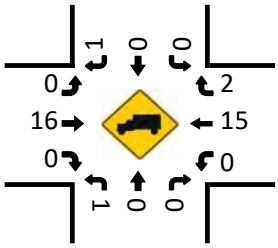
PM	33	0	12	4	21	PM
NOON	0	0	0	0	0	NOON
AM	17	0	12	1	15	AM

CONTROL			
Signalized			
TEV	1251 AM	0 NOON	1693 PM
PHF	0.91		0.94

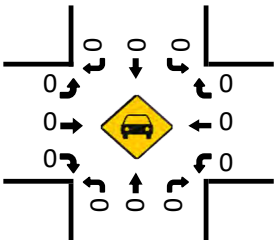
Cars (AM)



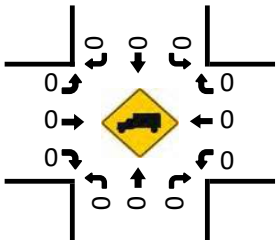
HT (AM)



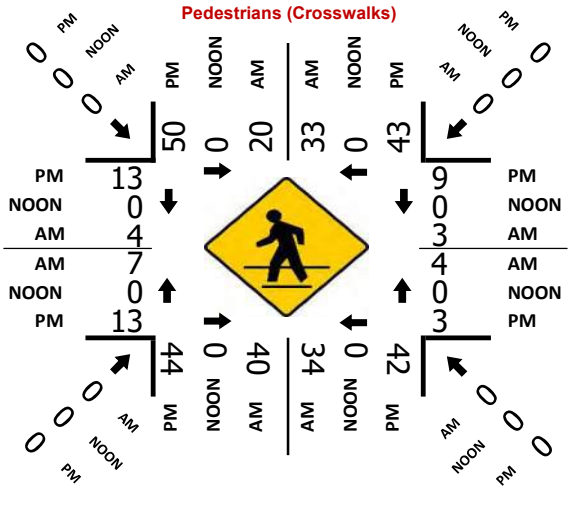
Cars (NOON)



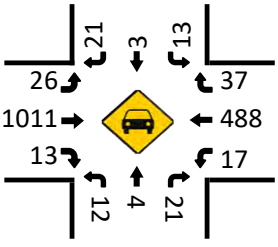
HT (NOON)



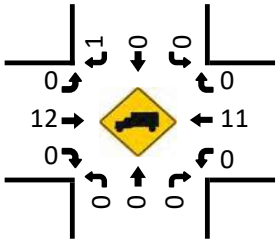
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Bellevue Ave E & Grand Ave
City: Oakland
Control: 2-Way Stop(NB/SB) with Signalized Crosswalk

Project ID: 24-080355-012
Date: 11/19/2024

Data - Total

NS/EW Streets:	Bellevue Ave E				Bellevue Ave E				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	10	0	1	0	4	0	2	43	0	0	0	92	1	0	153
7:15 AM	1	1	3	0	1	0	2	0	0	51	0	0	0	94	4	0	157
7:30 AM	0	0	8	0	1	0	2	0	1	53	0	0	0	123	5	0	193
7:45 AM	0	0	7	0	3	0	1	0	0	81	0	0	0	137	6	0	235
8:00 AM	0	0	6	0	1	0	4	0	1	97	0	0	0	166	7	0	282
8:15 AM	4	0	9	0	2	0	5	0	4	125	0	0	0	193	8	0	350
8:30 AM	1	0	3	0	2	0	2	0	1	120	0	0	0	203	9	0	341
8:45 AM	1	1	6	0	0	0	3	0	2	97	0	0	0	187	12	0	309
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	2	52	0	11	0	23	0	11	667	0	0	0	1195	52	0	2020
APPROACH %'s :	11.48%	3.28%	85.25%	0.00%	32.35%	0.00%	67.65%	0.00%	1.62%	98.38%	0.00%	0.00%	0.00%	95.83%	4.17%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	6	1	24	0	5	0	14	0	8	439	0	0	0	749	36	0	1282
PEAK HR FACTOR :	0.375	0.250	0.667	0.000	0.625	0.000	0.700	0.000	0.500	0.878	0.000	0.000	0.000	0.922	0.750	0.000	0.916
	0.596				0.679				0.866				0.926				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	0	17	0	3	0	3	0	2	200	0	0	0	134	4	2	367
4:15 PM	3	0	14	0	5	0	2	0	0	211	0	2	0	148	3	1	389
4:30 PM	0	0	19	0	1	0	8	0	2	266	0	0	0	114	7	1	418
4:45 PM	0	0	18	0	5	0	3	0	4	235	0	1	0	140	11	0	417
5:00 PM	4	0	14	0	1	0	4	0	5	278	0	1	0	126	12	0	445
5:15 PM	0	2	12	0	2	0	4	0	7	263	0	1	0	151	7	0	449
5:30 PM	6	0	9	0	3	0	3	0	7	227	0	0	0	124	8	0	387
5:45 PM	1	1	9	0	3	0	2	0	6	250	0	1	0	127	11	2	413
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	16	3	112	0	23	0	29	0	33	1930	0	6	0	1064	63	6	3285
APPROACH %'s :	12.21%	2.29%	85.50%	0.00%	44.23%	0.00%	55.77%	0.00%	1.68%	98.02%	0.00%	0.30%	0.00%	93.91%	5.56%	0.53%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	4	2	63	0	9	0	19	0	18	1042	0	3	0	531	37	1	1729
PEAK HR FACTOR :	0.250	0.250	0.829	0.000	0.450	0.000	0.594	0.000	0.643	0.937	0.000	0.750	0.000	0.879	0.771	0.250	0.963
	0.908				0.778				0.936				0.900				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bellevue Ave E & Grand Ave
City: Oakland
Control: 2-Way Stop(NB/SB) with Signalized Crosswalk

Project ID: 24-080355-012
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Bellevue Ave E				Bellevue Ave E				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	10	0	1	0	3	0	2	40	0	0	0	90	1	0	147
7:15 AM	1	0	3	0	1	0	2	0	0	49	0	0	0	91	4	0	151
7:30 AM	0	0	8	0	1	0	2	0	0	52	0	0	0	118	5	0	186
7:45 AM	0	0	6	0	3	0	1	0	0	79	0	0	0	133	6	0	228
8:00 AM	0	0	6	0	1	0	3	0	0	92	0	0	0	164	7	0	273
8:15 AM	3	0	9	0	2	0	5	0	4	123	0	0	0	189	8	0	343
8:30 AM	1	0	3	0	2	0	2	0	1	118	0	0	0	199	9	0	335
8:45 AM	1	1	6	0	0	0	3	0	2	91	0	0	0	182	12	0	298
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	1	51	0	11	0	21	0	9	644	0	0	0	1166	52	0	1961
APPROACH %'s :	10.34%	1.72%	87.93%	0.00%	34.38%	0.00%	65.63%	0.00%	1.38%	98.62%	0.00%	0.00%	0.00%	95.73%	4.27%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	5	1	24	0	5	0	13	0	7	424	0	0	0	734	36	0	1249
PEAK HR FACTOR :	0.417	0.250	0.667	0.000	0.625	0.000	0.650	0.000	0.438	0.862	0.000	0.000	0.000	0.922	0.750	0.000	0.910
	0.625				0.643				0.848				0.925				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	0	17	0	3	0	3	0	2	199	0	0	0	131	4	2	363
4:15 PM	3	0	14	0	5	0	2	0	0	208	0	1	0	146	3	1	383
4:30 PM	0	0	19	0	1	0	7	0	2	262	0	0	0	112	7	1	411
4:45 PM	0	0	18	0	5	0	3	0	3	234	0	1	0	138	11	0	413
5:00 PM	4	0	14	0	1	0	4	0	5	275	0	1	0	122	12	0	438
5:15 PM	0	2	11	0	2	0	4	0	7	260	0	1	0	149	7	0	443
5:30 PM	6	0	9	0	3	0	3	0	7	226	0	0	0	121	8	0	383
5:45 PM	1	1	9	0	3	0	2	0	6	246	0	1	0	125	11	2	407
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	16	3	111	0	23	0	28	0	32	1910	0	5	0	1044	63	6	3241
APPROACH %'s :	12.31%	2.31%	85.38%	0.00%	45.10%	0.00%	54.90%	0.00%	1.64%	98.10%	0.00%	0.26%	0.00%	93.80%	5.66%	0.54%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	4	2	62	0	9	0	18	0	17	1031	0	3	0	521	37	1	1705
PEAK HR FACTOR :	0.250	0.250	0.816	0.000	0.450	0.000	0.643	0.000	0.607	0.937	0.000	0.750	0.000	0.874	0.771	0.250	0.962
	0.895				0.844				0.935				0.896				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bellevue Ave E & Grand Ave
City: Oakland
Control: 2-Way Stop(NB/SB) with Signalized Crosswalk

Project ID: 24-080355-012
Date: 11/19/2024

Data - HT

NS/EW Streets:	Bellevue Ave E				Bellevue Ave E				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	1	0	0	3	0	0	0	2	0	0	6
7:15 AM	0	1	0	0	0	0	0	0	0	2	0	0	0	3	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	5	0	0	7
7:45 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	4	0	0	7
8:00 AM	0	0	0	0	0	0	1	0	1	5	0	0	0	2	0	0	9
8:15 AM	1	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	7
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
8:45 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	5	0	0	11
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	1	1	0	0	0	2	0	2	23	0	0	0	29	0	0	59
APPROACH %'s :	33.33%	33.33%	33.33%	0.00%	0.00%	0.00%	100.00%	0.00%	8.00%	92.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	1	0	1	15	0	0	0	15	0	0	33
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.625	0.000	0.000	0.000	0.750	0.000	0.000	0.750
	0.250				0.250				0.667				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	1	0	2	0	0	6
4:30 PM	0	0	0	0	0	0	1	0	0	4	0	0	0	2	0	0	7
4:45 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	0	7
5:15 PM	0	0	1	0	0	0	0	0	0	3	0	0	0	2	0	0	6
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	1	0	1	20	0	1	0	20	0	0	44
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	4.55%	90.91%	0.00%	4.55%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	1	0	1	11	0	0	0	10	0	0	24
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.250	0.688	0.000	0.000	0.000	0.625	0.000	0.000	0.857
	0.250				0.250				0.750				0.625				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bellevue Ave E & Grand Ave
City: Oakland
Control: 2-Way Stop(NB/SB) with Signalized Crosswalk

Project ID: 24-080355-012
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Bellevue Ave E				Bellevue Ave E				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	1	0	0	1	0	0	0	10	0	0	13
7:15 AM	0	0	1	0	0	0	1	0	0	2	0	0	0	3	0	0	7
7:30 AM	0	0	0	0	1	0	1	0	0	8	0	0	0	9	0	0	19
7:45 AM	0	0	4	0	0	0	1	0	0	3	0	0	0	4	0	0	12
8:00 AM	0	0	2	0	0	0	0	0	0	5	0	0	0	11	0	0	18
8:15 AM	0	0	2	0	0	0	1	0	0	6	0	0	0	7	1	0	17
8:30 AM	0	0	3	0	0	0	1	0	0	1	0	0	0	19	0	0	24
8:45 AM	0	0	1	0	0	0	0	0	1	4	0	0	0	8	0	0	14
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	14	0	1	0	6	0	1	30	0	0	0	71	1	0	124
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	14.29%	0.00%	85.71%	0.00%	3.23%	96.77%	0.00%	0.00%	0.00%	98.61%	1.39%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	8	0	0	0	2	0	1	16	0	0	0	45	1	0	73
PEAK HR FACTOR :	0.000	0.000	0.667	0.000	0.000	0.000	0.500	0.000	0.250	0.667	0.000	0.000	0.000	0.592	0.250	0.000	0.760
	0.667				0.500				0.708				0.605				

NS/EW Streets:	Bellevue Ave E				Bellevue Ave E				Grand Ave				Grand Ave				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	3	0	0	0	1	0	1	7	0	0	0	4	0	0	16
4:15 PM	0	0	0	0	0	0	0	0	1	16	0	0	0	3	0	0	20
4:30 PM	0	0	2	0	0	0	1	0	0	15	0	0	1	6	0	0	25
4:45 PM	0	0	2	0	0	0	0	0	2	12	0	0	0	4	0	0	20
5:00 PM	0	0	1	0	0	0	0	0	0	17	0	0	0	6	0	0	24
5:15 PM	0	0	1	0	1	0	0	0	1	7	0	0	0	3	0	0	13
5:30 PM	0	0	1	0	0	0	0	0	0	9	0	0	0	3	0	0	13
5:45 PM	0	0	2	0	2	0	1	0	0	13	0	0	0	6	0	0	24
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	12	0	3	0	3	0	5	96	0	0	1	35	0	0	155
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	50.00%	0.00%	50.00%	0.00%	4.95%	95.05%	0.00%	0.00%	2.78%	97.22%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	6	0	1	0	1	0	3	51	0	0	1	19	0	0	82
PEAK HR FACTOR :	0.000	0.000	0.750	0.000	0.250	0.000	0.250	0.000	0.375	0.750	0.000	0.000	0.250	0.792	0.000	0.000	0.820
	0.750				0.500				0.794				0.714				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bellevue Ave E & Grand Ave
City: Oakland

Project ID: 24-080355-012
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Bellevue Ave E		Bellevue Ave E		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	2	3	10	10	0	0	0	2	27
7:15 AM	2	4	11	5	0	0	0	2	24
7:30 AM	2	4	10	9	0	1	0	2	28
7:45 AM	1	6	9	9	1	0	0	2	28
8:00 AM	5	9	17	9	0	0	2	2	44
8:15 AM	5	5	7	13	0	0	4	2	36
8:30 AM	3	3	6	11	1	0	3	0	27
8:45 AM	8	10	9	9	0	0	1	2	39
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	28	44	79	75	2	1	10	14	253
APPROACH %'s :	38.89%	61.11%	51.30%	48.70%	66.67%	33.33%	41.67%	58.33%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	21	27	39	42	1	0	10	6	146
PEAK HR FACTOR :	0.656	0.675	0.574	0.808	0.250		0.625	0.750	0.830
	0.667		0.779		0.250		0.667		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	20	11	12	11	0	0	0	0	54
4:15 PM	17	9	8	14	0	0	1	0	49
4:30 PM	16	12	15	9	0	0	1	1	54
4:45 PM	10	8	9	5	0	0	2	0	34
5:00 PM	15	13	11	9	0	0	4	5	57
5:15 PM	6	9	15	8	0	0	0	1	39
5:30 PM	8	13	9	12	0	0	2	1	45
5:45 PM	9	8	12	4	0	0	0	2	35
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	101	83	91	72	0	0	10	10	367
APPROACH %'s :	54.89%	45.11%	55.83%	44.17%			50.00%	50.00%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	47	42	50	31	0	0	7	7	184
PEAK HR FACTOR :	0.734	0.808	0.833	0.861			0.438	0.350	0.807
	0.795		0.844				0.389		

Prepared by National Data & Surveying Services

Bellevue Ave E & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-012
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

CONTROL: 2-Way Stop(NB/SB) with Signalized Crosswalk

	AM	NOON	PM
TEV	1282	0	1729
PHF	0.92		0.96

SOUTHBOUND (Bellevue Ave E)

	Left	Thru	Right	U-Turn	
AM	14	0	5	0	45 AM
NOON	0	0	0	0	0 NOON
PM	19	0	9	0	57 PM

EASTBOUND (Grand Ave)

	Left	Thru	Right	U-Turn	
AM	769	0	557	0	AM
NOON	0	0	0	1	NOON
PM	0	0	3	0	PM
AM	8	0	18	1	AM
NOON	439	0	1042	2	NOON
PM	0	0	0	0	PM

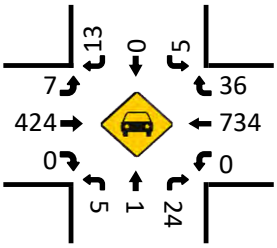
WESTBOUND (Grand Ave)

	Left	Thru	Right	U-Turn	
PM	37	0	36	0	PM
NOON	531	0	749	2	NOON
AM	0	0	0	0	AM
PM	1	0	0	0	PM
NOON	1115	0	468		NOON
AM					AM

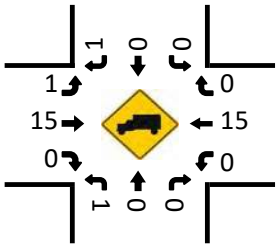
NORTHBOUND (Bellevue Ave E)

	Left	Thru	Right	U-Turn	
PM	0	0	4	2	63 PM
NOON	0	0	0	0	0 NOON
AM	0	0	6	1	24 AM

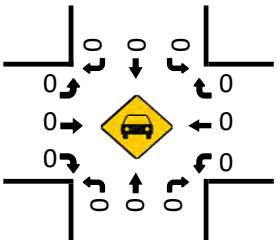
Cars (AM)



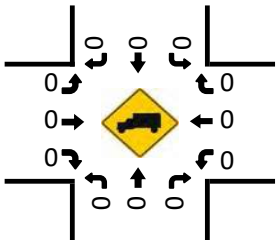
HT (AM)



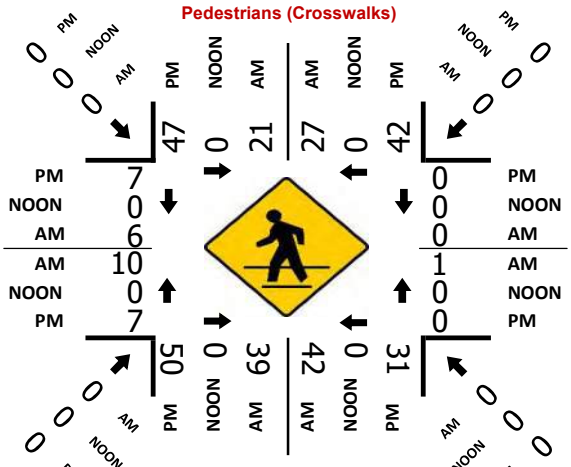
Cars (NOON)



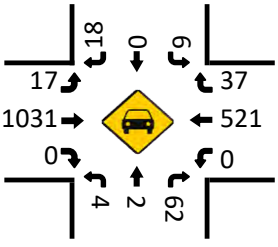
HT (NOON)



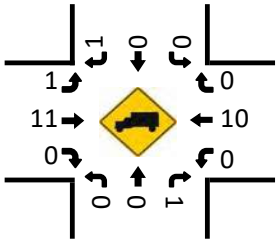
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Euclid Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-013
Date: 11/19/2024

Data - Total

NS/EW Streets:	Euclid Ave				Euclid Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	3	0	4	0	1	60	0	0	0	89	7	1	165
7:15 AM	0	0	0	0	2	0	1	0	1	51	0	0	0	100	7	0	162
7:30 AM	0	0	0	0	2	0	2	0	1	63	0	0	0	125	13	0	206
7:45 AM	0	0	0	0	4	0	5	0	2	91	0	0	0	143	20	0	265
8:00 AM	0	0	0	0	4	0	4	0	0	105	0	0	0	167	12	0	292
8:15 AM	0	0	0	0	8	0	1	0	3	129	0	0	0	200	15	0	356
8:30 AM	0	0	0	0	5	0	2	0	4	126	0	0	0	211	21	0	369
8:45 AM	0	0	0	0	6	0	1	0	5	98	0	0	0	198	16	0	324
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	34	0	20	0	17	723	0	0	0	1233	111	1	2139
APPROACH %'s :					62.96%	0.00%	37.04%	0.00%	2.30%	97.70%	0.00%	0.00%	0.00%	91.67%	8.25%	0.07%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	23	0	8	0	12	458	0	0	0	776	64	0	1341
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.719	0.000	0.500	0.000	0.600	0.888	0.000	0.000	0.000	0.919	0.762	0.000	0.909
					0.861				0.890				0.905				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	5	0	5	0	5	216	0	0	0	133	22	0	386
4:15 PM	0	0	0	0	6	0	5	0	7	226	0	1	0	145	32	1	423
4:30 PM	0	0	0	0	6	0	4	0	7	271	0	2	0	115	27	1	433
4:45 PM	0	0	0	0	7	0	5	0	6	261	0	1	0	147	27	0	454
5:00 PM	0	0	0	0	15	0	7	0	6	286	0	1	0	138	29	0	482
5:15 PM	0	0	0	0	10	0	4	0	6	287	0	1	0	148	33	1	490
5:30 PM	0	0	0	0	13	0	4	0	11	232	0	0	0	125	34	2	421
5:45 PM	0	0	0	0	5	0	5	0	11	255	0	0	0	136	39	0	451
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	67	0	39	0	59	2034	0	6	0	1087	243	5	3540
APPROACH %'s :					63.21%	0.00%	36.79%	0.00%	2.81%	96.90%	0.00%	0.29%	0.00%	81.42%	18.20%	0.37%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	38	0	20	0	25	1105	0	5	0	548	116	2	1859
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.633	0.000	0.714	0.000	0.893	0.963	0.000	0.625	0.000	0.926	0.879	0.500	0.948
					0.659				0.965				0.915				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Euclid Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-013
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Euclid Ave				Euclid Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	3	0	4	0	1	56	0	0	0	87	7	1	159
7:15 AM	0	0	0	0	2	0	0	0	1	50	0	0	0	98	7	0	158
7:30 AM	0	0	0	0	2	0	1	0	1	61	0	0	0	121	12	0	198
7:45 AM	0	0	0	0	4	0	4	0	1	89	0	0	0	140	19	0	257
8:00 AM	0	0	0	0	4	0	4	0	0	100	0	0	0	165	12	0	285
8:15 AM	0	0	0	0	8	0	1	0	3	127	0	0	0	196	14	0	349
8:30 AM	0	0	0	0	5	0	2	0	4	124	0	0	0	206	21	0	362
8:45 AM	0	0	0	0	6	0	1	0	4	93	0	0	0	194	16	0	314
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	34	0	17	0	15	700	0	0	0	1207	108	1	2082
APPROACH %'s :					66.67%	0.00%	33.33%	0.00%	2.10%	97.90%	0.00%	0.00%	0.00%	91.72%	8.21%	0.08%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	23	0	8	0	11	444	0	0	0	761	63	0	1310
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.719	0.000	0.500	0.000	0.688	0.874	0.000	0.000	0.000	0.924	0.750	0.000	0.905
					0.861				0.875				0.907				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	5	0	5	0	5	215	0	0	0	130	22	0	382
4:15 PM	0	0	0	0	6	0	5	0	7	223	0	1	0	143	32	1	418
4:30 PM	0	0	0	0	6	0	4	0	6	268	0	2	0	113	27	1	427
4:45 PM	0	0	0	0	7	0	5	0	6	259	0	1	0	145	27	0	450
5:00 PM	0	0	0	0	15	0	7	0	6	283	0	1	0	133	28	0	473
5:15 PM	0	0	0	0	9	0	4	0	6	284	0	1	0	146	33	1	484
5:30 PM	0	0	0	0	13	0	4	0	11	230	0	0	0	122	34	2	416
5:45 PM	0	0	0	0	5	0	5	0	11	251	0	0	0	134	38	0	444
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	66	0	39	0	58	2013	0	6	0	1066	241	5	3494
APPROACH %'s :					62.86%	0.00%	37.14%	0.00%	2.79%	96.92%	0.00%	0.29%	0.00%	81.25%	18.37%	0.38%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	37	0	20	0	24	1094	0	5	0	537	115	2	1834
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.617	0.000	0.714	0.000	1.000	0.963	0.000	0.625	0.000	0.920	0.871	0.500	0.947
					0.648				0.965				0.908				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Euclid Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-013
Date: 11/19/2024

Data - HT

NS/EW Streets:	Euclid Ave				Euclid Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	6
7:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	4
7:30 AM	0	0	0	0	0	0	1	0	0	2	0	0	0	4	1	0	8
7:45 AM	0	0	0	0	0	0	1	0	1	2	0	0	0	3	1	0	8
8:00 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	7
8:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	1	0	7
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7
8:45 AM	0	0	0	0	0	0	0	0	1	5	0	0	0	4	0	0	10
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	3	0	2	23	0	0	0	26	3	0	57
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	8.00%	92.00%	0.00%	0.00%	0.00%	89.66%	10.34%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	14	0	0	0	15	1	0	31
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.700	0.000	0.000	0.000	0.750	0.250	0.000	0.775
									0.625				0.800				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
4:30 PM	0	0	0	0	0	0	0	0	1	3	0	0	0	2	0	0	6
4:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	5	1	0	9
5:15 PM	0	0	0	0	1	0	0	0	0	3	0	0	0	2	0	0	6
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	1	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	1	21	0	0	0	21	2	0	46
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	4.55%	95.45%	0.00%	0.00%	0.00%	91.30%	8.70%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	1	11	0	0	0	11	1	0	25
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.917	0.000	0.000	0.000	0.550	0.250	0.000	0.694
					0.250				0.750				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Euclid Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-013
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Euclid Ave				Euclid Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	3	0	0	0	10	0	0	14
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
7:30 AM	0	0	0	0	0	0	0	0	0	8	0	0	0	9	0	0	17
7:45 AM	0	0	0	0	0	0	0	0	0	7	0	0	0	3	0	0	10
8:00 AM	0	0	0	0	0	0	0	0	0	6	0	0	0	11	0	0	17
8:15 AM	0	0	0	0	0	0	0	0	0	9	0	0	0	9	0	0	18
8:30 AM	0	0	0	0	0	0	1	0	0	4	0	0	0	17	0	0	22
8:45 AM	0	0	0	0	2	0	0	0	1	4	0	0	0	7	2	0	16
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	3	0	1	0	1	43	0	0	0	70	2	0	120
APPROACH %'s :					75.00%	0.00%	25.00%	0.00%	2.27%	97.73%	0.00%	0.00%	0.00%	97.22%	2.78%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	2	0	1	0	1	23	0	0	0	44	2	0	73
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.639	0.000	0.000	0.000	0.647	0.250	0.000	0.830
					0.375				0.667				0.676				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	1	8	0	0	0	3	0	0	12
4:15 PM	0	0	0	0	0	0	0	0	0	16	0	0	0	3	0	0	19
4:30 PM	0	0	0	0	0	0	0	0	0	17	0	0	1	7	0	0	25
4:45 PM	0	0	0	0	1	0	0	0	1	13	0	0	0	4	0	0	19
5:00 PM	0	0	0	0	0	0	0	0	0	17	0	0	0	6	0	0	23
5:15 PM	0	0	0	0	0	0	1	0	0	11	0	0	0	2	0	0	14
5:30 PM	0	0	0	0	0	0	1	0	0	10	0	0	0	4	0	0	15
5:45 PM	0	0	0	0	0	0	0	0	0	17	0	0	0	6	0	0	23
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	2	0	2	109	0	0	1	35	0	0	150
APPROACH %'s :					33.33%	0.00%	66.67%	0.00%	1.80%	98.20%	0.00%	0.00%	2.78%	97.22%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	1	0	1	58	0	0	1	19	0	0	81
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.853	0.000	0.000	0.250	0.679	0.000	0.000	0.810
					0.500				0.868				0.625				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Euclid Ave & Grand Ave
City: Oakland

Project ID: 24-080355-013
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Euclid Ave		Euclid Ave		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	3	0	0	0	0	0	0	4
7:15 AM	3	2	0	0	0	2	0	4	11
7:30 AM	3	4	0	0	1	0	1	6	15
7:45 AM	2	5	0	0	3	1	0	1	12
8:00 AM	5	4	0	0	1	4	2	3	19
8:15 AM	5	2	0	0	0	1	2	0	10
8:30 AM	1	5	0	0	1	1	1	1	10
8:45 AM	7	2	0	0	7	1	1	0	18
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	27	27	0	0	13	10	7	15	99
APPROACH %'s :	50.00%	50.00%			56.52%	43.48%	31.82%	68.18%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	18	13	0	0	9	7	6	4	57
PEAK HR FACTOR :	0.643	0.650			0.321	0.438	0.750	0.333	0.750
	0.861				0.500		0.500		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	12	7	0	0	4	2	1	4	30
4:15 PM	10	7	0	0	7	4	2	2	32
4:30 PM	16	16	0	0	5	2	1	3	43
4:45 PM	10	6	0	0	5	3	3	5	32
5:00 PM	8	8	0	0	3	2	2	3	26
5:15 PM	4	11	0	0	4	0	1	0	20
5:30 PM	3	10	0	0	4	2	3	2	24
5:45 PM	4	9	0	0	4	3	3	0	23
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	67	74	0	0	36	18	16	19	230
APPROACH %'s :	47.52%	52.48%			66.67%	33.33%	45.71%	54.29%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	38	41	0	0	17	7	7	11	121
PEAK HR FACTOR :	0.594	0.641			0.850	0.583	0.583	0.550	0.703
	0.617				0.750		0.563		

Prepared by National Data & Surveying Services

Euclid Ave & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-013
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS

AM: 08:00 AM - 09:00 AM
NOON: NONE
PM: 04:30 PM - 05:30 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (Euclid Ave)

AM	8	0	23	0	76	AM
NOON	0	0	0	0	0	NOON
PM	20	0	38	0	141	PM

EASTBOUND (Grand Ave)

AM	NOON	PM	
784	0	573	⇦
0	0	5	↶ 0
12	0	25	↱ 1
458	0	1105	→ 2
0	0	0	↷ 0
AM	NOON	PM	

WESTBOUND (Grand Ave)

PM	NOON	AM	
116	0	64	0 ↰
548	0	776	2 ←
0	0	0	0 ↙
2	0	0	0 ↶
1145	0	481	⇨
PM	NOON	AM	

NORTHBOUND (Euclid Ave)

PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

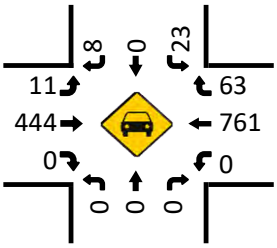
	0	1	0	0
	0	0	0	0

CONTROL

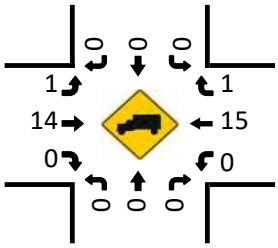
Signalized

TEV	1341 AM	0 NOON	1859 PM
PHF	0.91		0.95

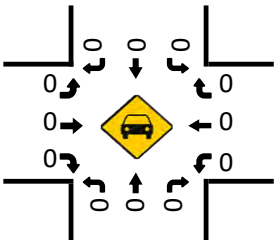
Cars (AM)



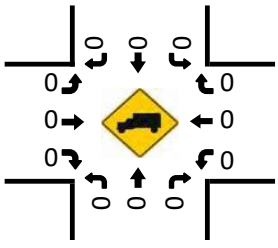
HT (AM)



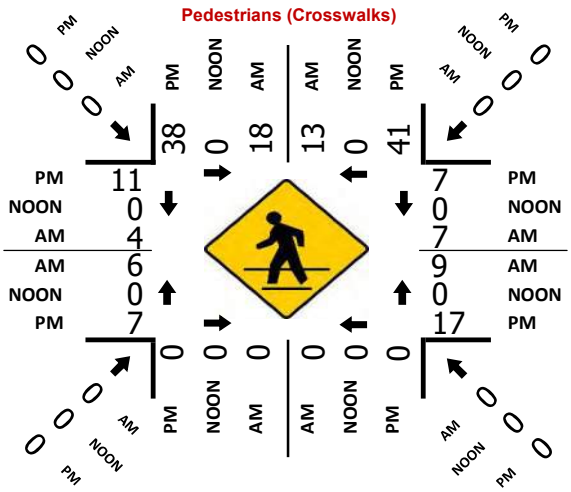
Cars (NOON)



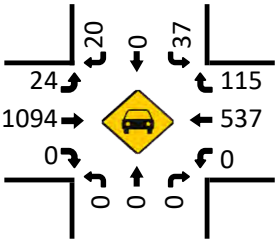
HT (NOON)



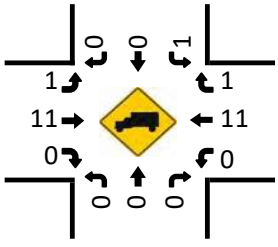
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: El Embarcadero & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-014
Date: 11/19/2024

Data - Total

NS/EW Streets:	El Embarcadero				El Embarcadero				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	23	0	37	0	0	0	0	0	0	44	21	0	7	65	0	0	197
7:15 AM	25	0	35	0	0	0	0	0	0	42	14	0	11	88	0	1	216
7:30 AM	32	0	43	0	0	0	0	0	0	50	16	0	13	102	0	0	256
7:45 AM	41	0	31	0	0	0	0	0	0	78	18	0	16	124	0	0	308
8:00 AM	48	0	36	0	0	0	0	0	0	76	26	0	21	129	0	0	336
8:15 AM	63	0	54	0	0	0	0	0	0	99	43	0	31	165	0	0	455
8:30 AM	51	0	43	0	0	0	0	0	0	86	41	0	25	171	0	0	417
8:45 AM	66	0	37	0	0	0	0	0	0	81	31	0	18	164	0	0	397
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	349	0	316	0	0	0	0	0	0	556	210	0	142	1008	0	1	2582
APPROACH %'s :	52.48%	0.00%	47.52%	0.00%					0.00%	72.58%	27.42%	0.00%	12.34%	87.58%	0.00%	0.09%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	228	0	170	0	0	0	0	0	0	342	141	0	95	629	0	0	1605
PEAK HR FACTOR :	0.864	0.000	0.787	0.000	0.000	0.000	0.000	0.000	0.000	0.864	0.820	0.000	0.766	0.920	0.000	0.000	0.882
	0.850								0.850				0.923				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	40	0	27	0	0	0	0	0	0	155	78	0	58	123	0	0	481
4:15 PM	44	0	36	0	0	0	0	0	0	171	73	0	41	136	0	0	501
4:30 PM	41	0	29	0	0	0	0	0	0	205	75	0	44	117	0	1	512
4:45 PM	41	0	27	0	0	0	0	0	0	173	85	0	52	132	0	1	511
5:00 PM	27	0	31	0	0	0	0	0	0	182	99	1	43	144	0	0	527
5:15 PM	46	0	35	0	0	0	0	0	0	190	113	0	50	126	0	0	560
5:30 PM	39	0	31	0	0	0	0	0	0	155	109	1	48	124	0	0	507
5:45 PM	42	0	28	0	0	0	0	0	0	143	98	0	60	132	0	0	503
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	320	0	244	0	0	0	0	0	0	1374	730	2	396	1034	0	2	4102
APPROACH %'s :	56.74%	0.00%	43.26%	0.00%					0.00%	65.24%	34.66%	0.09%	27.65%	72.21%	0.00%	0.14%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	155	0	122	0	0	0	0	0	0	750	372	1	189	519	0	2	2110
PEAK HR FACTOR :	0.842	0.000	0.871	0.000	0.000	0.000	0.000	0.000	0.000	0.915	0.823	0.250	0.909	0.901	0.000	0.500	0.942
	0.855								0.927				0.949				

National Data & Surveying Services

Intersection Turning Movement Count

Location: El Embarcadero & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-014
Date: 11/19/2024

Data - Cars

NS/EW Streets:	El Embarcadero				El Embarcadero				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	23	0	36	0	0	0	0	0	0	41	20	0	6	63	0	0	189
7:15 AM	25	0	35	0	0	0	0	0	0	41	14	0	11	84	0	1	211
7:30 AM	32	0	41	0	0	0	0	0	0	48	16	0	12	99	0	0	248
7:45 AM	40	0	30	0	0	0	0	0	0	77	18	0	16	120	0	0	301
8:00 AM	47	0	36	0	0	0	0	0	0	73	25	0	20	128	0	0	329
8:15 AM	63	0	54	0	0	0	0	0	0	96	42	0	30	160	0	0	445
8:30 AM	49	0	42	0	0	0	0	0	0	84	41	0	25	167	0	0	408
8:45 AM	65	0	37	0	0	0	0	0	0	76	31	0	18	162	0	0	389
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	344	0	311	0	0	0	0	0	0	536	207	0	138	983	0	1	2520
APPROACH %'s :	52.52%	0.00%	47.48%	0.00%					0.00%	72.14%	27.86%	0.00%	12.30%	87.61%	0.00%	0.09%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	224	0	169	0	0	0	0	0	0	329	139	0	93	617	0	0	1571
PEAK HR FACTOR :	0.862	0.000	0.782	0.000	0.000	0.000	0.000	0.000	0.000	0.857	0.827	0.000	0.775	0.924	0.000	0.000	0.883
	0.840								0.848				0.924				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	40	0	27	0	0	0	0	0	0	153	78	0	55	120	0	0	473
4:15 PM	44	0	36	0	0	0	0	0	0	168	73	0	40	134	0	0	495
4:30 PM	40	0	29	0	0	0	0	0	0	203	74	0	44	116	0	1	507
4:45 PM	41	0	27	0	0	0	0	0	0	172	84	0	50	130	0	1	505
5:00 PM	27	0	31	0	0	0	0	0	0	180	98	1	43	138	0	0	518
5:15 PM	45	0	35	0	0	0	0	0	0	188	113	0	50	125	0	0	556
5:30 PM	39	0	31	0	0	0	0	0	0	153	108	1	48	121	0	0	501
5:45 PM	41	0	28	0	0	0	0	0	0	139	98	0	60	129	0	0	495
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	317	0	244	0	0	0	0	0	0	1356	726	2	390	1013	0	2	4050
APPROACH %'s :	56.51%	0.00%	43.49%	0.00%					0.00%	65.07%	34.84%	0.10%	27.76%	72.10%	0.00%	0.14%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	153	0	122	0	0	0	0	0	0	743	369	1	187	509	0	2	2086
PEAK HR FACTOR :	0.850	0.000	0.871	0.000	0.000	0.000	0.000	0.000	0.000	0.915	0.816	0.250	0.935	0.922	0.000	0.500	0.938
	0.859								0.924				0.964				

National Data & Surveying Services

Intersection Turning Movement Count

Location: El Embarcadero & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-014
Date: 11/19/2024

Data - HT

NS/EW Streets:	El Embarcadero				El Embarcadero				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	1	0	0	0	0	0	0	3	1	0	1	2	0	0	8
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5
7:30 AM	0	0	2	0	0	0	0	0	0	2	0	0	1	3	0	0	8
7:45 AM	1	0	1	0	0	0	0	0	0	1	0	0	0	4	0	0	7
8:00 AM	1	0	0	0	0	0	0	0	0	3	1	0	1	1	0	0	7
8:15 AM	0	0	0	0	0	0	0	0	0	3	1	0	1	5	0	0	10
8:30 AM	2	0	1	0	0	0	0	0	0	2	0	0	0	4	0	0	9
8:45 AM	1	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	0	5	0	0	0	0	0	0	20	3	0	4	25	0	0	62
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%					0.00%	86.96%	13.04%	0.00%	13.79%	86.21%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	4	0	1	0	0	0	0	0	0	13	2	0	2	12	0	0	34
PEAK HR FACTOR :	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.650	0.500	0.000	0.500	0.600	0.000	0.000	0.850
	0.417								0.750				0.583				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	3	3	0	0	8
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	1	2	0	0	6
4:30 PM	1	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0	5
4:45 PM	0	0	0	0	0	0	0	0	0	1	1	0	2	2	0	0	6
5:00 PM	0	0	0	0	0	0	0	0	0	2	1	0	0	6	0	0	9
5:15 PM	1	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	2	1	0	0	3	0	0	6
5:45 PM	1	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	0	0	0	0	0	0	0	0	18	4	0	6	21	0	0	52
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	81.82%	18.18%	0.00%	22.22%	77.78%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	2	0	0	0	0	0	0	0	0	7	3	0	2	10	0	0	24
PEAK HR FACTOR :	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.875	0.750	0.000	0.250	0.417	0.000	0.000	0.667
	0.500								0.833				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: El Embarcadero & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-014
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	El Embarcadero				El Embarcadero				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	6	0	0	0	0	0	0	0	0	0	2	0	0	3	0	0	11
7:15 AM	2	0	0	0	0	0	0	0	0	2	1	0	1	2	0	0	8
7:30 AM	6	0	0	0	0	0	0	0	0	5	3	0	3	2	0	0	19
7:45 AM	2	0	2	0	0	0	0	0	0	2	4	0	0	5	0	0	15
8:00 AM	4	0	1	0	0	0	0	0	1	1	4	0	0	9	0	0	20
8:15 AM	6	0	1	0	0	0	0	0	0	4	3	0	0	3	0	0	17
8:30 AM	8	0	0	0	0	0	0	0	0	1	2	0	0	6	0	0	17
8:45 AM	7	0	0	0	0	0	0	0	0	3	1	0	1	3	0	0	15
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	41	0	4	0	0	0	0	0	1	18	20	0	5	33	0	0	122
APPROACH %'s :	91.11%	0.00%	8.89%	0.00%					2.56%	46.15%	51.28%	0.00%	13.16%	86.84%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	25	0	2	0	0	0	0	0	1	9	10	0	1	21	0	0	69
PEAK HR FACTOR :	0.781	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.250	0.563	0.625	0.000	0.250	0.583	0.000	0.000	0.863
	0.844								0.714				0.611				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	3	3	0	1	3	0	0	10
4:15 PM	2	0	1	0	0	0	0	0	0	7	6	0	2	1	0	0	19
4:30 PM	3	0	0	0	0	0	0	0	0	8	6	1	1	2	0	0	21
4:45 PM	1	0	2	0	0	0	0	0	0	7	5	0	0	2	0	0	17
5:00 PM	3	0	1	0	0	0	0	0	0	4	8	0	1	1	0	0	18
5:15 PM	1	0	2	0	0	0	0	0	0	5	4	0	0	1	0	0	13
5:30 PM	2	0	0	0	0	0	0	0	0	3	5	0	1	1	0	0	12
5:45 PM	1	0	0	0	0	0	0	0	0	5	4	0	0	3	0	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	13	0	6	0	0	0	0	0	0	42	41	1	6	14	0	0	123
APPROACH %'s :	68.42%	0.00%	31.58%	0.00%					0.00%	50.00%	48.81%	1.19%	30.00%	70.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	8	0	5	0	0	0	0	0	0	24	23	1	2	6	0	0	69
PEAK HR FACTOR :	0.667	0.000	0.625	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.719	0.250	0.500	0.750	0.000	0.000	0.821
	0.813								0.800				0.667				

National Data & Surveying Services

Intersection Turning Movement Count

Location: El Embarcadero & Grand Ave
City: Oakland

Project ID: 24-080355-014
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	El Embarcadero		El Embarcadero		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	3	2	1	1	1	0	8
7:15 AM	0	0	8	7	3	9	2	1	30
7:30 AM	0	0	1	6	2	5	0	2	16
7:45 AM	0	0	4	11	3	5	3	1	27
8:00 AM	0	0	13	5	5	6	3	0	32
8:15 AM	0	0	8	2	10	3	0	4	27
8:30 AM	0	0	5	9	4	5	1	2	26
8:45 AM	0	0	5	6	3	1	2	5	22
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	47	48	31	35	12	15	188
APPROACH %'s :			49.47%	50.53%	46.97%	53.03%	44.44%	55.56%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	0	0	31	22	22	15	6	11	107
PEAK HR FACTOR :			0.596	0.611	0.550	0.625	0.500	0.550	0.836
			0.736		0.712		0.607		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	9	5	9	4	6	6	39
4:15 PM	0	0	8	1	2	8	0	6	25
4:30 PM	0	0	13	13	7	3	7	2	45
4:45 PM	0	0	6	7	6	4	6	6	35
5:00 PM	0	0	8	4	4	5	1	2	24
5:15 PM	0	0	9	4	4	4	5	4	30
5:30 PM	0	0	9	10	7	5	9	1	41
5:45 PM	0	0	6	4	12	6	4	4	36
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	68	48	51	39	38	31	275
APPROACH %'s :			58.62%	41.38%	56.67%	43.33%	55.07%	44.93%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	0	0	36	28	21	16	19	14	134
PEAK HR FACTOR :			0.692	0.538	0.750	0.800	0.679	0.583	0.744
			0.615		0.925		0.688		

Prepared by National Data & Surveying Services

El Embarcadero & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-014
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND (El Embarcadero)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Grand Ave)

AM	NOON	PM	
857	0	675	⇦
0	0	1	↶ 0
0	0	0	↱ 0
342	0	750	→ 2
141	0	372	↴ 0
AM	NOON	PM	

WESTBOUND (Grand Ave)

PM	NOON	AM	
0	0	0	0 ↰
519	0	629	2 ←
189	0	95	1 ↰
2	0	0	0 ↰
			⇨
874	0	512	
PM	NOON	AM	

NORTHBOUND (El Embarcadero)

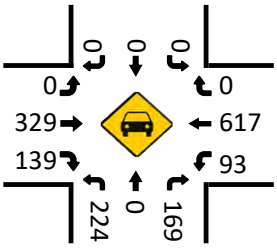
PM	561	0	155	0	122	PM
NOON	0	0	0	0	0	NOON
AM	236	0	228	0	170	AM

CONTROL

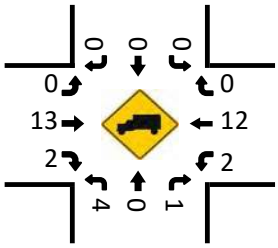
Signalized

TEV	1605 AM	0 NOON	2110 PM
PHF	0.88		0.94

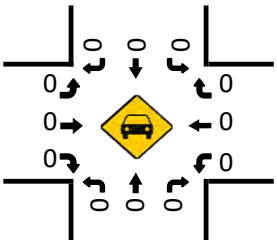
Cars (AM)



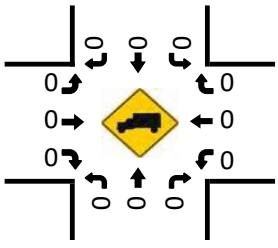
HT (AM)



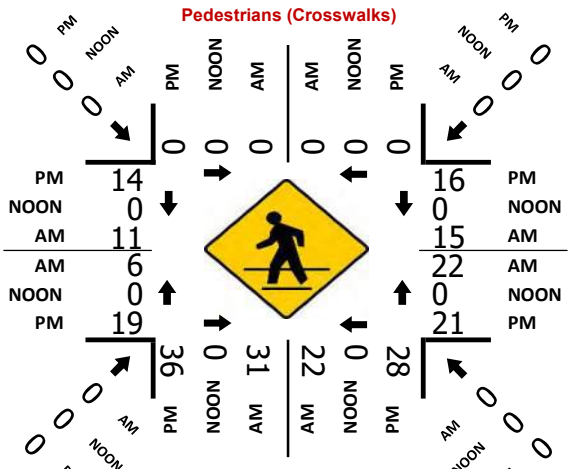
Cars (NOON)



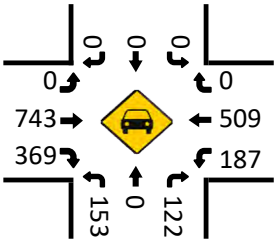
HT (NOON)



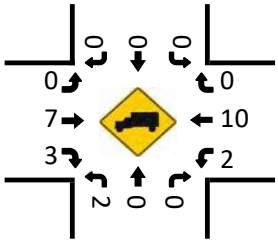
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: MacArthur Blvd & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-015
Date: 11/19/2024

Data - Total

NS/EW Streets:	MacArthur Blvd				MacArthur Blvd				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.5	2.5	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	27	67	16	0	0	50	29	0	14	57	0	0	260
7:15 AM	0	0	0	0	41	80	24	0	0	57	23	0	16	82	0	0	323
7:30 AM	0	0	0	0	62	89	23	0	0	60	33	0	20	91	0	0	378
7:45 AM	0	0	0	0	66	148	32	0	0	62	52	1	37	114	0	4	516
8:00 AM	0	0	0	0	79	151	33	0	0	60	48	0	56	124	0	7	558
8:15 AM	0	0	0	0	101	203	47	0	0	99	51	0	72	159	0	12	744
8:30 AM	0	0	0	0	82	179	39	0	0	74	57	0	49	148	0	12	640
8:45 AM	0	0	0	0	66	145	41	0	0	73	47	0	30	147	0	4	553
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	524	1062	255	0	0	535	340	1	294	922	0	39	3972
APPROACH %'s :					28.46%	57.69%	13.85%	0.00%	0.00%	61.07%	38.81%	0.11%	23.43%	73.47%	0.00%	3.11%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	328	678	160	0	0	306	203	0	207	578	0	35	2495
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.812	0.835	0.851	0.000	0.000	0.773	0.890	0.000	0.719	0.909	0.000	0.729	0.838
					0.830				0.848				0.844				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.5	2.5	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	60	177	49	0	0	89	87	0	66	147	0	9	684
4:15 PM	0	0	0	0	90	190	48	0	0	106	105	0	71	121	0	3	734
4:30 PM	0	0	0	0	79	181	39	0	0	103	119	0	65	128	0	1	715
4:45 PM	0	0	0	0	83	191	44	0	0	96	120	0	60	148	0	1	743
5:00 PM	0	0	0	0	68	178	46	0	0	104	95	0	66	147	0	5	709
5:15 PM	0	0	0	0	72	156	35	0	0	116	103	0	40	138	0	3	663
5:30 PM	0	0	0	0	68	176	38	0	0	100	81	0	62	144	0	0	669
5:45 PM	0	0	0	0	63	162	54	0	0	91	89	0	53	136	0	1	649
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	583	1411	353	0	0	805	799	0	483	1109	0	23	5566
APPROACH %'s :					24.84%	60.12%	15.04%	0.00%	0.00%	50.19%	49.81%	0.00%	29.91%	68.67%	0.00%	1.42%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	320	740	177	0	0	409	439	0	262	544	0	10	2901
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.889	0.969	0.922	0.000	0.000	0.965	0.915	0.000	0.923	0.919	0.000	0.500	0.976
					0.943				0.955				0.936				

National Data & Surveying Services

Intersection Turning Movement Count

Location: MacArthur Blvd & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-015
Date: 11/19/2024

Data - Cars

NS/EW Streets:	MacArthur Blvd				MacArthur Blvd				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.5	2.5	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	26	63	16	0	0	49	27	0	13	54	0	0	248
7:15 AM	0	0	0	0	40	74	24	0	0	56	22	0	14	78	0	0	308
7:30 AM	0	0	0	0	60	85	21	0	0	57	32	0	19	89	0	0	363
7:45 AM	0	0	0	0	63	145	30	0	0	60	52	1	35	112	0	4	502
8:00 AM	0	0	0	0	78	148	33	0	0	60	45	0	56	122	0	7	549
8:15 AM	0	0	0	0	99	198	46	0	0	98	49	0	72	154	0	12	728
8:30 AM	0	0	0	0	80	171	39	0	0	74	55	0	48	144	0	12	623
8:45 AM	0	0	0	0	65	145	40	0	0	70	45	0	30	146	0	4	545
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	511	1029	249	0	0	524	327	1	287	899	0	39	3866
APPROACH %'s :					28.56%	57.52%	13.92%	0.00%	0.00%	61.50%	38.38%	0.12%	23.43%	73.39%	0.00%	3.18%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	322	662	158	0	0	302	194	0	206	566	0	35	2445
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.813	0.836	0.859	0.000	0.000	0.770	0.882	0.000	0.715	0.919	0.000	0.729	0.840
					0.832				0.844				0.848				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.5	2.5	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	60	172	46	0	0	88	86	0	64	143	0	9	668
4:15 PM	0	0	0	0	90	186	47	0	0	104	104	0	70	120	0	3	724
4:30 PM	0	0	0	0	78	177	39	0	0	102	118	0	65	127	0	1	707
4:45 PM	0	0	0	0	82	189	42	0	0	96	119	0	60	145	0	1	734
5:00 PM	0	0	0	0	68	174	46	0	0	104	94	0	65	142	0	5	698
5:15 PM	0	0	0	0	72	153	35	0	0	114	102	0	39	137	0	3	655
5:30 PM	0	0	0	0	68	174	38	0	0	98	81	0	62	141	0	0	662
5:45 PM	0	0	0	0	63	159	53	0	0	90	87	0	52	134	0	1	639
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	581	1384	346	0	0	796	791	0	477	1089	0	23	5487
APPROACH %'s :					25.14%	59.89%	14.97%	0.00%	0.00%	50.16%	49.84%	0.00%	30.02%	68.53%	0.00%	1.45%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	318	726	174	0	0	406	435	0	260	534	0	10	2863
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.883	0.960	0.926	0.000	0.000	0.976	0.914	0.000	0.929	0.921	0.000	0.500	0.975
					0.943				0.956				0.948				

National Data & Surveying Services

Intersection Turning Movement Count

Location: MacArthur Blvd & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-015
Date: 11/19/2024

Data - HT

NS/EW Streets:	MacArthur Blvd				MacArthur Blvd				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.5	2.5	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	4	0	0	0	1	2	0	1	3	0	0	12
7:15 AM	0	0	0	0	1	6	0	0	0	1	1	0	2	4	0	0	15
7:30 AM	0	0	0	0	2	4	2	0	0	3	1	0	1	2	0	0	15
7:45 AM	0	0	0	0	3	3	2	0	0	2	0	0	2	2	0	0	14
8:00 AM	0	0	0	0	1	3	0	0	0	0	3	0	0	2	0	0	9
8:15 AM	0	0	0	0	2	5	1	0	0	1	2	0	0	5	0	0	16
8:30 AM	0	0	0	0	2	8	0	0	0	0	2	0	1	4	0	0	17
8:45 AM	0	0	0	0	1	0	1	0	0	3	2	0	0	1	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	13	33	6	0	0	11	13	0	7	23	0	0	106
APPROACH %'s :					25.00%	63.46%	11.54%	0.00%	0.00%	45.83%	54.17%	0.00%	23.33%	76.67%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	6	16	2	0	0	4	9	0	1	12	0	0	50
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.750	0.500	0.500	0.000	0.000	0.333	0.750	0.000	0.250	0.600	0.000	0.000	0.735
					0.600				0.650				0.650				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.5	2.5	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	5	3	0	0	1	1	0	2	4	0	0	16
4:15 PM	0	0	0	0	0	4	1	0	0	2	1	0	1	1	0	0	10
4:30 PM	0	0	0	0	1	4	0	0	0	1	1	0	0	1	0	0	8
4:45 PM	0	0	0	0	1	2	2	0	0	0	1	0	0	3	0	0	9
5:00 PM	0	0	0	0	0	4	0	0	0	0	1	0	1	5	0	0	11
5:15 PM	0	0	0	0	0	3	0	0	0	2	1	0	1	1	0	0	8
5:30 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	3	0	0	7
5:45 PM	0	0	0	0	0	3	1	0	0	1	2	0	1	2	0	0	10
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	27	7	0	0	9	8	0	6	20	0	0	79
APPROACH %'s :					5.56%	75.00%	19.44%	0.00%	0.00%	52.94%	47.06%	0.00%	23.08%	76.92%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	2	14	3	0	0	3	4	0	2	10	0	0	38
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.500	0.875	0.375	0.000	0.000	0.375	1.000	0.000	0.500	0.500	0.000	0.000	0.864
					0.950				0.583				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: MacArthur Blvd & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-015
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	MacArthur Blvd				MacArthur Blvd				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.5	2.5	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
7:30 AM	0	0	0	0	0	1	0	0	0	3	1	0	1	5	0	0	11
7:45 AM	0	0	0	0	0	2	0	0	0	2	1	0	0	5	0	0	10
8:00 AM	0	1	0	0	0	1	1	0	0	2	0	0	0	9	0	0	14
8:15 AM	0	0	0	0	0	1	0	0	0	4	1	0	0	2	0	0	8
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	6	0	0	8
8:45 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	3	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	1	0	0	0	5	1	0	0	13	5	0	2	34	0	0	62
APPROACH %'s :	50.00%	50.00%	0.00%	0.00%	0.00%	83.33%	16.67%	0.00%	0.00%	72.22%	27.78%	0.00%	5.56%	94.44%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	2	1	0	0	7	3	0	1	20	0	0	35
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.438	0.750	0.000	0.250	0.556	0.000	0.000	0.625
	0.250				0.375				0.500				0.583				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.5	2.5	0	0	0	2	1	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	0	10	0	0	1	0	0	0	11
4:30 PM	0	0	0	0	0	0	0	0	0	6	1	0	0	2	0	0	9
4:45 PM	0	0	0	0	0	0	0	0	0	7	2	0	0	2	0	0	11
5:00 PM	0	0	0	0	0	0	1	0	0	3	2	0	0	1	0	0	7
5:15 PM	0	0	0	0	0	0	0	0	0	5	2	0	1	2	0	0	10
5:30 PM	0	0	0	0	0	0	0	0	0	2	1	0	0	3	0	0	6
5:45 PM	0	0	0	0	0	0	0	0	0	5	1	0	1	2	0	0	9
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	1	0	0	40	9	0	3	15	0	0	68
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	81.63%	18.37%	0.00%	16.67%	83.33%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	0	26	5	0	1	5	0	0	38
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.650	0.625	0.000	0.250	0.625	0.000	0.000	0.864
					0.250				0.775				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: MacArthur Blvd & Grand Ave
City: Oakland

Project ID: 24-080355-015
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	MacArthur Blvd		MacArthur Blvd		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	3	6	4	1	0	1	4	20
7:15 AM	1	3	9	4	0	0	2	2	21
7:30 AM	5	7	10	13	0	0	4	8	47
7:45 AM	14	13	13	9	0	0	8	10	67
8:00 AM	12	4	13	4	0	0	2	4	39
8:15 AM	28	6	10	3	0	0	18	7	72
8:30 AM	3	4	7	6	0	0	1	5	26
8:45 AM	2	6	9	6	0	0	4	3	30
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	66	46	77	49	1	0	40	43	322
APPROACH %'s :	58.93%	41.07%	61.11%	38.89%	100.00%	0.00%	48.19%	51.81%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	45	20	39	19	0	0	25	19	167
PEAK HR FACTOR :	0.402	0.833	0.750	0.792			0.347	0.679	0.580
	0.478		0.853				0.440		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	13	13	14	13	0	0	6	10	69
4:15 PM	18	10	16	6	0	0	4	4	58
4:30 PM	15	5	14	16	0	0	8	7	65
4:45 PM	9	9	17	11	0	0	5	8	59
5:00 PM	12	6	14	9	0	1	7	7	56
5:15 PM	10	11	14	6	0	2	8	7	58
5:30 PM	6	6	8	13	0	0	6	6	45
5:45 PM	12	8	15	10	0	0	4	10	59
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	95	68	112	84	0	3	48	59	469
APPROACH %'s :	58.28%	41.72%	57.14%	42.86%	0.00%	100.00%	44.86%	55.14%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	54	30	61	42	0	1	24	26	238
PEAK HR FACTOR :	0.750	0.750	0.897	0.656		0.250	0.750	0.813	0.915
	0.750		0.858		0.250		0.833		

Prepared by National Data & Surveying Services

MacArthur Blvd & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-015
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS

AM: 08:00 AM - 09:00 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (MacArthur Blvd)

AM	160	678	328	0	0	AM
NOON	0	0	0	0	0	NOON
PM	177	740	320	0	0	PM

0 2.5 0.5 0

EASTBOUND (Grand Ave)

AM	NOON	PM	
738	0	721	
0	0	0	0
0	0	0	0
306	0	409	2
203	0	439	1

AM NOON PM

WESTBOUND (Grand Ave)

PM	NOON	AM	
0	0	0	0
544	0	578	2
262	0	207	1
10	0	35	0
739	0	669	

PM NOON AM

CONTROL

Signalized

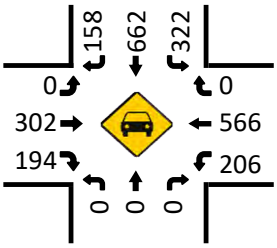
TEV	2495 AM	0 NOON	2901 PM
PHF	0.84		0.98

0 0 0 0

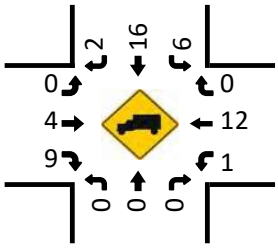
NORTHBOUND (MacArthur Blvd)

PM	1441	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	1088	0	0	0	0	AM

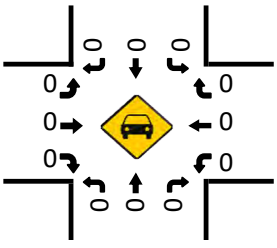
Cars (AM)



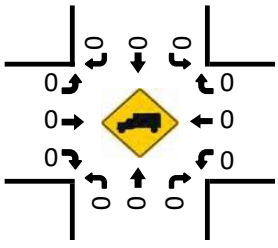
HT (AM)



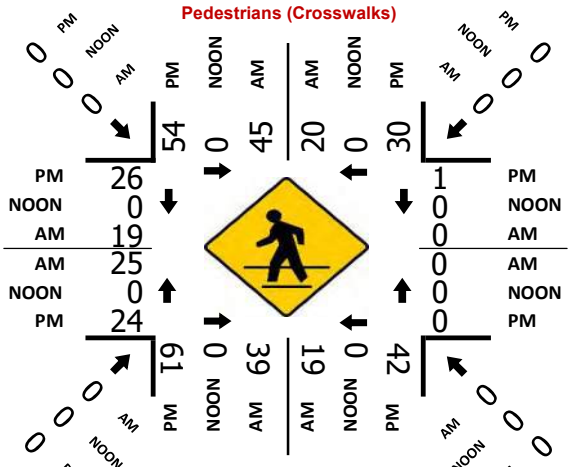
Cars (NOON)



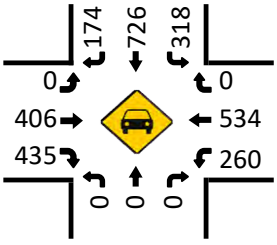
HT (NOON)



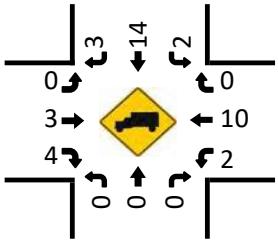
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Santa Clara Ave/Lake Park Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-016
Date: 11/19/2024

Data - Total

NS/EW Streets:	Santa Clara Ave/Lake Park Ave				Santa Clara Ave/Lake Park Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	0.3	0.3	1.3	0	1.5	1.5	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	12	67	18	1	4	1	35	0	39	26	10	1	2	21	40	0	277
7:15 AM	18	76	23	0	11	0	61	0	52	29	12	2	7	19	45	0	355
7:30 AM	21	100	34	0	4	2	53	0	40	62	13	4	7	39	63	0	442
7:45 AM	21	101	27	0	11	2	84	0	50	60	12	8	11	48	55	0	490
8:00 AM	27	148	26	0	13	0	90	1	49	39	22	29	4	64	85	0	597
8:15 AM	46	168	29	0	19	2	121	2	72	80	25	30	3	69	65	0	731
8:30 AM	33	186	23	0	17	2	88	0	61	79	14	21	6	61	69	0	660
8:45 AM	24	172	36	0	10	2	74	0	43	75	22	6	4	83	55	0	606
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	202	1018	216	1	89	11	606	3	406	450	130	101	44	404	477	0	4158
APPROACH %'s :	14.06%	70.84%	15.03%	0.07%	12.55%	1.55%	85.47%	0.42%	37.35%	41.40%	11.96%	9.29%	4.76%	43.68%	51.57%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	130	674	114	0	59	6	373	3	225	273	83	86	17	277	274	0	2594
PEAK HR FACTOR :	0.707	0.906	0.792	0.000	0.776	0.750	0.771	0.375	0.781	0.853	0.830	0.717	0.708	0.834	0.806	0.000	0.887
	0.944				0.766				0.806				0.928				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	0.3	0.3	1.3	0	1.5	1.5	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	37	124	44	0	15	0	47	1	49	74	33	4	11	91	51	0	581
4:15 PM	41	90	38	0	8	5	46	2	48	94	42	1	6	103	58	0	582
4:30 PM	42	125	31	0	17	2	44	2	31	107	47	3	8	115	67	0	641
4:45 PM	45	116	46	0	16	5	52	2	47	88	41	2	11	95	56	1	623
5:00 PM	29	105	43	0	17	1	69	1	53	83	41	1	12	112	57	0	624
5:15 PM	42	106	44	0	18	3	56	2	44	85	52	0	12	93	62	0	619
5:30 PM	26	107	28	0	13	0	53	5	42	87	45	2	12	120	53	0	593
5:45 PM	44	115	33	0	15	5	49	1	36	72	34	2	15	81	50	0	552
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	306	888	307	0	119	21	416	16	350	690	335	15	87	810	454	1	4815
APPROACH %'s :	20.39%	59.16%	20.45%	0.00%	20.80%	3.67%	72.73%	2.80%	25.18%	49.64%	24.10%	1.08%	6.43%	59.91%	33.58%	0.07%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	158	452	164	0	68	11	221	7	175	363	181	6	43	415	242	1	2507
PEAK HR FACTOR :	0.878	0.904	0.891	0.000	0.944	0.550	0.801	0.875	0.825	0.848	0.870	0.500	0.896	0.902	0.903	0.250	0.978
	0.935				0.872				0.964				0.922				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Santa Clara Ave/Lake Park Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-016
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Santa Clara Ave/Lake Park Ave				Santa Clara Ave/Lake Park Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	0.3	0.3	1.3	0	1.5	1.5	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	11	63	18	1	4	1	35	0	39	24	10	1	2	20	39	0	268
7:15 AM	15	74	22	0	10	0	59	0	51	28	12	2	7	18	41	0	339
7:30 AM	20	98	33	0	4	2	53	0	39	58	13	4	6	37	62	0	429
7:45 AM	19	98	26	0	11	2	84	0	49	58	11	8	10	46	53	0	475
8:00 AM	27	141	25	0	13	0	90	1	49	38	22	29	4	62	84	0	585
8:15 AM	45	168	29	0	19	2	117	2	72	77	25	30	3	67	63	0	719
8:30 AM	32	184	23	0	17	2	87	0	61	77	14	21	6	60	67	0	651
8:45 AM	24	168	36	0	10	2	74	0	43	71	22	6	3	80	54	0	593
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	193	994	212	1	88	11	599	3	403	431	129	101	41	390	463	0	4059
APPROACH %'s :	13.79%	71.00%	15.14%	0.07%	12.55%	1.57%	85.45%	0.43%	37.88%	40.51%	12.12%	9.49%	4.59%	43.62%	51.79%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	128	661	113	0	59	6	368	3	225	263	83	86	16	269	268	0	2548
PEAK HR FACTOR :	0.711	0.898	0.785	0.000	0.776	0.750	0.786	0.375	0.781	0.854	0.830	0.717	0.667	0.841	0.798	0.000	0.886
	0.932				0.779				0.805				0.922				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	0.3	0.3	1.3	0	1.5	1.5	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	35	118	44	0	14	0	47	1	49	73	33	4	11	88	49	0	566
4:15 PM	41	87	37	0	8	5	46	2	48	93	42	1	6	101	57	0	574
4:30 PM	41	122	31	0	17	2	44	2	31	104	47	3	8	115	66	0	633
4:45 PM	43	110	46	0	16	5	52	2	47	88	41	1	11	94	56	1	613
5:00 PM	27	104	42	0	17	1	69	1	53	83	41	1	12	112	57	0	620
5:15 PM	42	104	43	0	18	3	56	2	44	84	52	0	12	93	62	0	615
5:30 PM	24	106	28	0	13	0	52	5	41	86	45	2	12	119	53	0	586
5:45 PM	43	112	33	0	15	5	49	1	35	72	34	2	15	80	50	0	546
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	296	863	304	0	118	21	415	16	348	683	335	14	87	802	450	1	4753
APPROACH %'s :	20.23%	58.99%	20.78%	0.00%	20.70%	3.68%	72.81%	2.81%	25.22%	49.49%	24.28%	1.01%	6.49%	59.85%	33.58%	0.07%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	153	440	162	0	68	11	221	7	175	359	181	5	43	414	241	1	2481
PEAK HR FACTOR :	0.890	0.902	0.880	0.000	0.944	0.550	0.801	0.875	0.825	0.863	0.870	0.417	0.896	0.900	0.913	0.250	0.980
	0.948				0.872				0.973				0.925				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Santa Clara Ave/Lake Park Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-016
Date: 11/19/2024

Data - HT

NS/EW Streets:	Santa Clara Ave/Lake Park Ave				Santa Clara Ave/Lake Park Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	0.3	0.3	1.3	0	1.5	1.5	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	4	0	0	0	0	0	0	0	2	0	0	0	1	1	0	9
7:15 AM	3	2	1	0	1	0	2	0	1	1	0	0	0	1	4	0	16
7:30 AM	1	2	1	0	0	0	0	0	1	4	0	0	1	2	1	0	13
7:45 AM	2	3	1	0	0	0	0	0	1	2	1	0	1	2	2	0	15
8:00 AM	0	7	1	0	0	0	0	0	0	1	0	0	0	2	1	0	12
8:15 AM	1	0	0	0	0	0	4	0	0	3	0	0	0	2	2	0	12
8:30 AM	1	2	0	0	0	0	1	0	0	2	0	0	0	1	2	0	9
8:45 AM	0	4	0	0	0	0	0	0	0	4	0	0	1	3	1	0	13
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	9	24	4	0	1	0	7	0	3	19	1	0	3	14	14	0	99
APPROACH %'s :	24.32%	64.86%	10.81%	0.00%	12.50%	0.00%	87.50%	0.00%	13.04%	82.61%	4.35%	0.00%	9.68%	45.16%	45.16%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	2	13	1	0	0	0	5	0	0	10	0	0	1	8	6	0	46
PEAK HR FACTOR :	0.500	0.464	0.250	0.000	0.000	0.000	0.313	0.000	0.000	0.625	0.000	0.000	0.250	0.667	0.750	0.000	0.885
	0.500				0.313				0.625				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	0.3	0.3	1.3	0	1.5	1.5	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	6	0	0	1	0	0	0	0	1	0	0	0	3	2	0	15
4:15 PM	0	3	1	0	0	0	0	0	0	1	0	0	0	2	1	0	8
4:30 PM	1	3	0	0	0	0	0	0	0	3	0	0	0	0	1	0	8
4:45 PM	2	6	0	0	0	0	0	0	0	0	0	1	0	1	0	0	10
5:00 PM	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:15 PM	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	4
5:30 PM	2	1	0	0	0	0	1	0	1	1	0	0	0	1	0	0	7
5:45 PM	1	3	0	0	0	0	0	0	1	0	0	0	0	1	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	10	25	3	0	1	0	1	0	2	7	0	1	0	8	4	0	62
APPROACH %'s :	26.32%	65.79%	7.89%	0.00%	50.00%	0.00%	50.00%	0.00%	20.00%	70.00%	0.00%	10.00%	0.00%	66.67%	33.33%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	5	12	2	0	0	0	0	0	0	4	0	1	0	1	1	0	26
PEAK HR FACTOR :	0.625	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.333	0.000	0.250	0.000	0.250	0.250	0.000	0.650
	0.594								0.417				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Santa Clara Ave/Lake Park Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-016
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Santa Clara Ave/Lake Park Ave				Santa Clara Ave/Lake Park Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	0.3	0.3	1.3	0	1.5	1.5	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
7:15 AM	1	2	1	0	0	0	0	0	0	0	0	0	2	1	0	0	7
7:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	7	0	0	10
7:45 AM	2	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	7
8:00 AM	0	2	0	0	0	0	0	0	0	2	0	0	0	7	0	0	11
8:15 AM	0	2	1	0	0	0	0	0	0	3	0	0	0	3	0	0	9
8:30 AM	1	0	1	0	0	0	0	0	0	1	0	0	0	6	0	0	9
8:45 AM	1	1	0	0	0	0	0	0	0	0	1	0	0	2	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	7	7	3	0	0	0	0	0	0	12	1	0	2	29	0	0	61
APPROACH %'s :	41.18%	41.18%	17.65%	0.00%					0.00%	92.31%	7.69%	0.00%	6.45%	93.55%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	2	5	2	0	0	0	0	0	0	6	1	0	0	18	0	0	34
PEAK HR FACTOR :	0.500	0.625	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.643	0.000	0.000	0.773
	0.750								0.583				0.643				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	1	0	0.3	0.3	1.3	0	1.5	1.5	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	0	0	0	0	0	0	0	2	0	0	1	2	0	0	6
4:15 PM	0	0	5	0	0	0	0	0	0	5	0	0	0	2	0	0	12
4:30 PM	0	0	0	0	0	0	0	0	1	5	2	0	1	2	0	0	11
4:45 PM	1	0	2	0	1	0	0	0	0	4	2	0	2	0	0	0	12
5:00 PM	0	2	1	0	0	1	0	0	0	2	0	0	0	2	0	0	8
5:15 PM	1	0	0	0	0	1	0	0	1	4	0	0	0	0	0	0	7
5:30 PM	1	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	5
5:45 PM	0	0	1	0	0	0	0	0	1	1	2	0	0	1	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	3	9	0	1	2	0	0	3	25	6	0	5	10	0	0	67
APPROACH %'s :	20.00%	20.00%	60.00%	0.00%	33.33%	66.67%	0.00%	0.00%	8.82%	73.53%	17.65%	0.00%	33.33%	66.67%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	2	2	3	0	1	2	0	0	2	15	4	0	3	4	0	0	38
PEAK HR FACTOR :	0.500	0.250	0.375	0.000	0.250	0.500	0.000	0.000	0.500	0.750	0.500	0.000	0.375	0.500	0.000	0.000	0.792
	0.583				0.750				0.656				0.583				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Santa Clara Ave/Lake Park Ave & Grand Ave
City: Oakland
Project ID: 24-080355-016
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Santa Clara Ave/Lake Park Ave		Santa Clara Ave/Lake Park Ave		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	2	3	2	0	1	0	0	9
7:15 AM	3	3	4	4	3	3	1	1	22
7:30 AM	3	7	3	10	4	3	3	0	33
7:45 AM	3	11	12	10	6	3	8	4	57
8:00 AM	3	2	15	14	9	4	15	0	62
8:15 AM	4	7	5	8	2	6	26	1	59
8:30 AM	4	2	3	11	3	3	3	3	32
8:45 AM	0	2	6	12	2	3	5	0	30
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	21	36	51	71	29	26	61	9	304
APPROACH %'s :	36.84%	63.16%	41.80%	58.20%	52.73%	47.27%	87.14%	12.86%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	11	13	29	45	16	16	49	4	183
PEAK HR FACTOR :	0.688	0.464	0.483	0.804	0.444	0.667	0.471	0.333	0.738
	0.545		0.638		0.615		0.491		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	12	12	10	15	16	9	5	1	80
4:15 PM	10	8	17	6	7	12	4	4	68
4:30 PM	20	3	12	13	6	6	2	1	63
4:45 PM	13	6	14	8	5	13	3	2	64
5:00 PM	10	3	11	4	7	10	0	3	48
5:15 PM	12	8	15	15	8	9	2	1	70
5:30 PM	5	7	7	5	4	6	1	1	36
5:45 PM	6	5	7	7	11	9	3	6	54
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	88	52	93	73	64	74	20	19	483
APPROACH %'s :	62.86%	37.14%	56.02%	43.98%	46.38%	53.62%	51.28%	48.72%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	55	20	52	40	26	38	7	7	245
PEAK HR FACTOR :	0.688	0.625	0.867	0.667	0.813	0.731	0.583	0.583	0.875
	0.815		0.767		0.889		0.700		

Prepared by National Data & Surveying Services

Santa Clara Ave/Lake Park Ave & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-016
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND — Santa Clara Ave/Lake Park Ave

AM	373	6	59	3	1176	AM
NOON	0	0	0	0	0	NOON
PM	221	11	68	7	876	PM
	1.3	0.3	0.3	0		

EASTBOUND — Grand Ave

AM	NOON	PM	
866	0	800	
86	0	6	0
225	0	175	1.5
273	0	363	1.5
83	0	181	0
AM	NOON	PM	

WESTBOUND — Grand Ave

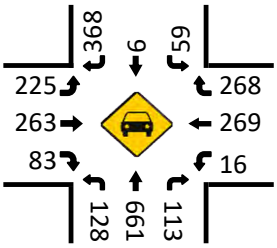
PM	NOON	AM	
242	0	274	1
415	0	277	2
43	0	17	0
1	0	0	0
596	0	446	
PM	NOON	AM	

NORTHBOUND — Santa Clara Ave/Lake Park Ave

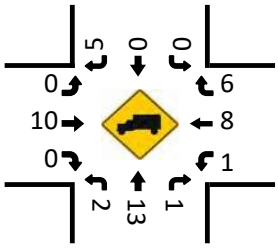
PM	235	0	158	452	164	PM
NOON	0	0	0	0	0	NOON
AM	106	0	130	674	114	AM
		0	1	2	1	

CONTROL			
Signalized			
TEV	2594 AM	0 NOON	2507 PM
PHF	0.89		0.98

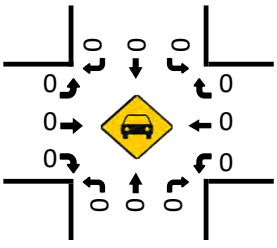
Cars (AM)



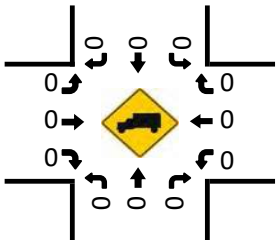
HT (AM)



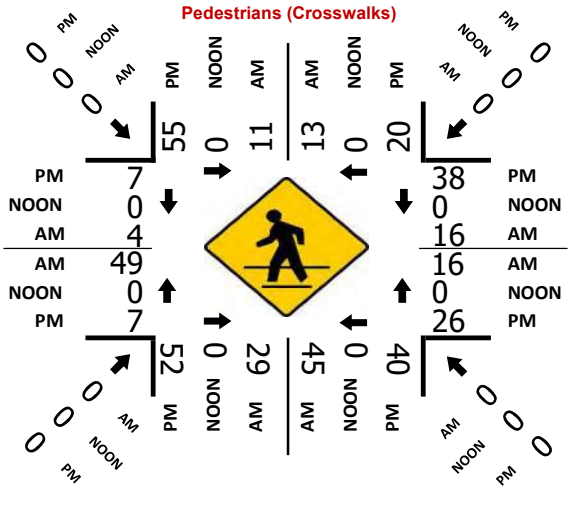
Cars (NOON)



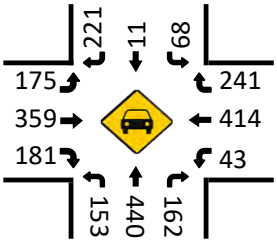
HT (NOON)



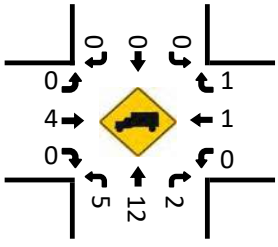
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Bake Sum at/Signalized Mid-block Ped Crossing & Grand Ave/Bet Santa Clara Ave & Elwood Ave
City: Oakland
Control: Signalized Crosswalk

Project ID: 24-080355-017
Date: 11/19/2024

Data - Total

NS/EW Streets:	Bake Sum at/Signalized Mid-block Ped Crossing				Bake Sum at/Signalized Mid-block Ped Crossing				Grand Ave/Bet Santa Clara Ave & Elwood Ave				Grand Ave/Bet Santa Clara Ave & Elwood Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	43	0	0	0	65	0	0	108
7:15 AM	0	0	0	0	0	0	1	0	0	57	2	0	0	73	0	0	133
7:30 AM	0	0	0	0	0	0	0	0	0	95	0	1	2	110	0	1	209
7:45 AM	0	0	0	0	0	0	0	0	0	82	2	0	0	114	1	0	199
8:00 AM	0	0	0	0	0	0	0	0	0	71	3	0	0	153	0	0	227
8:15 AM	0	0	0	0	0	0	0	0	0	114	1	0	1	142	0	0	258
8:30 AM	1	0	1	0	0	0	0	0	0	112	2	1	0	149	0	0	266
8:45 AM	0	0	0	0	0	0	0	0	0	107	4	0	0	152	1	0	264
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	1	0	0	0	1	0	0	681	14	2	3	958	2	1	1664
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	97.70%	2.01%	0.29%	0.31%	99.38%	0.21%	0.10%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	1	0	0	0	0	0	0	404	10	1	1	596	1	0	1015
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.886	0.625	0.250	0.250	0.974	0.250	0.000	0.954
	0.250				0.000				0.902				0.977				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	1	111	9	2	2	155	0	0	280
4:15 PM	0	0	0	0	0	0	0	0	0	131	3	1	2	160	0	0	297
4:30 PM	0	0	1	0	0	0	0	0	0	144	3	1	2	186	0	1	338
4:45 PM	1	0	1	0	1	0	0	0	1	135	9	1	3	153	0	0	305
5:00 PM	0	0	0	0	0	0	2	0	0	140	3	0	2	170	1	1	319
5:15 PM	0	0	0	0	0	0	2	0	0	130	8	1	2	161	0	1	305
5:30 PM	0	0	0	0	0	0	0	0	0	118	2	1	2	181	0	0	304
5:45 PM	0	0	0	0	0	0	1	0	0	115	4	0	4	141	0	1	266
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	2	0	1	0	5	0	2	1024	41	7	19	1307	1	4	2414
APPROACH %'s :	33.33%	0.00%	66.67%	0.00%	16.67%	0.00%	83.33%	0.00%	0.19%	95.34%	3.82%	0.65%	1.43%	98.20%	0.08%	0.30%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	0	2	0	1	0	4	0	1	549	23	3	9	670	1	3	1267
PEAK HR FACTOR :	0.250	0.000	0.500	0.000	0.250	0.000	0.500	0.000	0.250	0.953	0.639	0.750	0.750	0.901	0.250	0.750	0.937
	0.375				0.625				0.973				0.903				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bake Sum at/Signalized Mid-block Ped Crossing & Grand Ave/Bet Santa Clara Ave & Elwood Ave
City: Oakland
Control: Signalized Crosswalk

Project ID: 24-080355-017
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Bake Sum at/Signalized Mid-block Ped Crossing				Bake Sum at/Signalized Mid-block Ped Crossing				Grand Ave/Bet Santa Clara Ave & Elwood Ave				Grand Ave/Bet Santa Clara Ave & Elwood Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	41	0	0	0	63	0	0	104
7:15 AM	0	0	0	0	0	0	1	0	0	54	2	0	0	66	0	0	123
7:30 AM	0	0	0	0	0	0	0	0	0	90	0	1	2	107	0	1	201
7:45 AM	0	0	0	0	0	0	0	0	0	79	2	0	0	109	1	0	191
8:00 AM	0	0	0	0	0	0	0	0	0	69	3	0	0	151	0	0	223
8:15 AM	0	0	0	0	0	0	0	0	0	112	1	0	1	139	0	0	253
8:30 AM	1	0	1	0	0	0	0	0	0	110	2	1	0	146	0	0	261
8:45 AM	0	0	0	0	0	0	0	0	0	103	4	0	0	148	1	0	256
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	1	0	0	0	1	0	0	658	14	2	3	929	2	1	1612
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	97.63%	2.08%	0.30%	0.32%	99.36%	0.21%	0.11%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	1	0	0	0	0	0	0	394	10	1	1	584	1	0	993
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.879	0.625	0.250	0.250	0.967	0.250	0.000	0.951
	0.250				0.000				0.896				0.970				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	1	109	9	2	2	151	0	0	274
4:15 PM	0	0	0	0	0	0	0	0	0	131	2	1	2	159	0	0	295
4:30 PM	0	0	1	0	0	0	0	0	0	142	3	1	2	185	0	1	335
4:45 PM	1	0	1	0	1	0	0	0	1	134	9	1	3	152	0	0	303
5:00 PM	0	0	0	0	0	0	2	0	0	139	3	0	2	168	1	1	316
5:15 PM	0	0	0	0	0	0	2	0	0	128	8	1	2	161	0	1	303
5:30 PM	0	0	0	0	0	0	0	0	0	118	2	1	2	180	0	0	303
5:45 PM	0	0	0	0	0	0	1	0	0	115	4	0	4	141	0	1	266
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	2	0	1	0	5	0	2	1016	40	7	19	1297	1	4	2395
APPROACH %'s :	33.33%	0.00%	66.67%	0.00%	16.67%	0.00%	83.33%	0.00%	0.19%	95.40%	3.76%	0.66%	1.44%	98.18%	0.08%	0.30%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	0	2	0	1	0	4	0	1	543	23	3	9	666	1	3	1257
PEAK HR FACTOR :	0.250	0.000	0.500	0.000	0.250	0.000	0.500	0.000	0.250	0.956	0.639	0.750	0.750	0.900	0.250	0.750	0.938
	0.375				0.625				0.976				0.903				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bake Sum at/Signalized Mid-block Ped Crossing & Grand Ave/Bet Santa Clara Ave & Elwood Ave
City: Oakland
Control: Signalized Crosswalk

Project ID: 24-080355-017
Date: 11/19/2024

Data - HT

NS/EW Streets: Bake Sum at/Signalized Mid-block Ped Crossing | Bake Sum at/Signalized Mid-block Ped Crossing | Grand Ave/Bet Santa Clara Ave & Elwood Ave | Grand Ave/Bet Santa Clara Ave & Elwood Ave

AM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	7	0	0	10
7:30 AM	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	0	8
7:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0	0	8
8:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	0	8
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	23	0	0	0	29	0	0	52
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	**08:00 AM - 09:00 AM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	10	0	0	0	12	0	0	22
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.750	0.000	0.000	0.688
									0.625				0.750				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	8	1	0	0	10	0	0	19
APPROACH %'s :									0.00%	88.89%	11.11%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	**04:30 PM - 05:30 PM**																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	0	10
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.500	0.000	0.000	0.833
									0.750				0.500				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bake Sum at/Signalized Mid-block Ped Crossing & Grand Ave/Bet Santa Clara Ave & Elwood Ave
City: Oakland
Control: Signalized Crosswalk

Project ID: 24-080355-017
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Bake Sum at/Signalized Mid-block Ped Crossing				Bake Sum at/Signalized Mid-block Ped Crossing				Grand Ave/Bet Santa Clara Ave & Elwood Ave				Grand Ave/Bet Santa Clara Ave & Elwood Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
7:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	6	0	0	9
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	8	0	0	10
8:15 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	6	0	0	7
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	14	0	0	0	26	0	0	40
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	7	0	0	0	17	0	0	24
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.438	0.000	0.000	0.000	0.531	0.000	0.000	0.600
									0.438				0.531				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
4:15 PM	0	0	0	0	0	0	0	0	0	9	0	0	2	2	0	0	13
4:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	1	2	0	0	6
4:45 PM	0	0	0	0	0	0	0	0	0	3	1	0	0	2	0	0	6
5:00 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	0	8
5:15 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	1	0	0	4
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	28	1	0	4	16	0	0	50
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	96.55%	3.45%	0.00%	20.00%	80.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	13	1	0	1	8	0	0	24
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.650	0.250	0.000	0.250	0.667	0.000	0.000	0.750
			0.250						0.700				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Bake Sum at/Signalized Mid-block Ped Crossing & Grand Ave/Bet Santa Clara Ave & Elwood Ave Project ID: 24-080355-017
City: Oakland Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Bake Sum at/Signalized Mid-block Ped Crossing		Bake Sum at/Signalized Mid-block Ped Crossing		Grand Ave/Bet Santa Clara Ave & Elwood Ave		Grand Ave/Bet Santa Clara Ave & Elwood Ave				
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		MIDBLOCK		
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	TOTAL
7:00 AM	4	3	0	0	0	0	0	0	2	0	9
7:15 AM	2	5	1	0	1	0	0	0	4	2	15
7:30 AM	4	10	0	0	0	0	0	0	1	6	21
7:45 AM	3	8	0	0	0	0	0	0	1	0	12
8:00 AM	1	2	1	0	0	0	1	0	0	2	7
8:15 AM	4	7	0	0	0	0	0	0	3	1	15
8:30 AM	0	5	0	0	0	0	0	0	3	2	10
8:45 AM	2	4	0	0	0	0	0	0	0	2	8
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	20	44	2	0	1	0	1	0	14	15	97
APPROACH %'s :	31.25%	68.75%	100.00%	0.00%	100.00%	0.00%	100.00%	0.00%	48.28%	51.72%	
PEAK HR :	08:00 AM - 09:00 AM										TOTAL
PEAK HR VOL :	7	18	1	0	0	0	1	0	6	7	40
PEAK HR FACTOR :	0.438	0.643	0.250				0.250		0.500	0.875	0.667
	0.568		0.250				0.250		0.650		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		SCRAMBLE (NE/SW)		
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	TOTAL
4:00 PM	13	5	0	1	0	0	0	0	8	10	37
4:15 PM	12	14	1	0	0	0	0	0	10	3	40
4:30 PM	20	14	0	0	0	0	1	1	8	8	52
4:45 PM	5	8	0	0	0	0	0	0	2	9	24
5:00 PM	3	9	0	0	0	0	0	2	8	4	26
5:15 PM	9	9	0	0	0	0	1	0	13	5	37
5:30 PM	7	8	1	0	0	0	0	0	6	11	33
5:45 PM	13	8	2	1	0	0	0	0	4	14	42
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	82	75	4	2	0	0	2	3	59	64	291
APPROACH %'s :	52.23%	47.77%	66.67%	33.33%			40.00%	60.00%	47.97%	52.03%	
PEAK HR :	04:30 PM - 05:30 PM										TOTAL
PEAK HR VOL :	37	40	0	0	0	0	2	3	31	26	139
PEAK HR FACTOR :	0.463	0.714					0.500	0.375	0.596	0.722	0.668
	0.566						0.625		0.792		

Prepared by National Data & Surveying Services

Bake Sum at/Signalized Mid-block Ped Crossing & Grand Ave/Bet Santa Clara Ave & Elwood Ave

Peak Hour Turning Movement Count

ID: 24-080355-017
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS

AM	08:00 AM - 09:00 AM
NOON	NONE
PM	04:30 PM - 05:30 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND — Bake Sum at/Signalized Mid-block Ped Crossing

AM	0	0	0	0	1	AM
NOON	0	0	0	0	0	NOON
PM	4	0	1	0	2	PM

EASTBOUND — Grand Ave/Bet Santa Clara Ave & Elwood Ave

AM	NOON	PM	
598	0	678	⇦
1	0	3	↶ 0
0	0	1	↱ 0
404	0	549	→ 2
10	0	23	↴ 0
AM	NOON	PM	

WESTBOUND — Grand Ave/Bet Santa Clara Ave & Elwood Ave

PM	NOON	AM	
1	0	1	↰ 0
670	0	596	← 2
9	0	1	↰ 0
3	0	0	↰ 0
555	0	405	⇨
PM	NOON	AM	

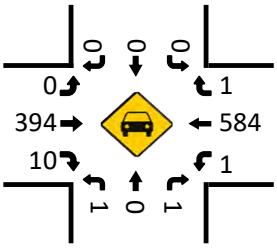
CONTROL: Signalized Crosswalk

TEV	1015 AM	0 NOON	1267 PM
PHF	0.95		0.94

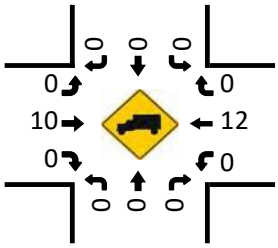
NORTHBOUND — Bake Sum at/Signalized Mid-block Ped Crossing

PM	32	0	1	0	2	PM
NOON	0	0	0	0	0	NOON
AM	11	0	1	0	1	AM

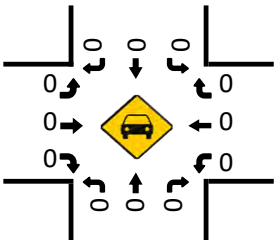
Cars (AM)



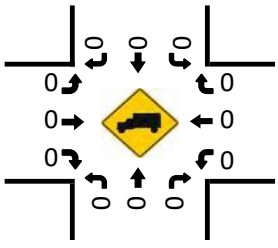
HT (AM)



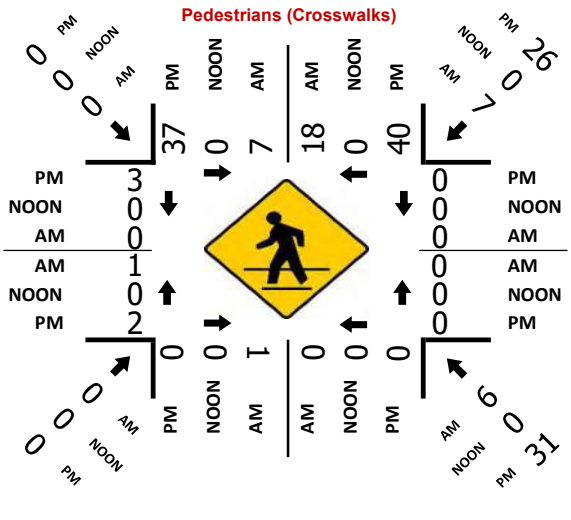
Cars (NOON)



HT (NOON)



Pedestrians (Crosswalks)


PM 3 0 0
NOON 0
AM 0
AM 1
NOON 0
PM 2
37 0 7
18 0 40
0 PM
0 NOON
0 AM
0 AM
0 NOON
0 PM
0 0 1
0 0 0
0 0 0
0 0 0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Elwood Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-018
Date: 11/19/2024

Data - Total

NS/EW Streets:	Elwood Ave				Elwood Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	5	0	3	0	0	39	0	1	0	63	4	0	115
7:15 AM	0	0	0	0	6	0	1	0	3	49	0	2	0	67	6	0	134
7:30 AM	1	0	0	0	11	0	14	0	12	85	0	1	0	98	12	0	234
7:45 AM	1	0	0	0	7	0	14	0	5	71	0	3	0	98	18	0	217
8:00 AM	2	0	0	0	13	0	15	0	0	70	0	0	1	131	18	0	250
8:15 AM	0	0	0	0	18	0	15	0	5	110	1	0	0	130	28	0	307
8:30 AM	0	0	0	0	16	0	14	0	6	101	0	0	0	136	17	0	290
8:45 AM	0	0	0	0	6	0	15	0	8	87	1	0	0	131	27	0	275
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	0	0	0	82	0	91	0	39	612	2	7	1	854	130	0	1822
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	47.40%	0.00%	52.60%	0.00%	5.91%	92.73%	0.30%	1.06%	0.10%	86.70%	13.20%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	2	0	0	0	53	0	59	0	19	368	2	0	1	528	90	0	1122
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.736	0.000	0.983	0.000	0.594	0.836	0.500	0.000	0.250	0.971	0.804	0.000	0.914
	0.250				0.848				0.838				0.979				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	0	0	18	1	10	1	4	102	1	2	0	141	21	0	302
4:15 PM	0	1	1	0	29	0	11	0	5	127	0	0	0	160	27	0	361
4:30 PM	0	1	0	0	27	1	14	0	8	131	0	0	1	171	24	0	378
4:45 PM	0	0	0	0	23	1	17	0	3	132	2	3	0	141	18	1	341
5:00 PM	0	0	2	0	31	0	16	0	12	122	2	3	0	157	18	0	363
5:15 PM	2	0	0	0	37	0	9	0	8	119	1	0	0	157	21	1	355
5:30 PM	1	0	0	0	37	0	23	0	6	108	1	0	0	163	16	1	356
5:45 PM	0	1	0	0	39	1	22	0	9	116	0	0	0	123	27	0	338
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	4	3	0	241	4	122	1	55	957	7	8	1	1213	172	3	2794
APPROACH %'s :	30.00%	40.00%	30.00%	0.00%	65.49%	1.09%	33.15%	0.27%	5.36%	93.18%	0.68%	0.78%	0.07%	87.33%	12.38%	0.22%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	2	3	0	110	2	58	0	28	512	4	6	1	629	87	1	1443
PEAK HR FACTOR :	0.000	0.500	0.375	0.000	0.887	0.500	0.853	0.000	0.583	0.970	0.500	0.500	0.250	0.920	0.806	0.250	0.954
	0.625				0.904				0.982				0.916				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Elwood Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-018
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Elwood Ave				Elwood Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	5	0	2	0	0	38	0	1	0	61	4	0	111
7:15 AM	0	0	0	0	6	0	1	0	3	45	0	2	0	61	6	0	124
7:30 AM	1	0	0	0	8	0	14	0	11	81	0	1	0	94	12	0	222
7:45 AM	1	0	0	0	7	0	14	0	5	68	0	3	0	93	18	0	209
8:00 AM	1	0	0	0	13	0	15	0	0	68	0	0	1	129	18	0	245
8:15 AM	0	0	0	0	18	0	15	0	5	107	1	0	0	128	28	0	302
8:30 AM	0	0	0	0	16	0	14	0	6	99	0	0	0	133	16	0	284
8:45 AM	0	0	0	0	6	0	14	0	8	84	1	0	0	129	27	0	269
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	0	0	0	79	0	89	0	38	590	2	7	1	828	129	0	1766
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	47.02%	0.00%	52.98%	0.00%	5.97%	92.62%	0.31%	1.10%	0.10%	86.43%	13.47%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	0	0	53	0	58	0	19	358	2	0	1	519	89	0	1100
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.736	0.000	0.967	0.000	0.594	0.836	0.500	0.000	0.250	0.976	0.795	0.000	0.911
	0.250				0.841				0.838				0.976				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	0	0	18	1	10	1	4	100	1	2	0	137	21	0	296
4:15 PM	0	1	1	0	29	0	11	0	5	127	0	0	0	158	26	0	358
4:30 PM	0	1	0	0	26	1	14	0	8	129	0	0	1	170	24	0	374
4:45 PM	0	0	0	0	23	1	17	0	3	131	2	3	0	140	17	1	338
5:00 PM	0	0	2	0	29	0	16	0	12	121	2	3	0	155	18	0	358
5:15 PM	2	0	0	0	36	0	9	0	8	116	1	0	0	155	21	1	349
5:30 PM	1	0	0	0	37	0	23	0	6	107	1	0	0	162	16	1	354
5:45 PM	0	1	0	0	39	1	22	0	9	116	0	0	0	122	27	0	337
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	3	4	3	0	237	4	122	1	55	947	7	8	1	1199	170	3	2764
APPROACH %'s :	30.00%	40.00%	30.00%	0.00%	65.11%	1.10%	33.52%	0.27%	5.41%	93.12%	0.69%	0.79%	0.07%	87.33%	12.38%	0.22%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	2	3	0	107	2	58	0	28	508	4	6	1	623	85	1	1428
PEAK HR FACTOR :	0.000	0.500	0.375	0.000	0.922	0.500	0.853	0.000	0.583	0.969	0.500	0.500	0.250	0.916	0.817	0.250	0.955
	0.625				0.928				0.982				0.910				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Elwood Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-018
Date: 11/19/2024

Data - HT

NS/EW Streets:	Elwood Ave				Elwood Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	4	0	0	0	6	0	0	10
7:30 AM	0	0	0	0	3	0	0	0	1	4	0	0	0	4	0	0	12
7:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0	0	8
8:00 AM	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	5
8:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
8:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	3	1	0	6
8:45 AM	0	0	0	0	0	0	1	0	0	3	0	0	0	2	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	3	0	2	0	1	22	0	0	0	26	1	0	56
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	60.00%	0.00%	40.00%	0.00%	4.35%	95.65%	0.00%	0.00%	0.00%	96.30%	3.70%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	1	0	0	10	0	0	0	9	1	0	22
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.833	0.000	0.000	0.000	0.750	0.250	0.000	0.917
	0.250				0.250				0.833				0.625				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	0	6
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
4:30 PM	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	3
5:00 PM	0	0	0	0	2	0	0	0	0	1	0	0	0	2	0	0	5
5:15 PM	0	0	0	0	1	0	0	0	0	3	0	0	0	2	0	0	6
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	4	0	0	0	0	10	0	0	0	14	2	0	30
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	87.50%	12.50%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	3	0	0	0	0	4	0	0	0	6	2	0	15
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.750	0.500	0.000	0.750
					0.375				0.500				0.667				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Elwood Ave & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-018
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Elwood Ave				Elwood Ave				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
7:30 AM	0	0	0	0	0	0	1	0	1	2	0	0	0	5	0	0	9
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	1	0	0	0	0	3	0	0	0	7	1	0	12
8:15 AM	0	0	0	0	1	0	0	0	1	3	0	0	0	0	0	0	5
8:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	6	0	0	8
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	2	0	2	13	0	0	0	21	1	0	41
APPROACH %'s :					50.00%	0.00%	50.00%	0.00%	13.33%	86.67%	0.00%	0.00%	0.00%	95.45%	4.55%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	2	0	1	0	1	7	0	0	0	14	1	0	26
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.500	0.000	0.250	0.000	0.250	0.583	0.000	0.000	0.000	0.500	0.250	0.000	0.542
					0.750				0.500				0.469				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	1	0	1	1	0	0	0	2	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	1	8	0	0	0	4	0	0	13
4:30 PM	1	0	0	0	0	0	1	0	0	3	1	0	0	2	1	0	9
4:45 PM	0	0	0	0	0	0	0	0	1	2	0	0	0	1	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	0	8
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	0	6
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	2	0	3	26	1	0	0	17	1	0	51
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	10.00%	86.67%	3.33%	0.00%	0.00%	94.44%	5.56%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	1	0	2	18	1	0	0	10	1	0	34
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.563	0.250	0.000	0.000	0.625	0.250	0.000	0.654
		0.250				0.250				0.583				0.688			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Elwood Ave & Grand Ave
City: Oakland

Project ID: 24-080355-018
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Elwood Ave		Elwood Ave		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	3	2	0	0	0	0	0	1	6
7:15 AM	2	5	0	0	0	0	0	2	9
7:30 AM	3	6	0	0	0	0	2	2	13
7:45 AM	6	7	0	1	0	0	3	4	21
8:00 AM	3	3	0	0	0	0	3	1	10
8:15 AM	3	7	0	0	0	0	0	3	13
8:30 AM	1	2	0	0	0	0	1	2	6
8:45 AM	2	5	0	0	0	0	5	0	12
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	23	37	0	1	0	0	14	15	90
APPROACH %'s :	38.33%	61.67%	0.00%	100.00%			48.28%	51.72%	
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	9	17	0	0	0	0	9	6	41
PEAK HR FACTOR :	0.750	0.607					0.450	0.500	0.788
	0.650						0.750		

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	14	8	0	0	0	0	3	0	25
4:15 PM	15	11	0	0	0	0	6	8	40
4:30 PM	17	13	0	0	0	0	7	9	46
4:45 PM	9	7	0	0	0	0	8	8	32
5:00 PM	5	14	0	0	0	0	5	5	29
5:15 PM	5	0	0	2	0	0	3	3	13
5:30 PM	10	9	1	0	0	0	9	7	36
5:45 PM	11	10	0	1	0	0	2	3	27
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	86	72	1	3	0	0	43	43	248
APPROACH %'s :	54.43%	45.57%	25.00%	75.00%			50.00%	50.00%	
PEAK HR :	04:15 PM - 05:15 PM								TOTAL
PEAK HR VOL :	46	45	0	0	0	0	26	30	147
PEAK HR FACTOR :	0.676	0.804					0.813	0.833	0.799
	0.758						0.875		

Prepared by National Data & Surveying Services

Elwood Ave & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-018
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS

AM: 08:00 AM - 09:00 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (Elwood Ave)

AM	59	0	53	0	109	AM
NOON	0	0	0	0	0	NOON
PM	58	2	110	0	117	PM

EASTBOUND (Grand Ave)

AM	NOON	PM	
589	0	693	⇦
0	0	6	↶ 0
19	0	28	↰ 0
368	0	512	→ 2
2	0	4	↷ 0

WESTBOUND (Grand Ave)

PM	NOON	AM	
87	0	90	↶ 0
629	0	528	← 2
1	0	1	↰ 0
1	0	0	↷ 0
626	0	421	⇨

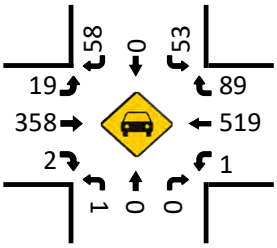
NORTHBOUND (Elwood Ave)

PM	7	0	0	2	3	PM
NOON	0	0	0	0	0	NOON
AM	3	0	2	0	0	AM

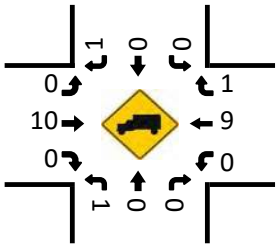
CONTROL: Signalized

TEV	1122 AM	0 NOON	1443 PM
PHF	0.91		0.95

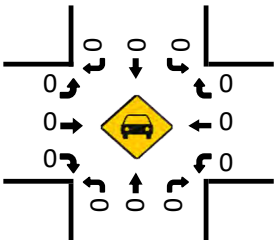
Cars (AM)



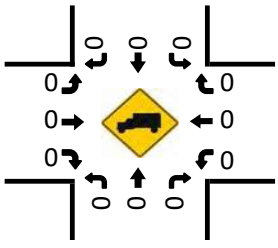
HT (AM)



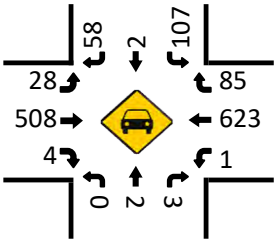
Cars (NOON)



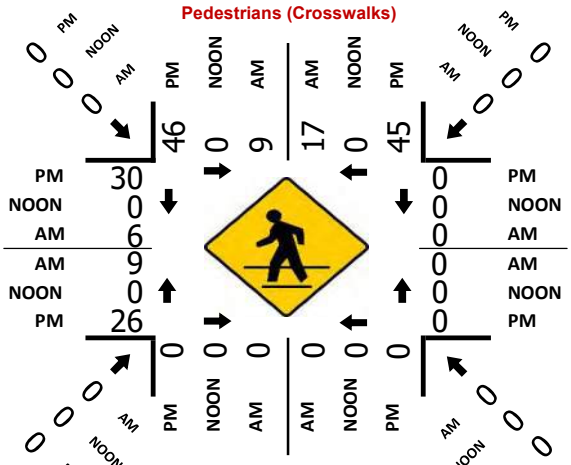
HT (NOON)



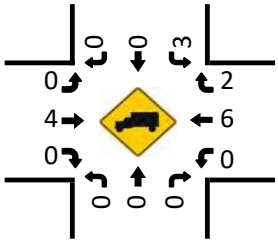
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Mandana Blvd/Milano Restaurant Parking & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-019
Date: 11/19/2024

Data - Total

NS/EW Streets:	Mandana Blvd/Milano Restaurant Parking				Mandana Blvd/Milano Restaurant Parking				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	33	0	9	0	0	0	0	0	0	34	8	0	10	32	0	0	126
7:15 AM	33	0	12	0	0	0	0	0	0	44	8	1	8	38	0	0	144
7:30 AM	59	0	19	0	0	0	0	0	0	72	22	0	8	46	0	0	226
7:45 AM	61	0	16	0	0	0	0	0	0	61	16	0	15	53	0	0	222
8:00 AM	78	0	31	0	0	0	0	0	0	66	16	1	14	75	0	0	281
8:15 AM	71	0	56	0	0	0	0	0	1	93	30	0	29	80	0	0	360
8:30 AM	68	0	33	0	0	0	0	0	0	81	38	1	42	93	0	0	356
8:45 AM	71	0	32	0	0	0	0	0	0	68	24	0	26	88	0	0	309
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	474	0	208	0	0	0	0	0	1	519	162	3	152	505	0	0	2024
APPROACH %'s :	69.50%	0.00%	30.50%	0.00%					0.15%	75.77%	23.65%	0.44%	23.14%	76.86%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	288	0	152	0	0	0	0	0	1	308	108	2	111	336	0	0	1306
PEAK HR FACTOR :	0.923	0.000	0.679	0.000	0.000	0.000	0.000	0.000	0.250	0.828	0.711	0.500	0.661	0.903	0.000	0.000	0.907
	0.866								0.845				0.828				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	52	0	33	0	0	0	0	0	0	85	35	0	59	115	0	1	380
4:15 PM	56	0	39	0	0	0	0	0	1	107	50	1	50	128	0	0	432
4:30 PM	67	0	23	0	0	0	1	0	2	94	53	2	64	124	0	0	430
4:45 PM	38	0	31	0	0	0	0	0	1	99	54	0	59	120	1	0	403
5:00 PM	44	0	45	0	0	0	1	0	0	100	60	1	69	136	0	0	456
5:15 PM	45	0	35	0	0	0	0	0	1	95	57	3	70	129	0	0	435
5:30 PM	43	0	28	0	0	0	0	0	2	83	58	1	75	137	0	1	428
5:45 PM	43	0	35	0	0	0	0	0	2	93	63	3	62	102	0	0	403
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	388	0	269	0	0	0	2	0	9	756	430	11	508	991	1	2	3367
APPROACH %'s :	59.06%	0.00%	40.94%	0.00%	0.00%	0.00%	100.00%	0.00%	0.75%	62.69%	35.66%	0.91%	33.82%	65.98%	0.07%	0.13%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	194	0	134	0	0	0	2	0	4	388	224	6	262	509	1	0	1724
PEAK HR FACTOR :	0.724	0.000	0.744	0.000	0.000	0.000	0.500	0.000	0.500	0.970	0.933	0.500	0.936	0.936	0.250	0.000	0.945
	0.911				0.500				0.966				0.941				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mandana Blvd/Milano Restaurant Parking & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-019
Date: 11/19/2024

Data - Cars

NS/EW Streets:	Mandana Blvd/Milano Restaurant Parking				Mandana Blvd/Milano Restaurant Parking				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	33	0	9	0	0	0	0	0	0	33	8	0	10	30	0	0	123
7:15 AM	33	0	12	0	0	0	0	0	0	40	8	1	7	33	0	0	134
7:30 AM	56	0	18	0	0	0	0	0	0	67	21	0	8	44	0	0	214
7:45 AM	60	0	16	0	0	0	0	0	0	58	16	0	13	49	0	0	212
8:00 AM	78	0	31	0	0	0	0	0	0	65	16	0	14	72	0	0	276
8:15 AM	71	0	56	0	0	0	0	0	1	92	29	0	29	79	0	0	357
8:30 AM	67	0	32	0	0	0	0	0	0	79	37	1	42	90	0	0	348
8:45 AM	71	0	32	0	0	0	0	0	0	65	24	0	26	86	0	0	304
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	469	0	206	0	0	0	0	0	1	499	159	2	149	483	0	0	1968
APPROACH %'s :	69.48%	0.00%	30.52%	0.00%					0.15%	75.49%	24.05%	0.30%	23.58%	76.42%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	287	0	151	0	0	0	0	0	1	301	106	1	111	327	0	0	1285
PEAK HR FACTOR :	0.920	0.000	0.674	0.000	0.000	0.000	0.000	0.000	0.250	0.818	0.716	0.250	0.661	0.908	0.000	0.000	0.900
	0.862								0.838				0.830				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	51	0	32	0	0	0	0	0	0	83	35	0	58	112	0	1	372
4:15 PM	55	0	38	0	0	0	0	0	1	107	49	1	49	126	0	0	426
4:30 PM	66	0	23	0	0	0	1	0	2	93	51	2	64	124	0	0	426
4:45 PM	37	0	30	0	0	0	0	0	1	98	54	0	59	118	1	0	398
5:00 PM	44	0	45	0	0	0	1	0	0	99	59	1	69	134	0	0	452
5:15 PM	45	0	35	0	0	0	0	0	1	91	57	3	70	128	0	0	430
5:30 PM	43	0	27	0	0	0	0	0	2	82	58	1	75	136	0	1	425
5:45 PM	43	0	35	0	0	0	0	0	2	93	63	3	62	101	0	0	402
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	384	0	265	0	0	0	2	0	9	746	426	11	506	979	1	2	3331
APPROACH %'s :	59.17%	0.00%	40.83%	0.00%	0.00%	0.00%	100.00%	0.00%	0.76%	62.58%	35.74%	0.92%	34.01%	65.79%	0.07%	0.13%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	192	0	133	0	0	0	2	0	4	381	221	6	262	504	1	0	1706
PEAK HR FACTOR :	0.727	0.000	0.739	0.000	0.000	0.000	0.500	0.000	0.500	0.962	0.936	0.500	0.936	0.940	0.250	0.000	0.944
	0.913				0.500				0.962				0.945				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mandana Blvd/Milano Restaurant Parking & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-019
Date: 11/19/2024

Data - HT

NS/EW Streets:	Mandana Blvd/Milano Restaurant Parking				Mandana Blvd/Milano Restaurant Parking				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	4	0	0	1	5	0	0	10
7:30 AM	3	0	1	0	0	0	0	0	0	5	1	0	0	2	0	0	12
7:45 AM	1	0	0	0	0	0	0	0	0	3	0	0	2	4	0	0	10
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	0	5
8:15 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3
8:30 AM	1	0	1	0	0	0	0	0	0	2	1	0	0	3	0	0	8
8:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	0	2	0	0	0	0	0	0	20	3	1	3	22	0	0	56
APPROACH %'s :	71.43%	0.00%	28.57%	0.00%					0.00%	83.33%	12.50%	4.17%	12.00%	88.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	1	0	0	0	0	0	0	7	2	1	0	9	0	0	21
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.583	0.500	0.250	0.000	0.750	0.000	0.000	0.656
	0.250								0.833				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	0	1	0	0	0	0	0	0	2	0	0	1	3	0	0	8
4:15 PM	1	0	1	0	0	0	0	0	0	0	1	0	1	2	0	0	6
4:30 PM	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	4
4:45 PM	1	0	1	0	0	0	0	0	0	1	0	0	0	2	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	5
5:30 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	0	4	0	0	0	0	0	0	10	4	0	2	12	0	0	36
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%					0.00%	71.43%	28.57%	0.00%	14.29%	85.71%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	2	0	1	0	0	0	0	0	0	7	3	0	0	5	0	0	18
PEAK HR FACTOR :	0.500	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.438	0.375	0.000	0.000	0.625	0.000	0.000	0.900
	0.375								0.625				0.625				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mandana Blvd/Milano Restaurant Parking & Grand Ave
City: Oakland
Control: Signalized

Project ID: 24-080355-019
Date: 11/19/2024

Data - Bikes

NS/EW Streets:	Mandana Blvd/Milano Restaurant Parking				Mandana Blvd/Milano Restaurant Parking				Grand Ave				Grand Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	5	0	0	7
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
8:00 AM	1	0	0	0	0	0	0	0	0	4	0	0	0	7	0	0	12
8:15 AM	0	0	1	0	0	0	0	0	0	3	1	0	0	0	0	0	5
8:30 AM	2	0	2	0	0	0	0	0	0	1	0	0	0	5	0	0	10
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	0	3	0	0	0	0	0	0	14	1	0	0	19	0	0	41
APPROACH %'s :	57.14%	0.00%	42.86%	0.00%					0.00%	93.33%	6.67%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	3	0	3	0	0	0	0	0	0	8	1	0	0	13	0	0	28
PEAK HR FACTOR :	0.375	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.464	0.000	0.000	0.583
	0.375								0.563				0.464				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
4:15 PM	0	0	1	0	0	0	0	0	0	8	0	0	0	4	0	0	13
4:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	1	4	0	0	8
4:45 PM	1	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	6
5:00 PM	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	7
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	0	7
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	1	0	0	0	0	0	0	26	0	0	3	19	0	0	50
APPROACH %'s :	50.00%	0.00%	50.00%	0.00%					0.00%	100.00%	0.00%	0.00%	13.64%	86.36%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	12	0	0	3	9	0	0	25
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.600	0.000	0.000	0.375	0.563	0.000	0.000	0.781
	0.250								0.600				0.600				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mandana Blvd/Milano Restaurant Parking & Grand Ave
City: Oakland
Project ID: 24-080355-019
Date: 11/19/2024

Data - Pedestrians (Crosswalks)

NS/EW Streets:	Mandana Blvd/Milano Restaurant Parking		Mandana Blvd/Milano Restaurant Parking		Grand Ave		Grand Ave		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	4	2	1	1	0	0	0	0	8
7:15 AM	1	6	2	4	0	0	0	0	13
7:30 AM	4	4	3	1	1	1	0	0	14
7:45 AM	5	6	6	4	2	0	0	0	23
8:00 AM	3	2	6	2	0	0	0	0	13
8:15 AM	3	4	1	3	1	1	0	0	13
8:30 AM	1	2	4	1	2	1	0	0	11
8:45 AM	1	3	7	1	2	0	0	0	14
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	22	29	30	17	8	3	0	0	109
APPROACH %'s :	43.14%	56.86%	63.83%	36.17%	72.73%	27.27%			
PEAK HR :	08:00 AM - 09:00 AM								TOTAL
PEAK HR VOL :	8	11	18	7	5	2	0	0	51
PEAK HR FACTOR :	0.667	0.688	0.643	0.583	0.625	0.500			0.911
	0.679		0.781		0.583				

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	8	7	12	5	5	5	0	0	42
4:15 PM	9	10	5	6	4	4	0	1	39
4:30 PM	13	16	7	9	4	5	0	0	54
4:45 PM	9	14	6	3	6	4	1	0	43
5:00 PM	13	16	5	7	9	6	1	0	57
5:15 PM	17	15	14	4	7	8	0	0	65
5:30 PM	12	18	7	3	6	7	0	0	53
5:45 PM	15	25	7	4	12	3	0	0	66
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	96	121	63	41	53	42	2	1	419
APPROACH %'s :	44.24%	55.76%	60.58%	39.42%	55.79%	44.21%	66.67%	33.33%	
PEAK HR :	04:30 PM - 05:30 PM								TOTAL
PEAK HR VOL :	52	61	32	23	26	23	2	0	219
PEAK HR FACTOR :	0.765	0.953	0.571	0.639	0.722	0.719	0.500		0.842
	0.883		0.764		0.817		0.500		

Prepared by National Data & Surveying Services

Mandana Blvd/Milano Restaurant Parking & Grand Ave

Peak Hour Turning Movement Count

ID: 24-080355-019
City: Oakland

Day: Tuesday
Date: 11/19/2024

PEAK HOURS

AM	08:00 AM - 09:00 AM
NOON	NONE
PM	04:30 PM - 05:30 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND — Mandana Blvd/Milano Restaurant Parking

AM	0	0	0	0	1	AM
NOON	0	0	0	0	0	NOON
PM	2	0	0	0	5	PM

EASTBOUND — Grand Ave

AM	NOON	PM		
626	0	711	⇦	
2	0	6	↶	0
1	0	4	↰	1
308	0	388	→	1
108	0	224	↷	1
AM	NOON	PM		

WESTBOUND — Grand Ave

PM	NOON	AM		
1	0	0	↶	0
509	0	336	←	1
262	0	111	↰	1
0	0	0	↷	0
522	0	460	⇨	
PM	NOON	AM		

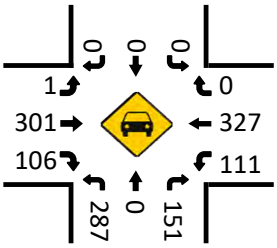
CONTROL: Signalized

	AM	NOON	PM
TEV	1306	0	1724
PHF	0.91	NOON	0.95

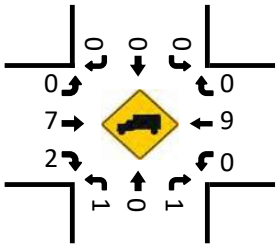
NORTHBOUND — Mandana Blvd/Milano Restaurant Parking

PM	486	0	194	0	134	PM
NOON	0	0	0	0	0	NOON
AM	219	0	288	0	152	AM

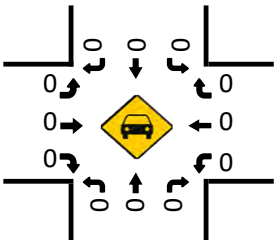
Cars (AM)



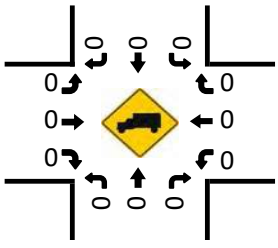
HT (AM)



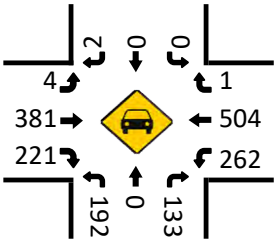
Cars (NOON)



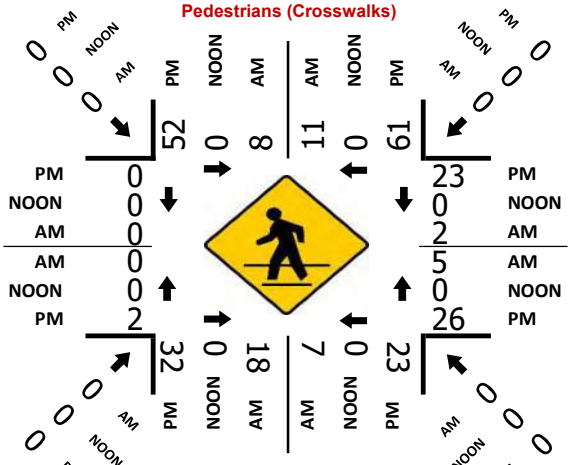
HT (NOON)



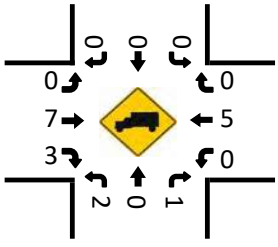
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



Prepared by National Data & Surveying Services

SPEED

Grand Ave Bet Lenox Ave & Lee St

Day: Tuesday
Date: 11/19/2024

City: Oakland
Project #: CA24_080367_001

HOURLY BREAKDOWN

Time	EASTBOUND													Total	WESTBOUND													Total	TOTALS													Total
	5	15	20	25	30	35	40	45	50	55	60	65	70		5	15	20	25	30	35	40	45	50	55	60	65	70		5	15	20	25	30	35	40	45	50	55	60	65	70	
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
0:00	0	0	9	20	27	21	3	1	1	0	0	0	0	82	0	2	7	22	20	8	4	0	0	0	0	0	0	63	0	2	16	42	47	29	7	1	1	0	0	0	0	145
1:00	0	1	3	21	22	14	0	0	0	0	0	0	0	61	0	4	6	12	16	6	0	2	0	0	0	0	0	46	0	5	9	33	38	20	0	2	0	0	0	0	0	107
2:00	0	0	2	4	15	11	1	0	1	0	0	0	0	34	0	0	1	10	10	1	1	0	0	0	0	0	0	23	0	0	3	14	25	12	2	0	1	0	0	0	0	57
3:00	0	2	1	7	6	3	2	0	0	0	0	0	0	21	0	2	4	9	7	2	0	1	0	0	0	0	0	25	0	4	5	16	13	5	2	1	0	0	0	0	0	46
4:00	0	0	3	3	6	3	2	1	0	0	0	0	0	18	2	1	7	18	11	6	0	0	0	0	0	0	0	45	2	1	10	21	17	9	2	1	0	0	0	0	0	63
5:00	0	0	6	12	17	9	1	0	0	0	0	0	0	45	1	0	6	34	29	22	7	1	0	0	0	0	0	100	1	0	12	46	46	31	8	1	0	0	0	0	0	145
6:00	1	0	7	30	36	24	6	0	0	0	0	0	0	104	0	0	11	50	72	30	18	0	1	0	0	0	0	182	1	0	18	80	108	54	24	0	1	0	0	0	0	286
7:00	0	1	17	79	75	33	13	1	0	0	0	0	0	219	12	10	32	129	173	68	12	7	0	0	0	0	0	443	12	11	49	208	248	101	25	8	0	0	0	0	0	662
8:00	2	6	79	182	110	34	6	1	0	0	0	0	0	420	138	82	111	202	150	51	7	0	0	0	0	0	0	741	140	88	190	384	260	85	13	1	0	0	0	0	0	1161
9:00	2	3	58	150	115	24	8	0	0	0	0	0	0	360	46	54	124	187	125	41	12	1	0	0	0	0	0	590	48	57	182	337	240	65	20	1	0	0	0	0	0	950
10:00	2	3	76	161	105	36	7	2	0	0	0	0	0	392	32	33	73	148	146	47	8	0	0	0	0	0	0	487	34	36	149	309	251	83	15	2	0	0	0	0	0	879
11:00	3	14	69	183	128	27	4	0	0	0	0	0	0	428	35	30	65	160	120	34	11	2	1	0	0	0	0	458	38	44	134	343	248	61	15	2	1	0	0	0	0	886
12:00	5	10	79	204	164	36	7	2	0	0	0	0	0	507	40	51	78	165	111	32	6	1	0	0	0	0	0	484	45	61	157	369	275	68	13	3	0	0	0	0	0	991
13:00	3	2	69	217	159	52	11	0	0	0	0	0	0	513	30	20	73	159	132	47	12	1	0	0	0	0	0	474	33	22	142	376	291	99	23	1	0	0	0	0	0	987
14:00	2	3	68	231	203	54	10	4	0	0	0	0	0	575	5	11	75	197	134	68	5	0	0	0	0	0	0	495	7	14	143	428	337	122	15	4	0	0	0	0	0	1070
15:00	1	13	140	272	206	48	6	0	1	0	0	0	0	687	47	34	81	177	175	28	8	1	0	0	0	0	0	551	48	47	221	449	381	76	14	1	1	0	0	0	0	1238
16:00	8	52	318	345	168	39	5	1	0	0	0	0	0	936	50	44	102	174	128	38	8	0	0	0	0	0	0	544	58	96	420	519	296	77	13	1	0	0	0	0	0	1480
17:00	22	69	419	433	139	18	3	0	0	0	0	0	0	1103	34	39	83	191	127	32	4	0	1	0	0	0	0	511	56	108	502	624	266	50	7	0	1	0	0	0	0	1614
18:00	11	43	218	323	177	28	3	1	0	0	0	0	0	804	19	37	101	173	118	20	4	1	0	0	0	0	0	473	30	80	319	496	295	48	7	2	0	0	0	0	0	1277
19:00	1	14	84	191	117	32	9	0	1	0	0	0	0	449	23	15	76	182	82	17	6	1	0	0	0	0	0	402	24	29	160	373	199	49	15	1	1	0	0	0	0	851
20:00	3	6	43	160	113	47	6	1	0	0	0	0	0	379	12	11	67	103	83	24	2	0	0	0	0	0	0	302	15	17	110	263	196	71	8	1	0	0	0	0	0	681
21:00	1	3	40	93	105	38	8	1	0	0	0	0	0	289	2	12	48	98	76	19	1	1	0	0	0	0	0	257	3	15	88	191	181	57	9	2	0	0	0	0	0	546
22:00	1	3	14	86	76	24	5	0	0	0	0	0	0	209	1	2	26	58	44	12	3	1	0	0	0	0	0	147	2	5	40	144	120	36	8	1	0	0	0	0	0	356
23:00	0	1	11	46	50	24	9	3	1	0	0	0	0	145	0	6	17	35	25	10	1	0	0	0	0	0	0	94	0	7	28	81	75	34	10	3	1	0	0	0	0	239
Totals	68	249	1,833	3,453	2,339	679	135	19	5	0	0	0	0	8,780	529	500	1,274	2,693	2,114	663	140	21	3	0	0	0	0	7,937	597	749	3,107	6,146	4,453	1,342	275	40	8	0	0	0	0	16,717
% of Totals	1%	3%	21%	39%	27%	8%	2%	0%	0%					100%	7%	6%	16%	34%	27%	8%	2%	0%	0%					100%	4%	4%	19%	37%	27%	8%	2%	0%	0%					100%

STATISTICS

00:00 - 12:00	10	30	330	852	662	239	53	6	2	0	0	0	0	2184	266	218	447	981	879	316	80	14	2	0	0	0	0	3203	276	248	777	1833	1541	555	133	20	4	0	0	0	0	5387
%	0%	0%	4%	10%	8%	3%	1%	0%	0%	0%	0%	0%	0%	25%	3%	2%	5%	11%	10%	4%	1%	0%	0%	0%	0%	0%	0%	36%	3%	3%	9%	21%	18%	6%	2%	0%	0%	0%	0%	0%	0%	61%
Peak Hour	11:45	11:30	8:15	11:30	11:45	7:15	6:45	9:30	0:00	0:00	0:00	0:00	0:00	11:45	8:15	8:15	8:15	8:00	7:00	6:45	6:30	7:00	6:00	0:00	0:00	0:00	0:00	8:15	8:15	8:15	8:15	7:45	11:45	6:45	6:30	7:00	0:00	0:00	0:00	0:00	0:00	8:15
Peak Volume	5	16	94	193	170	39	15	2	1	0	0	0	0	484	158	98	133	202	173	71	21	7	1	0	0	0	0	757	160	103	227	386	282	105	33	8	1	0	0	0	0	1186
12:00 - 24:00	58	219	1503	2601	1677	440	82	13	3	0	0	0	0	6596	263	282	827	1712	1235	347	60	7	1	0	0	0	0	4734	321	501	2330	4313	2912	787	142	20	4	0	0	0	0	11330
%	1%	2%	17%	30%	19%	5%	1%	0%	0%	0%	0%	0%	0%	75%	3%	3%	9%	19%	14%	4%	1%	0%	0%	0%	0%	0%	0%	54%	4%	6%	27%	49%	33%	9%	2%	0%	0%	0%	0%	0%	0%	129%
Peak Hour	16:15	16:15	16:30	17:15	14:15	14:15	12:30	14:00	15:00	12:00	12:00	12:00	12:00	16:45	15:30	17:30	17:30	18:30	15:15	14:00	12:30	12:30	16:45	12:00	12:00	12:00	12:00	15:30	16:15	16:15	16:30	17:15	15:15	14:00	12:30	14:00	15:00	12:00	12:00	12:00	12:00	16:45
Peak Volume	26	86	445	442	220	61	12	4	1	0	0	0	0	1112	73	52	109	203	182	68	12	2	1	0	0	0	0	599	82	135	545	633	383	122	24	4	1	0	0	0	0	1632
07:00 - 09:00	2	7	96	261	185	67	19	2	0	0	0	0	0	639	150	92	143	331	323	119	19	7	0	0	0	0	0	1184	152	99	239	592	508	186	38	9	0	0	0	0	0	1823
%	0%	0%	1%	3%	2%	1%	0%	0%	0%	0%	0%	0%	0%	7%	2%	1%	2%	4%	4%	1%	0%	0%	0%	0%	0%	0%	0%	13%	2%	1%	3%	7%	6%	2%	0%	0%	0%	0%	0%	0%	0%	21%
Peak Hour	8:00	8:00	8:00	7:45	8:00	7:15	7:00	7:00	7:00	7:00	7:00	7:00	7:00	8:00	8:00	8:00	8:00	8:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	8:00	8:00	8:00	8:00	7:45	7:30	7:15	7:00	7:00	7:00	7:00	7:00	7:00	7:00	8:00
Peak Volume	2	6	79	187	110	39	13	1	0	0	0	0	0	420	138	82	111	202	173	68	12	7	0	0	0	0	0	741	140	88	190	386	260	104	25	8	0	0	0	0	0	1161
16:00 - 18:00	30	121	737	778	307	57	8	1	0	0	0	0	0	2039	84	83	185	365	255	70	12	0	1	0	0	0	0	1055	114	204	922	1143	562	127	20	1	1	0	0	0	0	3094
%	0%	1%	8%	9%	3%	1%	0%	0%	0%	0%	0%	0%	0%	23%	1%	1%	2%	4%	3%	1%	0%	0%	0%	0%	0%	0%	0%	12%	1%	2%	11%	13%	6%	1%	0%	0%	0%	0%	0%	0%	0%	35%
Peak Hour	16:15	16:15	16:30	17:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:45	16:15	16:15	16:00	16:45	16:30	16:00	16:00	16:00	16:45	16:00	16:00	16:00	16:00	16:00	16:15	16:15	16:30	17:00	16:00	16:00	16:00	16:00	16:45	16:00	16:00	16:00	16:00	16:45
Peak Volume	26	86	445	433	168	39	5	1	0	0	0	0	0	1112	56	49	102	201	135	38	8	0	1	0	0	0	0	544	82	135	545	624	296	77	13	1	1	0	0	0	0	1632

Direction	Percentiles					
	15th	50th	Average	85th	95th	ADT
EASTBOUND	23	28	28	34	38	8780
WESTBOUND	21	28	27	34	38	7937
TOTALS	22	28	28	34	38	16717

Prepared by National Data & Surveying Services

SPEED

Grand Ave Bet Lenox Ave & Lee St

Day: Tuesday
Date: 11/19/2024

City: Oakland
Project #: CA24_080367_001

15-MINUTE BREAKDOWN

Time	EASTBOUND														WESTBOUND														TOTALS												
	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
0:00	0	0	3	6	11	4	1	0	0	0	0	0	0	**25**	0	0	3	6	9	5	2	0	0	0	0	0	0	**25**	0	0	6	12	20	9	3	0	0	0	0	0	0	**50**
0:15	0	0	0	5	10	3	1	0	0	0	0	0	0	**19**	0	1	1	9	3	1	1	0	0	0	0	0	0	**16**	0	1	1	14	13	4	2	0	0	0	0	0	0	**35**
0:30	0	0	1	1	3	7	0	0	1	0	0	0	0	**13**	0	1	3	4	6	1	0	0	0	0	0	0	0	**15**	0	1	4	5	9	8	0	0	1	0	0	0	0	**28**
0:45	0	0	5	8	3	7	1	1	0	0	0	0	0	**25**	0	0	0	3	2	1	1	0	0	0	0	0	0	**7**	0	0	5	11	5	8	2	1	0	0	0	0	0	**32**
1:00	0	1	2	5	5	5	0	0	0	0	0	0	0	**18**	0	2	2	6	7	1	0	0	0	0	0	0	0	**18**	0	3	4	11	12	6	0	0	0	0	0	0	0	**36**
1:15	0	0	0	3	10	1	0	0	0	0	0	0	0	**14**	0	0	1	4	2	1	0	1	0	0	0	0	0	**9**	0	0	1	7	12	2	0	1	0	0	0	0	0	**23**
1:30	0	0	1	8	6	7	0	0	0	0	0	0	0	**22**	0	0	1	2	3	3	0	1	0	0	0	0	0	**10**	0	0	2	10	9	10	0	1	0	0	0	0	0	**32**
1:45	0	0	0	5	1	1	0	0	0	0	0	0	0	**7**	0	2	2	0	4	1	0	0	0	0	0	0	0	**9**	0	2	2	5	5	2	0	0	0	0	0	0	0	**16**
2:00	0	0	0	1	4	4	1	0	0	0	0	0	0	**10**	0	0	1	3	4	0	0	0	0	0	0	0	0	**8**	0	0	1	4	8	4	1	0	0	0	0	0	0	**18**
2:15	0	0	0	1	4	2	0	0	0	0	0	0	0	**7**	0	0	0	4	1	0	1	0	0	0	0	0	0	**6**	0	0	0	5	5	2	1	0	0	0	0	0	0	**13**
2:30	0	0	2	1	4	2	0	0	1	0	0	0	0	**10**	0	0	0	0	2	1	0	0	0	0	0	0	0	**3**	0	0	2	1	6	3	0	0	1	0	0	0	0	**13**
2:45	0	0	0	1	3	3	0	0	0	0	0	0	0	**7**	0	0	0	3	3	0	0	0	0	0	0	0	0	**6**	0	0	0	4	6	3	0	0	0	0	0	0	0	**13**
3:00	0	1	0	1	2	1	2	0	0	0	0	0	0	**7**	0	0	0	1	1	0	0	1	0	0	0	0	0	**3**	0	1	0	2	3	1	2	1	0	0	0	0	0	**10**
3:15	0	1	0	1	1	2	0	0	0	0	0	0	0	**5**	0	1	3	2	3	0	0	0	0	0	0	0	0	**9**	0	2	3	3	4	2	0	0	0	0	0	0	0	**14**
3:30	0	0	0	2	3	0	0	0	0	0	0	0	0	**5**	0	1	1	2	1	0	0	0	0	0	0	0	0	**5**	0	1	1	4	4	0	0	0	0	0	0	0	0	**10**
3:45	0	0	1	3	0	0	0	0	0	0	0	0	0	**4**	0	0	0	4	2	2	0	0	0	0	0	0	0	**8**	0	0	1	7	2	2	0	0	0	0	0	0	0	**12**
4:00	0	0	1	1	2	0	0	0	0	0	0	0	0	**4**	0	0	2	5	2	0	0	0	0	0	0	0	0	**9**	0	0	3	6	4	0	0	0	0	0	0	0	0	**13**
4:15	0	0	0	0	1	2	1	1	0	0	0	0	0	**5**	0	1	1	3	3	3	0	0	0	0	0	0	0	**11**	0	1	1	3	4	5	1	1	0	0	0	0	0	**16**
4:30	0	0	2	2	1	0	0	0	0	0	0	0	0	**5**	2	0	2	2	1	1	0	0	0	0	0	0	0	**8**	2	0	4	4	2	1	0	0	0	0	0	0	0	**13**
4:45	0	0	0	0	2	1	1	0	0	0	0	0	0	**4**	0	0	2	8	5	2	0	0	0	0	0	0	0	**17**	0	0	2	8	7	3	1	0	0	0	0	0	0	**21**
5:00	0	0	2	1	2	2	0	0	0	0	0	0	0	**7**	0	0	2	6	4	3	1	1	0	0	0	0	0	**17**	0	0	4	7	6	5	1	1	0	0	0	0	0	**24**
5:15	0	0	2	1	1	1	1	0	0	0	0	0	0	**6**	1	0	2	7	9	5	2	0	0	0	0	0	0	**26**	1	0	4	8	10	6	3	0	0	0	0	0	0	**32**
5:30	0	0	0	5	5	1	0	0	0	0	0	0	0	**11**	0	0	0	5	7	9	2	0	0	0	0	0	0	**23**	0	0	0	10	12	10	2	0	0	0	0	0	0	**34**
5:45	0	0	2	5	9	5	0	0	0	0	0	0	0	**21**	0	0	2	16	9	5	2	0	0	0	0	0	0	**34**	0	0	4	21	18	10	2	0	0	0	0	0	0	**55**
6:00	1	0	1	3	8	8	0	0	0	0	0	0	0	**21**	0	0	2	9	8	3	2	0	0	0	0	0	0	**24**	1	0	3	12	16	11	2	0	0	0	0	0	0	**45**
6:15	0	0	2	11	7	5	0	0	0	0	0	0	0	**25**	0	0	4	21	18	4	1	0	0	0	0	0	0	**48**	0	0	6	32	25	9	1	0	0	0	0	0	0	**73**
6:30	0	0	3	8	11	5	1	0	0	0	0	0	0	**28**	0	0	5	7	21	7	6	0	0	0	0	0	0	**46**	0	0	8	15	32	12	7	0	0	0	0	0	0	**74**
6:45	0	0	1	8	10	6	5	0	0	0	0	0	0	**30**	0	0	0	13	25	16	9	0	1	0	0	0	0	**64**	0	0	1	21	35	22	14	0	1	0	0	0	0	**94**
7:00	0	0	1	19	15	5	2	0	0	0	0	0	0	**42**	0	0	1	16	42	17	4	2	0	0	0	0	0	**82**	0	0	2	35	57	22	6	2	0	0	0	0	0	**124**
7:15	0	0	5	15	16	8	4	1	0	0	0	0	0	**49**	2	3	6	31	36	16	2	1	0	0	0	0	0	**97**	2	3	11	46	52	24	6	2	0	0	0	0	0	**146**
7:30	0	1	1	15	18	15	4	0	0	0	0	0	0	**54**	0	3	11	38	45	22	3	2	0	0	0	0	0	**124**	0	4	12	53	63	37	7	2	0	0	0	0	0	**178**
7:45	0	0	10	30	26	5	3	0	0	0	0	0	0	**74**	10	4	14	44	50	13	3	2	0	0	0	0	0	**140**	10	4	24	74	76	18	6	2	0	0	0	0	0	**214**
8:00	1	2	5	39	31	11	1	0	0	0	0	0	0	**90**	14	13	26	73	33	14	3	0	0	0	0	0	0	**176**	15	15	31	112	64	25	4	0	0	0	0	0	0	**266**
8:15	0	1	24	66	21	6	1	0	0	0	0	0	0	**119**	52	31	38	45	36	4	1	0	0	0	0	0	0	**207**	52	32	62	111	57	10	2	0	0	0	0	0	0	**326**
8:30	0	1	29	52	29	7	1	0	0	0	0	0	0	**119**	52	27	23	37	30	13	0	0	0	0	0	0	0	**182**	52	28	52	89	59	20	1	0	0	0	0	0	0	**301**
8:45	1	2	21	25	29	10	3	1	0	0	0	0	0	**92**	20	11	24	47	51	20	3	0	0	0	0	0	0	**176**	21	13	45	72	80	30	6	1	0	0	0	0	0	**268**
9:00	1	1	20	41	27	9	0	0	0	0	0	0	0	**99**	34	29	48	44	28	6	3	0	0	0	0	0	0	**192**	35	30	68	85	55	15	3	0	0	0	0	0	0	**291**
9:15	0	1	18	32	29	2	3	0	0	0	0	0	0	**85**	3	7	33	56	32	11	1	1	0	0	0	0	0	**144**	3	8	51	88	61	13	4	1	0	0	0	0	0	**229**
9:30	1	1	7	29	30	7	1	0	0	0	0	0	0	**76**	0	5	12	37	32	14	6	0	0	0	0	0	0	**106**	1	6	19	66	62	21	7	0	0	0	0	0	0	**182**
9:45	0	0	13	48	29	6	4	0	0	0	0	0	0	**100**	9	13	31	50	33	10	2	0	0	0	0	0	0	**148**	9	13	44	98	62	16	6	0	0	0	0	0	0	**248**
10:00	1	0	5	42	31	11	2	1	0	0	0	0	0	**93**	2	2	13	40	55	22	3	0	0	0	0	0	0	**137**	3	2	18	82	86	33	5	1	0	0	0	0	0	**230**
10:15	0	1	41	40	31	3	0	1	0	0	0	0	0	**117**	14	8	17	35	23	8	0	0	0	0	0	0	0	**105**	14	9	58	75	54	11	0	1	0	0	0	0	0	**222**
10:30	1	1	14	51	14	10	2	0	0	0	0	0	0	**93**	7	12	17	40	30	7	1	0	0	0	0	0	0	**114**	8	13	31	91	44	17	3	0	0	0	0	0	0	**207**
10:45	0	1	16	28	29	12	3	0	0	0	0	0	0	**89**	9	11	26	33	38	10	4	0	0	0	0	0	0	**131**	9	12	42	61	67	22	7	0	0	0	0	0	0	**220**
11:00	2	4	19	48	30	2	0	0	0	0	0	0	0	**105**	6	7	15	43	26	7	2	0	0	0	0	0	0	**106**	8	11	34	91	56	9	2	0	0	0	0	0	0	**211**
11:15	1	4	13	46	35	11	2	0	0	0	0	0	0	**112**	9	11	13	39	27	14	2	1	1	0	0	0	0	**117**	10	15	26	85	62	25	4	1	1	0	0	0	0	**229**
11:30	0	3	18	48	27	4	1	0	0	0	0	0	0	**101**	12	5	17	40	34	5	3	1	0	0	0	0	0	**117**	12	8	35	88	61	9	4	1	0	0	0	0	0	**218**
11:45	0	3	19	41	36	10	1	0	0	0	0	0	0	**110**	8	7	20	38	33	8	4	0	0	0	0	0	0	**118**	8	10	39	79	69	18	5	0	0	0	0	0	0	**228**

Prepared by National Data & Surveying Services

SPEED

Grand Ave Bet Lenox Ave & Lee St

Day: Tuesday
Date: 11/19/2024

City: Oakland
Project #: CA24_080367_001

15-MINUTE BREAKDOWN

Time	EASTBOUND														WESTBOUND														TOTALS												
	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
12:00	0	2	28	49	39	4	2	0	0	0	0	0	0	124	7	15	27	45	31	9	1	0	0	0	0	0	0	135	7	17	55	94	70	13	3	0	0	0	0	0	0	259
12:15	4	8	18	55	35	3	0	1	0	0	0	0	0	124	25	16	25	37	23	5	0	0	0	0	0	0	0	131	29	24	43	92	58	8	0	1	0	0	0	0	0	255
12:30	1	0	12	37	60	14	2	0	0	0	0	0	0	126	5	15	15	41	25	9	3	0	0	0	0	0	0	113	6	15	27	78	85	23	5	0	0	0	0	0	0	239
12:45	0	0	21	63	30	15	3	1	0	0	0	0	0	133	3	5	11	42	32	9	2	1	0	0	0	0	0	105	3	5	32	105	62	24	5	2	0	0	0	0	0	238
13:00	0	0	20	66	34	7	5	0	0	0	0	0	0	132	7	9	22	40	15	8	2	0	0	0	0	0	0	103	7	9	42	106	49	15	7	0	0	0	0	0	0	235
13:15	2	0	19	40	37	15	2	0	0	0	0	0	0	115	5	3	11	26	40	20	5	1	0	0	0	0	0	111	7	3	30	66	77	35	7	1	0	0	0	0	0	226
13:30	1	2	8	48	38	20	2	0	0	0	0	0	0	119	10	7	23	48	32	9	2	0	0	0	0	0	0	131	11	9	31	96	70	29	4	0	0	0	0	0	0	250
13:45	0	0	22	63	50	10	2	0	0	0	0	0	0	147	8	1	17	45	45	10	3	0	0	0	0	0	0	129	8	1	39	108	95	20	5	0	0	0	0	0	0	276
14:00	0	0	14	56	50	11	1	0	0	0	0	0	0	132	0	2	29	40	28	24	2	0	0	0	0	0	0	125	0	2	43	96	78	35	3	0	0	0	0	0	0	257
14:15	1	0	17	74	51	13	4	2	0	0	0	0	0	162	1	3	15	53	32	20	0	0	0	0	0	0	0	124	2	3	32	127	83	33	4	2	0	0	0	0	0	286
14:30	0	3	25	48	40	16	4	1	0	0	0	0	0	137	4	5	17	37	31	9	0	0	0	0	0	0	0	103	4	8	42	85	71	25	4	1	0	0	0	0	0	240
14:45	1	0	12	53	62	14	1	1	0	0	0	0	0	144	0	1	14	67	43	15	3	0	0	0	0	0	0	143	1	1	26	120	105	29	4	1	0	0	0	0	0	287
15:00	0	3	17	59	67	18	0	0	0	0	0	0	0	164	0	1	22	44	46	8	2	0	0	0	0	0	0	123	0	4	39	103	113	26	2	0	0	0	0	0	0	287
15:15	0	1	37	51	48	3	3	0	0	0	0	0	0	143	9	10	16	37	38	6	4	0	0	0	0	0	0	120	9	11	53	88	86	9	7	0	0	0	0	0	0	263
15:30	0	3	42	83	30	14	0	0	0	0	0	0	0	172	32	16	27	48	36	5	1	1	0	0	0	0	0	166	32	19	69	131	66	19	1	1	0	0	0	0	0	338
15:45	1	6	44	79	61	13	3	0	1	0	0	0	0	208	6	7	16	48	55	9	1	0	0	0	0	0	0	142	7	13	60	127	116	22	4	0	1	0	0	0	0	350
16:00	0	1	25	86	62	18	1	1	0	0	0	0	0	194	7	4	18	48	53	15	4	0	0	0	0	0	0	149	7	5	43	134	115	33	5	1	0	0	0	0	0	343
16:15	0	15	78	78	45	5	3	0	0	0	0	0	0	224	28	16	28	40	20	9	1	0	0	0	0	0	0	142	28	31	106	118	65	14	4	0	0	0	0	0	0	366
16:30	3	23	102	85	34	8	0	0	0	0	0	0	0	255	6	10	24	45	24	9	2	0	0	0	0	0	0	120	9	33	126	130	58	17	2	0	0	0	0	0	0	375
16:45	5	13	113	96	27	8	1	0	0	0	0	0	0	263	9	14	32	41	31	5	1	0	0	0	0	0	0	133	14	27	145	137	58	13	2	0	0	0	0	0	0	396
17:00	18	35	117	90	33	4	0	0	0	0	0	0	0	297	13	9	18	49	40	7	0	0	0	0	0	0	0	136	31	44	135	139	73	11	0	0	0	0	0	0	0	433
17:15	0	8	113	120	35	3	1	0	0	0	0	0	0	280	3	4	26	60	40	4	1	0	0	0	0	0	0	138	3	12	139	180	75	7	2	0	0	0	0	0	0	418
17:30	3	25	101	107	30	5	1	0	0	0	0	0	0	272	3	2	20	51	21	13	2	0	1	0	0	0	0	113	6	27	121	158	51	18	3	0	1	0	0	0	0	385
17:45	1	1	88	116	41	6	1	0	0	0	0	0	0	254	15	24	19	31	26	8	1	0	0	0	0	0	0	124	16	25	107	147	67	14	2	0	0	0	0	0	0	378
18:00	6	31	96	99	35	5	2	0	0	0	0	0	0	274	4	15	38	49	23	3	0	0	0	0	0	0	0	132	10	46	134	148	58	8	2	0	0	0	0	0	0	406
18:15	3	7	56	89	60	9	0	1	0	0	0	0	0	225	11	11	32	30	25	5	2	0	0	0	0	0	0	116	14	18	88	119	85	14	2	1	0	0	0	0	0	341
18:30	1	3	31	78	42	5	1	0	0	0	0	0	0	161	0	2	16	54	36	4	1	1	0	0	0	0	0	114	1	5	47	132	78	9	2	1	0	0	0	0	0	275
18:45	1	2	35	57	40	9	0	0	0	0	0	0	0	144	4	9	15	40	34	8	1	0	0	0	0	0	0	111	5	11	50	97	74	17	1	0	0	0	0	0	0	255
19:00	1	9	38	44	27	7	1	0	0	0	0	0	0	127	5	6	30	40	20	3	0	0	0	0	0	0	0	104	6	15	68	84	47	10	1	0	0	0	0	0	0	231
19:15	0	1	14	43	35	7	2	0	0	0	0	0	0	102	4	1	10	69	23	5	1	0	0	0	0	0	0	113	4	2	24	112	58	12	3	0	0	0	0	0	0	215
19:30	0	2	13	53	26	11	3	0	0	0	0	0	0	108	7	4	15	45	24	6	2	0	0	0	0	0	0	103	7	6	28	98	50	17	5	0	0	0	0	0	0	211
19:45	0	2	19	51	29	7	3	0	1	0	0	0	0	112	7	4	21	28	15	3	3	1	0	0	0	0	0	82	7	6	40	79	44	10	6	1	1	0	0	0	0	194
20:00	0	1	7	43	37	11	4	1	0	0	0	0	0	104	5	4	17	37	20	7	0	0	0	0	0	0	0	90	5	5	24	80	57	18	4	1	0	0	0	0	0	194
20:15	0	0	10	42	39	11	2	0	0	0	0	0	0	104	3	3	15	23	23	4	1	0	0	0	0	0	0	72	3	3	25	65	62	15	3	0	0	0	0	0	0	176
20:30	1	0	9	38	20	13	0	0	0	0	0	0	0	81	3	0	22	22	24	10	0	0	0	0	0	0	0	81	4	0	31	60	44	23	0	0	0	0	0	0	0	162
20:45	2	5	17	37	17	12	0	0	0	0	0	0	0	90	1	4	13	21	16	3	1	0	0	0	0	0	0	59	3	9	30	58	33	15	1	0	0	0	0	0	0	149
21:00	0	2	15	21	24	14	2	0	0	0	0	0	0	78	2	9	11	32	24	4	0	0	0	0	0	0	0	82	2	11	26	53	48	18	2	0	0	0	0	0	0	160
21:15	0	0	7	26	37	5	1	1	0	0	0	0	0	77	0	1	11	30	18	7	0	0	0	0	0	0	0	67	0	1	18	56	55	12	1	1	0	0	0	0	0	144
21:30	0	0	8	27	23	10	3	0	0	0	0	0	0	71	0	2	9	19	17	5	0	0	0	0	0	0	0	52	0	2	17	46	40	15	3	0	0	0	0	0	0	123
21:45	1	1	10	19	21	9	2	0	0	0	0	0	0	63	0	0	17	17	17	3	1	1	0	0	0	0	0	56	1	1	27	36	38	12	3	1	0	0	0	0	0	119
22:00	0	1	5	37	23	7	1	0	0	0	0	0	0	74	1	1	7	17	19	1	1	0	0	0	0	0	0	47	1	2	12	54	42	8	2	0	0	0	0	0	0	121
22:15	0	1	3	13	15	5	1	0	0	0	0	0	0	38	0	1	8	22	11	5	0	0	0	0	0	0	0	47	0	2	11	35	26	10	1	0	0	0	0	0	0	85
22:30	1	1	5	23	24	4	2	0	0	0	0	0	0	60	0	0	5	14	9	3	2	0	0	0	0	0	0	33	1	1	10	37	33	7	4	0	0	0	0	0	0	93
22:45	0	0	1	13	14	8	1	0	0	0	0	0	0	37	0	0	6	5	5	3	0	1	0	0	0	0	0	20	0	0	7	18	19	11	1	1	0	0	0	0	0	57
23:00	0	1	3	15	15	6	1	0	0	0	0	0	0	41	0	3	3	8	9	2	0	0	0	0	0	0	0	25	0	4	6	23	24	8	1	0	0	0	0	0	0	66
23:15	0	0	5	10	15	9	3	1	0	0	0	0	0	43	0	1	4	8	6	5	0	0	0	0	0	0	0	24	0	1	9	18	21	14	3	1	0	0	0	0	0	67
23:30	0	0	0	13	12	7	2	1	0	0	0	0	0	35	0	2	6	8	4	3	1	0	0	0	0	0	0	24	0	2	6	21	16	10	3	1	0	0	0	0	0	59
23:45	0	0	3	8	8	2	3	1	1	0	0	0	0	26	0	0	4	11	6	0	0	0	0	0	0	0	0	21	0	0	7	19	14	2	3	1	1	0	0	0	0	47
Totals	**68**	**249**	**1,833**	**3,453**	**2,339**	**679**	**135**	**19**	**5**	**0**	**0**	**0**	**0**	**8,780**	**529**	**500**	**1,274**	**2,693**	**2,114**	**663**	**140**	**21**	**3**	**0**	**0**	**0**	**0**	**7,937**	**597**	**749**	**3,107**	**6,146**	**4,453**	**1,342**	**275**	**40**	**8**	**0**	**0**	**0**	**0**	**16,717**
% of Totals	1%	3%	21%	39%	27%	8%	2%	0%	0%	0%	0%	0%	0%	100%	7%	6%	16%	34%	27%	8%	2%	0%	0%	0%	0%	0%	0%	100%	4%	4%	19%	37%	27%	8%	2%	0%	0%	0%	0%	0%	0%	100%

Prepared by National Data & Surveying Services

VOLUME

Grand Ave Bet Lenox Ave & Lee St

Day: Tuesday
Date: 11/19/2024

City: Oakland
Project #: CA24_080367_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	8,780	7,937	16,717

DAILY TOTALS

15-Minutes Interval

TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL
0:00			25	25	50	12:00			124	135	259
0:15			19	16	35	12:15			124	131	255
0:30			13	15	28	12:30			126	113	239
0:45			25	7	32	12:45			133	105	238
1:00			18	18	36	13:00			132	103	235
1:15			14	9	23	13:15			115	111	226
1:30			22	10	32	13:30			119	131	250
1:45			7	9	16	13:45			147	129	276
2:00			10	8	18	14:00			132	125	257
2:15			7	6	13	14:15			162	124	286
2:30			10	3	13	14:30			137	103	240
2:45			7	6	13	14:45			144	143	287
3:00			7	3	10	15:00			164	123	287
3:15			5	9	14	15:15			143	120	263
3:30			5	5	10	15:30			172	166	338
3:45			4	8	12	15:45			208	142	350
4:00			4	9	13	16:00			194	149	343
4:15			5	11	16	16:15			224	142	366
4:30			5	8	13	16:30			255	120	375
4:45			4	17	21	16:45			263	133	396
5:00			7	17	24	17:00			297	136	433
5:15			6	26	32	17:15			280	138	418
5:30			11	23	34	17:30			272	113	385
5:45			21	34	55	17:45			254	124	378
6:00			21	24	45	18:00			274	132	406
6:15			25	48	73	18:15			225	116	341
6:30			28	46	74	18:30			161	114	275
6:45			30	64	94	18:45			144	111	255
7:00			42	82	124	19:00			127	104	231
7:15			49	97	146	19:15			102	113	215
7:30			54	124	178	19:30			108	103	211
7:45			74	140	214	19:45			112	82	194
8:00			90	176	266	20:00			104	90	194
8:15			119	207	326	20:15			104	72	176
8:30			119	182	301	20:30			81	81	162
8:45			92	176	268	20:45			90	59	149
9:00			99	192	291	21:00			78	82	160
9:15			85	144	229	21:15			77	67	144
9:30			76	106	182	21:30			71	52	123
9:45			100	148	248	21:45			63	56	119
10:00			93	137	230	22:00			74	47	121
10:15			117	105	222	22:15			38	47	85
10:30			93	114	207	22:30			60	33	93
10:45			89	131	220	22:45			37	20	57
11:00			105	106	211	23:00			41	25	66
11:15			112	117	229	23:15			43	24	67
11:30			101	117	218	23:30			35	24	59
11:45			110	118	228	23:45			26	21	47
TOTALS	0	0	2184	3203	5387	TOTALS	0	0	6596	4734	11330
SPLIT %	0%	0%	41%	59%	32%	SPLIT %	0%	0%	58%	42%	68%

Hourly Intervals

TIME		NB	SB	EB	WB	TOTAL
00:00	01:00			82	63	145
01:00	02:00			61	46	107
02:00	03:00			34	23	57
03:00	04:00			21	25	46
04:00	05:00			18	45	63
05:00	06:00			45	100	145
06:00	07:00			104	182	286
07:00	08:00			219	443	662
08:00	09:00			420	741	1161
09:00	10:00			360	590	950
10:00	11:00			392	487	879
11:00	12:00			428	458	886
12:00	13:00			507	484	991
13:00	14:00			513	474	987
14:00	15:00			575	495	1070
15:00	16:00			687	551	1238
16:00	17:00			936	544	1480
17:00	18:00			1103	511	1614
18:00	19:00			804	473	1277
19:00	20:00			449	402	851
20:00	21:00			379	302	681
21:00	22:00			289	257	546
22:00	23:00			209	147	356
23:00	00:00			145	94	239

STATISTICS

	NB	SB	EB	WB	TOTAL
Peak Period	00:00	to	12:00		
Volume			2184	3203	5387
Peak Hour			8:15	8:15	8:15
Peak Volume			429	757	1186
Peak Hour Factor			0.901	0.914	0.910
Peak Period	12:00	to	00:00		
Volume			6596	4734	11330
Peak Hour			16:45	15:30	16:45
Peak Volume			1112	599	1632
Peak Hour Factor			0.936	0.902	0.942
Peak Period	07:00	to	09:00		
Volume			639	1184	1823
Peak Hour			8:00	8:00	8:00
Peak Volume			420	741	1161
Peak Hour Factor			0.882	0.895	0.890
Peak Period	16:00	to	18:00		
Volume			2039	1055	3094
Peak Hour			16:45	16:00	16:45
Peak Volume			1112	544	1632
Peak Hour Factor			0.936	0.913	0.942

Prepared by National Data & Surveying Services

SPEED

Grand Ave Bet Bellevue Ave & Euclid Ave

Day: Tuesday
Date: 11/19/2024

City: Oakland
Project #: CA24_080367_002

HOURLY BREAKDOWN

Time	EASTBOUND														WESTBOUND														TOTALS												
	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
0:00	2	1	3	21	34	14	9	2	1	0	0	0	0	87	0	1	5	13	13	14	15	4	1	0	0	0	0	66	2	2	8	34	47	28	24	6	2	0	0	0	0	153
1:00	4	1	6	11	19	14	5	1	1	0	0	0	0	62	2	0	3	4	18	7	4	6	2	0	0	0	0	46	6	1	9	15	37	21	9	7	3	0	0	0	0	108
2:00	4	4	7	8	10	6	3	3	1	1	0	0	0	47	0	0	2	3	4	2	4	2	0	0	0	0	0	17	4	4	9	11	14	8	7	5	1	1	0	0	0	64
3:00	1	1	5	6	5	3	1	2	0	0	0	0	0	24	0	0	0	4	8	1	3	2	2	1	0	0	0	21	1	1	5	10	13	4	4	4	2	1	0	0	0	45
4:00	0	0	4	3	8	4	3	1	0	1	0	0	0	24	0	1	1	6	12	11	7	3	1	0	0	0	0	42	0	1	5	9	20	15	10	4	1	1	0	0	0	66
5:00	1	2	6	7	19	12	7	4	0	0	0	0	0	58	1	2	0	8	21	30	16	8	4	0	0	0	0	90	2	4	6	15	40	42	23	12	4	0	0	0	0	148
6:00	4	3	6	21	45	32	18	5	1	0	0	0	0	135	0	3	10	15	41	53	34	10	0	1	0	0	0	167	4	6	16	36	86	85	52	15	1	1	0	0	0	302
7:00	13	8	17	44	67	63	37	13	3	3	0	0	0	268	10	10	23	69	117	138	82	13	6	1	0	0	0	469	23	18	40	113	184	201	119	26	9	4	0	0	0	737
8:00	33	15	33	104	132	96	50	7	2	0	0	0	0	472	13	21	127	202	232	117	55	13	4	1	0	0	0	785	46	36	160	306	364	213	105	20	6	1	0	0	0	1257
9:00	45	22	42	91	107	62	26	6	0	0	0	0	0	401	20	25	94	163	174	124	41	7	2	1	0	0	0	651	65	47	136	254	281	186	67	13	2	1	0	0	0	1052
10:00	85	16	30	116	116	73	27	2	3	0	0	0	0	468	8	32	90	124	148	94	22	6	0	0	0	0	0	524	93	48	120	240	264	167	49	8	3	0	0	0	0	992
11:00	63	18	38	119	146	79	18	2	0	1	0	0	0	484	15	34	90	123	120	92	36	8	1	0	0	0	0	519	78	52	128	242	266	171	54	10	1	1	0	0	0	1003
12:00	124	49	54	106	144	70	24	5	0	0	0	0	0	576	22	28	120	163	163	81	28	0	0	0	0	0	0	605	146	77	174	269	307	151	52	5	0	0	0	0	0	1181
13:00	80	28	66	124	156	66	25	13	1	0	0	0	0	559	3	29	123	138	140	74	38	4	1	0	0	0	0	550	83	57	189	262	296	140	63	17	2	0	0	0	0	1109
14:00	109	31	57	153	164	90	35	10	4	1	0	0	0	654	6	25	83	189	153	78	31	9	4	0	0	0	0	578	115	56	140	342	317	168	66	19	8	1	0	0	0	1232
15:00	143	99	120	172	133	76	37	6	1	0	0	0	0	787	6	28	110	199	159	71	34	5	2	0	0	0	0	614	149	127	230	371	292	147	71	11	3	0	0	0	0	1401
16:00	152	86	209	263	183	73	32	1	1	0	0	0	0	1000	17	23	91	147	171	82	24	5	1	2	0	0	0	563	169	109	300	410	354	155	56	6	2	2	0	0	0	1563
17:00	308	247	264	140	75	29	9	2	0	0	0	0	0	1074	42	80	165	126	83	53	17	0	0	0	0	0	0	566	350	327	429	266	158	82	26	2	0	0	0	0	0	1640
18:00	176	134	118	136	133	56	19	1	0	0	0	0	0	773	28	45	128	132	107	54	23	2	1	1	0	0	0	521	204	179	246	268	240	110	42	3	1	1	0	0	0	1294
19:00	147	66	50	64	91	49	18	3	0	0	0	0	0	488	9	27	88	129	128	54	21	3	2	0	0	0	0	461	156	93	138	193	219	103	39	6	2	0	0	0	0	949
20:00	98	46	35	74	78	49	22	4	2	0	0	0	0	408	3	13	77	103	78	45	19	4	2	2	0	0	0	346	101	59	112	177	156	94	41	8	4	2	0	0	0	754
21:00	92	21	24	50	59	28	16	3	1	0	0	0	0	294	1	7	50	76	94	44	12	2	0	0	0	0	0	286	93	28	74	126	153	72	28	5	1	0	0	0	0	580
22:00	70	10	19	31	52	34	14	1	1	0	0	0	0	232	3	6	22	39	34	36	17	7	0	1	0	0	0	165	73	16	41	70	86	70	31	8	1	1	0	0	0	397
23:00	51	13	6	20	27	19	15	1	1	0	0	0	0	153	2	2	13	23	20	10	13	1	2	0	0	0	0	86	53	15	19	43	47	29	28	2	3	0	0	0	0	239
Totals	**1,805**	**921**	**1,219**	**1,884**	**2,003**	**1,097**	**470**	**98**	**24**	**7**	**0**	**0**	**0**	**9,528**	**211**	**442**	**1,515**	**2,198**	**2,238**	**1,365**	**596**	**124**	**38**	**11**	**0**	**0**	**0**	**8,738**	**2,016**	**1,363**	**2,734**	**4,082**	**4,241**	**2,462**	**1,066**	**222**	**62**	**18**	**0**	**0**	**0**	**18,266**
% of Totals	19%	10%	13%	20%	21%	12%	5%	1%	0%	0%				100%	2%	5%	17%	25%	26%	16%	7%	1%	0%	0%				100%	11%	7%	15%	22%	23%	13%	6%	1%	0%	0%				100%

STATISTICS

00:00 - 12:00	255	91	197	551	708	458	204	48	12	6	0	0	0	2530	69	129	445	734	908	683	319	82	23	5	0	0	0	3397	324	220	642	1285	1616	1141	523	130	35	11	0	0	0	5927
%	3%	1%	2%	6%	7%	5%	2%	1%	0%	0%	0%	0%	0%	27%	1%	1%	5%	8%	10%	7%	3%	1%	0%	0%	0%	0%	0%	36%	3%	2%	7%	13%	17%	12%	5%	1%	0%	0%	0%	0%	0%	62%
Peak Hour	11:45	11:45	11:45	11:15	11:00	8:00	7:45	7:00	6:45	7:00	0:00	0:00	0:00	11:45	11:45	10:45	8:30	8:15	8:15	7:30	7:00	6:45	7:00	7:15	0:00	0:00	0:00	8:15	11:45	11:45	8:30	8:15	8:15	7:30	7:15	7:00	7:00	7:15	0:00	0:00	0:00	8:15
Peak Volume	103	42	52	122	146	96	55	13	3	3	0	0	0	557	21	43	160	212	234	143	82	15	6	2	0	0	0	811	124	67	197	329	365	231	126	26	9	5	0	0	0	1283
12:00 - 24:00	1550	830	1022	1333	1295	639	266	50	12	1	0	0	0	6998	142	313	1070	1464	1330	682	277	42	15	6	0	0	0	5341	1692	1143	2092	2797	2625	1321	543	92	27	7	0	0	0	12339
%	16%	9%	11%	14%	14%	7%	3%	1%	0%	0%	0%	0%	0%	73%	1%	3%	11%	15%	14%	7%	3%	0%	0%	0%	0%	0%	0%	56%	18%	12%	22%	29%	28%	14%	6%	1%	0%	0%	0%	0%	0%	130%
Peak Hour	17:00	17:00	17:00	16:00	16:00	14:15	14:15	13:00	14:30	13:45	12:00	12:00	12:00	16:30	16:45	17:00	17:00	15:00	15:30	14:15	12:45	14:00	14:00	15:30	12:00	12:00	12:00	15:30	17:00	17:00	17:00	16:00	16:00	14:15	14:45	14:15	14:00	15:30	12:00	12:00	12:00	16:30
Peak Volume	308	247	264	263	183	93	45	13	5	1	0	0	0	1114	46	80	165	199	194	86	46	9	4	2	0	0	0	634	350	327	429	410	354	179	80	21	8	2	0	0	0	1685
07:00 - 09:00	46	23	50	148	199	159	87	20	5	3	0	0	0	740	23	31	150	271	349	255	137	26	10	2	0	0	0	1254	69	54	200	419	548	414	224	46	15	5	0	0	0	1994
%	0%	0%	1%	2%	2%	2%	1%	0%	0%	0%	0%	0%	0%	8%	0%	0%	2%	3%	4%	3%	1%	0%	0%	0%	0%	0%	0%	13%	1%	1%	2%	4%	6%	4%	2%	0%	0%	0%	0%	0%	0%	21%
Peak Hour	8:00	8:00	8:00	8:00	8:00	8:00	7:45	7:00	7:00	7:00	7:00	7:00	7:00	8:00	7:45	7:45	8:00	8:00	8:00	7:30	7:00	7:15	7:00	7:15	7:00	7:00	7:00	8:00	8:00	8:00	8:00	8:00	8:00	7:30	7:15	7:00	7:00	7:15	7:00	7:00	7:00	8:00
Peak Volume	33	15	33	104	132	96	55	13	3	3	0	0	0	472	15	22	127	202	232	143	82	14	6	2	0	0	0	785	46	36	160	306	364	231	126	26	9	5	0	0	0	1257
16:00 - 18:00	460	333	473	403	258	102	41	3	1	0	0	0	0	2074	59	103	256	273	254	135	41	5	1	2	0	0	0	1129	519	436	729	676	512	237	82	8	2	2	0	0	0	3203
%	5%	3%	5%	4%	3%	1%	0%	0%	0%	0%	0%	0%	0%	22%	1%	1%	3%	3%	3%	1%	0%	0%	0%	0%	0%	0%	0%	12%	5%	5%	8%	7%	5%	2%	1%	0%	0%	0%	0%	0%	0%	34%
Peak Hour	17:00	17:00	17:00	16:00	16:00	16:00	16:00	17:00	16:00	16:00	16:00	16:00	16:00	16:30	16:45	17:00	17:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:45	17:00	17:00	17:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:30
Peak Volume	308	247	264	263	183	73	32	2	1	0	0	0	0	1114	46	80	165	147	171	82	24	5	1	2	0	0	0	581	350	327	429	410	354	155	56	6	2	2	0	0	0	1685

Direction	Percentiles					
	15th	50th	Average	85th	95th	ADT
EASTBOUND	13	27	26	36	41	9528
WESTBOUND	22	30	30	38	43	8738
TOTALS	18	29	28	37	42	18266

Prepared by National Data & Surveying Services

SPEED

Grand Ave Bet Bellevue Ave & Euclid Ave

Day: Tuesday
Date: 11/19/2024

City: Oakland
Project #: CA24_080367_002

15-MINUTE BREAKDOWN

Time	EASTBOUND														WESTBOUND														TOTALS											
	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
0:00	0	0	2	5	6	4	3	0	0	0	0	0	0	**20**	0	1	1	4	7	8	4	4	0	0	0	0	0	**29**	0	1	3	9	13	12	7	4	0	0	0	0	0	**49**
0:15	0	0	0	5	11	4	4	1	0	0	0	0	0	**25**	0	0	1	2	3	3	4	0	1	0	0	0	0	**14**	0	0	1	7	14	7	8	1	1	0	0	0	0	**39**
0:30	2	1	0	2	4	3	1	1	1	0	0	0	0	**15**	0	0	2	2	3	1	6	0	0	0	0	0	0	**14**	2	1	2	4	7	4	7	1	1	0	0	0	0	**29**
0:45	0	0	1	9	13	3	1	0	0	0	0	0	0	**27**	0	0	1	5	0	2	1	0	0	0	0	0	0	**9**	0	0	2	14	13	5	2	0	0	0	0	0	0	**36**
1:00	0	1	2	2	8	2	1	0	0	0	0	0	0	**16**	0	0	2	1	7	1	1	3	0	0	0	0	0	**15**	0	1	4	3	15	3	2	3	0	0	0	0	0	**31**
1:15	3	0	1	2	3	6	0	0	0	0	0	0	0	**15**	1	0	0	0	5	4	0	1	1	0	0	0	0	**12**	4	0	1	2	8	10	0	1	1	0	0	0	0	**27**
1:30	0	0	1	4	5	6	3	1	1	0	0	0	0	**21**	1	0	0	1	5	1	1	1	1	0	0	0	0	**11**	1	0	1	5	10	7	4	2	2	0	0	0	0	**32**
1:45	1	0	2	3	3	0	1	0	0	0	0	0	0	**10**	0	0	1	2	1	1	2	1	0	0	0	0	0	**8**	1	0	3	5	4	1	3	1	0	0	0	0	0	**18**
2:00	1	1	0	4	1	3	1	0	1	1	0	0	0	**13**	0	0	0	0	1	0	1	1	0	0	0	0	0	**3**	1	1	0	4	2	3	2	1	1	1	0	0	0	**16**
2:15	0	1	3	2	3	0	0	2	0	0	0	0	0	**11**	0	0	1	2	0	1	0	1	0	0	0	0	0	**5**	0	1	4	4	3	1	0	3	0	0	0	0	0	**16**
2:30	3	1	2	1	4	2	1	1	0	0	0	0	0	**15**	0	0	0	1	2	1	1	0	0	0	0	0	0	**5**	3	1	2	2	6	3	2	1	0	0	0	0	0	**20**
2:45	0	1	2	1	2	1	1	0	0	0	0	0	0	**8**	0	0	1	0	1	0	2	0	0	0	0	0	0	**4**	0	1	3	1	3	1	3	0	0	0	0	0	0	**12**
3:00	0	0	1	0	2	0	0	1	0	0	0	0	0	**4**	0	0	0	1	0	0	1	1	0	1	0	0	0	**4**	0	0	1	1	2	0	1	2	0	1	0	0	0	**8**
3:15	1	0	1	2	1	1	1	0	0	0	0	0	0	**7**	0	0	0	1	3	1	1	0	0	0	0	0	0	**6**	1	0	1	3	4	2	2	0	0	0	0	0	0	**13**
3:30	0	0	1	3	1	1	0	1	0	0	0	0	0	**7**	0	0	0	2	3	0	0	0	1	0	0	0	0	**6**	0	0	1	5	4	1	0	1	1	0	0	0	0	**13**
3:45	0	1	2	1	1	1	0	0	0	0	0	0	0	**6**	0	0	0	0	2	0	1	1	1	0	0	0	0	**5**	0	1	2	1	3	1	1	1	1	0	0	0	0	**11**
4:00	0	0	2	0	1	2	1	0	0	0	0	0	0	**6**	0	0	0	1	2	4	3	0	1	0	0	0	0	**11**	0	0	2	1	3	6	4	0	1	0	0	0	0	**17**
4:15	0	0	0	0	3	1	1	1	0	1	0	0	0	**7**	0	0	1	2	1	1	1	2	0	0	0	0	0	**8**	0	0	1	2	4	2	2	3	0	1	0	0	0	**15**
4:30	0	0	2	0	3	0	0	0	0	0	0	0	0	**5**	0	1	0	2	4	0	0	0	0	0	0	0	0	**7**	0	1	2	2	7	0	0	0	0	0	0	0	0	**12**
4:45	0	0	0	3	1	1	1	0	0	0	0	0	0	**6**	0	0	0	1	5	6	3	1	0	0	0	0	0	**16**	0	0	0	4	6	7	4	1	0	0	0	0	0	**22**
5:00	0	0	2	2	0	3	1	1	0	0	0	0	0	**9**	0	0	0	2	4	4	1	1	0	0	0	0	0	**12**	0	0	2	4	4	7	2	2	0	0	0	0	0	**21**
5:15	0	0	2	2	2	0	1	0	0	0	0	0	0	**7**	1	0	0	3	4	7	6	2	2	0	0	0	0	**25**	1	0	2	5	6	7	7	2	2	0	0	0	0	**32**
5:30	0	0	0	2	8	5	2	2	0	0	0	0	0	**19**	0	1	0	0	5	5	7	3	2	0	0	0	0	**23**	0	1	0	2	13	10	9	5	2	0	0	0	0	**42**
5:45	1	2	2	1	9	4	3	1	0	0	0	0	0	**23**	0	1	0	3	8	14	2	2	0	0	0	0	0	**30**	1	3	2	4	17	18	5	3	0	0	0	0	0	**53**
6:00	0	1	1	4	11	10	4	1	0	0	0	0	0	**32**	0	2	2	1	7	8	6	1	0	0	0	0	0	**27**	0	3	3	5	18	18	10	2	0	0	0	0	0	**59**
6:15	2	1	2	6	7	7	5	2	1	0	0	0	0	**33**	0	0	0	3	12	16	6	3	0	0	0	0	0	**40**	2	1	2	9	19	23	11	5	1	0	0	0	0	**73**
6:30	0	0	2	7	12	12	3	1	0	0	0	0	0	**37**	0	1	6	6	8	11	7	2	0	1	0	0	0	**42**	0	1	8	13	20	23	10	3	0	1	0	0	0	**79**
6:45	2	1	1	4	15	3	6	1	0	0	0	0	0	**33**	0	0	2	5	14	18	15	4	0	0	0	0	0	**58**	2	1	3	9	29	21	21	5	0	0	0	0	0	**91**
7:00	2	2	8	15	13	7	9	2	1	0	0	0	0	**59**	8	5	7	6	12	30	20	3	3	0	0	0	0	**94**	10	7	15	21	25	37	29	5	4	0	0	0	0	**153**
7:15	1	1	3	9	13	16	4	5	0	1	0	0	0	**53**	0	1	3	10	21	35	26	5	0	0	0	0	0	**101**	1	2	6	19	34	51	30	10	0	1	0	0	0	**154**
7:30	1	2	2	7	17	19	11	2	2	0	0	0	0	**63**	0	2	8	21	32	42	17	3	1	1	0	0	0	**127**	1	4	10	28	49	61	28	5	3	1	0	0	0	**190**
7:45	9	3	4	13	24	21	13	4	0	2	0	0	0	**93**	2	2	5	32	52	31	19	2	2	0	0	0	0	**147**	11	5	9	45	76	52	32	6	2	2	0	0	0	**240**
8:00	2	4	3	16	32	27	20	1	0	0	0	0	0	**105**	1	6	19	43	48	34	16	4	0	1	0	0	0	**172**	3	10	22	59	80	61	36	5	0	1	0	0	0	**277**
8:15	10	3	13	40	38	21	10	0	1	0	0	0	0	**136**	10	8	15	34	79	36	13	4	2	0	0	0	0	**201**	20	11	28	74	117	57	23	4	3	0	0	0	0	**337**
8:30	7	3	10	34	37	21	12	3	0	0	0	0	0	**127**	2	6	46	64	51	27	12	3	2	0	0	0	0	**213**	9	9	56	98	88	48	24	6	2	0	0	0	0	**340**
8:45	14	5	7	14	25	27	8	3	1	0	0	0	0	**104**	0	1	47	61	54	20	14	2	0	0	0	0	0	**199**	14	6	54	75	79	47	22	5	1	0	0	0	0	**303**
9:00	7	2	11	29	31	18	6	1	0	0	0	0	0	**105**	4	3	37	53	50	34	14	3	0	0	0	0	0	**198**	11	5	48	82	81	52	20	4	0	0	0	0	0	**303**
9:15	13	3	9	23	21	18	8	3	0	0	0	0	0	**98**	11	8	30	33	34	35	7	3	1	0	0	0	0	**162**	24	11	39	56	55	53	15	6	1	0	0	0	0	**260**
9:30	8	7	10	20	30	13	5	2	0	0	0	0	0	**95**	0	6	14	29	38	23	9	0	0	1	0	0	0	**120**	8	13	24	49	68	36	14	2	0	1	0	0	0	**215**
9:45	17	10	12	19	25	13	7	0	0	0	0	0	0	**103**	5	8	13	48	52	32	11	1	1	0	0	0	0	**171**	22	18	25	67	77	45	18	1	1	0	0	0	0	**274**
10:00	25	4	6	30	29	17	7	0	0	0	0	0	0	**118**	2	10	28	35	35	27	4	2	0	0	0	0	0	**143**	27	14	34	65	64	44	11	2	0	0	0	0	0	**261**
10:15	12	3	8	35	40	24	9	0	2	0	0	0	0	**133**	2	3	8	25	41	26	5	0	0	0	0	0	0	**110**	14	6	16	60	81	50	14	0	2	0	0	0	0	**243**
10:30	21	4	11	28	27	16	5	1	0	0	0	0	0	**113**	0	3	25	28	33	22	7	3	0	0	0	0	0	**121**	21	7	36	56	60	38	12	4	0	0	0	0	0	**234**
10:45	27	5	5	23	20	16	6	1	1	0	0	0	0	**104**	4	16	29	36	39	19	6	1	0	0	0	0	0	**150**	31	21	34	59	59	35	12	2	1	0	0	0	0	**254**
11:00	12	2	10	27	42	16	0	0	0	0	0	0	0	**109**	4	8	23	33	32	15	6	3	0	0	0	0	0	**124**	16	10	33	60	74	31	6	3	0	0	0	0	0	**233**
11:15	21	6	8	29	38	16	4	0	0	0	0	0	0	**122**	7	14	21	27	31	17	5	2	0	0	0	0	0	**124**	28	20	29	56	69	33	9	2	0	0	0	0	0	**246**
11:30	17	7	10	27	34	19	7	1	0	1	0	0	0	**123**	1	5	17	31	34	35	15	0	1	0	0	0	0	**139**	18	12	27	58	68	54	22	1	1	1	0	0	0	**262**
11:45	13	3	10	36	32	28	7	1	0	0	0	0	0	**130**	3	7	29	32	23	25	10	3	0	0	0	0	0	**132**	16	10	39	68	55	53	17	4	0	0	0	0	0	**262**

Prepared by National Data & Surveying Services

SPEED

Grand Ave Bet Bellevue Ave & Euclid Ave

Day: Tuesday
Date: 11/19/2024

City: Oakland
Project #: CA24_080367_002

15-MINUTE BREAKDOWN

Time	EASTBOUND														WESTBOUND														TOTALS												
	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total	5	15	20	25	30	35	40	45	50	55	60	65	70	Total
	15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99		15	20	25	30	35	40	45	50	55	60	65	70	99	
12:00	25	15	10	30	28	21	5	2	0	0	0	0	0	**136**	0	3	26	36	63	28	9	0	0	0	0	0	0	**165**	25	18	36	66	91	49	14	2	0	0	0	0	0	**301**
12:15	35	8	12	19	39	8	5	0	0	0	0	0	0	**126**	16	10	33	42	33	9	4	0	0	0	0	0	0	**147**	51	18	45	61	72	17	9	0	0	0	0	0	0	**273**
12:30	30	16	20	30	36	23	8	2	0	0	0	0	0	**165**	2	5	33	39	37	17	2	0	0	0	0	0	0	**135**	32	21	53	69	73	40	10	2	0	0	0	0	0	**300**
12:45	34	10	12	27	41	18	6	1	0	0	0	0	0	**149**	4	10	28	46	30	27	13	0	0	0	0	0	0	**158**	38	20	40	73	71	45	19	1	0	0	0	0	0	**307**
13:00	24	8	17	36	35	15	8	3	0	0	0	0	0	**146**	1	5	29	26	26	14	12	1	0	0	0	0	0	**114**	25	13	46	62	61	29	20	4	0	0	0	0	0	**260**
13:15	23	11	13	32	37	12	3	3	0	0	0	0	0	**134**	0	7	29	35	33	21	13	2	0	0	0	0	0	**140**	23	18	42	67	70	33	16	5	0	0	0	0	0	**274**
13:30	18	6	11	22	37	22	6	3	0	0	0	0	0	**125**	1	8	31	33	42	21	8	1	1	0	0	0	0	**146**	19	14	42	55	79	43	14	4	1	0	0	0	0	**271**
13:45	15	3	25	34	47	17	8	4	1	0	0	0	0	**154**	1	9	34	44	39	18	5	0	0	0	0	0	0	**150**	16	12	59	78	86	35	13	4	1	0	0	0	0	**304**
14:00	28	6	19	37	36	18	6	2	0	0	0	0	0	**152**	0	4	18	62	36	12	9	2	1	0	0	0	0	**144**	28	10	37	99	72	30	15	4	1	0	0	0	0	**296**
14:15	20	8	13	45	53	23	10	3	0	0	0	0	0	**175**	2	1	26	43	35	22	6	3	1	0	0	0	0	**139**	22	9	39	88	88	45	16	6	1	0	0	0	0	**314**
14:30	29	7	13	29	39	25	8	3	1	1	0	0	0	**155**	0	4	14	43	44	27	5	2	0	0	0	0	0	**139**	29	11	27	72	83	52	13	5	1	1	0	0	0	**294**
14:45	32	10	12	42	36	24	11	2	3	0	0	0	0	**172**	4	16	25	41	38	17	11	2	2	0	0	0	0	**156**	36	26	37	83	74	41	22	4	5	0	0	0	0	**328**
15:00	19	15	27	35	43	21	16	5	0	0	0	0	0	**181**	2	6	29	41	29	20	6	1	0	0	0	0	0	**134**	21	21	56	76	72	41	22	6	0	0	0	0	0	**315**
15:15	13	13	18	39	43	19	8	1	1	0	0	0	0	**155**	0	6	17	40	38	19	12	2	1	0	0	0	0	**135**	13	19	35	79	81	38	20	3	2	0	0	0	0	**290**
15:30	54	32	43	55	19	15	8	0	0	0	0	0	0	**226**	4	10	31	56	57	16	8	1	0	0	0	0	0	**183**	58	42	74	111	76	31	16	1	0	0	0	0	0	**409**
15:45	57	39	32	43	28	21	5	0	0	0	0	0	0	**225**	0	6	33	62	35	16	8	1	1	0	0	0	0	**162**	57	45	65	105	63	37	13	1	1	0	0	0	0	**387**
16:00	34	25	41	43	41	21	12	1	1	0	0	0	0	**219**	1	3	18	35	47	25	6	2	0	1	0	0	0	**138**	35	28	59	78	88	46	18	3	1	1	0	0	0	**357**
16:15	31	14	37	69	51	22	11	0	0	0	0	0	0	**235**	1	9	20	34	55	22	8	1	0	1	0	0	0	**151**	32	23	57	103	106	44	19	1	0	1	0	0	0	**386**
16:30	35	21	77	90	46	9	4	0	0	0	0	0	0	**282**	3	1	14	31	42	19	7	2	1	0	0	0	0	**120**	38	22	91	121	88	28	11	2	1	0	0	0	0	**402**
16:45	52	26	54	61	45	21	5	0	0	0	0	0	0	**264**	12	10	39	47	27	16	3	0	0	0	0	0	0	**154**	64	36	93	108	72	37	8	0	0	0	0	0	0	**418**
17:00	81	66	82	34	20	4	3	0	0	0	0	0	0	**290**	13	34	48	23	11	10	3	0	0	0	0	0	0	**142**	94	100	130	57	31	14	6	0	0	0	0	0	0	**432**
17:15	111	81	47	16	17	4	2	0	0	0	0	0	0	**278**	6	12	49	45	25	12	6	0	0	0	0	0	0	**155**	117	93	96	61	42	16	8	0	0	0	0	0	0	**433**
17:30	55	51	66	43	15	5	3	1	0	0	0	0	0	**239**	15	11	27	32	28	13	4	0	0	0	0	0	0	**130**	70	62	93	75	43	18	7	1	0	0	0	0	0	**369**
17:45	61	49	69	47	23	16	1	1	0	0	0	0	0	**267**	8	23	41	26	19	18	4	0	0	0	0	0	0	**139**	69	72	110	73	42	34	5	1	0	0	0	0	0	**406**
18:00	50	48	54	46	46	14	3	1	0	0	0	0	0	**262**	8	17	36	43	22	11	3	0	0	0	0	0	0	**140**	58	65	90	89	68	25	6	1	0	0	0	0	0	**402**
18:15	61	41	35	28	23	15	4	0	0	0	0	0	0	**207**	15	18	30	25	18	9	6	1	0	0	0	0	0	**122**	76	59	65	53	41	24	10	1	0	0	0	0	0	**329**
18:30	30	20	16	44	35	18	5	0	0	0	0	0	0	**168**	0	4	22	26	47	21	7	1	1	0	0	0	0	**129**	30	24	38	70	82	39	12	1	1	0	0	0	0	**297**
18:45	35	25	13	18	29	9	7	0	0	0	0	0	0	**136**	5	6	40	38	20	13	7	0	0	1	0	0	0	**130**	40	31	53	56	49	22	14	0	0	1	0	0	0	**266**
19:00	46	31	18	13	28	11	7	0	0	0	0	0	0	**154**	5	17	17	37	31	5	4	2	0	0	0	0	0	**118**	51	48	35	50	59	16	11	2	0	0	0	0	0	**272**
19:15	28	12	10	21	24	12	1	1	0	0	0	0	0	**109**	1	1	25	28	40	19	6	0	0	0	0	0	0	**120**	29	13	35	49	64	31	7	1	0	0	0	0	0	**229**
19:30	43	14	13	18	10	12	3	2	0	0	0	0	0	**115**	2	7	21	39	33	9	5	0	1	0	0	0	0	**117**	45	21	34	57	43	21	8	2	1	0	0	0	0	**232**
19:45	30	9	9	12	29	14	7	0	0	0	0	0	0	**110**	1	2	25	25	24	21	6	1	1	0	0	0	0	**106**	31	11	34	37	53	35	13	1	1	0	0	0	0	**216**
20:00	34	11	9	18	18	12	2	2	0	0	0	0	0	**106**	2	4	19	34	23	17	3	0	1	0	0	0	0	**103**	36	15	28	52	41	29	5	2	1	0	0	0	0	**209**
20:15	26	16	7	24	18	14	8	1	1	0	0	0	0	**115**	1	7	18	19	19	8	2	2	0	0	0	0	0	**76**	27	23	25	43	37	22	10	3	1	0	0	0	0	**191**
20:30	19	5	8	14	26	9	6	0	1	0	0	0	0	**88**	0	0	23	26	16	11	9	2	1	2	0	0	0	**90**	19	5	31	40	42	20	15	2	2	2	0	0	0	**178**
20:45	19	14	11	18	16	14	6	1	0	0	0	0	0	**99**	0	2	17	24	20	9	5	0	0	0	0	0	0	**77**	19	16	28	42	36	23	11	1	0	0	0	0	0	**176**
21:00	15	3	12	10	13	10	3	0	0	0	0	0	0	**66**	0	0	17	19	29	11	3	1	0	0	0	0	0	**80**	15	3	29	29	42	21	6	1	0	0	0	0	0	**146**
21:15	22	8	7	15	17	7	3	1	0	0	0	0	0	**80**	1	1	9	11	29	11	1	0	0	0	0	0	0	**63**	23	9	16	26	46	18	4	1	0	0	0	0	0	**143**
21:30	28	7	2	10	17	5	5	1	1	0	0	0	0	**76**	0	3	10	23	13	14	6	0	0	0	0	0	0	**69**	28	10	12	33	30	19	11	1	1	0	0	0	0	**145**
21:45	27	3	3	15	12	6	5	1	0	0	0	0	0	**72**	0	3	14	23	23	8	2	1	0	0	0	0	0	**74**	27	6	17	38	35	14	7	2	0	0	0	0	0	**146**
22:00	31	5	8	14	14	10	6	0	0	0	0	0	0	**88**	0	5	9	11	10	10	10	0	0	0	0	0	0	**55**	31	10	17	25	24	20	16	0	0	0	0	0	0	**143**
22:15	12	1	1	7	10	7	1	0	0	0	0	0	0	**39**	1	0	5	5	7	15	4	4	0	0	0	0	0	**41**	13	1	6	12	17	22	5	4	0	0	0	0	0	**80**
22:30	16	2	4	6	18	9	2	1	1	0	0	0	0	**59**	1	1	6	10	13	6	0	2	0	0	0	0	0	**39**	17	3	10	16	31	15	2	3	1	0	0	0	0	**98**
22:45	11	2	6	4	10	8	5	0	0	0	0	0	0	**46**	1	0	2	13	4	5	3	1	0	1	0	0	0	**30**	12	2	8	17	14	13	8	1	0	1	0	0	0	**76**
23:00	16	5	0	4	9	3	2	0	0	0	0	0	0	**39**	0	0	3	8	3	3	4	0	0	0	0	0	0	**21**	16	5	3	12	12	6	6	0	0	0	0	0	0	**60**
23:15	13	1	1	8	6	9	5	1	0	0	0	0	0	**44**	1	0	5	7	7	2	4	1	1	0	0	0	0	**28**	14	1	6	15	13	11	9	2	1	0	0	0	0	**72**
23:30	13	4	3	7	7	4	6	0	1	0	0	0	0	**45**	1	0	2	4	5	2	3	0	0	0	0	0	0	**17**	14	4	5	11	12	6	9	0	1	0	0	0	0	**62**
23:45	9	3	2	1	5	3	2	0	0	0	0	0	0	**25**	0	2	3	4	5	3	2	0	1	0	0	0	0	**20**	9	5	5	5	10	6	4	0	1	0	0	0	0	**45**
Totals	**1,805**	**921**	**1,219**	**1,884**	**2,003**	**1,097**	**470**	**98**	**24**	**7**	**0**	**0**	**0**	**9,528**	**211**	**442**	**1,515**	**2,198**	**2,238**	**1,365**	**596**	**124**	**38**	**11**	**0**	**0**	**0**	**8,738**	**2,016**	**1,363**	**2,734**	**4,082**	**4,241**	**2,462**	**1,066**	**222**	**62**	**18**	**0**	**0**	**0**	**18,266**
% of Totals	19%	10%	13%	20%	21%	12%	5%	1%	0%	0%	0%	0%	0%	**100%**	2%	5%	17%	25%	26%	16%	7%	1%	0%	0%	0%	0%	0%	**100%**	11%	7%	15%	22%	23%	13%	6%	1%	0%	0%	0%	0%	0%	**100%**

Prepared by National Data & Surveying Services

VOLUME

Grand Ave Bet Bellevue Ave & Euclid Ave

Day: Tuesday
Date: 11/19/2024

City: Oakland
Project #: CA24_080367_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,528	8,738	18,266

15-Minutes Interval

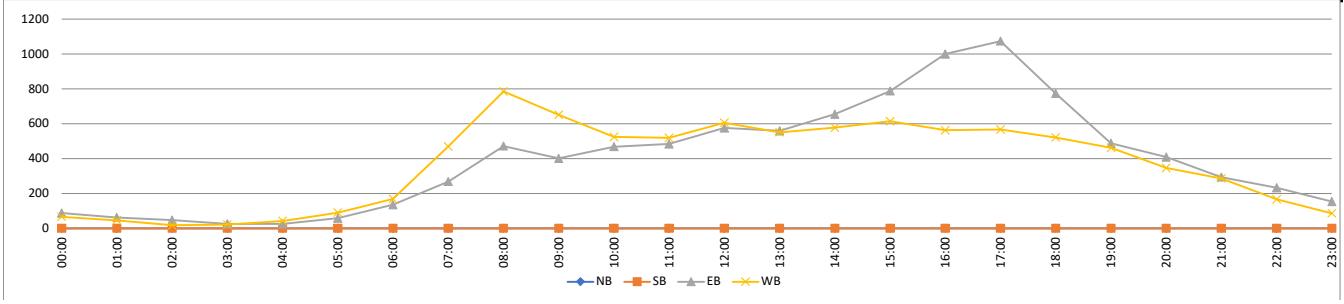
TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL
0:00			20	29	49	12:00			136	165	301
0:15			25	14	39	12:15			126	147	273
0:30			15	14	29	12:30			165	135	300
0:45			27	9	36	12:45			149	158	307
1:00			16	15	31	13:00			146	114	260
1:15			15	12	27	13:15			134	140	274
1:30			21	11	32	13:30			125	146	271
1:45			10	8	18	13:45			154	150	304
2:00			13	3	16	14:00			152	144	296
2:15			11	5	16	14:15			175	139	314
2:30			15	5	20	14:30			155	139	294
2:45			8	4	12	14:45			172	156	328
3:00			4	4	8	15:00			181	134	315
3:15			7	6	13	15:15			155	135	290
3:30			7	6	13	15:30			226	183	409
3:45			6	5	11	15:45			225	162	387
4:00			6	11	17	16:00			219	138	357
4:15			7	8	15	16:15			235	151	386
4:30			5	7	12	16:30			282	120	402
4:45			6	16	22	16:45			264	154	418
5:00			9	12	21	17:00			290	142	432
5:15			7	25	32	17:15			278	155	433
5:30			19	23	42	17:30			239	130	369
5:45			23	30	53	17:45			267	139	406
6:00			32	27	59	18:00			262	140	402
6:15			33	40	73	18:15			207	122	329
6:30			37	42	79	18:30			168	129	297
6:45			33	58	91	18:45			136	130	266
7:00			59	94	153	19:00			154	118	272
7:15			53	101	154	19:15			109	120	229
7:30			63	127	190	19:30			115	117	232
7:45			93	147	240	19:45			110	106	216
8:00			105	172	277	20:00			106	103	209
8:15			136	201	337	20:15			115	76	191
8:30			127	213	340	20:30			88	90	178
8:45			104	199	303	20:45			99	77	176
9:00			105	198	303	21:00			66	80	146
9:15			98	162	260	21:15			80	63	143
9:30			95	120	215	21:30			76	69	145
9:45			103	171	274	21:45			72	74	146
10:00			118	143	261	22:00			88	55	143
10:15			133	110	243	22:15			39	41	80
10:30			113	121	234	22:30			59	39	98
10:45			104	150	254	22:45			46	30	76
11:00			109	124	233	23:00			39	21	60
11:15			122	124	246	23:15			44	28	72
11:30			123	139	262	23:30			45	17	62
11:45			130	132	262	23:45			25	20	45
TOTALS	0	0	2530	3397	5927	TOTALS	0	0	6998	5341	12339
SPLIT %	0%	0%	43%	57%	32%	SPLIT %	0%	0%	57%	43%	68%

Hourly Intervals

TIME		NB	SB	EB	WB	TOTAL
00:00	01:00			87	66	153
01:00	02:00			62	46	108
02:00	03:00			47	17	64
03:00	04:00			24	21	45
04:00	05:00			24	42	66
05:00	06:00			58	90	148
06:00	07:00			135	167	302
07:00	08:00			268	469	737
08:00	09:00			472	785	1257
09:00	10:00			401	651	1052
10:00	11:00			468	524	992
11:00	12:00			484	519	1003
12:00	13:00			576	605	1181
13:00	14:00			559	550	1109
14:00	15:00			654	578	1232
15:00	16:00			787	614	1401
16:00	17:00			1000	563	1563
17:00	18:00			1074	566	1640
18:00	19:00			773	521	1294
19:00	20:00			488	461	949
20:00	21:00			408	346	754
21:00	22:00			294	286	580
22:00	23:00			232	165	397
23:00	00:00			153	86	239

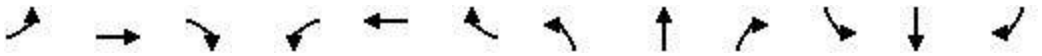
STATISTICS

	NB	SB	EB	WB	TOTAL
Peak Period	00:00	to	12:00		
Volume			2530	3397	5927
Peak Hour			11:00	8:15	8:15
Peak Volume			484	811	1283
Peak Hour Factor			0.931	0.952	0.943
Peak Period	12:00	to	00:00		
Volume			6998	5341	12339
Peak Hour			16:30	15:30	16:30
Peak Volume			1114	634	1685
Peak Hour Factor			0.960	0.866	0.973
Peak Period	07:00	to	09:00		
Volume			740	1254	1994
Peak Hour			8:00	8:00	8:00
Peak Volume			472	785	1257
Peak Hour Factor			0.868	0.921	0.924
Peak Period	16:00	to	18:00		
Volume			2074	1129	3203
Peak Hour			16:30	16:45	16:30
Peak Volume			1114	581	1685
Peak Hour Factor			0.960	0.937	0.973



Attachment B:
Synchro HCM 7th Edition LOS Reports

Alternative 1 No Build



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	71
Future Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	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		0.90	1.00		0.89	0.92		0.86	0.94		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	78	464	73	53	200	44	41	280	102	41	228	79
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	446	890	359	124	458	99	379	1271	485	378	895	292
Arrive On Green	0.25	0.25	0.25	0.19	0.19	0.19	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1767	3526	1420	638	2366	511	983	3526	1345	933	2483	810
Grp Volume(v), veh/h	78	464	73	151	0	146	41	280	102	41	158	149
Grp Sat Flow(s),veh/h/ln	1767	1763	1420	1824	0	1692	983	1763	1345	933	1763	1530
Q Serve(g_s), s	2.7	8.8	3.1	5.7	0.0	5.9	2.4	4.3	4.1	2.5	4.9	5.4
Cycle Q Clear(g_c), s	2.7	8.8	3.1	5.7	0.0	5.9	7.8	4.3	4.1	6.8	4.9	5.4
Prop In Lane	1.00		1.00	0.35		0.30	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	446	890	359	353	0	328	379	1271	485	378	636	552
V/C Ratio(X)	0.17	0.52	0.20	0.43	0.00	0.44	0.11	0.22	0.21	0.11	0.25	0.27
Avail Cap(c_a), veh/h	728	1453	585	587	0	545	379	1271	485	378	636	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.7	25.0	22.9	27.5	0.0	27.6	20.3	17.2	17.2	19.6	17.4	17.6
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.4	0.6	0.4	1.0	0.6	0.9	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	1.1	3.6	1.0	2.5	0.0	2.4	0.6	1.8	1.4	0.6	2.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.8	25.2	23.0	27.8	0.0	28.0	20.9	17.6	18.2	20.2	18.4	18.8
LnGrp LOS	C	C	C	C		C	C	B	B	C	B	B
Approach Vol, veh/h		615			297			423			348	
Approach Delay, s/veh		24.6			27.9			18.1			18.8	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		20.0		33.0		24.6		33.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		25.0		28.0		32.0		28.0				
Max Q Clear Time (g_c+I1), s		7.9		9.8		10.8		8.8				
Green Ext Time (p_c), s		1.1		1.5		2.4		1.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			22.3									
HCM 7th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
Future Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
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)	0.91		0.85	1.00		0.90				1.00		0.80
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	66	253	289	116	268	69				29	131	30
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	121	375	334	461	1659	414				143	623	137
Arrive On Green	0.28	0.28	0.28	0.52	1.00	1.00				0.26	0.26	0.26
Sat Flow, veh/h	251	1358	1210	1767	2729	681				545	2371	520
Grp Volume(v), veh/h	319	0	289	116	170	167				97	0	93
Grp Sat Flow(s),veh/h/ln	1609	0	1210	1767	1763	1647				1828	0	1608
Q Serve(g_s), s	9.8	0.0	19.3	3.1	0.0	0.0				3.5	0.0	3.8
Cycle Q Clear(g_c), s	14.8	0.0	19.3	3.1	0.0	0.0				3.5	0.0	3.8
Prop In Lane	0.21		1.00	1.00		0.41				0.30		0.32
Lane Grp Cap(c), veh/h	496	0	334	461	1072	1001				480	0	422
V/C Ratio(X)	0.64	0.00	0.86	0.25	0.16	0.17				0.20	0.00	0.22
Avail Cap(c_a), veh/h	632	0	441	461	1072	1001				538	0	473
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.90	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	27.3	0.0	29.2	15.7	0.0	0.0				24.4	0.0	24.5
Incr Delay (d2), s/veh	5.7	0.0	22.6	0.1	0.3	0.4				0.1	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
%ile BackOfQ(50%),veh/ln	6.4	0.0	7.5	1.2	0.1	0.1				1.5	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.0	0.0	51.8	15.8	0.3	0.4				24.5	0.0	24.6
LnGrp LOS	C		D	B	A	A				C		C
Approach Vol, veh/h		608			453						190	
Approach Delay, s/veh		41.9			4.3						24.5	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	28.2	29.5		27.3		57.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	13.5	* 31		25.0		49.0
Max Q Clear Time (g_c+I1), s	5.1	21.3		5.8		2.0
Green Ext Time (p_c), s	0.1	2.2		0.6		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	25.7
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)	10	244	0	7	383	24	2	0	3	22	0	22
Future Volume (veh/h)	10	244	0	7	383	24	2	0	3	22	0	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)	0.98		1.00	0.96		0.92	0.96		0.94	0.94		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	11	271	0	8	426	27	2	0	3	24	0	24
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	614	2232	0	687	2120	134	180	23	215	415	0	369
Arrive On Green	0.21	0.21	0.00	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	913	3618	0	1055	3348	211	485	91	863	1325	0	1480
Grp Volume(v), veh/h	11	271	0	8	223	230	5	0	0	24	0	24
Grp Sat Flow(s),veh/h/ln	913	1763	0	1055	1763	1797	1439	0	0	1325	0	1480
Q Serve(g_s), s	0.8	5.3	0.0	0.3	4.5	4.6	0.0	0.0	0.0	0.9	0.0	1.1
Cycle Q Clear(g_c), s	5.4	5.3	0.0	5.6	4.5	4.6	0.2	0.0	0.0	1.1	0.0	1.1
Prop In Lane	1.00		0.00	1.00		0.12	0.40		0.60	1.00		1.00
Lane Grp Cap(c), veh/h	614	2232	0	687	1116	1137	418	0	0	415	0	369
V/C Ratio(X)	0.02	0.12	0.00	0.01	0.20	0.20	0.01	0.00	0.00	0.06	0.00	0.07
Avail Cap(c_a), veh/h	614	2232	0	687	1116	1137	564	0	0	552	0	522
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.00	0.98	0.98	0.98	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.3	14.4	0.0	7.9	6.5	6.6	24.0	0.0	0.0	24.4	0.0	24.4
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.1	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	0.2	2.1	0.0	0.1	1.7	1.7	0.1	0.0	0.0	0.4	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.4	14.5	0.0	7.9	6.9	7.0	24.0	0.0	0.0	24.4	0.0	24.4
LnGrp LOS	B	B		A	A	A	C			C		C
Approach Vol, veh/h		282			461			5			48	
Approach Delay, s/veh		14.6			7.0			24.0			24.4	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.2	58.8	26.2	58.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	45.0	30.0	45.0
Max Q Clear Time (g_c+I1), s	3.1	7.6	2.2	7.4
Green Ext Time (p_c), s	0.2	3.2	0.0	2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	10.8
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	62
Future Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	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		0.89	1.00		0.91	0.98		0.93	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	48	181	70	309	328	42	63	450	268	14	568	69
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	717	260	417	1202	152	137	848	508	59	1048	125
Arrive On Green	0.04	0.29	0.29	0.12	0.39	0.39	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	3428	2445	888	3428	3111	393	218	2433	1458	27	3007	359
Grp Volume(v), veh/h	48	127	124	309	184	186	210	303	268	348	0	303
Grp Sat Flow(s),veh/h/ln	1714	1763	1570	1714	1763	1742	1047	1604	1458	1813	0	1580
Q Serve(g_s), s	1.0	4.2	4.6	6.6	5.4	5.6	3.9	11.6	11.2	0.0	0.0	11.8
Cycle Q Clear(g_c), s	1.0	4.2	4.6	6.6	5.4	5.6	15.7	11.6	11.2	11.4	0.0	11.8
Prop In Lane	1.00		0.57	1.00		0.23	0.30		1.00	0.04		0.23
Lane Grp Cap(c), veh/h	144	517	460	417	681	673	427	559	508	681	0	551
V/C Ratio(X)	0.33	0.25	0.27	0.74	0.27	0.28	0.49	0.54	0.53	0.51	0.00	0.55
Avail Cap(c_a), veh/h	225	648	577	720	903	892	554	716	651	852	0	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	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	35.5	20.5	20.7	32.3	16.0	16.1	20.2	19.9	19.8	19.9	0.0	20.0
Incr Delay (d2), s/veh	1.4	0.2	0.3	2.6	0.2	0.2	0.9	0.8	0.8	0.6	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.7	1.7	2.9	2.2	2.2	3.2	4.2	3.8	4.8	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	20.7	21.0	34.9	16.2	16.3	21.1	20.7	20.6	20.5	0.0	20.9
LnGrp LOS	D	C	C	C	B	B	C	C	C	C		C
Approach Vol, veh/h		299			679			781			651	
Approach Delay, s/veh		23.4			24.7			20.8			20.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	32.6	8.2	35.4	32.6	15.3	28.3
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	34.0	5.0	39.0	34.0	16.0	* 28
Max Q Clear Time (g_c+I1), s	17.7	3.0	7.6	13.8	8.6	6.6
Green Ext Time (p_c), s	4.1	0.0	2.5	4.1	0.7	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	61	356	548	283	97	63
Future Volume (veh/h)	61	356	548	283	97	63
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)	0.99			0.92	1.00	0.93
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	68	396	609	314	108	70
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	501	2488	1540	794	180	117
Arrive On Green	0.71	0.71	1.00	1.00	0.18	0.18
Sat Flow, veh/h	597	3618	2274	1124	984	638
Grp Volume(v), veh/h	68	396	492	431	179	0
Grp Sat Flow(s),veh/h/ln	597	1763	1763	1543	1632	0
Q Serve(g_s), s	3.4	3.4	0.0	0.0	9.1	0.0
Cycle Q Clear(g_c), s	3.4	3.4	0.0	0.0	9.1	0.0
Prop In Lane	1.00			0.73	0.60	0.39
Lane Grp Cap(c), veh/h	501	2488	1244	1089	299	0
V/C Ratio(X)	0.14	0.16	0.40	0.40	0.60	0.00
Avail Cap(c_a), veh/h	501	2488	1244	1089	562	0
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.95	0.95	1.00	0.00
Uniform Delay (d), s/veh	4.4	4.4	0.0	0.0	33.7	0.0
Incr Delay (d2), s/veh	0.5	0.1	0.9	1.0	1.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.1	0.3	0.3	3.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.9	4.5	0.9	1.0	35.6	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		464	923		179	
Approach Delay, s/veh		4.6	1.0		35.6	
Approach LOS		A	A		D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	21.5	68.5	68.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	31.0	49.0	49.0
Max Q Clear Time (g_c+I1), s	11.1	2.0	5.4
Green Ext Time (p_c), s	0.5	8.4	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	6.0
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
Future Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
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)	0.98		0.91	0.97		0.88				1.00		0.91
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	14	470	19	19	870	16				33	1	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	527	2587	1045	718	2587	1014				91	3	146
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00				0.16	0.16	0.16
Sat Flow, veh/h	609	3526	1424	869	3526	1381				588	18	944
Grp Volume(v), veh/h	14	470	19	19	870	16				87	0	0
Grp Sat Flow(s),veh/h/ln	609	1763	1424	869	1763	1381				1550	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				4.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				4.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00				0.38		0.61
Lane Grp Cap(c), veh/h	527	2587	1045	718	2587	1014				240	0	0
V/C Ratio(X)	0.03	0.18	0.02	0.03	0.34	0.02				0.36	0.00	0.00
Avail Cap(c_a), veh/h	527	2587	1045	718	2587	1014				482	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				34.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.1	0.4	0.0				0.9	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
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.0	0.0	0.1	0.0				1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.1	0.0	0.1	0.4	0.0				35.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A				C		
Approach Vol, veh/h		503			905						87	
Approach Delay, s/veh		0.1			0.3						35.0	
Approach LOS		A			A						C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	19.0	71.0	71.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	28.0	52.0	52.0
Max Q Clear Time (g_c+I1), s	6.5	2.0	2.0
Green Ext Time (p_c), s	0.4	8.5	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	2.3
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	438	767	17	6	47
Future Vol, veh/h	15	438	767	17	6	47
Conflicting Peds, #/hr	0	0	0	112	14	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	30	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	17	487	852	19	7	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	983	0	-	0	1255	538
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	291	-
Critical Hdwy	4.16	-	-	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	2.23	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	692	-	-	-	162	485
Stage 1	-	-	-	-	328	-
Stage 2	-	-	-	-	730	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	618	-	-	-	126	433
Mov Cap-2 Maneuver	-	-	-	-	126	-
Stage 1	-	-	-	-	285	-
Stage 2	-	-	-	-	652	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.36	0	17.82
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	618	-	-	-	339
HCM Lane V/C Ratio	0.027	-	-	-	0.173
HCM Control Delay (s/veh)	11	-	-	-	17.8
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

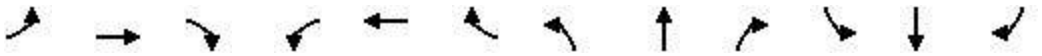
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	428	756	19	11	28
Future Vol, veh/h	16	428	756	19	11	28
Conflicting Peds, #/hr	0	0	0	79	19	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	476	840	21	12	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	940	0	-	0	1222	510
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	292	-
Critical Hdwy	4.16	-	-	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	2.23	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	719	-	-	-	171	506
Stage 1	-	-	-	-	342	-
Stage 2	-	-	-	-	729	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	665	-	-	-	142	468
Mov Cap-2 Maneuver	-	-	-	-	142	-
Stage 1	-	-	-	-	308	-
Stage 2	-	-	-	-	674	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.38	0	19.94
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	665	-	-	-	284
HCM Lane V/C Ratio	0.027	-	-	-	0.153
HCM Control Delay (s/veh)	10.6	-	-	-	19.9
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	52
Future Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	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)	0.99		0.93	0.98		0.91	0.97		0.96	0.96		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	41	438	9	23	794	47	9	3	6	43	8	58
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	506	2603	1084	755	2603	1056	159	58	79	124	38	120
Arrive On Green	1.00	1.00	1.00	0.74	0.74	0.74	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	644	3526	1468	915	3526	1430	660	388	524	450	253	800
Grp Volume(v), veh/h	41	438	9	23	794	47	18	0	0	109	0	0
Grp Sat Flow(s),veh/h/ln	644	1763	1468	915	1763	1430	1573	0	0	1503	0	0
Q Serve(g_s), s	0.6	0.0	0.0	0.6	6.8	0.8	0.0	0.0	0.0	2.8	0.0	0.0
Cycle Q Clear(g_c), s	7.5	0.0	0.0	0.6	6.8	0.8	0.8	0.0	0.0	5.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.50		0.33	0.39		0.53
Lane Grp Cap(c), veh/h	506	2603	1084	755	2603	1056	297	0	0	282	0	0
V/C Ratio(X)	0.08	0.17	0.01	0.03	0.31	0.04	0.06	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	506	2603	1084	755	2603	1056	559	0	0	549	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.4	0.0	0.0	3.2	4.0	3.2	32.8	0.0	0.0	34.8	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.1	0.0	0.1	0.3	0.1	0.1	0.0	0.0	0.9	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	0.0	0.1	0.0	0.1	2.0	0.2	0.3	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.7	0.1	0.0	3.2	4.3	3.3	32.9	0.0	0.0	35.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C			D		
Approach Vol, veh/h		488			864			18			109	
Approach Delay, s/veh		0.2			4.2			32.9			35.7	
Approach LOS		A			A			C			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.6		71.4		18.6		71.4				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		30.0		50.0		30.0		50.0				
Max Q Clear Time (g_c+I1), s		7.7		8.8		2.8		9.5				
Green Ext Time (p_c), s		0.6		7.1		0.1		3.7				
Intersection Summary												
HCM 7th Control Delay, s/veh			5.5									
HCM 7th LOS			A									

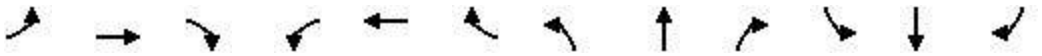
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	431	7	13	773	5	9
Future Vol, veh/h	431	7	13	773	5	9
Conflicting Peds, #/hr	0	69	0	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	479	8	14	859	6	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	556	0	1016	312
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	464	-
Critical Hdwy	-	-	4.16	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	-	-	2.23	-	3.53	3.33
Pot Cap-1 Maneuver	-	-	1004	-	232	681
Stage 1	-	-	-	-	538	-
Stage 2	-	-	-	-	596	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	938	-	213	636
Mov Cap-2 Maneuver	-	-	-	-	213	-
Stage 1	-	-	-	-	503	-
Stage 2	-	-	-	-	584	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.15	15.11
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	372	-	-	938	-
HCM Lane V/C Ratio	0.042	-	-	0.015	-
HCM Control Delay (s/veh)	15.1	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	16
Future Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	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)	0.99		0.93	0.98		0.93	0.97		0.98	0.98		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	10	478	1	19	842	31	13	1	17	14	1	18
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	543	2900	6	793	2777	102	92	23	71	93	22	70
Arrive On Green	1.00	1.00	1.00	0.80	0.80	0.80	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	626	3609	8	887	3456	127	417	269	833	423	264	824
Grp Volume(v), veh/h	10	233	246	19	429	444	31	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	626	1763	1853	887	1763	1821	1519	0	0	1511	0	0
Q Serve(g_s), s	0.1	0.0	0.0	0.4	5.7	5.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.8	0.0	0.0	0.4	5.7	5.7	1.6	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.07	0.42		0.55	0.42		0.55
Lane Grp Cap(c), veh/h	543	1416	1489	793	1416	1463	186	0	0	186	0	0
V/C Ratio(X)	0.02	0.16	0.16	0.02	0.30	0.30	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	543	1416	1489	793	1416	1463	466	0	0	465	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.2	0.0	0.0	1.8	2.3	2.3	38.4	0.0	0.0	38.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.2	0.1	0.6	0.5	0.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.1	1.4	1.4	0.7	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.3	0.3	0.2	1.8	2.8	2.8	38.8	0.0	0.0	38.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D			D		
Approach Vol, veh/h		489			892			31			33	
Approach Delay, s/veh		0.2			2.8			38.8			38.9	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.7		77.3		12.7		77.3				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		25.0		55.0		25.0		55.0				
Max Q Clear Time (g_c+I1), s		3.7		7.7		3.6		7.8				
Green Ext Time (p_c), s		0.1		7.0		0.1		3.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			3.5									
HCM 7th LOS			A									

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	450	0	0	783	38	6	1	24	5	0	14
Future Vol, veh/h	8	450	0	0	783	38	6	1	24	5	0	14
Conflicting Peds, #/hr	0	0	81	0	0	48	0	0	1	0	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	500	0	0	870	42	7	1	27	6	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	960	0	-	-	-	0	969	1478	251	1208	1457	520
Stage 1	-	-	-	-	-	-	518	518	-	939	939	-
Stage 2	-	-	-	-	-	-	451	960	-	269	518	-
Critical Hdwy	4.16	-	-	-	-	-	7.56	6.56	6.96	7.56	6.56	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-	6.56	5.56	-	6.56	5.56	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.56	5.56	-	6.56	5.56	-
Follow-up Hdwy	2.23	-	-	-	-	-	3.53	4.03	3.33	3.53	4.03	3.33
Pot Cap-1 Maneuver	706	-	0	0	-	-	207	124	746	138	127	498
Stage 1	-	-	0	0	-	-	506	529	-	282	339	-
Stage 2	-	-	0	0	-	-	555	331	-	710	529	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	674	-	-	-	-	-	194	116	745	124	120	468
Mov Cap-2 Maneuver	-	-	-	-	-	-	194	116	-	124	120	-
Stage 1	-	-	-	-	-	-	500	522	-	269	323	-
Stage 2	-	-	-	-	-	-	528	316	-	674	522	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	14.05	19.45
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	432	674	-	-	-	270
HCM Lane V/C Ratio	0.08	0.013	-	-	-	0.078
HCM Control Delay (s/veh)	14	10.4	-	-	-	19.5
HCM Lane LOS	B	B	-	-	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	-	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	467	813	68	23	8
Future Volume (veh/h)	12	467	813	68	23	8
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			0.93	1.00	0.99
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	13	519	903	76	26	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	176	1386	1142	474	627	217
Arrive On Green	0.01	0.13	0.32	0.32	0.51	0.51
Sat Flow, veh/h	1767	3618	3618	1464	1238	428
Grp Volume(v), veh/h	13	519	903	76	36	0
Grp Sat Flow(s),veh/h/ln	1767	1763	1763	1464	1714	0
Q Serve(g_s), s	0.4	12.1	20.9	3.3	1.0	0.0
Cycle Q Clear(g_c), s	0.4	12.1	20.9	3.3	1.0	0.0
Prop In Lane	1.00			1.00	0.72	0.25
Lane Grp Cap(c), veh/h	176	1386	1142	474	869	0
V/C Ratio(X)	0.07	0.37	0.79	0.16	0.04	0.00
Avail Cap(c_a), veh/h	309	2057	1547	643	869	0
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.92	0.92	1.00	0.00
Uniform Delay (d), s/veh	21.3	29.0	27.6	21.7	11.2	0.0
Incr Delay (d2), s/veh	0.2	0.2	1.9	0.1	0.0	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	0.2	5.7	8.8	1.1	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.5	29.2	29.5	21.8	11.2	0.0
LnGrp LOS	C	C	C	C	B	
Approach Vol, veh/h		532	979		36	
Approach Delay, s/veh		29.0	28.9		11.2	
Approach LOS		C	C		B	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		6.2	33.7		50.1	39.9
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		9.0	39.5		28.5	52.5
Max Q Clear Time (g_c+I1), s		2.4	22.9		3.0	14.1
Green Ext Time (p_c), s		0.0	6.2		0.1	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	28.5
HCM 7th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	349	141	99	653	228	170
Future Volume (veh/h)	349	141	99	653	228	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)		0.84	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	388	157	110	726	253	189
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	497	195	807	2560	301	268
Arrive On Green	0.21	0.21	0.91	1.00	0.17	0.17
Sat Flow, veh/h	2428	918	1767	3618	1767	1572
Grp Volume(v), veh/h	290	255	110	726	253	189
Grp Sat Flow(s),veh/h/ln	1763	1490	1767	1763	1767	1572
Q Serve(g_s), s	16.4	17.2	0.7	0.0	14.7	12.0
Cycle Q Clear(g_c), s	16.4	17.2	0.7	0.0	14.7	12.0
Prop In Lane		0.62	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	375	317	807	2560	301	268
V/C Ratio(X)	0.77	0.80	0.14	0.28	0.84	0.71
Avail Cap(c_a), veh/h	615	520	807	2560	567	504
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.62	0.62	0.95	0.95	1.00	1.00
Uniform Delay (d), s/veh	39.3	39.6	2.5	0.0	42.6	41.5
Incr Delay (d2), s/veh	9.3	12.6	0.1	0.3	6.3	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	7.4	0.2	0.1	6.9	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	48.6	52.3	2.6	0.3	48.9	44.9
LnGrp LOS	D	D	A	A	D	D
Approach Vol, veh/h	545			836	442	
Approach Delay, s/veh	50.3			0.6	47.2	
Approach LOS	D			A	D	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.4	28.5			83.0	23.0
Change Period (Y+Rc), s	6.0	* 6			6.0	5.0
Max Green Setting (Gmax), s	19.0	* 37			61.0	34.0
Max Q Clear Time (g_c+I1), s	12.7	19.2			2.0	16.7
Green Ext Time (p_c), s	0.2	3.3			6.1	1.3

Intersection Summary		
HCM 7th Control Delay, s/veh	26.7	
HCM 7th LOS	C	

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	312	207	35	207	592	0	0	0	0	328	678	160
Future Volume (veh/h)	0	312	207	35	207	592	0	0	0	0	328	678	160
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		0.94
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	0	1856	1856		1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	347	0		230	658	0				364	753	178
Peak Hour Factor	0.90	0.90	0.90		0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3		3	3	0				3	3	3
Cap, veh/h	0	529			712	2115	0				436	902	213
Arrive On Green	0.00	0.15	0.00		0.81	1.00	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3618	1572		1767	3618	0				1448	2995	707
Grp Volume(v), veh/h	0	347	0		230	658	0				448	424	422
Grp Sat Flow(s),veh/h/ln	0	1763	1572		1767	1763	0				1783	1689	1678
Q Serve(g_s), s	0.0	9.8	0.0		3.6	0.0	0.0				24.9	24.9	24.9
Cycle Q Clear(g_c), s	0.0	9.8	0.0		3.6	0.0	0.0				24.9	24.9	24.9
Prop In Lane	0.00		1.00		1.00		0.00				0.81		0.42
Lane Grp Cap(c), veh/h	0	529			712	2115	0				537	508	505
V/C Ratio(X)	0.00	0.66			0.32	0.31	0.00				0.83	0.83	0.84
Avail Cap(c_a), veh/h	0	732			712	2115	0				681	645	641
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	0.95	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	42.5	0.0		6.5	0.0	0.0				34.6	34.6	34.6
Incr Delay (d2), s/veh	0.0	5.9	0.0		0.1	0.4	0.0				5.8	6.1	6.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.7	0.0		1.2	0.1	0.0				11.5	10.9	10.9
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	48.4	0.0		6.6	0.4	0.0				40.4	40.7	40.8
LnGrp LOS		D			A	A					D	D	D
Approach Vol, veh/h		347				888						1295	
Approach Delay, s/veh		48.4				2.0						40.6	
Approach LOS		D				A						D	

Timer - Assigned Phs	1	2		4		6							
Phs Duration (G+Y+Rc), s	7.7	20.9		37.4		68.6							
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0							
Max Green Setting (Gmax), s	2.6	22.0		40.5		55.0							
Max Q Clear Time (g_c+I1), s	5.6	11.8		26.9		2.0							
Green Ext Time (p_c), s	0.3	1.2		5.0		3.6							

Intersection Summary	
HCM 7th Control Delay, s/veh	28.1
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Future Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.98	1.00		0.96	0.97		0.95	1.00		0.90
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	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		218	358	92	19	324	321	144	749	127	0	0	493
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, %		3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h		249	1810	458	91	1447	680	302	947	401	0	499	762
Arrive On Green		0.24	1.00	1.00	0.45	0.45	0.45	0.27	0.27	0.27	0.00	0.00	0.27
Sat Flow, veh/h		1767	2842	719	119	3223	1515	870	3526	1492	0	1856	2835
Grp Volume(v), veh/h		218	232	218	179	164	321	144	749	127	0	0	493
Grp Sat Flow(s),veh/h/ln		1767	1856	1706	1738	1604	1515	870	1763	1492	0	1856	1417
Q Serve(g_s), s		12.6	0.0	0.0	0.0	6.6	15.7	15.4	20.9	7.2	0.0	0.0	16.3
Cycle Q Clear(g_c), s		12.6	0.0	0.0	6.2	6.6	15.7	15.4	20.9	7.2	0.0	0.0	16.3
Prop In Lane		1.00		0.42	0.11		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h		249	1182	1086	818	720	680	302	947	401	0	499	762
V/C Ratio(X)		0.88	0.20	0.20	0.22	0.23	0.47	0.48	0.79	0.32	0.00	0.00	0.65
Avail Cap(c_a), veh/h		367	1182	1086	818	720	680	363	1197	507	0	630	963
HCM Platoon Ratio		1.67	1.67	1.67	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	0.00	0.00	1.00
Uniform Delay (d), s/veh		39.6	0.0	0.0	17.8	17.9	20.4	34.0	36.0	31.0	0.0	0.0	34.3
Incr Delay (d2), s/veh		14.7	0.4	0.4	0.6	0.7	2.3	1.2	2.9	0.4	0.0	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		6.0	0.1	0.1	2.8	2.6	6.0	3.4	9.4	2.7	0.0	0.0	5.7
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		54.3	0.4	0.4	18.4	18.7	22.8	35.1	38.9	31.4	0.0	0.0	35.3
LnGrp LOS		D	A	A	B	B	C	D	D	C			D
Approach Vol, veh/h			668			664			1020			493	
Approach Delay, s/veh			18.0			20.6			37.4			35.3	
Approach LOS			B			C			D			D	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	72.5		33.5	19.9	52.6		33.5					
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0					
Max Green Setting (Gmax), s	60.0		36.0	22.0	33.0		36.0					
Max Q Clear Time (g_c+I1), s	2.0		18.3	14.6	17.7		22.9					
Green Ext Time (p_c), s	3.3		2.2	0.4	3.0		5.6					

Intersection Summary	
HCM 7th Control Delay, s/veh	28.6
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	0	63
Future Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	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		0.98	1.00		0.96	0.98		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	24	477	2	1	592	100	2	0	0	59	0	70
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	128	2431	10	45	2186	367	254	0	0	138	17	106
Arrive On Green	0.74	0.74	0.74	0.25	0.25	0.25	0.13	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	106	3263	14	0	2934	493	1263	0	0	557	128	812
Grp Volume(v), veh/h	255	0	248	374	0	319	2	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	1698	0	1686	1855	0	1573	1263	0	0	1497	0	0
Q Serve(g_s), s	0.0	0.0	3.5	0.0	0.0	13.1	0.0	0.0	0.0	4.7	0.0	0.0
Cycle Q Clear(g_c), s	3.3	0.0	3.5	13.0	0.0	13.1	0.1	0.0	0.0	6.5	0.0	0.0
Prop In Lane	0.09		0.01	0.00		0.31	1.00		0.00	0.46		0.54
Lane Grp Cap(c), veh/h	1314	0	1256	1427	0	1172	254	0	0	260	0	0
V/C Ratio(X)	0.19	0.00	0.20	0.26	0.00	0.27	0.01	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1314	0	1256	1427	0	1172	538	0	0	582	0	0
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.00	0.99	0.92	0.00	0.92	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.0	0.0	3.0	12.6	0.0	12.6	30.3	0.0	0.0	33.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.3	0.4	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	1.0	6.6	0.0	5.6	0.0	0.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.3	0.0	3.4	13.0	0.0	13.2	30.3	0.0	0.0	33.6	0.0	0.0
LnGrp LOS	A		A	B		B	C			C		
Approach Vol, veh/h		503			693			2			129	
Approach Delay, s/veh		3.4			13.1			30.3			33.6	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.4	64.6	15.4	64.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	28.0	42.0	28.0	42.0
Max Q Clear Time (g_c+I1), s	8.5	15.1	2.1	5.5
Green Ext Time (p_c), s	0.5	3.2	0.0	2.3

Intersection Summary	
HCM 7th Control Delay, s/veh	11.4
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	0
Future Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	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)	0.99		0.95	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	3	391	141	123	373	0	320	0	169	0	0	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	482	960	773	424	960	0	433	0	189	0	699	0
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.00	0.38	0.00	0.38	0.00	0.00	0.00
Sat Flow, veh/h	992	1856	1495	861	1856	0	952	0	503	0	1856	0
Grp Volume(v), veh/h	3	391	141	123	373	0	489	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	992	1856	1495	861	1856	0	1455	0	0	0	1856	0
Q Serve(g_s), s	0.1	10.3	4.0	8.2	9.7	0.0	25.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.9	10.3	4.0	18.5	9.7	0.0	25.2	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	0.65		0.35	0.00		0.00
Lane Grp Cap(c), veh/h	482	960	773	424	960	0	622	0	0	0	699	0
V/C Ratio(X)	0.01	0.41	0.18	0.29	0.39	0.00	0.79	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	482	960	773	424	960	0	820	0	0	0	939	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.99	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	14.7	11.8	10.3	17.5	11.7	0.0	23.4	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.5	1.7	1.2	0.0	3.7	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	4.3	1.4	1.8	4.1	0.0	8.9	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	13.1	10.8	19.2	12.9	0.0	27.2	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	B	B	B	B	B		C					
Approach Vol, veh/h		535			496			489			0	
Approach Delay, s/veh		12.5			14.4			27.2			0.0	
Approach LOS		B			B			C				

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	45.4	34.6	45.4	34.6
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	31.0	* 41	31.0	40.5
Max Q Clear Time (g_c+I1), s	20.5	27.2	12.3	0.0
Green Ext Time (p_c), s	2.3	2.9	2.9	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	17.8
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

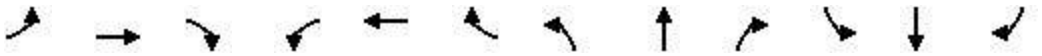
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	675	794	87	0	40
Future Vol, veh/h	0	675	794	87	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	750	882	97	0	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	489
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	522
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	522
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.54
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	522
HCM Lane V/C Ratio	-	-	-	0.085
HCM Control Delay (s/veh)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Future Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.85	0.94		0.82	0.96		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	106	505	76	62	229	64	116	420	159	81	281	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	450	898	357	133	481	131	343	1308	479	309	886	327
Arrive On Green	0.25	0.25	0.25	0.21	0.21	0.21	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1795	3582	1422	624	2257	615	941	3582	1313	808	2427	895
Grp Volume(v), veh/h	106	505	76	184	0	171	116	420	159	81	203	187
Grp Sat Flow(s),veh/h/ln	1795	1791	1422	1854	0	1643	941	1791	1313	808	1791	1531
Q Serve(g_s), s	4.1	10.8	3.7	7.6	0.0	8.0	8.9	7.4	7.7	7.0	7.1	7.7
Cycle Q Clear(g_c), s	4.1	10.8	3.7	7.6	0.0	8.0	16.6	7.4	7.7	14.4	7.1	7.7
Prop In Lane	1.00		1.00	0.34		0.37	1.00		1.00	1.00		0.58
Lane Grp Cap(c), veh/h	450	898	357	395	0	350	343	1308	479	309	654	559
V/C Ratio(X)	0.24	0.56	0.21	0.47	0.00	0.49	0.34	0.32	0.33	0.26	0.31	0.33
Avail Cap(c_a), veh/h	594	1185	471	508	0	450	343	1308	479	309	654	559
HCM Platoon Ratio	1.00	1.00	1.00	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	26.1	28.6	26.0	30.1	0.0	30.3	26.1	20.0	20.1	25.2	19.9	20.1
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.4	2.7	0.6	1.9	2.1	1.2	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	1.8	4.6	1.3	3.4	0.0	3.2	2.2	3.2	2.6	1.5	3.2	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.2	28.8	26.1	30.5	0.0	30.7	28.8	20.7	22.0	27.3	21.2	21.7
LnGrp LOS	C	C	C	C		C	C	C	C	C	C	C
Approach Vol, veh/h		687			355			695			471	
Approach Delay, s/veh		28.1			30.6			22.3			22.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.7		37.0		27.0		37.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		24.0		32.0		29.0		32.0				
Max Q Clear Time (g_c+I1), s		10.0		18.6		12.8		16.4				
Green Ext Time (p_c), s		1.3		2.4		2.5		1.9				

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)	52	538	118	72	246	43	0	0	0	67	150	92
Future Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
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)	0.92		0.89	1.00		0.92				1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	55	566	124	76	259	45				71	158	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	95	693	149	499	1872	318				190	412	240
Arrive On Green	0.27	0.27	0.27	0.56	1.00	1.00				0.25	0.25	0.25
Sat Flow, veh/h	173	2551	548	1795	3019	513				760	1644	956
Grp Volume(v), veh/h	397	0	348	76	151	153				173	0	153
Grp Sat Flow(s),veh/h/ln	1732	0	1539	1795	1791	1742				1847	0	1513
Q Serve(g_s), s	12.2	0.0	18.1	1.7	0.0	0.0				6.6	0.0	7.2
Cycle Q Clear(g_c), s	18.2	0.0	18.1	1.7	0.0	0.0				6.6	0.0	7.2
Prop In Lane	0.14		0.36	1.00		0.29				0.41		0.63
Lane Grp Cap(c), veh/h	519	0	418	499	1111	1080				463	0	379
V/C Ratio(X)	0.77	0.00	0.83	0.15	0.14	0.14				0.37	0.00	0.40
Avail Cap(c_a), veh/h	734	0	616	499	1111	1080				543	0	445
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.87	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	29.1	14.0	0.0	0.0				26.3	0.0	26.6
Incr Delay (d2), s/veh	9.1	0.0	15.5	0.1	0.3	0.3				0.2	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	8.2	0.7	0.1	0.1				2.8	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.0	0.0	44.6	14.1	0.3	0.3				26.5	0.0	26.8
LnGrp LOS	D		D	B	A	A				C		C
Approach Vol, veh/h		745			380						326	
Approach Delay, s/veh		41.1			3.0						26.7	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.6	29.1		26.3		58.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	10.5	* 34		25.0		49.0
Max Q Clear Time (g_c+I1), s	3.7	20.2		9.2		2.0
Green Ext Time (p_c), s	0.0	2.9		1.2		1.2

Intersection Summary		
HCM 7th Control Delay, s/veh		27.9
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)	28	574	3	1	313	42	2	0	2	73	0	46
Future Volume (veh/h)	28	574	3	1	313	42	2	0	2	73	0	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)	0.98		0.92	0.99		0.93	0.96		0.94	0.96		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	29	604	3	1	329	44	2	0	2	77	0	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	672	2316	11	487	1995	263	213	20	169	437	0	380
Arrive On Green	0.21	0.21	0.21	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	995	3653	18	812	3147	415	602	79	682	1417	0	1528
Grp Volume(v), veh/h	29	296	311	1	185	188	4	0	0	77	0	48
Grp Sat Flow(s),veh/h/ln	995	1791	1880	812	1791	1771	1363	0	0	1417	0	1528
Q Serve(g_s), s	2.0	11.8	11.8	0.1	3.6	3.7	0.0	0.0	0.0	0.0	0.0	2.1
Cycle Q Clear(g_c), s	5.7	11.8	11.8	11.8	3.6	3.7	3.0	0.0	0.0	3.0	0.0	2.1
Prop In Lane	1.00		0.01	1.00		0.23	0.50		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	672	1135	1192	487	1135	1123	402	0	0	437	0	380
V/C Ratio(X)	0.04	0.26	0.26	0.00	0.16	0.17	0.01	0.00	0.00	0.18	0.00	0.13
Avail Cap(c_a), veh/h	672	1135	1192	487	1135	1123	615	0	0	644	0	611
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	0.97	0.97	0.97	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.1	17.0	17.0	10.8	6.4	6.4	24.1	0.0	0.0	25.1	0.0	24.8
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.0	0.3	0.3	0.0	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	5.7	6.0	0.0	1.3	1.4	0.1	0.0	0.0	1.2	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.2	17.4	17.4	10.8	6.7	6.7	24.1	0.0	0.0	25.3	0.0	24.9
LnGrp LOS	B	B	B	B	A	A	C			C		C
Approach Vol, veh/h		636			374			4			125	
Approach Delay, s/veh		17.4			6.7			24.1			25.2	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.1	58.9	26.1	58.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	34.0	41.0	34.0	41.0
Max Q Clear Time (g_c+I1), s	5.0	13.8	5.0	13.8
Green Ext Time (p_c), s	0.6	2.4	0.0	4.3

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)	89	490	70	132	274	23	24	653	536	13	342	58
Future Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	0.98		0.91	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	94	516	74	139	288	24	25	687	564	14	360	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	179	856	122	212	990	82	71	1547	663	64	1288	214
Arrive On Green	0.05	0.28	0.28	0.06	0.30	0.30	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	3483	3084	439	3483	3316	273	60	3397	1456	44	2829	469
Grp Volume(v), veh/h	94	298	292	139	154	158	377	335	564	227	0	208
Grp Sat Flow(s),veh/h/ln	1742	1791	1732	1742	1791	1798	1827	1630	1456	1744	0	1598
Q Serve(g_s), s	2.3	12.6	12.8	3.4	5.8	5.9	0.0	12.3	30.1	0.0	0.0	7.1
Cycle Q Clear(g_c), s	2.3	12.6	12.8	3.4	5.8	5.9	11.9	12.3	30.1	6.5	0.0	7.1
Prop In Lane	1.00		0.25	1.00		0.15	0.07		1.00	0.06		0.29
Lane Grp Cap(c), veh/h	179	497	481	212	535	537	876	742	663	838	0	728
V/C Ratio(X)	0.53	0.60	0.61	0.66	0.29	0.29	0.43	0.45	0.85	0.27	0.00	0.29
Avail Cap(c_a), veh/h	239	595	575	319	636	638	1205	1045	934	1130	0	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.4	27.3	27.4	40.1	23.5	23.6	16.2	16.3	21.1	14.7	0.0	14.9
Incr Delay (d2), s/veh	2.4	1.2	1.3	3.4	0.3	0.3	0.3	0.4	5.4	0.2	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	1.0	5.5	5.4	1.6	2.5	2.5	5.0	4.4	10.7	2.7	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.8	28.5	28.7	43.5	23.8	23.9	16.5	16.7	26.5	14.9	0.0	15.1
LnGrp LOS	D	C	C	D	C	C	B	B	C	B		B
Approach Vol, veh/h		684			451			1276			435	
Approach Delay, s/veh		30.6			29.9			21.0			15.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	45.8	9.5	32.1	45.8	11.3	30.2
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	56.0	6.0	31.0	56.0	8.0	* 29
Max Q Clear Time (g_c+I1), s	32.1	4.3	7.9	9.1	5.4	14.8
Green Ext Time (p_c), s	7.7	0.0	1.9	3.1	0.1	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	23.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	917	372	177	254	57
Future Volume (veh/h)	122	917	372	177	254	57
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)	0.99			0.96	1.00	0.90
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	128	965	392	186	267	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	647	2449	1599	746	303	68
Arrive On Green	0.68	0.68	1.00	1.00	0.22	0.22
Sat Flow, veh/h	835	3676	2432	1091	1399	314
Grp Volume(v), veh/h	128	965	299	279	328	0
Grp Sat Flow(s),veh/h/ln	835	1791	1791	1638	1719	0
Q Serve(g_s), s	5.4	11.1	0.0	0.0	17.6	0.0
Cycle Q Clear(g_c), s	5.4	11.1	0.0	0.0	17.6	0.0
Prop In Lane	1.00			0.67	0.81	0.18
Lane Grp Cap(c), veh/h	647	2449	1224	1120	372	0
V/C Ratio(X)	0.20	0.39	0.24	0.25	0.88	0.00
Avail Cap(c_a), veh/h	647	2449	1224	1120	678	0
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.99	0.99	1.00	0.00
Uniform Delay (d), s/veh	5.6	6.5	0.0	0.0	36.1	0.0
Incr Delay (d2), s/veh	0.5	0.3	0.5	0.5	6.9	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	3.9	0.2	0.2	8.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.1	6.8	0.5	0.5	43.0	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		1093	578		328	
Approach Delay, s/veh		6.7	0.5		43.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		70.0		25.0	70.0
Change Period (Y+Rc), s		5.0		4.5	5.0
Max Green Setting (Gmax), s		48.0		37.5	48.0
Max Q Clear Time (g_c+I1), s		2.0		19.6	13.1
Green Ext Time (p_c), s		4.4		1.0	10.1

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)	18	1124	29	23	518	13	0	0	0	21	5	31
Future Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
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)	0.97		0.89	0.99		0.90				1.00		0.89
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	19	1183	31	24	545	14				22	5	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	684	2640	1053	414	2640	1056				91	21	137
Arrive On Green	1.00	1.00	1.00	0.98	0.98	0.98				0.16	0.16	0.16
Sat Flow, veh/h	829	3582	1429	459	3582	1433				577	131	866
Grp Volume(v), veh/h	19	1183	31	24	545	14				60	0	0
Grp Sat Flow(s),veh/h/ln	829	1791	1429	459	1791	1433				1574	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.4	0.0				3.2	0.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	0.1	0.4	0.0				3.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00				0.37		0.55
Lane Grp Cap(c), veh/h	684	2640	1053	414	2640	1056				248	0	0
V/C Ratio(X)	0.03	0.45	0.03	0.06	0.21	0.01				0.24	0.00	0.00
Avail Cap(c_a), veh/h	684	2640	1053	414	2640	1056				431	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33				1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	1.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.2	0.3	0.2				35.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.5	0.0	0.3	0.2	0.0				0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.2	0.0	0.0	0.2	0.0				1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.5	0.0	0.5	0.4	0.3				35.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A				D		
Approach Vol, veh/h		1233			583						60	
Approach Delay, s/veh		0.5			0.4						35.5	
Approach LOS		A			A						D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	20.0	75.0	75.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	26.0	59.0	59.0
Max Q Clear Time (g_c+I1), s	5.2	2.4	2.4
Green Ext Time (p_c), s	0.3	5.0	13.6

Intersection Summary	
HCM 7th Control Delay, s/veh	1.6
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	1127	536	12	6	18
Future Vol, veh/h	18	1127	536	12	6	18
Conflicting Peds, #/hr	0	0	0	95	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	30	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	1186	564	13	6	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	672	0	-	0	1303	377
Stage 1	-	-	-	-	659	-
Stage 2	-	-	-	-	644	-
Critical Hdwy	4.12	-	-	-	6.82	6.92
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	2.21	-	-	-	3.51	3.31
Pot Cap-1 Maneuver	921	-	-	-	153	623
Stage 1	-	-	-	-	479	-
Stage 2	-	-	-	-	488	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	838	-	-	-	124	567
Mov Cap-2 Maneuver	-	-	-	-	124	-
Stage 1	-	-	-	-	426	-
Stage 2	-	-	-	-	443	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.15	0	18.12
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	838	-	-	-	300
HCM Lane V/C Ratio	0.023	-	-	-	0.084
HCM Control Delay (s/veh)	9.4	-	-	-	18.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

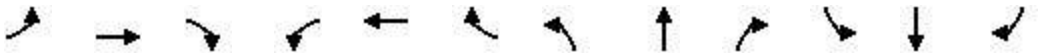
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	1101	527	35	8	21
Future Vol, veh/h	32	1101	527	35	8	21
Conflicting Peds, #/hr	0	0	0	96	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	34	1159	555	37	8	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	688	0	-	0	1340	392
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	671	-
Critical Hdwy	4.12	-	-	-	6.82	6.92
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	2.21	-	-	-	3.51	3.31
Pot Cap-1 Maneuver	909	-	-	-	145	610
Stage 1	-	-	-	-	473	-
Stage 2	-	-	-	-	472	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	826	-	-	-	115	554
Mov Cap-2 Maneuver	-	-	-	-	115	-
Stage 1	-	-	-	-	413	-
Stage 2	-	-	-	-	429	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.27	0	20.04
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	826	-	-	-	270
HCM Lane V/C Ratio	0.041	-	-	-	0.113
HCM Control Delay (s/veh)	9.5	-	-	-	20
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	63
Future Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	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)	0.96		0.89	0.99		0.89	0.94		0.93	0.95		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	88	1063	16	19	496	73	29	11	9	67	15	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	639	2470	981	434	2470	976	217	81	53	171	49	133
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	816	3582	1423	519	3582	1415	763	393	260	567	241	650
Grp Volume(v), veh/h	88	1063	16	19	496	73	49	0	0	148	0	0
Grp Sat Flow(s),veh/h/ln	816	1791	1423	519	1791	1415	1417	0	0	1457	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	8.3	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.59		0.18	0.45		0.45
Lane Grp Cap(c), veh/h	639	2470	981	434	2470	976	351	0	0	354	0	0
V/C Ratio(X)	0.14	0.43	0.02	0.04	0.20	0.07	0.14	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	639	2470	981	434	2470	976	505	0	0	512	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	30.9	0.0	0.0	33.2	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.5	0.0	0.2	0.2	0.1	0.2	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	0.1	0.2	0.0	0.0	0.1	0.0	0.9	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.4	0.5	0.0	0.2	0.2	0.1	31.1	0.0	0.0	34.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	C			C		
Approach Vol, veh/h		1167			588			49			148	
Approach Delay, s/veh		0.5			0.2			31.1			34.0	
Approach LOS		A			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.5		70.5		24.5		70.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		30.0		55.0		30.0		55.0				
Max Q Clear Time (g_c+I1), s		10.3		2.0		4.3		2.0				
Green Ext Time (p_c), s		0.8		4.4		0.2		11.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	3.7
HCM 7th LOS	A

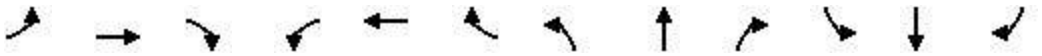
Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1074	9	15	541	17	15
Future Vol, veh/h	1074	9	15	541	17	15
Conflicting Peds, #/hr	0	91	0	0	41	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1131	9	16	569	18	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1231	0	1584	661
Stage 1	-	-	-	-	1226	-
Stage 2	-	-	-	-	357	-
Critical Hdwy	-	-	4.12	-	6.82	6.92
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	-	-	2.21	-	3.51	3.31
Pot Cap-1 Maneuver	-	-	567	-	100	407
Stage 1	-	-	-	-	242	-
Stage 2	-	-	-	-	682	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	518	-	85	372
Mov Cap-2 Maneuver	-	-	-	-	85	-
Stage 1	-	-	-	-	221	-
Stage 2	-	-	-	-	635	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	40.81
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	134	-	-	518	-
HCM Lane V/C Ratio	0.252	-	-	0.03	-
HCM Control Delay (s/veh)	40.8	-	-	12.2	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	23
Future Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	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)	0.97		0.90	0.99		0.91	0.94		0.97	0.97		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	31	1102	14	18	547	39	14	4	23	15	3	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	706	2799	36	465	2606	185	93	39	105	96	33	104
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	814	3616	46	503	3367	239	352	326	867	372	277	865
Grp Volume(v), veh/h	31	546	570	18	290	296	41	0	0	42	0	0
Grp Sat Flow(s),veh/h/ln	814	1791	1871	503	1791	1815	1545	0	0	1515	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.2	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.13	0.34		0.56	0.36		0.57
Lane Grp Cap(c), veh/h	706	1386	1448	465	1386	1405	237	0	0	234	0	0
V/C Ratio(X)	0.04	0.39	0.39	0.04	0.21	0.21	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	706	1386	1448	465	1386	1405	433	0	0	427	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	37.6	0.0	0.0	37.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.8	0.2	0.3	0.3	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.3	0.0	0.1	0.1	0.9	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.8	0.8	0.2	0.3	0.3	38.0	0.0	0.0	38.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D			D		
Approach Vol, veh/h		1147			604			41			42	
Approach Delay, s/veh		0.8			0.3			38.0			38.0	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.5		78.5		16.5		78.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		24.0		61.0		24.0		61.0				
Max Q Clear Time (g_c+I1), s		4.2		2.0		4.1		2.0				
Green Ext Time (p_c), s		0.1		4.4		0.1		10.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			2.3									
HCM 7th LOS			A									

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	21	1062	0	0	550	37	4	2	65	10	0	20
Future Vol, veh/h	21	1062	0	0	550	37	4	2	65	10	0	20
Conflicting Peds, #/hr	0	0	81	0	0	89	0	0	0	0	0	14
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	22	1118	0	0	579	39	4	2	68	11	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	-	-	-	0	1466	1869	559	1292	1850	412
Stage 1	-	-	-	-	-	-	1162	1162	-	687	687	-
Stage 2	-	-	-	-	-	-	303	707	-	604	1162	-
Critical Hdwy	4.12	-	-	-	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	-	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	894	-	0	0	-	-	90	72	475	121	74	592
Stage 1	-	-	0	0	-	-	209	269	-	405	448	-
Stage 2	-	-	0	0	-	-	684	439	-	454	269	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	818	-	-	-	-	-	83	64	475	90	66	534
Mov Cap-2 Maneuver	-	-	-	-	-	-	83	64	-	90	66	-
Stage 1	-	-	-	-	-	-	203	262	-	371	410	-
Stage 2	-	-	-	-	-	-	648	402	-	375	262	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	19.14	26.18
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	329	818	-	-	-	201
HCM Lane V/C Ratio	0.227	0.027	-	-	-	0.157
HCM Control Delay (s/veh)	19.1	9.5	-	-	-	26.2
HCM Lane LOS	C	A	-	-	-	D
HCM 95th %tile Q(veh)	0.9	0.1	-	-	-	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	1107	566	116	38	21
Future Volume (veh/h)	30	1107	566	116	38	21
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)	0.98			0.86	1.00	0.96
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	32	1165	596	122	40	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1049	2808	730	279	130	72
Arrive On Green	1.00	1.00	0.20	0.20	0.12	0.12
Sat Flow, veh/h	1795	3676	3676	1370	1075	591
Grp Volume(v), veh/h	32	1165	596	122	63	0
Grp Sat Flow(s),veh/h/ln	1795	1791	1791	1370	1693	0
Q Serve(g_s), s	0.0	0.0	15.1	7.4	3.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	15.1	7.4	3.2	0.0
Prop In Lane	1.00			1.00	0.63	0.35
Lane Grp Cap(c), veh/h	1049	2808	730	279	205	0
V/C Ratio(X)	0.03	0.41	0.82	0.44	0.31	0.00
Avail Cap(c_a), veh/h	1049	2808	867	332	909	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	36.1	33.1	38.1	0.0
Incr Delay (d2), s/veh	0.0	0.5	9.6	4.8	0.8	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	0.0	0.2	7.5	2.8	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	0.0	0.5	45.7	37.8	38.9	0.0
LnGrp LOS	A	A	D	D	D	
Approach Vol, veh/h		1197	718		63	
Approach Delay, s/veh		0.4	44.4		38.9	
Approach LOS		A	D		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		55.1	23.9		16.0	79.0
Change Period (Y+Rc), s		4.5	* 4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	* 23		51.0	35.0
Max Q Clear Time (g_c+I1), s		2.0	17.1		5.2	2.0
Green Ext Time (p_c), s		0.0	2.3		0.2	10.8

Intersection Summary	
HCM 7th Control Delay, s/veh	17.6
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	765	380	194	527	157	122
Future Volume (veh/h)	765	380	194	527	157	122
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)		0.88	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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	805	400	204	555	165	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	916	451	559	2797	207	184
Arrive On Green	0.41	0.41	0.62	1.00	0.12	0.12
Sat Flow, veh/h	2312	1092	1795	3676	1795	1598
Grp Volume(v), veh/h	649	556	204	555	165	128
Grp Sat Flow(s),veh/h/ln	1791	1520	1795	1791	1795	1598
Q Serve(g_s), s	35.3	36.0	5.9	0.0	9.5	8.2
Cycle Q Clear(g_c), s	35.3	36.0	5.9	0.0	9.5	8.2
Prop In Lane		0.72	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	739	627	559	2797	207	184
V/C Ratio(X)	0.88	0.89	0.36	0.20	0.80	0.69
Avail Cap(c_a), veh/h	811	688	559	2797	407	362
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	28.6	28.8	14.9	0.0	45.7	45.1
Incr Delay (d2), s/veh	12.8	15.7	0.4	0.2	6.9	4.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.3	15.4	2.1	0.1	4.6	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	41.5	44.5	15.2	0.2	52.5	49.7
LnGrp LOS	D	D	B	A	D	D
Approach Vol, veh/h	1205			759	293	
Approach Delay, s/veh	42.9			4.2	51.3	
Approach LOS	D			A	D	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	39.0	49.8			88.8	17.2
Change Period (Y+Rc), s	6.0	* 6			6.0	5.0
Max Green Setting (Gmax), s	18.0	* 48			71.0	24.0
Max Q Clear Time (g_c+I1), s	17.9	38.0			2.0	11.5
Green Ext Time (p_c), s	0.4	5.8			4.4	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	31.0
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	428	459	10	262	544	0	0	0	0	320	740	177
Future Volume (veh/h)	0	428	459	10	262	544	0	0	0	0	320	740	177
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		0.95
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	0	1885	1885		1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	451	0		276	573	0				337	779	186
Peak Hour Factor	0.95	0.95	0.95		0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1		1	1	0				1	1	1
Cap, veh/h	0	598			702	2166	0				401	928	221
Arrive On Green	0.00	0.06	0.00		0.13	0.20	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3676	1598		1795	3676	0				1355	3133	748
Grp Volume(v), veh/h	0	451	0		276	573	0				452	426	424
Grp Sat Flow(s),veh/h/ln	0	1791	1598		1795	1791	0				1817	1716	1704
Q Serve(g_s), s	0.0	13.2	0.0		15.0	14.3	0.0				24.7	24.7	24.7
Cycle Q Clear(g_c), s	0.0	13.2	0.0		15.0	14.3	0.0				24.7	24.7	24.7
Prop In Lane	0.00		1.00		1.00		0.00				0.75		0.44
Lane Grp Cap(c), veh/h	0	598			702	2166	0				538	508	504
V/C Ratio(X)	0.00	0.75			0.39	0.26	0.00				0.84	0.84	0.84
Avail Cap(c_a), veh/h	0	777			702	2166	0				660	623	619
HCM Platoon Ratio	1.00	0.33	0.33		0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.68	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	47.9	0.0		34.6	22.5	0.0				34.9	34.9	35.0
Incr Delay (d2), s/veh	0.0	6.0	0.0		0.1	0.3	0.0				6.7	7.1	7.2
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	0.0	6.8	0.0		7.2	7.0	0.0				11.7	11.1	11.1
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	53.9	0.0		34.8	22.8	0.0				41.7	42.0	42.1
LnGrp LOS		D			C	C					D	D	D
Approach Vol, veh/h		451				849						1302	
Approach Delay, s/veh		53.9				26.7						41.9	
Approach LOS		D				C						D	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	16.4	22.7		36.9		69.1			
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0			
Max Green Setting (Gmax), s	29.0	23.0		38.5		57.0			
Max Q Clear Time (g_c+I1), s	17.0	15.2		26.7		16.3			
Green Ext Time (p_c), s	0.3	1.3		4.7		3.0			

Intersection Summary	
HCM 7th Control Delay, s/veh	39.0
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Future Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.90	0.91		0.89	1.00		0.93	0.98		0.97
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No			No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		192	400	200	46	437	255	166	476	173	79	119	162
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		576	1363	666	88	677	321	181	1115	461	146	202	484
Arrive On Green		0.64	1.00	1.00	0.23	0.23	0.23	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h		1795	2294	1121	210	2990	1418	1106	3582	1480	317	649	1555
Grp Volume(v), veh/h		192	327	273	241	242	255	166	476	173	198	0	162
Grp Sat Flow(s),veh/h/ln		1795	1885	1529	1570	1630	1418	1106	1791	1480	966	0	1555
Q Serve(g_s), s		5.2	0.0	0.0	8.0	14.3	18.0	10.9	11.2	9.7	11.0	0.0	8.5
Cycle Q Clear(g_c), s		5.2	0.0	0.0	14.1	14.3	18.0	33.0	11.2	9.7	22.1	0.0	8.5
Prop In Lane		1.00		0.73	0.19		1.00	1.00		1.00	0.40		1.00
Lane Grp Cap(c), veh/h		576	1120	909	396	369	321	181	1115	461	348	0	484
V/C Ratio(X)		0.33	0.29	0.30	0.61	0.66	0.79	0.92	0.43	0.38	0.57	0.00	0.33
Avail Cap(c_a), veh/h		576	1120	909	575	569	495	181	1115	461	348	0	484
HCM Platoon Ratio		2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		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		13.9	0.0	0.0	36.7	37.2	38.7	49.3	29.0	28.5	33.7	0.0	28.1
Incr Delay (d2), s/veh		0.3	0.7	0.8	6.8	8.8	18.0	43.8	0.3	0.5	2.2	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		1.9	0.2	0.2	6.4	6.6	7.9	6.6	4.9	3.5	4.8	0.0	3.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		14.2	0.7	0.8	43.5	46.0	56.7	93.1	29.2	29.0	35.9	0.0	28.5
LnGrp LOS		B	A	A	D	D	E	F	C	C	D		C
Approach Vol, veh/h			792			738			815			360	
Approach Delay, s/veh			4.0			48.9			42.2			32.5	
Approach LOS			A			D			D			C	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	68.0		38.0	39.0	29.0		38.0					
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0					
Max Green Setting (Gmax), s	63.0		33.0	21.0	37.0		33.0					
Max Q Clear Time (g_c+I1), s	2.0		24.1	7.2	20.0		35.0					
Green Ext Time (p_c), s	4.8		1.4	0.4	4.0		0.0					

Intersection Summary	
HCM 7th Control Delay, s/veh	31.6
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	61
Future Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	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)	0.98		0.97	1.00		0.91	1.00		1.00	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	41	606	4	2	674	92	0	2	3	116	2	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	151	2142	14	46	2066	281	0	136	204	244	19	102
Arrive On Green	0.68	0.68	0.68	0.90	0.90	0.90	0.00	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	149	3171	21	1	3058	416	0	681	1021	853	94	513
Grp Volume(v), veh/h	321	0	330	416	0	352	0	0	5	182	0	0
Grp Sat Flow(s),veh/h/ln	1630	0	1711	1884	0	1592	0	0	1701	1460	0	0
Q Serve(g_s), s	0.0	0.0	6.2	0.0	0.0	2.6	0.0	0.0	0.2	7.9	0.0	0.0
Cycle Q Clear(g_c), s	5.3	0.0	6.2	2.5	0.0	2.6	0.0	0.0	0.2	9.0	0.0	0.0
Prop In Lane	0.13		0.01	0.00		0.26	0.00		0.60	0.64		0.35
Lane Grp Cap(c), veh/h	1152	0	1156	1318	0	1075	0	0	339	365	0	0
V/C Ratio(X)	0.28	0.00	0.29	0.32	0.00	0.33	0.00	0.00	0.01	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1152	0	1156	1318	0	1075	0	0	617	600	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.98	0.00	0.98	0.88	0.00	0.88	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.1	0.0	5.2	1.4	0.0	1.4	0.0	0.0	25.7	29.2	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.6	0.6	0.0	0.7	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	2.1	0.8	0.0	0.8	0.0	0.0	0.1	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.7	0.0	5.8	2.0	0.0	2.2	0.0	0.0	25.7	29.5	0.0	0.0
LnGrp LOS	A		A	A		A			C	C		
Approach Vol, veh/h		651			768			5			182	
Approach Delay, s/veh		5.7			2.1			25.7			29.5	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	21.0	59.0	21.0	59.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	29.0	41.0	29.0	41.0
Max Q Clear Time (g_c+I1), s	11.0	4.6	2.2	8.2
Green Ext Time (p_c), s	0.7	3.7	0.0	3.2

Intersection Summary	
HCM 7th Control Delay, s/veh	6.8
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	0	2
Future Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	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)	0.96		0.93	0.98		0.89	1.00		0.91	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	11	453	262	276	557	1	208	0	141	0	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	465	1160	914	539	1158	2	306	4	162	0	0	443
Arrive On Green	1.00	1.00	1.00	0.62	0.62	0.62	0.28	0.00	0.28	0.00	0.00	0.28
Sat Flow, veh/h	826	1885	1485	729	1881	3	843	15	582	0	0	1594
Grp Volume(v), veh/h	11	453	262	276	0	558	349	0	0	0	0	2
Grp Sat Flow(s),veh/h/ln	826	1885	1485	729	0	1884	1440	0	0	0	0	1594
Q Serve(g_s), s	0.3	0.0	0.0	18.7	0.0	12.9	18.1	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	13.2	0.0	0.0	18.7	0.0	12.9	18.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		0.00	0.60		0.40	0.00		1.00
Lane Grp Cap(c), veh/h	465	1160	914	539	0	1160	472	0	0	0	0	443
V/C Ratio(X)	0.02	0.39	0.29	0.51	0.00	0.48	0.74	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	465	1160	914	539	0	1160	558	0	0	0	0	528
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	1.7	0.0	0.0	9.5	0.0	8.4	27.5	0.0	0.0	0.0	0.0	20.9
Incr Delay (d2), s/veh	0.1	1.0	0.8	3.5	0.0	1.4	4.3	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	0.3	0.2	3.1	0.0	5.1	6.7	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	1.8	1.0	0.8	13.0	0.0	9.8	31.8	0.0	0.0	0.0	0.0	20.9
LnGrp LOS	A	A	A	B		A	C					C
Approach Vol, veh/h		726			834			349			2	
Approach Delay, s/veh		0.9			10.9			31.8			20.9	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.2	26.8	53.2	26.8
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	45.0	* 27	45.0	26.5
Max Q Clear Time (g_c+I1), s	20.7	20.5	15.2	2.1
Green Ext Time (p_c), s	6.7	1.2	4.5	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	758	794	6	0	22
Future Vol, veh/h	0	758	794	6	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	798	836	6	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	421
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.31
Pot Cap-1 Maneuver	0	-	-	-	0	584
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	584
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.42
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	584
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s/veh)	-	-	-	11.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Alternatives 2 (WB Diet), 3 (EB Diet), and 4 (3-Lane Diet) Version 1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	71
Future Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	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)	0.96		0.91	0.97		0.95	0.86		0.70	0.89		0.67
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	78	464	73	53	200	44	41	280	102	41	228	79
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	233	523	404	600	768	169	247	987	307	264	655	203
Arrive On Green	0.05	0.28	0.28	0.10	0.17	0.17	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1767	1856	1434	1767	1458	321	912	3526	1095	882	2338	724
Grp Volume(v), veh/h	78	464	73	53	0	244	41	280	102	41	165	142
Grp Sat Flow(s),veh/h/ln	1767	1856	1434	1767	0	1779	912	1763	1095	882	1763	1299
Q Serve(g_s), s	3.4	24.0	3.9	0.0	0.0	11.9	3.8	6.2	7.4	3.8	7.4	8.8
Cycle Q Clear(g_c), s	3.4	24.0	3.9	0.0	0.0	11.9	12.6	6.2	7.4	10.0	7.4	8.8
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	233	523	404	600	0	937	247	987	307	264	494	364
V/C Ratio(X)	0.33	0.89	0.18	0.09	0.00	0.26	0.17	0.28	0.33	0.16	0.33	0.39
Avail Cap(c_a), veh/h	315	928	717	600	0	937	247	987	307	264	494	364
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	34.4	27.2	31.8	0.0	24.5	34.2	28.2	28.6	32.1	28.6	29.1
Incr Delay (d2), s/veh	0.8	19.6	1.0	0.1	0.0	0.7	1.4	0.7	2.9	1.2	1.8	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	1.5	13.5	1.4	1.2	0.0	5.8	0.9	2.7	2.2	0.9	3.4	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.8	54.0	28.2	31.9	0.0	25.1	35.6	28.9	31.5	33.3	30.4	32.2
LnGrp LOS	C	D	C	C		C	D	C	C	C	C	C
Approach Vol, veh/h		615			297			423			348	
Approach Delay, s/veh		48.0			26.3			30.2			31.5	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	57.6		33.0	33.8	33.2		33.0				
Change Period (Y+Rc), s	4.5	5.0		5.0	5.0	* 5		5.0				
Max Green Setting (Gmax), s	9.5	48.0		28.0	7.5	* 50		28.0				
Max Q Clear Time (g_c+I1), s	5.4	13.9		14.6	2.0	26.0		12.0				
Green Ext Time (p_c), s	0.0	1.1		1.5	0.0	2.2		1.4				

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)	59	228	260	104	241	62	0	0	0	26	118	27
Future Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
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)	0.94		0.89	1.00		0.91				1.00		0.77
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	66	253	289	116	268	69				29	131	30
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	91	279	299	323	1802	450				125	544	119
Arrive On Green	0.70	0.70	0.70	0.37	1.00	1.00				0.23	0.23	0.23
Sat Flow, veh/h	123	671	719	1767	2733	682				544	2356	514
Grp Volume(v), veh/h	608	0	0	116	170	167				98	0	92
Grp Sat Flow(s),veh/h/ln	1512	0	0	1767	1763	1652				1828	0	1586
Q Serve(g_s), s	27.2	0.0	0.0	4.8	0.0	0.0				4.3	0.0	4.8
Cycle Q Clear(g_c), s	37.0	0.0	0.0	4.8	0.0	0.0				4.3	0.0	4.8
Prop In Lane	0.11		0.48	1.00		0.41				0.30		0.32
Lane Grp Cap(c), veh/h	669	0	0	323	1162	1089				422	0	366
V/C Ratio(X)	0.91	0.00	0.00	0.36	0.15	0.15				0.23	0.00	0.25
Avail Cap(c_a), veh/h	808	0	0	323	1162	1089				457	0	397
HCM Platoon Ratio	1.67	1.67	1.67	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.72	0.00	0.00	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	0.0	27.4	0.0	0.0				31.3	0.0	31.4
Incr Delay (d2), s/veh	14.2	0.0	0.0	0.2	0.3	0.3				0.1	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
%ile BackOfQ(50%),veh/ln	8.9	0.0	0.0	1.9	0.1	0.1				1.9	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	0.0	0.0	27.7	0.3	0.3				31.4	0.0	31.6
LnGrp LOS	C			C	A	A				C		C
Approach Vol, veh/h		608			453						190	
Approach Delay, s/veh		28.5			7.3						31.5	
Approach LOS		C			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.3	47.6		28.1		71.9
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	18.3	* 51		25.0		64.0
Max Q Clear Time (g_c+I1), s	16.8	39.0		6.8		2.0
Green Ext Time (p_c), s	0.0	2.6		0.6		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	21.3
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)	10	244	0	7	383	24	2	0	3	22	0	22
Future Volume (veh/h)	10	244	0	7	383	24	2	0	3	22	0	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)	0.98		1.00	0.97		0.93	0.95		0.94	0.94		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	11	271	0	8	426	27	2	0	3	24	0	24
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	95	2221	0	54	2188	137	160	19	193	197	16	159
Arrive On Green	0.22	0.22	0.00	0.67	0.67	0.67	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	83	3376	0	24	3243	203	487	85	858	633	73	705
Grp Volume(v), veh/h	150	132	0	243	0	218	5	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	1770	1604	0	1837	0	1633	1430	0	0	1411	0	0
Q Serve(g_s), s	0.0	6.6	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	6.4	6.6	0.0	4.9	0.0	5.0	0.2	0.0	0.0	2.4	0.0	0.0
Prop In Lane	0.07		0.00	0.03		0.12	0.40		0.60	0.50		0.50
Lane Grp Cap(c), veh/h	1233	1082	0	1277	0	1102	373	0	0	372	0	0
V/C Ratio(X)	0.12	0.12	0.00	0.19	0.00	0.20	0.01	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1233	1082	0	1277	0	1102	519	0	0	517	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.39	0.39	0.00	0.98	0.00	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.1	15.2	0.0	6.1	0.0	6.1	30.1	0.0	0.0	30.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.5	0.0	1.9	0.0	1.7	0.1	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.2	15.3	0.0	6.4	0.0	6.5	30.1	0.0	0.0	31.1	0.0	0.0
LnGrp LOS	B	B		A		A	C			C		
Approach Vol, veh/h		282			461			5			48	
Approach Delay, s/veh		15.3			6.5			30.1			31.1	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	27.5	72.5	27.5	72.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	33.0	57.0	33.0	57.0
Max Q Clear Time (g_c+I1), s	4.4	7.0	2.2	8.6
Green Ext Time (p_c), s	0.2	3.3	0.0	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	11.2
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	62
Future Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	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		0.89	1.00		0.91	0.98		0.93	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	48	181	70	309	328	42	63	450	268	14	568	69
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	717	260	417	1202	152	137	848	508	59	1048	125
Arrive On Green	0.04	0.29	0.29	0.12	0.39	0.39	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	3428	2445	888	3428	3111	393	218	2433	1458	27	3007	359
Grp Volume(v), veh/h	48	127	124	309	184	186	210	303	268	348	0	303
Grp Sat Flow(s),veh/h/ln	1714	1763	1570	1714	1763	1742	1047	1604	1458	1813	0	1580
Q Serve(g_s), s	1.0	4.2	4.6	6.6	5.4	5.6	3.9	11.6	11.2	0.0	0.0	11.8
Cycle Q Clear(g_c), s	1.0	4.2	4.6	6.6	5.4	5.6	15.7	11.6	11.2	11.4	0.0	11.8
Prop In Lane	1.00		0.57	1.00		0.23	0.30		1.00	0.04		0.23
Lane Grp Cap(c), veh/h	144	517	460	417	681	673	427	559	508	681	0	551
V/C Ratio(X)	0.33	0.25	0.27	0.74	0.27	0.28	0.49	0.54	0.53	0.51	0.00	0.55
Avail Cap(c_a), veh/h	225	648	577	720	903	892	554	716	651	852	0	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	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	35.5	20.5	20.7	32.3	16.0	16.1	20.2	19.9	19.8	19.9	0.0	20.0
Incr Delay (d2), s/veh	1.4	0.2	0.3	2.6	0.2	0.2	0.9	0.8	0.8	0.6	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.7	1.7	2.9	2.2	2.2	3.2	4.2	3.8	4.8	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	20.7	21.0	34.9	16.2	16.3	21.1	20.7	20.6	20.5	0.0	20.9
LnGrp LOS	D	C	C	C	B	B	C	C	C	C		C
Approach Vol, veh/h		299			679			781			651	
Approach Delay, s/veh		23.4			24.7			20.8			20.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	32.6	8.2	35.4	32.6	15.3	28.3
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	34.0	5.0	39.0	34.0	16.0	* 28
Max Q Clear Time (g_c+I1), s	17.7	3.0	7.6	13.8	8.6	6.6
Green Ext Time (p_c), s	4.1	0.0	2.5	4.1	0.7	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	61	356	548	283	97	63
Future Volume (veh/h)	61	356	548	283	97	63
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			0.92	1.00	0.93
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	68	396	609	314	108	70
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	362	2488	1540	794	180	117
Arrive On Green	0.71	0.71	0.23	0.23	0.18	0.18
Sat Flow, veh/h	600	3618	2274	1124	984	638
Grp Volume(v), veh/h	68	396	492	431	179	0
Grp Sat Flow(s),veh/h/ln	600	1763	1763	1543	1632	0
Q Serve(g_s), s	6.1	3.4	21.2	21.2	9.1	0.0
Cycle Q Clear(g_c), s	27.3	3.4	21.2	21.2	9.1	0.0
Prop In Lane	1.00			0.73	0.60	0.39
Lane Grp Cap(c), veh/h	362	2488	1244	1089	299	0
V/C Ratio(X)	0.19	0.16	0.40	0.40	0.60	0.00
Avail Cap(c_a), veh/h	362	2488	1244	1089	562	0
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.70	0.70	1.00	0.00
Uniform Delay (d), s/veh	14.3	4.4	18.3	18.3	33.7	0.0
Incr Delay (d2), s/veh	1.1	0.1	0.7	0.8	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	1.1	10.1	8.9	3.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.4	4.5	19.0	19.1	35.6	0.0
LnGrp LOS	B	A	B	B	D	
Approach Vol, veh/h		464	923		179	
Approach Delay, s/veh		6.1	19.0		35.6	
Approach LOS		A	B		D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	21.5	68.5	68.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	31.0	49.0	49.0
Max Q Clear Time (g_c+I1), s	11.1	23.2	29.3
Green Ext Time (p_c), s	0.5	7.4	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	17.1
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
Future Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
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)	0.98		0.91	0.97		0.88				1.00		0.91
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	14	470	19	19	870	16				33	1	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	527	2524	102	718	1329	24				91	3	146
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00				0.15	0.15	0.15
Sat Flow, veh/h	609	3438	139	869	1811	33				588	18	944
Grp Volume(v), veh/h	14	240	249	19	0	886				87	0	0
Grp Sat Flow(s),veh/h/ln	609	1763	1814	869	0	1844				1550	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				4.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				4.5	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.02				0.38		0.61
Lane Grp Cap(c), veh/h	527	1294	1331	718	0	1354				240	0	0
V/C Ratio(X)	0.03	0.19	0.19	0.03	0.00	0.65				0.36	0.00	0.00
Avail Cap(c_a), veh/h	527	1294	1331	718	0	1354				413	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				34.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.1	0.0	2.5				0.9	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
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.0	0.9				1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.3	0.3	0.1	0.0	2.5				35.0	0.0	0.0
LnGrp LOS	A	A	A	A		A				C		
Approach Vol, veh/h		503			905						87	
Approach Delay, s/veh		0.3			2.4						35.0	
Approach LOS		A			A						C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	18.9	71.1	71.1
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	56.0	56.0
Max Q Clear Time (g_c+I1), s	6.5	2.0	2.0
Green Ext Time (p_c), s	0.4	9.9	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	3.6
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	438	767	17	6	47
Future Vol, veh/h	15	438	767	17	6	47
Conflicting Peds, #/hr	0	0	0	112	14	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	17	487	852	19	7	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	983	0	-	0	1264	974
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	291	-
Critical Hdwy	4.145	-	-	-	6.645	6.245
Critical Hdwy Stg 1	-	-	-	-	5.445	-
Critical Hdwy Stg 2	-	-	-	-	5.845	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	695	-	-	-	173	303
Stage 1	-	-	-	-	363	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	621	-	-	-	134	271
Mov Cap-2 Maneuver	-	-	-	-	134	-
Stage 1	-	-	-	-	316	-
Stage 2	-	-	-	-	653	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.36	0	24.53
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	621	-	-	-	243
HCM Lane V/C Ratio	0.027	-	-	-	0.243
HCM Control Delay (s/veh)	11	-	-	-	24.5
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

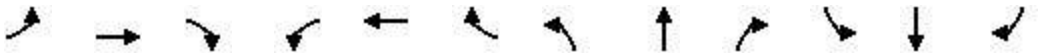
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	428	756	19	11	28
Future Vol, veh/h	16	428	756	19	11	28
Conflicting Peds, #/hr	0	0	0	79	19	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	476	840	21	12	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	940	0	-	0	1222	930
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	292	-
Critical Hdwy	4.145	-	-	-	6.645	6.245
Critical Hdwy Stg 1	-	-	-	-	5.445	-
Critical Hdwy Stg 2	-	-	-	-	5.845	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	722	-	-	-	183	321
Stage 1	-	-	-	-	381	-
Stage 2	-	-	-	-	730	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	668	-	-	-	153	297
Mov Cap-2 Maneuver	-	-	-	-	153	-
Stage 1	-	-	-	-	343	-
Stage 2	-	-	-	-	675	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.38	0	23.79
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	668	-	-	-	235
HCM Lane V/C Ratio	0.027	-	-	-	0.185
HCM Control Delay (s/veh)	10.5	-	-	-	23.8
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	52
Future Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	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)	0.99		0.93	0.98		0.91	0.95		0.96	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	41	438	9	23	794	47	9	3	6	43	8	58
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	539	2604	53	755	1272	75	158	58	78	123	38	119
Arrive On Green	1.00	1.00	1.00	0.98	0.98	0.98	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	641	3527	72	915	1723	102	654	386	520	444	250	789
Grp Volume(v), veh/h	41	219	228	23	0	841	18	0	0	109	0	0
Grp Sat Flow(s),veh/h/ln	641	1763	1836	915	0	1825	1561	0	0	1482	0	0
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	2.1	0.0	0.0	0.0	0.0	1.9	0.8	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.06	0.50		0.33	0.39		0.53
Lane Grp Cap(c), veh/h	539	1302	1356	755	0	1348	295	0	0	279	0	0
V/C Ratio(X)	0.08	0.17	0.17	0.03	0.00	0.62	0.06	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	539	1302	1356	755	0	1348	441	0	0	427	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	0.0	0.0	0.0	0.2	0.0	0.2	32.8	0.0	0.0	34.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.3	0.3	0.1	0.0	2.2	0.1	0.0	0.0	0.9	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	0.0	0.1	0.1	0.0	0.0	1.0	0.3	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.3	0.3	0.3	0.3	0.0	2.4	32.9	0.0	0.0	35.8	0.0	0.0
LnGrp LOS	A	A	A	A		A	C			D		
Approach Vol, veh/h		488			864			18			109	
Approach Delay, s/veh		0.3			2.4			32.9			35.8	
Approach LOS		A			A			C			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.5		71.5		18.5		71.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.8		57.2		22.8		57.2				
Max Q Clear Time (g_c+I1), s		7.8		3.9		2.8		4.1				
Green Ext Time (p_c), s		0.5		8.5		0.0		3.4				
Intersection Summary												
HCM 7th Control Delay, s/veh			4.5									
HCM 7th LOS			A									

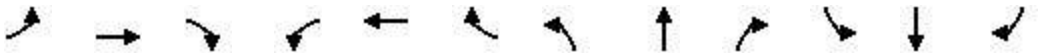
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	431	7	13	773	5	9
Future Vol, veh/h	431	7	13	773	5	9
Conflicting Peds, #/hr	0	69	0	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	479	8	14	859	6	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	556	0	1446	312
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	894	-
Critical Hdwy	-	-	4.145	-	6.645	6.945
Critical Hdwy Stg 1	-	-	-	-	5.845	-
Critical Hdwy Stg 2	-	-	-	-	5.445	-
Follow-up Hdwy	-	-	2.2285	-	3.5285	3.3285
Pot Cap-1 Maneuver	-	-	1007	-	132	682
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	396	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	941	-	121	637
Mov Cap-2 Maneuver	-	-	-	-	121	-
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	388	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.15	20.19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	253	-	-	941	-
HCM Lane V/C Ratio	0.062	-	-	0.015	-
HCM Control Delay (s/veh)	20.2	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	16
Future Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	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)	0.99		0.93	0.98		0.93	0.94		0.98	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	10	478	1	19	842	31	13	1	17	14	1	18
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	581	2900	6	793	1424	52	92	23	71	93	22	69
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	624	3609	8	887	1772	65	412	269	827	417	259	812
Grp Volume(v), veh/h	10	233	246	19	0	873	31	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	624	1763	1853	887	0	1838	1508	0	0	1489	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.04	0.42		0.55	0.42		0.55
Lane Grp Cap(c), veh/h	581	1416	1489	793	0	1477	186	0	0	184	0	0
V/C Ratio(X)	0.02	0.16	0.16	0.02	0.00	0.59	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	581	1416	1489	793	0	1477	414	0	0	411	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.0	0.0	38.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.2	0.1	0.0	1.7	0.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.0	0.7	0.7	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.3	0.2	0.1	0.0	1.7	38.8	0.0	0.0	38.9	0.0	0.0
LnGrp LOS	A	A	A	A		A	D			D		
Approach Vol, veh/h		489			892			31			33	
Approach Delay, s/veh		0.2			1.7			38.8			38.9	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.7		77.3		12.7		77.3				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		58.0		22.0		58.0				
Max Q Clear Time (g_c+I1), s		3.7		2.0		3.6		2.0				
Green Ext Time (p_c), s		0.1		9.0		0.1		3.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			2.9									
HCM 7th LOS			A									

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	8	450	0	0	783	38	6	1	24	5	0	14
Future Vol, veh/h	8	450	0	0	783	38	6	1	24	5	0	14
Conflicting Peds, #/hr	0	0	81	0	0	48	0	0	1	0	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	500	0	0	870	42	7	1	27	6	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	960	0	-	-	-	0	1404	1478	251	1208	1457	955
Stage 1	-	-	-	-	-	-	518	518	-	939	939	-
Stage 2	-	-	-	-	-	-	886	960	-	269	518	-
Critical Hdwy	4.145	-	-	-	-	-	7.345	6.545	6.945	7.345	6.545	6.245
Critical Hdwy Stg 1	-	-	-	-	-	-	6.545	5.545	-	6.145	5.545	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.145	5.545	-	6.545	5.545	-
Follow-up Hdwy	2.2285	-	-	-	-	-	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285
Pot Cap-1 Maneuver	709	-	0	0	-	-	107	124	747	148	128	311
Stage 1	-	-	0	0	-	-	508	530	-	314	340	-
Stage 2	-	-	0	0	-	-	336	332	-	711	530	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	677	-	-	-	-	-	99	117	746	133	121	292
Mov Cap-2 Maneuver	-	-	-	-	-	-	99	117	-	133	121	-
Stage 1	-	-	-	-	-	-	501	523	-	300	324	-
Stage 2	-	-	-	-	-	-	314	317	-	675	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	18.29	22.91
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	305	677	-	-	-	222
HCM Lane V/C Ratio	0.113	0.013	-	-	-	0.095
HCM Control Delay (s/veh)	18.3	10.4	-	-	-	22.9
HCM Lane LOS	C	B	-	-	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	-	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	467	813	68	23	8
Future Volume (veh/h)	12	467	813	68	23	8
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			0.96	1.00	0.97
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	13	519	903	76	26	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	377	2862	1249	105	108	38
Arrive On Green	0.05	1.00	0.74	0.74	0.09	0.09
Sat Flow, veh/h	1767	3618	1682	142	1229	425
Grp Volume(v), veh/h	13	519	0	979	36	0
Grp Sat Flow(s),veh/h/ln	1767	1763	0	1824	1702	0
Q Serve(g_s), s	0.1	0.0	0.0	26.8	1.8	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	26.8	1.8	0.0
Prop In Lane	1.00			0.08	0.72	0.25
Lane Grp Cap(c), veh/h	377	2862	0	1354	150	0
V/C Ratio(X)	0.03	0.18	0.00	0.72	0.24	0.00
Avail Cap(c_a), veh/h	490	2862	0	1354	511	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	0.0	6.4	38.2	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	3.4	0.8	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	0.1	0.1	0.0	8.8	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.6	0.1	0.0	9.8	39.0	0.0
LnGrp LOS	A	A		A	D	
Approach Vol, veh/h		532	979		36	
Approach Delay, s/veh		0.3	9.8		39.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		6.2	71.3		12.4	77.6
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	42.0		27.0	54.0
Max Q Clear Time (g_c+I1), s		2.1	28.8		3.8	2.0
Green Ext Time (p_c), s		0.0	6.4		0.1	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.2
HCM 7th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	490	0	0	653	228	170
Future Volume (veh/h)	490	0	0	653	228	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	1856	0	0	1856	1856	1856
Adj Flow Rate, veh/h	544	0	0	726	253	189
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	2557	0	0	2557	302	269
Arrive On Green	0.73	0.00	0.00	1.00	0.17	0.17
Sat Flow, veh/h	3711	0	0	3711	1767	1572
Grp Volume(v), veh/h	544	0	0	726	253	189
Grp Sat Flow(s),veh/h/ln	1763	0	0	1763	1767	1572
Q Serve(g_s), s	5.3	0.0	0.0	0.0	14.7	12.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	0.0	14.7	12.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2557	0	0	2557	302	269
V/C Ratio(X)	0.21	0.00	0.00	0.28	0.84	0.70
Avail Cap(c_a), veh/h	2557	0	0	2557	700	623
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.97	1.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	0.0	0.0	42.5	41.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	6.1	3.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.1	6.9	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.9	0.0	0.0	0.3	48.6	44.7
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	544			726	442	
Approach Delay, s/veh	4.9			0.3	47.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	82.9			82.9	23.1
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	53.0			53.0	42.0
Max Q Clear Time (g_c+I1), s	7.3			2.0	16.7
Green Ext Time (p_c), s	4.2			6.1	1.4

Intersection Summary		
HCM 7th Control Delay, s/veh	13.8	
HCM 7th LOS	B	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
Future Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
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		0.94
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	0	1856	1856		1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	347	0		340	548	0				364	753	178
Peak Hour Factor	0.90	0.90	0.90		0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3		3	3	0				3	3	3
Cap, veh/h	0	520			724	2131	0				429	888	210
Arrive On Green	0.00	0.25	0.00		0.82	1.00	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3618	1572		1767	3618	0				1448	2995	707
Grp Volume(v), veh/h	0	347	0		340	548	0				448	424	422
Grp Sat Flow(s),veh/h/ln	0	1763	1572		1767	1763	0				1783	1689	1678
Q Serve(g_s), s	0.0	9.4	0.0		6.0	0.0	0.0				25.1	25.0	25.1
Cycle Q Clear(g_c), s	0.0	9.4	0.0		6.0	0.0	0.0				25.1	25.0	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.81		0.42
Lane Grp Cap(c), veh/h	0	520			724	2131	0				529	501	497
V/C Ratio(X)	0.00	0.67			0.47	0.26	0.00				0.85	0.85	0.85
Avail Cap(c_a), veh/h	0	632			724	2131	0				631	597	594
HCM Platoon Ratio	1.00	1.67	1.67		2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.97	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	37.6	0.0		6.2	0.0	0.0				35.0	35.0	35.0
Incr Delay (d2), s/veh	0.0	6.4	0.0		0.2	0.3	0.0				8.0	8.3	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
%ile BackOfQ(50%),veh/ln	0.0	4.2	0.0		1.7	0.1	0.0				11.8	11.3	11.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	44.0	0.0		6.4	0.3	0.0				43.0	43.4	43.5
LnGrp LOS		D			A	A					D	D	D
Approach Vol, veh/h		347				888						1295	
Approach Delay, s/veh		44.0				2.6						43.3	
Approach LOS		D				A						D	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	48.4	20.6		36.9		69.1			
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0			
Max Green Setting (Gmax), s	34.0	19.0		37.5		58.0			
Max Q Clear Time (g_c+I1), s	18.0	11.4		27.1		2.0			
Green Ext Time (p_c), s	0.5	1.0		4.4		2.9			

Intersection Summary	
HCM 7th Control Delay, s/veh	29.1
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Future Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.98	1.00		0.97	0.97		0.92	1.00		0.90
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	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		254	308	92	19	324	321	144	749	127	0	0	493
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, %		3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h		321	857	256	98	1574	741	309	976	399	0	514	787
Arrive On Green		0.16	1.00	1.00	0.49	0.49	0.49	0.28	0.28	0.28	0.00	0.00	0.28
Sat Flow, veh/h		3428	1363	407	124	3224	1518	871	3526	1442	0	1856	2844
Grp Volume(v), veh/h		254	0	400	180	163	321	144	749	127	0	0	493
Grp Sat Flow(s),veh/h/ln		1714	0	1771	1744	1604	1518	871	1763	1442	0	1856	1422
Q Serve(g_s), s		7.6	0.0	0.0	0.0	6.2	14.5	15.2	20.7	7.4	0.0	0.0	16.1
Cycle Q Clear(g_c), s		7.6	0.0	0.0	5.8	6.2	14.5	15.2	20.7	7.4	0.0	0.0	16.1
Prop In Lane		1.00		0.23	0.11		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h		321	0	1113	889	783	741	309	976	399	0	514	787
V/C Ratio(X)		0.79	0.00	0.36	0.20	0.21	0.43	0.47	0.77	0.32	0.00	0.00	0.63
Avail Cap(c_a), veh/h		453	0	1113	889	783	741	405	1364	558	0	718	1100
HCM Platoon Ratio		1.67	1.67	1.67	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	0.00	0.00	1.00
Uniform Delay (d), s/veh		43.7	0.0	0.0	15.4	15.5	17.6	33.2	35.2	30.4	0.0	0.0	33.5
Incr Delay (d2), s/veh		6.3	0.0	0.9	0.5	0.6	1.8	1.1	1.8	0.5	0.0	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		3.3	0.0	0.3	2.6	2.4	5.4	3.3	9.1	2.6	0.0	0.0	5.6
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		50.0	0.0	0.9	15.9	16.1	19.5	34.3	36.9	30.8	0.0	0.0	34.3
LnGrp LOS		D		A	B	B	B	C	D	C			C
Approach Vol, veh/h			654			664			1020			493	
Approach Delay, s/veh			20.0			17.7			35.8			34.3	
Approach LOS			B			B			D			C	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	71.7		34.3	14.9	56.7		34.3					
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0					
Max Green Setting (Gmax), s	55.0		41.0	14.0	36.0		41.0					
Max Q Clear Time (g_c+I1), s	2.0		18.1	9.6	8.2		22.7					
Green Ext Time (p_c), s	3.1		2.3	0.4	0.9		6.7					

Intersection Summary	
HCM 7th Control Delay, s/veh	27.6
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	0	63
Future Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	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)	0.99		0.98	1.00		0.96	0.96		1.00	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	24	477	2	1	592	100	2	0	0	59	0	70
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	642	1375	6	45	1144	193	251	0	0	137	16	104
Arrive On Green	0.74	0.74	0.74	1.00	1.00	1.00	0.13	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	741	1846	8	0	1535	259	1238	0	0	550	126	802
Grp Volume(v), veh/h	24	0	479	693	0	0	2	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	741	0	1854	1795	0	0	1238	0	0	1478	0	0
Q Serve(g_s), s	0.7	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	7.1	0.0	0.0	0.0	0.1	0.0	0.0	6.6	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.14	1.00		0.00	0.46		0.54
Lane Grp Cap(c), veh/h	642	0	1381	1382	0	0	251	0	0	258	0	0
V/C Ratio(X)	0.04	0.00	0.35	0.50	0.00	0.00	0.01	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	642	0	1381	1382	0	0	420	0	0	449	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.96	0.92	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.7	0.0	3.5	0.0	0.0	0.0	30.3	0.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.7	1.2	0.0	0.0	0.0	0.0	0.0	0.6	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	0.1	0.0	2.2	0.5	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	2.8	0.0	4.2	1.2	0.0	0.0	30.3	0.0	0.0	33.6	0.0	0.0
LnGrp LOS	A		A	A			C			C		
Approach Vol, veh/h		503			693			2			129	
Approach Delay, s/veh		4.1			1.2			30.3			33.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.4	64.6	15.4	64.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	8.6	2.0	2.1	9.1
Green Ext Time (p_c), s	0.4	3.9	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	5.5
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	0
Future Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	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)	0.99		0.95	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	3	391	141	123	373	0	320	0	169	0	0	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	957	773	373	960	0	433	0	189	0	699	0
Arrive On Green	0.17	0.17	0.17	0.52	0.52	0.00	0.38	0.00	0.38	0.00	0.00	0.00
Sat Flow, veh/h	2	1851	1495	864	1856	0	952	0	503	0	1856	0
Grp Volume(v), veh/h	394	0	141	123	373	0	489	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1853	0	1495	864	1856	0	1455	0	0	0	1856	0
Q Serve(g_s), s	0.0	0.0	6.5	8.9	9.7	0.0	25.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	15.1	0.0	6.5	24.1	9.7	0.0	25.2	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	0.65		0.35	0.00		0.00
Lane Grp Cap(c), veh/h	1004	0	773	373	960	0	622	0	0	0	699	0
V/C Ratio(X)	0.39	0.00	0.18	0.33	0.39	0.00	0.79	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1004	0	773	373	960	0	820	0	0	0	939	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.00	0.95	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	22.3	0.0	18.7	21.1	11.7	0.0	23.4	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	2.4	1.2	0.0	3.7	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	7.8	0.0	2.4	2.0	4.1	0.0	8.9	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.4	0.0	19.2	23.4	12.9	0.0	27.2	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	C		B	C	B		C					
Approach Vol, veh/h		535			496			489			0	
Approach Delay, s/veh		22.3			15.5			27.2			0.0	
Approach LOS		C			B			C				

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	45.4	34.6	45.4	34.6
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	31.0	* 41	31.0	40.5
Max Q Clear Time (g_c+I1), s	26.1	27.2	17.1	0.0
Green Ext Time (p_c), s	1.4	2.9	2.6	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	21.6
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

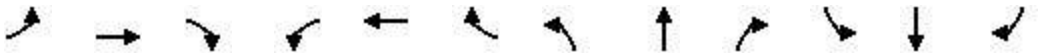
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	675	794	87	0	40
Future Vol, veh/h	0	675	794	87	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	750	882	97	0	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	489
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	522
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	522
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.54
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	522
HCM Lane V/C Ratio	-	-	-	0.085
HCM Control Delay (s/veh)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Future Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.96		0.94	0.99		0.93	0.90		0.69	0.94		0.71
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	106	505	76	62	229	64	116	420	159	81	281	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	665	931	740	403	678	189	267	1146	352	254	738	263
Arrive On Green	0.05	0.49	0.49	0.08	0.98	0.98	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1795	1885	1499	1795	1390	388	902	3582	1099	792	2307	822
Grp Volume(v), veh/h	106	505	76	62	0	293	116	420	159	81	213	177
Grp Sat Flow(s),veh/h/ln	1795	1885	1499	1795	0	1778	902	1791	1099	792	1791	1338
Q Serve(g_s), s	2.9	18.5	2.7	1.7	0.0	0.6	11.6	9.0	11.5	8.8	9.2	10.4
Cycle Q Clear(g_c), s	2.9	18.5	2.7	1.7	0.0	0.6	22.0	9.0	11.5	17.8	9.2	10.4
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	665	931	740	403	0	867	267	1146	352	254	573	428
V/C Ratio(X)	0.16	0.54	0.10	0.15	0.00	0.34	0.43	0.37	0.45	0.32	0.37	0.41
Avail Cap(c_a), veh/h	696	931	740	428	0	867	267	1146	352	254	573	428
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	17.5	13.5	12.7	0.0	0.6	35.3	26.2	27.0	33.0	26.2	26.7
Incr Delay (d2), s/veh	0.1	2.3	0.3	0.2	0.0	1.1	5.1	0.9	4.2	3.3	1.8	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	1.2	8.5	1.0	0.7	0.0	0.4	2.9	4.0	3.4	1.9	4.2	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.6	19.8	13.8	12.8	0.0	1.7	40.3	27.1	31.2	36.3	28.1	29.6
LnGrp LOS	B	B	B	B		A	D	C	C	D	C	C
Approach Vol, veh/h		687			355			695			471	
Approach Delay, s/veh		17.8			3.6			30.2			30.1	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	53.8		37.0	8.6	54.4		37.0				
Change Period (Y+Rc), s	4.5	5.0		5.0	4.5	5.0		5.0				
Max Green Setting (Gmax), s	6.5	47.0		32.0	5.5	48.0		32.0				
Max Q Clear Time (g_c+I1), s	4.9	2.6		24.0	3.7	20.5		19.8				
Green Ext Time (p_c), s	0.0	1.3		2.0	0.0	2.5		1.8				

Intersection Summary		
HCM 7th Control Delay, s/veh	22.1	
HCM 7th LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
Future Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
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)	0.96		0.94	1.00		0.93				1.00		0.83
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	55	566	124	76	259	45				71	158	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	88	749	159	126	2012	342				170	366	212
Arrive On Green	1.00	1.00	1.00	0.02	0.22	0.22				0.22	0.22	0.22
Sat Flow, veh/h	90	1360	289	1795	3021	514				757	1634	947
Grp Volume(v), veh/h	745	0	0	76	151	153				173	0	153
Grp Sat Flow(s),veh/h/ln	1739	0	0	1795	1791	1744				1847	0	1491
Q Serve(g_s), s	0.0	0.0	0.0	4.2	6.8	7.0				8.0	0.0	8.9
Cycle Q Clear(g_c), s	0.0	0.0	0.0	4.2	6.8	7.0				8.0	0.0	8.9
Prop In Lane	0.07		0.17	1.00		0.29				0.41		0.64
Lane Grp Cap(c), veh/h	996	0	0	126	1193	1161				414	0	334
V/C Ratio(X)	0.75	0.00	0.00	0.60	0.13	0.13				0.42	0.00	0.46
Avail Cap(c_a), veh/h	996	0	0	144	1193	1161				462	0	373
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33				1.00	1.00	1.00
Upstream Filter(I)	0.74	0.00	0.00	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	47.5	15.7	15.8				33.2	0.0	33.5
Incr Delay (d2), s/veh	3.8	0.0	0.0	2.8	0.2	0.2				0.3	0.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	2.0	2.9	2.9				3.6	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.8	0.0	0.0	50.3	15.9	16.0				33.5	0.0	33.9
LnGrp LOS	A			D	B	B				C		C
Approach Vol, veh/h		745			380						326	
Approach Delay, s/veh		3.8			22.8						33.7	
Approach LOS		A			C						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	11.5	61.1		27.4		72.6
Change Period (Y+Rc), s	4.5	6.0		5.0		6.0
Max Green Setting (Gmax), s	8.0	51.5		25.0		64.0
Max Q Clear Time (g_c+I1), s	6.2	2.0		10.9		9.0
Green Ext Time (p_c), s	0.0	4.2		1.1		1.2

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)	28	574	3	1	313	42	2	0	2	73	0	46
Future Volume (veh/h)	28	574	3	1	313	42	2	0	2	73	0	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)	0.98		0.93	0.98		0.93	0.96		0.94	0.95		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	29	604	3	1	329	44	2	0	2	77	0	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	114	2286	11	37	2091	275	202	17	165	241	13	122
Arrive On Green	1.00	1.00	1.00	0.68	0.68	0.68	0.22	0.00	0.22	0.22	0.00	0.22
Sat Flow, veh/h	110	3371	17	1	3084	405	668	75	743	822	60	550
Grp Volume(v), veh/h	326	0	310	200	0	174	4	0	0	125	0	0
Grp Sat Flow(s),veh/h/ln	1787	0	1711	1884	0	1606	1486	0	0	1432	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	6.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.8	0.0	3.9	0.2	0.0	0.0	7.2	0.0	0.0
Prop In Lane	0.09		0.01	0.01		0.25	0.50		0.50	0.62		0.38
Lane Grp Cap(c), veh/h	1251	0	1160	1314	0	1089	384	0	0	376	0	0
V/C Ratio(X)	0.26	0.00	0.27	0.15	0.00	0.16	0.01	0.00	0.00	0.33	0.00	0.00
Avail Cap(c_a), veh/h	1251	0	1160	1314	0	1089	661	0	0	656	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.00	0.48	0.98	0.00	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	5.8	0.0	5.8	30.3	0.0	0.0	33.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.2	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	1.5	0.0	1.3	0.1	0.0	0.0	2.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.2	0.0	0.3	6.0	0.0	6.1	30.4	0.0	0.0	33.5	0.0	0.0
LnGrp LOS	A		A	A		A	C			C		
Approach Vol, veh/h		636			374			4			125	
Approach Delay, s/veh		0.3			6.1			30.4			33.5	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	27.2	72.8	27.2	72.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	42.0	48.0	42.0	48.0
Max Q Clear Time (g_c+I1), s	9.2	5.9	2.2	2.0
Green Ext Time (p_c), s	0.8	2.6	0.0	4.8

Intersection Summary	
HCM 7th Control Delay, s/veh	5.9
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Future Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.91	0.98		0.91	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	94	516	74	139	288	24	25	687	564	14	360	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	168	793	113	426	1136	94	67	1461	624	59	1216	202
Arrive On Green	0.05	0.26	0.26	0.12	0.34	0.34	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	3483	3079	438	3483	3320	274	62	3392	1450	44	2824	469
Grp Volume(v), veh/h	94	298	292	139	154	158	377	335	564	227	0	208
Grp Sat Flow(s),veh/h/ln	1742	1791	1727	1742	1791	1802	1825	1630	1450	1742	0	1596
Q Serve(g_s), s	2.5	14.1	14.3	3.5	5.9	6.0	0.0	14.0	34.4	0.0	0.0	8.1
Cycle Q Clear(g_c), s	2.5	14.1	14.3	3.5	5.9	6.0	13.5	14.0	34.4	7.4	0.0	8.1
Prop In Lane	1.00		0.25	1.00		0.15	0.07		1.00	0.06		0.29
Lane Grp Cap(c), veh/h	168	461	445	426	613	617	826	702	624	790	0	687
V/C Ratio(X)	0.56	0.65	0.66	0.33	0.25	0.26	0.46	0.48	0.90	0.29	0.00	0.30
Avail Cap(c_a), veh/h	183	490	473	426	613	617	902	772	687	858	0	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)	0.97	0.97	0.97	0.97	0.97	0.97	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.2	31.4	31.5	38.1	22.5	22.5	19.3	19.4	25.2	17.5	0.0	17.7
Incr Delay (d2), s/veh	3.1	6.7	7.2	0.4	1.0	1.0	0.4	0.5	14.6	0.2	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	1.2	6.9	6.8	1.5	2.6	2.7	5.8	5.2	13.9	3.2	0.0	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.3	38.1	38.7	38.5	23.4	23.5	19.6	19.9	39.8	17.7	0.0	17.9
LnGrp LOS	D	D	D	D	C	C	B	B	D	B		B
Approach Vol, veh/h		684			451			1276			435	
Approach Delay, s/veh		39.6			28.1			28.6			17.8	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	46.9	9.6	38.5	46.9	17.6	30.5
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	45.0	5.0	28.0	45.0	7.0	* 26
Max Q Clear Time (g_c+I1), s	36.4	4.5	8.0	10.1	5.5	16.3
Green Ext Time (p_c), s	4.5	0.0	1.8	3.1	0.1	2.7

Intersection Summary	
HCM 7th Control Delay, s/veh	29.5
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	917	372	177	254	57
Future Volume (veh/h)	122	917	372	177	254	57
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)	0.99			0.96	1.00	0.90
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	128	965	392	186	267	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	627	2425	1583	738	304	68
Arrive On Green	0.68	0.68	0.90	0.90	0.22	0.22
Sat Flow, veh/h	836	3676	2432	1091	1399	314
Grp Volume(v), veh/h	128	965	299	279	328	0
Grp Sat Flow(s),veh/h/ln	836	1791	1791	1638	1719	0
Q Serve(g_s), s	5.6	10.7	1.9	2.0	16.6	0.0
Cycle Q Clear(g_c), s	7.6	10.7	1.9	2.0	16.6	0.0
Prop In Lane	1.00			0.67	0.81	0.18
Lane Grp Cap(c), veh/h	627	2425	1212	1109	374	0
V/C Ratio(X)	0.20	0.40	0.25	0.25	0.88	0.00
Avail Cap(c_a), veh/h	627	2425	1212	1109	678	0
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.91	0.91	1.00	0.00
Uniform Delay (d), s/veh	6.3	6.4	1.5	1.5	34.1	0.0
Incr Delay (d2), s/veh	0.5	0.4	0.4	0.5	6.6	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	1.0	3.7	0.7	0.6	7.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.9	6.8	2.0	2.0	40.7	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		1093	578		328	
Approach Delay, s/veh		6.8	2.0		40.7	
Approach LOS		A	A		D	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		65.9		24.1	65.9
Change Period (Y+Rc), s		5.0		4.5	5.0
Max Green Setting (Gmax), s		45.0		35.5	45.0
Max Q Clear Time (g_c+I1), s		4.0		18.6	12.7
Green Ext Time (p_c), s		4.4		1.0	9.9

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)	18	1124	29	23	518	13	0	0	0	21	5	31
Future Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
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)	0.98		0.89	0.99		0.90				1.00		0.89
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	19	1183	31	24	545	14				22	5	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	593	2586	68	414	1327	34				93	21	140
Arrive On Green	1.00	1.00	1.00	0.73	0.73	0.73				0.16	0.16	0.16
Sat Flow, veh/h	838	3553	93	459	1823	47				578	131	867
Grp Volume(v), veh/h	19	596	618	24	0	559				60	0	0
Grp Sat Flow(s),veh/h/ln	838	1791	1855	459	0	1870				1576	0	0
Q Serve(g_s), s	0.3	0.0	0.0	1.4	0.0	10.4				3.0	0.0	0.0
Cycle Q Clear(g_c), s	10.8	0.0	0.0	1.4	0.0	10.4				3.0	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.03				0.37		0.55
Lane Grp Cap(c), veh/h	593	1304	1350	414	0	1361				254	0	0
V/C Ratio(X)	0.03	0.46	0.46	0.06	0.00	0.41				0.24	0.00	0.00
Avail Cap(c_a), veh/h	593	1304	1350	414	0	1361				455	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.9	0.0	0.0	3.5	0.0	4.8				32.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.0	1.0	0.3	0.0	0.9				0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.1	0.0	3.6				1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.9	1.0	1.0	3.8	0.0	5.7				33.4	0.0	0.0
LnGrp LOS	A	A	A	A		A				C		
Approach Vol, veh/h		1233			583						60	
Approach Delay, s/veh		1.0			5.6						33.4	
Approach LOS		A			A						C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	19.5	70.5	70.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	26.0	54.0	54.0
Max Q Clear Time (g_c+I1), s	5.0	12.4	12.8
Green Ext Time (p_c), s	0.3	5.0	11.9

Intersection Summary	
HCM 7th Control Delay, s/veh	3.4
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	1127	536	12	6	18
Future Vol, veh/h	18	1127	536	12	6	18
Conflicting Peds, #/hr	0	0	0	95	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	1186	564	13	6	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	672	0	-	0	1310	666
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	644	-
Critical Hdwy	4.115	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	922	-	-	-	164	461
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	488	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	839	-	-	-	132	419
Mov Cap-2 Maneuver	-	-	-	-	132	-
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	444	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.15	0	19.59
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	839	-	-	-	272
HCM Lane V/C Ratio	0.023	-	-	-	0.093
HCM Control Delay (s/veh)	9.4	-	-	-	19.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

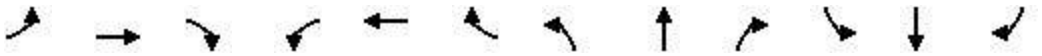
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	1101	527	35	8	21
Future Vol, veh/h	32	1101	527	35	8	21
Conflicting Peds, #/hr	0	0	0	96	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	34	1159	555	37	8	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	688	0	-	0	1340	669
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	671	-
Critical Hdwy	4.115	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	910	-	-	-	157	459
Stage 1	-	-	-	-	510	-
Stage 2	-	-	-	-	473	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	827	-	-	-	124	417
Mov Cap-2 Maneuver	-	-	-	-	124	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	430	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.27	0	21.21
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	827	-	-	-	252
HCM Lane V/C Ratio	0.041	-	-	-	0.121
HCM Control Delay (s/veh)	9.5	-	-	-	21.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	63
Future Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	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		0.89	0.99		0.88	0.90		0.93	0.95		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	88	1063	16	19	496	73	29	11	9	67	15	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	422	2436	37	431	1065	157	222	83	54	175	50	135
Arrive On Green	1.00	1.00	1.00	0.22	0.22	0.22	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	849	3604	54	519	1576	232	745	388	255	550	235	632
Grp Volume(v), veh/h	88	528	551	19	0	569	49	0	0	148	0	0
Grp Sat Flow(s),veh/h/ln	849	1791	1867	519	0	1808	1388	0	0	1418	0	0
Q Serve(g_s), s	4.4	0.0	0.0	2.6	0.0	24.6	0.0	0.0	0.0	5.6	0.0	0.0
Cycle Q Clear(g_c), s	29.0	0.0	0.0	2.6	0.0	24.6	2.2	0.0	0.0	8.0	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.13	0.59		0.18	0.45		0.45
Lane Grp Cap(c), veh/h	422	1211	1262	431	0	1222	359	0	0	360	0	0
V/C Ratio(X)	0.21	0.44	0.44	0.04	0.00	0.47	0.14	0.00	0.00	0.41	0.00	0.00
Avail Cap(c_a), veh/h	422	1211	1262	431	0	1222	477	0	0	481	0	0
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	5.9	0.0	0.0	12.3	0.0	20.9	28.7	0.0	0.0	30.9	0.0	0.0
Incr Delay (d2), s/veh	1.1	1.1	1.1	0.2	0.0	1.3	0.2	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	0.7	0.4	0.4	0.3	0.0	12.2	0.9	0.0	0.0	2.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.0	1.1	1.1	12.5	0.0	22.1	28.9	0.0	0.0	31.7	0.0	0.0
LnGrp LOS	A	A	A	B		C	C			C		
Approach Vol, veh/h		1167			588			49			148	
Approach Delay, s/veh		1.6			21.8			28.9			31.7	
Approach LOS		A			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.2		65.8		24.2		65.8				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		27.0		53.0		27.0		53.0				
Max Q Clear Time (g_c+I1), s		10.0		26.6		4.2		31.0				
Green Ext Time (p_c), s		0.8		4.4		0.2		8.2				

Intersection Summary												
HCM 7th Control Delay, s/veh			10.6									
HCM 7th LOS			B									

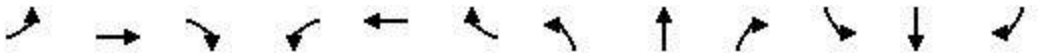
Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1074	9	15	541	17	15
Future Vol, veh/h	1074	9	15	541	17	15
Conflicting Peds, #/hr	0	91	0	0	41	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1131	9	16	569	18	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1231	0	1868	661
Stage 1	-	-	-	-	1226	-
Stage 2	-	-	-	-	642	-
Critical Hdwy	-	-	4.115	-	6.615	6.915
Critical Hdwy Stg 1	-	-	-	-	5.815	-
Critical Hdwy Stg 2	-	-	-	-	5.415	-
Follow-up Hdwy	-	-	2.2095	-	3.5095	3.3095
Pot Cap-1 Maneuver	-	-	568	-	72	408
Stage 1	-	-	-	-	243	-
Stage 2	-	-	-	-	525	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	519	-	61	372
Mov Cap-2 Maneuver	-	-	-	-	61	-
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	490	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	57.77
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	101	-	-	519	-
HCM Lane V/C Ratio	0.335	-	-	0.03	-
HCM Control Delay (s/veh)	57.8	-	-	12.2	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	1.3	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	23
Future Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	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)	0.99		0.90	1.00		0.91	0.91		0.97	0.97		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	31	1102	14	18	547	39	14	4	23	15	3	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	623	2767	35	374	1320	94	96	41	106	99	34	104
Arrive On Green	0.51	0.51	0.51	0.77	0.77	0.77	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	828	3616	46	509	1726	123	344	329	860	359	274	844
Grp Volume(v), veh/h	31	546	570	18	0	586	41	0	0	42	0	0
Grp Sat Flow(s),veh/h/ln	828	1791	1871	509	0	1849	1532	0	0	1477	0	0
Q Serve(g_s), s	1.9	16.8	16.8	1.4	0.0	9.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.7	16.8	16.8	18.2	0.0	9.8	2.0	0.0	0.0	2.1	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.07	0.34		0.56	0.36		0.57
Lane Grp Cap(c), veh/h	623	1370	1431	374	0	1415	243	0	0	237	0	0
V/C Ratio(X)	0.05	0.40	0.40	0.05	0.00	0.41	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	623	1370	1431	374	0	1415	453	0	0	441	0	0
HCM Platoon Ratio	0.67	0.67	0.67	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	10.8	9.2	9.2	8.3	0.0	3.6	35.4	0.0	0.0	35.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.9	0.8	0.2	0.0	0.9	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	7.4	7.7	0.2	0.0	2.9	0.8	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.0	10.1	10.1	8.5	0.0	4.5	35.7	0.0	0.0	35.8	0.0	0.0
LnGrp LOS	B	B	B	A		A	D			D		
Approach Vol, veh/h		1147			604			41			42	
Approach Delay, s/veh		10.1			4.7			35.7			35.8	
Approach LOS		B			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.1		73.9		16.1		73.9				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		24.0		56.0		24.0		56.0				
Max Q Clear Time (g_c+I1), s		4.1		20.2		4.0		18.8				
Green Ext Time (p_c), s		0.2		4.8		0.1		9.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	9.5
HCM 7th LOS	A

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	21	1062	0	0	550	37	4	2	65	10	0	20
Future Vol, veh/h	21	1062	0	0	550	37	4	2	65	10	0	20
Conflicting Peds, #/hr	0	0	81	0	0	89	0	0	0	0	0	14
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	22	1118	0	0	579	39	4	2	68	11	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	-	-	-	0	1755	1869	559	1292	1850	701
Stage 1	-	-	-	-	-	-	1162	1162	-	687	687	-
Stage 2	-	-	-	-	-	-	593	707	-	604	1162	-
Critical Hdwy	4.115	-	-	-	-	-	7.315	6.515	6.915	7.315	6.515	6.215
Critical Hdwy Stg 1	-	-	-	-	-	-	6.515	5.515	-	6.115	5.515	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.115	5.515	-	6.515	5.515	-
Follow-up Hdwy	2.2095	-	-	-	-	-	3.5095	4.0095	3.3095	3.5095	4.0095	3.3095
Pot Cap-1 Maneuver	895	-	0	0	-	-	61	73	475	131	75	440
Stage 1	-	-	0	0	-	-	209	270	-	438	448	-
Stage 2	-	-	0	0	-	-	493	439	-	455	270	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	819	-	-	-	-	-	55	65	475	96	66	397
Mov Cap-2 Maneuver	-	-	-	-	-	-	55	65	-	96	66	-
Stage 1	-	-	-	-	-	-	204	263	-	401	410	-
Stage 2	-	-	-	-	-	-	461	402	-	376	263	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	21.27	27.02
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	295	819	-	-	-	195
HCM Lane V/C Ratio	0.253	0.027	-	-	-	0.162
HCM Control Delay (s/veh)	21.3	9.5	-	-	-	27
HCM Lane LOS	C	A	-	-	-	D
HCM 95th %tile Q(veh)	1	0.1	-	-	-	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	1107	566	116	38	21
Future Volume (veh/h)	30	1107	566	116	38	21
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			0.95	1.00	0.96
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	32	1165	596	122	40	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	518	2778	1025	210	134	74
Arrive On Green	0.07	1.00	0.68	0.68	0.12	0.12
Sat Flow, veh/h	1795	3676	1502	308	1075	591
Grp Volume(v), veh/h	32	1165	0	718	63	0
Grp Sat Flow(s),veh/h/ln	1795	1791	0	1810	1693	0
Q Serve(g_s), s	0.4	0.0	0.0	18.8	3.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	18.8	3.0	0.0
Prop In Lane	1.00			0.17	0.63	0.35
Lane Grp Cap(c), veh/h	518	2778	0	1234	211	0
V/C Ratio(X)	0.06	0.42	0.00	0.58	0.30	0.00
Avail Cap(c_a), veh/h	589	2778	0	1234	510	0
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.2	0.0	0.0	7.5	35.8	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	2.0	0.8	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	0.1	0.2	0.0	6.7	1.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.3	0.5	0.0	9.5	36.6	0.0
LnGrp LOS	A	A		A	D	
Approach Vol, veh/h		1197	718		63	
Approach Delay, s/veh		0.6	9.5		36.6	
Approach LOS		A	A		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		8.4	65.9		15.7	74.3
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	41.9		27.1	53.9
Max Q Clear Time (g_c+I1), s		2.4	20.8		5.0	2.0
Green Ext Time (p_c), s		0.0	5.4		0.1	11.9

Intersection Summary	
HCM 7th Control Delay, s/veh	5.0
HCM 7th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1145	0	0	527	157	122
Future Volume (veh/h)	1145	0	0	527	157	122
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	1885	0	0	1885	1885	1885
Adj Flow Rate, veh/h	1205	0	0	555	165	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2794	0	0	2794	209	186
Arrive On Green	0.78	0.00	0.00	1.00	0.12	0.12
Sat Flow, veh/h	3770	0	0	3770	1795	1598
Grp Volume(v), veh/h	1205	0	0	555	165	128
Grp Sat Flow(s),veh/h/ln	1791	0	0	1791	1795	1598
Q Serve(g_s), s	11.8	0.0	0.0	0.0	9.5	8.2
Cycle Q Clear(g_c), s	11.8	0.0	0.0	0.0	9.5	8.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2794	0	0	2794	209	186
V/C Ratio(X)	0.43	0.00	0.00	0.20	0.79	0.69
Avail Cap(c_a), veh/h	2794	0	0	2794	508	452
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.99	1.00	1.00
Uniform Delay (d), s/veh	3.9	0.0	0.0	0.0	45.6	45.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.2	6.6	4.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.0	0.1	4.6	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.4	0.0	0.0	0.2	52.2	49.5
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	1205			555	293	
Approach Delay, s/veh	4.4			0.2	51.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	88.7			88.7	17.3
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	65.0			65.0	30.0
Max Q Clear Time (g_c+I1), s	13.8			2.0	11.5
Green Ext Time (p_c), s	12.5			4.4	0.8

Intersection Summary		
HCM 7th Control Delay, s/veh	9.9	
HCM 7th LOS	A	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
Future Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
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		0.95
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	0	1885	1885		1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	451	0		480	368	0				337	779	186
Peak Hour Factor	0.95	0.95	0.95		0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1		1	1	0				1	1	1
Cap, veh/h	0	1030			504	2204	0				387	894	213
Arrive On Green	0.00	0.48	0.00		0.47	1.00	0.00				0.29	0.29	0.29
Sat Flow, veh/h	0	3676	1598		1795	3676	0				1355	3132	747
Grp Volume(v), veh/h	0	451	0		480	368	0				452	426	424
Grp Sat Flow(s),veh/h/ln	0	1791	1598		1795	1791	0				1817	1716	1702
Q Serve(g_s), s	0.0	8.8	0.0		27.2	0.0	0.0				25.1	25.1	25.1
Cycle Q Clear(g_c), s	0.0	8.8	0.0		27.2	0.0	0.0				25.1	25.1	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.75		0.44
Lane Grp Cap(c), veh/h	0	1030			504	2204	0				519	490	486
V/C Ratio(X)	0.00	0.44			0.95	0.17	0.00				0.87	0.87	0.87
Avail Cap(c_a), veh/h	0	1030			627	2204	0				574	542	538
HCM Platoon Ratio	1.00	1.67	1.67		1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.88	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.9	0.0		27.5	0.0	0.0				36.0	36.0	36.0
Incr Delay (d2), s/veh	0.0	1.2	0.0		20.7	0.2	0.0				11.8	12.4	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
%ile BackOfQ(50%),veh/ln	0.0	3.5	0.0		12.6	0.1	0.0				12.6	12.0	11.9
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	23.1	0.0		48.1	0.2	0.0				47.8	48.4	48.6
LnGrp LOS		C			D	A					D	D	D
Approach Vol, veh/h		451				848						1302	
Approach Delay, s/veh		23.1				27.3						48.3	
Approach LOS		C				C						D	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	34.8	35.5		35.8		70.2			
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0			
Max Green Setting (Gmax), s	27.6	20.0		33.5		62.0			
Max Q Clear Time (g_c+I1), s	29.2	10.8		27.1		2.0			
Green Ext Time (p_c), s	0.6	1.5		3.2		1.9			

Intersection Summary	
HCM 7th Control Delay, s/veh	37.1
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Future Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.90	1.00		0.93	1.00		0.88	0.97		0.97
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No			No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		192	400	200	46	437	255	166	476	173	79	119	162
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		617	675	338	93	728	547	180	1115	436	145	201	484
Arrive On Green		0.12	0.40	0.40	0.37	0.37	0.37	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h		3483	1136	568	124	1967	1480	1106	3582	1401	315	646	1555
Grp Volume(v), veh/h		192	0	600	116	367	255	166	476	173	198	0	162
Grp Sat Flow(s),veh/h/ln		1742	0	1705	461	1630	1480	1106	1791	1401	961	0	1555
Q Serve(g_s), s		5.3	0.0	29.4	4.8	19.4	13.9	10.8	11.2	10.3	11.0	0.0	8.5
Cycle Q Clear(g_c), s		5.3	0.0	29.4	34.2	19.4	13.9	33.0	11.2	10.3	22.2	0.0	8.5
Prop In Lane		1.00		0.33	0.40		1.00	1.00		1.00	0.40		1.00
Lane Grp Cap(c), veh/h		617	0	1013	218	603	547	180	1115	436	347	0	484
V/C Ratio(X)		0.31	0.00	0.59	0.53	0.61	0.47	0.92	0.43	0.40	0.57	0.00	0.33
Avail Cap(c_a), veh/h		617	0	1013	298	707	642	180	1115	436	347	0	484
HCM Platoon Ratio		0.67	0.67	0.67	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	0.00	1.00
Uniform Delay (d), s/veh		40.8	0.0	21.8	31.6	27.1	25.4	49.4	29.0	28.7	33.7	0.0	28.1
Incr Delay (d2), s/veh		0.3	0.0	2.5	9.1	4.5	2.8	45.0	0.3	0.6	2.2	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		2.4	0.0	13.2	3.5	8.3	5.3	6.7	4.9	3.5	4.8	0.0	3.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		41.1	0.0	24.3	40.7	31.7	28.3	94.4	29.2	29.3	35.9	0.0	28.5
LnGrp LOS		D		C	D	C	C	F	C	C	D		C
Approach Vol, veh/h			792			738			815			360	
Approach Delay, s/veh			28.4			31.9			42.5			32.6	
Approach LOS			C			C			D			C	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	68.0		38.0	23.8	44.2		38.0					
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0					
Max Green Setting (Gmax), s	63.0		33.0	12.0	46.0		33.0					
Max Q Clear Time (g_c+I1), s	31.4		24.2	7.3	36.2		35.0					
Green Ext Time (p_c), s	5.2		1.4	0.2	3.1		0.0					

Intersection Summary	
HCM 7th Control Delay, s/veh	34.2
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	61
Future Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	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)	0.98		0.97	1.00		0.91	1.00		1.00	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	41	606	4	2	674	92	0	2	3	116	2	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	556	1262	8	46	1080	147	0	136	204	240	18	100
Arrive On Green	0.68	0.68	0.68	1.00	1.00	1.00	0.00	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	691	1870	12	1	1601	218	0	681	1021	834	91	502
Grp Volume(v), veh/h	41	0	610	768	0	0	0	0	5	182	0	0
Grp Sat Flow(s),veh/h/ln	691	0	1883	1819	0	0	0	0	1701	1427	0	0
Q Serve(g_s), s	1.6	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.2	8.1	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.2	9.3	0.0	0.0
Prop In Lane	1.00		0.01	0.00		0.12	0.00		0.60	0.64		0.35
Lane Grp Cap(c), veh/h	556	0	1271	1273	0	0	0	0	340	359	0	0
V/C Ratio(X)	0.07	0.00	0.48	0.60	0.00	0.00	0.00	0.00	0.01	0.51	0.00	0.00
Avail Cap(c_a), veh/h	556	0	1271	1273	0	0	0	0	447	447	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.90	0.88	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.5	0.0	6.2	0.0	0.0	0.0	0.0	0.0	25.7	29.2	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.2	1.9	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	4.5	0.7	0.0	0.0	0.0	0.0	0.1	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.7	0.0	7.4	1.9	0.0	0.0	0.0	0.0	25.7	29.6	0.0	0.0
LnGrp LOS	A		A	A					C	C		
Approach Vol, veh/h		651			768			5			182	
Approach Delay, s/veh		7.2			1.9			25.7			29.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	21.0	59.0	21.0	59.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	11.3	2.0	2.2	14.5
Green Ext Time (p_c), s	0.5	4.6	0.0	3.4

Intersection Summary	
HCM 7th Control Delay, s/veh	7.3
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	0	2
Future Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	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)	0.96		0.93	0.98		0.89	1.00		0.91	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	11	453	262	276	557	1	208	0	141	0	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	54	1141	914	539	1158	2	306	4	162	0	0	443
Arrive On Green	1.00	1.00	1.00	0.62	0.62	0.62	0.28	0.00	0.28	0.00	0.00	0.28
Sat Flow, veh/h	14	1854	1485	729	1881	3	842	15	581	0	0	1592
Grp Volume(v), veh/h	464	0	262	276	0	558	349	0	0	0	0	2
Grp Sat Flow(s),veh/h/ln	1868	0	1485	729	0	1884	1439	0	0	0	0	1592
Q Serve(g_s), s	0.0	0.0	0.0	18.7	0.0	12.9	18.1	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	18.7	0.0	12.9	18.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	0.02		1.00	1.00		0.00	0.60		0.40	0.00		1.00
Lane Grp Cap(c), veh/h	1196	0	914	539	0	1160	472	0	0	0	0	443
V/C Ratio(X)	0.39	0.00	0.29	0.51	0.00	0.48	0.74	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1196	0	914	539	0	1160	557	0	0	0	0	527
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.87	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.5	0.0	8.4	27.5	0.0	0.0	0.0	0.0	20.9
Incr Delay (d2), s/veh	0.8	0.0	0.7	3.5	0.0	1.4	4.3	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	0.3	0.0	0.2	3.1	0.0	5.1	6.7	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.8	0.0	0.7	13.0	0.0	9.8	31.8	0.0	0.0	0.0	0.0	20.9
LnGrp LOS	A		A	B		A	C					C
Approach Vol, veh/h		726			834			349			2	
Approach Delay, s/veh		0.8			10.9			31.8			20.9	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.2	26.8	53.2	26.8
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	45.0	* 27	45.0	26.5
Max Q Clear Time (g_c+I1), s	20.7	20.5	2.0	2.1
Green Ext Time (p_c), s	6.7	1.2	4.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

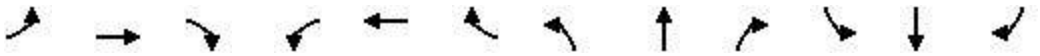
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	758	794	6	0	22
Future Vol, veh/h	0	758	794	6	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	798	836	6	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	421
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.31
Pot Cap-1 Maneuver	0	-	-	-	0	584
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	584
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.42
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	584
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s/veh)	-	-	-	11.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	71
Future Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	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)	0.96		0.91	0.97		0.95	0.86		0.70	0.89		0.67
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	78	464	73	53	200	44	41	280	102	41	228	79
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	233	523	404	600	768	169	247	987	307	264	655	203
Arrive On Green	0.05	0.28	0.28	0.10	0.17	0.17	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1767	1856	1434	1767	1458	321	912	3526	1095	882	2338	724
Grp Volume(v), veh/h	78	464	73	53	0	244	41	280	102	41	165	142
Grp Sat Flow(s),veh/h/ln	1767	1856	1434	1767	0	1779	912	1763	1095	882	1763	1299
Q Serve(g_s), s	3.4	24.0	3.9	0.0	0.0	11.9	3.8	6.2	7.4	3.8	7.4	8.8
Cycle Q Clear(g_c), s	3.4	24.0	3.9	0.0	0.0	11.9	12.6	6.2	7.4	10.0	7.4	8.8
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	233	523	404	600	0	937	247	987	307	264	494	364
V/C Ratio(X)	0.33	0.89	0.18	0.09	0.00	0.26	0.17	0.28	0.33	0.16	0.33	0.39
Avail Cap(c_a), veh/h	315	928	717	600	0	937	247	987	307	264	494	364
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	34.4	27.2	31.8	0.0	24.5	34.2	28.2	28.6	32.1	28.6	29.1
Incr Delay (d2), s/veh	0.8	19.6	1.0	0.1	0.0	0.7	1.4	0.7	2.9	1.2	1.8	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	1.5	13.5	1.4	1.2	0.0	5.8	0.9	2.7	2.2	0.9	3.4	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.8	54.0	28.2	31.9	0.0	25.1	35.6	28.9	31.5	33.3	30.4	32.2
LnGrp LOS	C	D	C	C		C	D	C	C	C	C	C
Approach Vol, veh/h		615			297			423			348	
Approach Delay, s/veh		48.0			26.3			30.2			31.5	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	57.6		33.0	33.8	33.2		33.0				
Change Period (Y+Rc), s	4.5	5.0		5.0	5.0	* 5		5.0				
Max Green Setting (Gmax), s	9.5	48.0		28.0	7.5	* 50		28.0				
Max Q Clear Time (g_c+I1), s	5.4	13.9		14.6	2.0	26.0		12.0				
Green Ext Time (p_c), s	0.0	1.1		1.5	0.0	2.2		1.4				

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)	59	228	260	104	241	62	0	0	0	26	118	27
Future Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
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)	0.94		0.89	1.00		0.91				1.00		0.77
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	66	253	289	116	268	69				29	131	30
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	91	279	299	323	1802	450				125	544	119
Arrive On Green	0.70	0.70	0.70	0.37	1.00	1.00				0.23	0.23	0.23
Sat Flow, veh/h	123	671	719	1767	2733	682				544	2356	514
Grp Volume(v), veh/h	608	0	0	116	170	167				98	0	92
Grp Sat Flow(s),veh/h/ln	1512	0	0	1767	1763	1652				1828	0	1586
Q Serve(g_s), s	27.2	0.0	0.0	4.8	0.0	0.0				4.3	0.0	4.8
Cycle Q Clear(g_c), s	37.0	0.0	0.0	4.8	0.0	0.0				4.3	0.0	4.8
Prop In Lane	0.11		0.48	1.00		0.41				0.30		0.32
Lane Grp Cap(c), veh/h	669	0	0	323	1162	1089				422	0	366
V/C Ratio(X)	0.91	0.00	0.00	0.36	0.15	0.15				0.23	0.00	0.25
Avail Cap(c_a), veh/h	808	0	0	323	1162	1089				457	0	397
HCM Platoon Ratio	1.67	1.67	1.67	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.72	0.00	0.00	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	0.0	27.4	0.0	0.0				31.3	0.0	31.4
Incr Delay (d2), s/veh	14.2	0.0	0.0	0.2	0.3	0.3				0.1	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
%ile BackOfQ(50%),veh/ln	8.9	0.0	0.0	1.9	0.1	0.1				1.9	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	0.0	0.0	27.7	0.3	0.3				31.4	0.0	31.6
LnGrp LOS	C			C	A	A				C		C
Approach Vol, veh/h		608			453						190	
Approach Delay, s/veh		28.5			7.3						31.5	
Approach LOS		C			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	24.3	47.6		28.1		71.9
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	18.3	* 51		25.0		64.0
Max Q Clear Time (g_c+I1), s	16.8	39.0		6.8		2.0
Green Ext Time (p_c), s	0.0	2.6		0.6		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	21.3
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)	10	244	0	7	383	24	2	0	3	22	0	22
Future Volume (veh/h)	10	244	0	7	383	24	2	0	3	22	0	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)	0.98		1.00	0.97		0.93	0.95		0.94	0.94		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	11	271	0	8	426	27	2	0	3	24	0	24
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	95	2221	0	54	2188	137	160	19	193	197	16	159
Arrive On Green	0.22	0.22	0.00	0.67	0.67	0.67	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	83	3376	0	24	3243	203	487	85	858	633	73	705
Grp Volume(v), veh/h	150	132	0	243	0	218	5	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	1770	1604	0	1837	0	1633	1430	0	0	1411	0	0
Q Serve(g_s), s	0.0	6.6	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	6.4	6.6	0.0	4.9	0.0	5.0	0.2	0.0	0.0	2.4	0.0	0.0
Prop In Lane	0.07		0.00	0.03		0.12	0.40		0.60	0.50		0.50
Lane Grp Cap(c), veh/h	1233	1082	0	1277	0	1102	373	0	0	372	0	0
V/C Ratio(X)	0.12	0.12	0.00	0.19	0.00	0.20	0.01	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1233	1082	0	1277	0	1102	519	0	0	517	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.39	0.39	0.00	0.98	0.00	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.1	15.2	0.0	6.1	0.0	6.1	30.1	0.0	0.0	30.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.5	0.0	1.9	0.0	1.7	0.1	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.2	15.3	0.0	6.4	0.0	6.5	30.1	0.0	0.0	31.1	0.0	0.0
LnGrp LOS	B	B		A		A	C			C		
Approach Vol, veh/h		282			461			5			48	
Approach Delay, s/veh		15.3			6.5			30.1			31.1	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	27.5	72.5	27.5	72.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	33.0	57.0	33.0	57.0
Max Q Clear Time (g_c+I1), s	4.4	7.0	2.2	8.6
Green Ext Time (p_c), s	0.2	3.3	0.0	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	11.2
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	62
Future Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	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		0.89	1.00		0.91	0.98		0.93	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	48	181	70	309	328	42	63	450	268	14	568	69
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	717	260	417	1202	152	137	848	508	59	1048	125
Arrive On Green	0.04	0.29	0.29	0.12	0.39	0.39	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	3428	2445	888	3428	3111	393	218	2433	1458	27	3007	359
Grp Volume(v), veh/h	48	127	124	309	184	186	210	303	268	348	0	303
Grp Sat Flow(s),veh/h/ln	1714	1763	1570	1714	1763	1742	1047	1604	1458	1813	0	1580
Q Serve(g_s), s	1.0	4.2	4.6	6.6	5.4	5.6	3.9	11.6	11.2	0.0	0.0	11.8
Cycle Q Clear(g_c), s	1.0	4.2	4.6	6.6	5.4	5.6	15.7	11.6	11.2	11.4	0.0	11.8
Prop In Lane	1.00		0.57	1.00		0.23	0.30		1.00	0.04		0.23
Lane Grp Cap(c), veh/h	144	517	460	417	681	673	427	559	508	681	0	551
V/C Ratio(X)	0.33	0.25	0.27	0.74	0.27	0.28	0.49	0.54	0.53	0.51	0.00	0.55
Avail Cap(c_a), veh/h	225	648	577	720	903	892	554	716	651	852	0	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	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	35.5	20.5	20.7	32.3	16.0	16.1	20.2	19.9	19.8	19.9	0.0	20.0
Incr Delay (d2), s/veh	1.4	0.2	0.3	2.6	0.2	0.2	0.9	0.8	0.8	0.6	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.7	1.7	2.9	2.2	2.2	3.2	4.2	3.8	4.8	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	20.7	21.0	34.9	16.2	16.3	21.1	20.7	20.6	20.5	0.0	20.9
LnGrp LOS	D	C	C	C	B	B	C	C	C	C		C
Approach Vol, veh/h		299			679			781			651	
Approach Delay, s/veh		23.4			24.7			20.8			20.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	32.6	8.2	35.4	32.6	15.3	28.3
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	34.0	5.0	39.0	34.0	16.0	* 28
Max Q Clear Time (g_c+I1), s	17.7	3.0	7.6	13.8	8.6	6.6
Green Ext Time (p_c), s	4.1	0.0	2.5	4.1	0.7	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	61	356	548	283	97	63
Future Volume (veh/h)	61	356	548	283	97	63
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			0.92	1.00	0.93
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	68	396	609	314	108	70
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	434	2488	1540	794	180	117
Arrive On Green	0.71	0.71	0.71	0.71	0.18	0.18
Sat Flow, veh/h	599	3618	2274	1124	984	638
Grp Volume(v), veh/h	68	396	492	431	179	0
Grp Sat Flow(s),veh/h/ln	599	1763	1763	1543	1632	0
Q Serve(g_s), s	4.7	3.4	10.3	10.3	9.1	0.0
Cycle Q Clear(g_c), s	15.0	3.4	10.3	10.3	9.1	0.0
Prop In Lane	1.00			0.73	0.60	0.39
Lane Grp Cap(c), veh/h	434	2488	1244	1089	299	0
V/C Ratio(X)	0.16	0.16	0.40	0.40	0.60	0.00
Avail Cap(c_a), veh/h	434	2488	1244	1089	562	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.5	4.4	5.4	5.4	33.7	0.0
Incr Delay (d2), s/veh	0.7	0.1	0.9	1.1	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	0.7	1.1	3.5	3.1	3.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.2	4.5	6.4	6.5	35.6	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		464	923		179	
Approach Delay, s/veh		5.2	6.4		35.6	
Approach LOS		A	A		D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	21.5	68.5	68.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	31.0	49.0	49.0
Max Q Clear Time (g_c+I1), s	11.1	12.3	17.0
Green Ext Time (p_c), s	0.5	8.1	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	9.4
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
Future Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
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)	0.98		0.91	0.98		0.88				1.00		0.91
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	14	470	19	19	870	16				33	1	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	527	1293	52	639	2591	48				91	3	146
Arrive On Green	0.73	0.73	0.73	1.00	1.00	1.00				0.16	0.16	0.16
Sat Flow, veh/h	609	1763	71	878	3531	65				588	18	944
Grp Volume(v), veh/h	14	0	489	19	434	452				87	0	0
Grp Sat Flow(s),veh/h/ln	609	0	1834	878	1763	1833				1550	0	0
Q Serve(g_s), s	0.6	0.0	8.7	0.3	0.0	0.0				4.5	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	8.7	9.0	0.0	0.0				4.5	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.04				0.38		0.61
Lane Grp Cap(c), veh/h	527	0	1346	639	1294	1345				240	0	0
V/C Ratio(X)	0.03	0.00	0.36	0.03	0.34	0.34				0.36	0.00	0.00
Avail Cap(c_a), veh/h	527	0	1346	639	1294	1345				482	0	0
HCM Platoon Ratio	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				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.3	0.0	4.3	0.6	0.0	0.0				34.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.1	0.7	0.7				0.9	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
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.9	0.0	0.3	0.3				1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.4	0.0	5.1	0.7	0.7	0.7				35.0	0.0	0.0
LnGrp LOS	A		A	A	A	A				C		
Approach Vol, veh/h		503			905						87	
Approach Delay, s/veh		5.1			0.7						35.0	
Approach LOS		A			A						C	

Timer - Assigned Phs	2	4			8							
Phs Duration (G+Y+Rc), s	19.0	71.0			71.0							
Change Period (Y+Rc), s	5.0	5.0			5.0							
Max Green Setting (Gmax), s	28.0	52.0			52.0							
Max Q Clear Time (g_c+I1), s	6.5	11.0			10.7							
Green Ext Time (p_c), s	0.4	7.4			4.0							

Intersection Summary												
HCM 7th Control Delay, s/veh		4.2										
HCM 7th LOS		A										

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	438	767	17	6	47
Future Vol, veh/h	15	438	767	17	6	47
Conflicting Peds, #/hr	0	0	0	112	14	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	17	487	852	19	7	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	983	0	-	0	1508	548
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	534	-
Critical Hdwy	4.145	-	-	-	6.645	6.945
Critical Hdwy Stg 1	-	-	-	-	5.845	-
Critical Hdwy Stg 2	-	-	-	-	5.445	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	695	-	-	-	121	479
Stage 1	-	-	-	-	326	-
Stage 2	-	-	-	-	584	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	621	-	-	-	94	428
Mov Cap-2 Maneuver	-	-	-	-	94	-
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	522	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.36	0	19.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	621	-	-	-	305
HCM Lane V/C Ratio	0.027	-	-	-	0.193
HCM Control Delay (s/veh)	11	-	-	-	19.6
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7

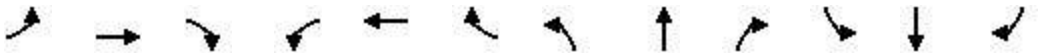
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	428	756	19	11	28
Future Vol, veh/h	16	428	756	19	11	28
Conflicting Peds, #/hr	0	0	0	79	19	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	476	840	21	12	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	940	0	-	0	1460	510
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	530	-
Critical Hdwy	4.145	-	-	-	6.645	6.945
Critical Hdwy Stg 1	-	-	-	-	5.845	-
Critical Hdwy Stg 2	-	-	-	-	5.445	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	722	-	-	-	130	507
Stage 1	-	-	-	-	344	-
Stage 2	-	-	-	-	587	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	668	-	-	-	108	469
Mov Cap-2 Maneuver	-	-	-	-	108	-
Stage 1	-	-	-	-	309	-
Stage 2	-	-	-	-	543	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.38	0	23.15
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	668	-	-	-	241
HCM Lane V/C Ratio	0.027	-	-	-	0.18
HCM Control Delay (s/veh)	10.5	-	-	-	23.1
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	52
Future Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	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)	0.99		0.93	0.99		0.91	0.97		0.94	0.94		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	41	438	9	23	794	47	9	3	6	43	8	58
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	503	1335	27	686	2481	147	159	58	79	123	38	120
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	644	1809	37	925	3360	199	657	386	521	445	252	793
Grp Volume(v), veh/h	41	0	447	23	416	425	18	0	0	109	0	0
Grp Sat Flow(s),veh/h/ln	644	0	1846	925	1763	1796	1564	0	0	1491	0	0
Q Serve(g_s), s	2.1	0.0	7.5	0.8	7.3	7.3	0.0	0.0	0.0	2.8	0.0	0.0
Cycle Q Clear(g_c), s	9.4	0.0	7.5	8.3	7.3	7.3	0.8	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.11	0.50		0.33	0.39		0.53
Lane Grp Cap(c), veh/h	503	0	1363	686	1301	1326	296	0	0	280	0	0
V/C Ratio(X)	0.08	0.00	0.33	0.03	0.32	0.32	0.06	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	503	0	1363	686	1301	1326	524	0	0	512	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	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.6	0.0	4.1	5.5	4.0	4.0	32.8	0.0	0.0	34.8	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.1	0.6	0.6	0.1	0.0	0.0	0.9	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	0.3	0.0	2.4	0.2	2.2	2.3	0.3	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	6.0	0.0	4.7	5.6	4.7	4.7	32.9	0.0	0.0	35.7	0.0	0.0
LnGrp LOS	A		A	A	A	A	C			D		
Approach Vol, veh/h		488			864			18			109	
Approach Delay, s/veh		4.8			4.7			32.9			35.7	
Approach LOS		A			A			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.6		71.4		18.6		71.4				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		28.0		52.0		28.0		52.0				
Max Q Clear Time (g_c+I1), s		7.8		10.3		2.8		11.4				
Green Ext Time (p_c), s		0.6		6.6		0.0		3.6				

Intersection Summary												
HCM 7th Control Delay, s/veh			7.4									
HCM 7th LOS			A									

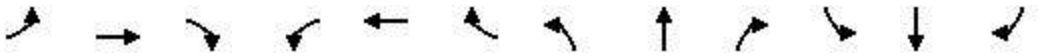
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	431	7	13	773	5	9
Future Vol, veh/h	431	7	13	773	5	9
Conflicting Peds, #/hr	0	69	0	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	479	8	14	859	6	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	556	0	1016	552
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	464	-
Critical Hdwy	-	-	4.145	-	6.645	6.245
Critical Hdwy Stg 1	-	-	-	-	5.445	-
Critical Hdwy Stg 2	-	-	-	-	5.845	-
Follow-up Hdwy	-	-	2.2285	-	3.5285	3.3285
Pot Cap-1 Maneuver	-	-	1007	-	247	530
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	598	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	941	-	226	495
Mov Cap-2 Maneuver	-	-	-	-	226	-
Stage 1	-	-	-	-	536	-
Stage 2	-	-	-	-	585	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.15	15.85
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	347	-	-	941	-
HCM Lane V/C Ratio	0.045	-	-	0.015	-
HCM Control Delay (s/veh)	15.8	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	16
Future Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	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)	0.99		0.93	0.98		0.93	0.97		0.96	0.96		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	10	478	1	19	842	31	13	1	17	14	1	18
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	581	1487	3	793	2777	102	92	23	70	93	22	70
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	624	1851	4	887	3456	127	413	267	825	421	263	821
Grp Volume(v), veh/h	10	0	479	19	429	444	31	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	624	0	1854	887	1763	1821	1505	0	0	1504	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.07	0.42		0.55	0.42		0.55
Lane Grp Cap(c), veh/h	581	0	1490	793	1416	1463	185	0	0	185	0	0
V/C Ratio(X)	0.02	0.00	0.32	0.02	0.30	0.30	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	581	0	1490	793	1416	1463	430	0	0	430	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.0	0.0	38.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.1	0.6	0.5	0.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	0.0	0.2	0.2	0.7	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.0	0.6	0.1	0.6	0.5	38.8	0.0	0.0	38.9	0.0	0.0
LnGrp LOS	A		A	A	A	A	D			D		
Approach Vol, veh/h		489			892			31			33	
Approach Delay, s/veh		0.6			0.5			38.8			38.9	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.7		77.3		12.7		77.3				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		23.0		57.0		23.0		57.0				
Max Q Clear Time (g_c+I1), s		3.7		2.0		3.6		2.0				
Green Ext Time (p_c), s		0.1		7.0		0.1		3.6				

Intersection Summary												
HCM 7th Control Delay, s/veh			2.2									
HCM 7th LOS			A									

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	8	450	0	0	783	38	6	1	24	5	0	14
Future Vol, veh/h	8	450	0	0	783	38	6	1	24	5	0	14
Conflicting Peds, #/hr	0	0	81	0	0	48	0	0	1	0	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	500	0	0	870	42	7	1	27	6	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	960	0	-	-	-	0	969	1478	501	1458	1457	520
Stage 1	-	-	-	-	-	-	518	518	-	939	939	-
Stage 2	-	-	-	-	-	-	451	960	-	519	518	-
Critical Hdwy	4.145	-	-	-	-	-	7.345	6.545	6.245	7.345	6.545	6.945
Critical Hdwy Stg 1	-	-	-	-	-	-	6.145	5.545	-	6.545	5.545	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.545	5.545	-	6.145	5.545	-
Follow-up Hdwy	2.2285	-	-	-	-	-	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285
Pot Cap-1 Maneuver	709	-	0	0	-	-	219	124	567	98	128	500
Stage 1	-	-	0	0	-	-	538	530	-	283	340	-
Stage 2	-	-	0	0	-	-	556	332	-	537	530	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	677	-	-	-	-	-	206	117	566	87	121	469
Mov Cap-2 Maneuver	-	-	-	-	-	-	206	117	-	87	121	-
Stage 1	-	-	-	-	-	-	530	523	-	270	324	-
Stage 2	-	-	-	-	-	-	529	317	-	503	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	15.21	23.33
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	387	677	-	-	-	217
HCM Lane V/C Ratio	0.089	0.013	-	-	-	0.097
HCM Control Delay (s/veh)	15.2	10.4	-	-	-	23.3
HCM Lane LOS	C	B	-	-	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	-	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	467	813	68	23	8
Future Volume (veh/h)	12	467	813	68	23	8
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			0.96	1.00	0.97
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	13	519	903	76	26	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	491	1506	2436	205	108	38
Arrive On Green	0.02	0.54	0.74	0.74	0.09	0.09
Sat Flow, veh/h	1767	1856	3373	276	1229	425
Grp Volume(v), veh/h	13	519	485	494	36	0
Grp Sat Flow(s),veh/h/ln	1767	1856	1763	1793	1702	0
Q Serve(g_s), s	0.1	14.1	8.8	8.8	1.8	0.0
Cycle Q Clear(g_c), s	0.1	14.1	8.8	8.8	1.8	0.0
Prop In Lane	1.00			0.15	0.72	0.25
Lane Grp Cap(c), veh/h	491	1506	1309	1332	150	0
V/C Ratio(X)	0.03	0.34	0.37	0.37	0.24	0.00
Avail Cap(c_a), veh/h	604	1506	1309	1332	511	0
HCM Platoon Ratio	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.92	0.92	1.00	0.00
Uniform Delay (d), s/veh	2.7	7.1	4.1	4.1	38.2	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.7	0.7	0.8	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	0.0	6.3	2.6	2.7	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	2.7	7.7	4.9	4.8	39.0	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		532	979		36	
Approach Delay, s/veh		7.6	4.8		39.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		6.2	71.3		12.4	77.6
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	42.0		27.0	54.0
Max Q Clear Time (g_c+I1), s		2.1	10.8		3.8	16.1
Green Ext Time (p_c), s		0.0	7.6		0.1	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	6.6
HCM 7th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	490	0	0	653	228	170
Future Volume (veh/h)	490	0	0	653	228	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	1856	0	0	1856	1856	1856
Adj Flow Rate, veh/h	544	0	0	726	253	189
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	2557	0	0	2557	302	269
Arrive On Green	0.73	0.00	0.00	1.00	0.17	0.17
Sat Flow, veh/h	3711	0	0	3711	1767	1572
Grp Volume(v), veh/h	544	0	0	726	253	189
Grp Sat Flow(s),veh/h/ln	1763	0	0	1763	1767	1572
Q Serve(g_s), s	5.3	0.0	0.0	0.0	14.7	12.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	0.0	14.7	12.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2557	0	0	2557	302	269
V/C Ratio(X)	0.21	0.00	0.00	0.28	0.84	0.70
Avail Cap(c_a), veh/h	2557	0	0	2557	700	623
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	0.00	0.97	1.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	0.0	0.0	42.5	41.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	6.1	3.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.1	6.9	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.9	0.0	0.0	0.3	48.6	44.7
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	544			726	442	
Approach Delay, s/veh	4.9			0.3	47.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	82.9			82.9	23.1
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	53.0			53.0	42.0
Max Q Clear Time (g_c+I1), s	7.3			2.0	16.7
Green Ext Time (p_c), s	4.2			6.1	1.4

Intersection Summary		
HCM 7th Control Delay, s/veh	13.8	
HCM 7th LOS	B	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
Future Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
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		0.94
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	0	1856	1856		1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	347	0		340	548	0				364	753	178
Peak Hour Factor	0.90	0.90	0.90		0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3		3	3	0				3	3	3
Cap, veh/h	0	520			724	2131	0				429	888	210
Arrive On Green	0.00	0.25	0.00		0.82	1.00	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3618	1572		1767	3618	0				1448	2995	707
Grp Volume(v), veh/h	0	347	0		340	548	0				448	424	422
Grp Sat Flow(s),veh/h/ln	0	1763	1572		1767	1763	0				1783	1689	1678
Q Serve(g_s), s	0.0	9.4	0.0		6.0	0.0	0.0				25.1	25.0	25.1
Cycle Q Clear(g_c), s	0.0	9.4	0.0		6.0	0.0	0.0				25.1	25.0	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.81		0.42
Lane Grp Cap(c), veh/h	0	520			724	2131	0				529	501	497
V/C Ratio(X)	0.00	0.67			0.47	0.26	0.00				0.85	0.85	0.85
Avail Cap(c_a), veh/h	0	632			724	2131	0				631	597	594
HCM Platoon Ratio	1.00	1.67	1.67		2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.97	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	37.6	0.0		6.2	0.0	0.0				35.0	35.0	35.0
Incr Delay (d2), s/veh	0.0	6.4	0.0		0.2	0.3	0.0				8.0	8.3	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
%ile BackOfQ(50%),veh/ln	0.0	4.2	0.0		1.7	0.1	0.0				11.8	11.3	11.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	44.0	0.0		6.4	0.3	0.0				43.0	43.4	43.5
LnGrp LOS		D			A	A					D	D	D
Approach Vol, veh/h		347				888						1295	
Approach Delay, s/veh		44.0				2.6						43.3	
Approach LOS		D				A						D	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	48.4	20.6	36.9	69.1
Change Period (Y+Rc), s	5.0	5.0	5.5	5.0
Max Green Setting (Gmax), s	34.0	19.0	37.5	58.0
Max Q Clear Time (g_c+I1), s	18.0	11.4	27.1	2.0
Green Ext Time (p_c), s	0.5	1.0	4.4	2.9

Intersection Summary	
HCM 7th Control Delay, s/veh	29.1
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Future Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.98	1.00		0.97	0.97		0.92	1.00		0.90
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	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		254	308	92	19	324	321	144	749	127	0	0	493
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, %		3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h		321	857	256	98	1574	741	309	976	399	0	514	787
Arrive On Green		0.16	1.00	1.00	0.49	0.49	0.49	0.28	0.28	0.28	0.00	0.00	0.28
Sat Flow, veh/h		3428	1363	407	124	3224	1518	871	3526	1442	0	1856	2844
Grp Volume(v), veh/h		254	0	400	180	163	321	144	749	127	0	0	493
Grp Sat Flow(s),veh/h/ln		1714	0	1771	1744	1604	1518	871	1763	1442	0	1856	1422
Q Serve(g_s), s		7.6	0.0	0.0	0.0	6.2	14.5	15.2	20.7	7.4	0.0	0.0	16.1
Cycle Q Clear(g_c), s		7.6	0.0	0.0	5.8	6.2	14.5	15.2	20.7	7.4	0.0	0.0	16.1
Prop In Lane		1.00		0.23	0.11		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h		321	0	1113	889	783	741	309	976	399	0	514	787
V/C Ratio(X)		0.79	0.00	0.36	0.20	0.21	0.43	0.47	0.77	0.32	0.00	0.00	0.63
Avail Cap(c_a), veh/h		453	0	1113	889	783	741	405	1364	558	0	718	1100
HCM Platoon Ratio		1.67	1.67	1.67	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	0.00	0.00	1.00
Uniform Delay (d), s/veh		43.7	0.0	0.0	15.4	15.5	17.6	33.2	35.2	30.4	0.0	0.0	33.5
Incr Delay (d2), s/veh		6.3	0.0	0.9	0.5	0.6	1.8	1.1	1.8	0.5	0.0	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		3.3	0.0	0.3	2.6	2.4	5.4	3.3	9.1	2.6	0.0	0.0	5.6
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		50.0	0.0	0.9	15.9	16.1	19.5	34.3	36.9	30.8	0.0	0.0	34.3
LnGrp LOS		D		A	B	B	B	C	D	C			C
Approach Vol, veh/h			654			664			1020			493	
Approach Delay, s/veh			20.0			17.7			35.8			34.3	
Approach LOS			B			B			D			C	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	71.7		34.3	14.9	56.7		34.3
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	55.0		41.0	14.0	36.0		41.0
Max Q Clear Time (g_c+I1), s	2.0		18.1	9.6	16.5		22.7
Green Ext Time (p_c), s	3.1		2.3	0.4	3.3		6.7

Intersection Summary	
HCM 7th Control Delay, s/veh	27.6
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	0	63
Future Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	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)	0.99		0.98	1.00		0.96	0.96		1.00	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	24	477	2	1	592	100	2	0	0	59	0	70
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	642	1375	6	45	1144	193	251	0	0	137	16	104
Arrive On Green	0.74	0.74	0.74	1.00	1.00	1.00	0.13	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	741	1846	8	0	1535	259	1238	0	0	550	126	802
Grp Volume(v), veh/h	24	0	479	693	0	0	2	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	741	0	1854	1795	0	0	1238	0	0	1478	0	0
Q Serve(g_s), s	0.7	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	7.1	0.0	0.0	0.0	0.1	0.0	0.0	6.6	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.14	1.00		0.00	0.46		0.54
Lane Grp Cap(c), veh/h	642	0	1381	1382	0	0	251	0	0	258	0	0
V/C Ratio(X)	0.04	0.00	0.35	0.50	0.00	0.00	0.01	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	642	0	1381	1382	0	0	420	0	0	449	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.96	0.92	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.7	0.0	3.5	0.0	0.0	0.0	30.3	0.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.7	1.2	0.0	0.0	0.0	0.0	0.0	0.6	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	0.1	0.0	2.2	0.5	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	2.8	0.0	4.2	1.2	0.0	0.0	30.3	0.0	0.0	33.6	0.0	0.0
LnGrp LOS	A		A	A			C			C		
Approach Vol, veh/h		503			693			2			129	
Approach Delay, s/veh		4.1			1.2			30.3			33.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.4	64.6	15.4	64.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	8.6	2.0	2.1	9.1
Green Ext Time (p_c), s	0.4	3.9	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	5.5
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	0
Future Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	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)	0.99		0.95	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	3	391	141	123	373	0	320	0	169	0	0	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	957	773	373	960	0	433	0	189	0	699	0
Arrive On Green	0.17	0.17	0.17	0.52	0.52	0.00	0.38	0.00	0.38	0.00	0.00	0.00
Sat Flow, veh/h	2	1851	1495	864	1856	0	952	0	503	0	1856	0
Grp Volume(v), veh/h	394	0	141	123	373	0	489	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1853	0	1495	864	1856	0	1455	0	0	0	1856	0
Q Serve(g_s), s	0.0	0.0	6.5	8.9	9.7	0.0	25.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	15.1	0.0	6.5	24.1	9.7	0.0	25.2	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	0.65		0.35	0.00		0.00
Lane Grp Cap(c), veh/h	1004	0	773	373	960	0	622	0	0	0	699	0
V/C Ratio(X)	0.39	0.00	0.18	0.33	0.39	0.00	0.79	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1004	0	773	373	960	0	820	0	0	0	939	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.00	0.95	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	22.3	0.0	18.7	21.1	11.7	0.0	23.4	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	2.4	1.2	0.0	3.7	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	7.8	0.0	2.4	2.0	4.1	0.0	8.9	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.4	0.0	19.2	23.4	12.9	0.0	27.2	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	C		B	C	B		C					
Approach Vol, veh/h		535			496			489			0	
Approach Delay, s/veh		22.3			15.5			27.2			0.0	
Approach LOS		C			B			C				

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	45.4	34.6	45.4	34.6
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	31.0	* 41	31.0	40.5
Max Q Clear Time (g_c+I1), s	26.1	27.2	17.1	0.0
Green Ext Time (p_c), s	1.4	2.9	2.6	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	21.6
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

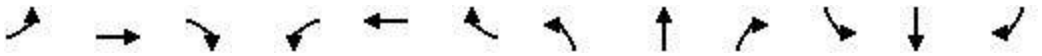
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	675	794	87	0	40
Future Vol, veh/h	0	675	794	87	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	750	882	97	0	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	489
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	522
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	522
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.54
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	522
HCM Lane V/C Ratio	-	-	-	0.085
HCM Control Delay (s/veh)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Future Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.96		0.94	0.99		0.93	0.90		0.69	0.94		0.71
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	106	505	76	62	229	64	116	420	159	81	281	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	665	931	740	403	678	189	267	1146	352	254	738	263
Arrive On Green	0.05	0.49	0.49	0.08	0.98	0.98	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1795	1885	1499	1795	1390	388	902	3582	1099	792	2307	822
Grp Volume(v), veh/h	106	505	76	62	0	293	116	420	159	81	213	177
Grp Sat Flow(s),veh/h/ln	1795	1885	1499	1795	0	1778	902	1791	1099	792	1791	1338
Q Serve(g_s), s	2.9	18.5	2.7	1.7	0.0	0.6	11.6	9.0	11.5	8.8	9.2	10.4
Cycle Q Clear(g_c), s	2.9	18.5	2.7	1.7	0.0	0.6	22.0	9.0	11.5	17.8	9.2	10.4
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	665	931	740	403	0	867	267	1146	352	254	573	428
V/C Ratio(X)	0.16	0.54	0.10	0.15	0.00	0.34	0.43	0.37	0.45	0.32	0.37	0.41
Avail Cap(c_a), veh/h	696	931	740	428	0	867	267	1146	352	254	573	428
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	17.5	13.5	12.7	0.0	0.6	35.3	26.2	27.0	33.0	26.2	26.7
Incr Delay (d2), s/veh	0.1	2.3	0.3	0.2	0.0	1.1	5.1	0.9	4.2	3.3	1.8	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	1.2	8.5	1.0	0.7	0.0	0.4	2.9	4.0	3.4	1.9	4.2	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.6	19.8	13.8	12.8	0.0	1.7	40.3	27.1	31.2	36.3	28.1	29.6
LnGrp LOS	B	B	B	B		A	D	C	C	D	C	C
Approach Vol, veh/h		687			355			695			471	
Approach Delay, s/veh		17.8			3.6			30.2			30.1	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	53.8		37.0	8.6	54.4		37.0				
Change Period (Y+Rc), s	4.5	5.0		5.0	4.5	5.0		5.0				
Max Green Setting (Gmax), s	6.5	47.0		32.0	5.5	48.0		32.0				
Max Q Clear Time (g_c+I1), s	4.9	2.6		24.0	3.7	20.5		19.8				
Green Ext Time (p_c), s	0.0	1.3		2.0	0.0	2.5		1.8				

Intersection Summary		
HCM 7th Control Delay, s/veh	22.1	
HCM 7th LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
Future Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
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)	0.96		0.94	1.00		0.93				1.00		0.83
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	55	566	124	76	259	45				71	158	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	88	749	159	126	2012	342				170	366	212
Arrive On Green	1.00	1.00	1.00	0.02	0.22	0.22				0.22	0.22	0.22
Sat Flow, veh/h	90	1360	289	1795	3021	514				757	1634	947
Grp Volume(v), veh/h	745	0	0	76	151	153				173	0	153
Grp Sat Flow(s),veh/h/ln	1739	0	0	1795	1791	1744				1847	0	1491
Q Serve(g_s), s	0.0	0.0	0.0	4.2	6.8	7.0				8.0	0.0	8.9
Cycle Q Clear(g_c), s	0.0	0.0	0.0	4.2	6.8	7.0				8.0	0.0	8.9
Prop In Lane	0.07		0.17	1.00		0.29				0.41		0.64
Lane Grp Cap(c), veh/h	996	0	0	126	1193	1161				414	0	334
V/C Ratio(X)	0.75	0.00	0.00	0.60	0.13	0.13				0.42	0.00	0.46
Avail Cap(c_a), veh/h	996	0	0	144	1193	1161				462	0	373
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33				1.00	1.00	1.00
Upstream Filter(I)	0.74	0.00	0.00	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	47.5	15.7	15.8				33.2	0.0	33.5
Incr Delay (d2), s/veh	3.8	0.0	0.0	2.8	0.2	0.2				0.3	0.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	2.0	2.9	2.9				3.6	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.8	0.0	0.0	50.3	15.9	16.0				33.5	0.0	33.9
LnGrp LOS	A			D	B	B				C		C
Approach Vol, veh/h		745			380						326	
Approach Delay, s/veh		3.8			22.8						33.7	
Approach LOS		A			C						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	11.5	61.1		27.4		72.6
Change Period (Y+Rc), s	4.5	6.0		5.0		6.0
Max Green Setting (Gmax), s	8.0	51.5		25.0		64.0
Max Q Clear Time (g_c+I1), s	6.2	2.0		10.9		9.0
Green Ext Time (p_c), s	0.0	4.2		1.1		1.2

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)	28	574	3	1	313	42	2	0	2	73	0	46
Future Volume (veh/h)	28	574	3	1	313	42	2	0	2	73	0	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)	0.98		0.93	0.98		0.93	0.96		0.94	0.95		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	29	604	3	1	329	44	2	0	2	77	0	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	114	2286	11	37	2091	275	202	17	165	241	13	122
Arrive On Green	1.00	1.00	1.00	0.68	0.68	0.68	0.22	0.00	0.22	0.22	0.00	0.22
Sat Flow, veh/h	110	3371	17	1	3084	405	668	75	743	822	60	550
Grp Volume(v), veh/h	326	0	310	200	0	174	4	0	0	125	0	0
Grp Sat Flow(s),veh/h/ln	1787	0	1711	1884	0	1606	1486	0	0	1432	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0	6.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.8	0.0	3.9	0.2	0.0	0.0	7.2	0.0	0.0
Prop In Lane	0.09		0.01	0.01		0.25	0.50		0.50	0.62		0.38
Lane Grp Cap(c), veh/h	1251	0	1160	1314	0	1089	384	0	0	376	0	0
V/C Ratio(X)	0.26	0.00	0.27	0.15	0.00	0.16	0.01	0.00	0.00	0.33	0.00	0.00
Avail Cap(c_a), veh/h	1251	0	1160	1314	0	1089	661	0	0	656	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.00	0.48	0.97	0.00	0.97	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	5.8	0.0	5.8	30.3	0.0	0.0	33.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.2	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	1.5	0.0	1.3	0.1	0.0	0.0	2.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.2	0.0	0.3	6.0	0.0	6.1	30.4	0.0	0.0	33.5	0.0	0.0
LnGrp LOS	A		A	A		A	C			C		
Approach Vol, veh/h		636			374			4			125	
Approach Delay, s/veh		0.3			6.1			30.4			33.5	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	27.2	72.8	27.2	72.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	42.0	48.0	42.0	48.0
Max Q Clear Time (g_c+I1), s	9.2	5.9	2.2	2.0
Green Ext Time (p_c), s	0.8	2.6	0.0	4.8

Intersection Summary	
HCM 7th Control Delay, s/veh	5.9
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Future Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	0.98		0.91	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	94	516	74	139	288	24	25	687	564	14	360	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	179	856	122	212	990	82	71	1547	663	64	1288	214
Arrive On Green	0.05	0.28	0.28	0.06	0.30	0.30	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	3483	3084	439	3483	3316	273	60	3397	1456	44	2829	469
Grp Volume(v), veh/h	94	298	292	139	154	158	377	335	564	227	0	208
Grp Sat Flow(s),veh/h/ln	1742	1791	1732	1742	1791	1798	1827	1630	1456	1744	0	1598
Q Serve(g_s), s	2.3	12.6	12.8	3.4	5.8	5.9	0.0	12.3	30.1	0.0	0.0	7.1
Cycle Q Clear(g_c), s	2.3	12.6	12.8	3.4	5.8	5.9	11.9	12.3	30.1	6.5	0.0	7.1
Prop In Lane	1.00		0.25	1.00		0.15	0.07		1.00	0.06		0.29
Lane Grp Cap(c), veh/h	179	497	481	212	535	537	876	742	663	838	0	728
V/C Ratio(X)	0.53	0.60	0.61	0.66	0.29	0.29	0.43	0.45	0.85	0.27	0.00	0.29
Avail Cap(c_a), veh/h	239	595	575	319	636	638	1205	1045	934	1130	0	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.4	27.3	27.4	40.1	23.5	23.6	16.2	16.3	21.1	14.7	0.0	14.9
Incr Delay (d2), s/veh	2.4	1.2	1.3	3.4	0.3	0.3	0.3	0.4	5.4	0.2	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	1.0	5.5	5.4	1.6	2.5	2.5	5.0	4.4	10.7	2.7	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.8	28.5	28.7	43.5	23.8	23.9	16.5	16.7	26.5	14.9	0.0	15.1
LnGrp LOS	D	C	C	D	C	C	B	B	C	B		B
Approach Vol, veh/h		684			451			1276			435	
Approach Delay, s/veh		30.6			29.9			21.0			15.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	45.8	9.5	32.1		45.8	11.3	30.2
Change Period (Y+Rc), s	6.0	5.0	6.0		6.0	6.0	* 6
Max Green Setting (Gmax), s	56.0	6.0	31.0		56.0	8.0	* 29
Max Q Clear Time (g_c+I1), s	32.1	4.3	7.9		9.1	5.4	14.8
Green Ext Time (p_c), s	7.7	0.0	1.9		3.1	0.1	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	23.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	917	372	177	254	57
Future Volume (veh/h)	122	917	372	177	254	57
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)	0.99			0.96	1.00	0.90
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	128	965	392	186	267	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	594	2449	1599	746	303	68
Arrive On Green	0.68	0.68	0.68	0.68	0.22	0.22
Sat Flow, veh/h	837	3676	2432	1091	1399	314
Grp Volume(v), veh/h	128	965	299	279	328	0
Grp Sat Flow(s),veh/h/ln	837	1791	1791	1638	1719	0
Q Serve(g_s), s	6.5	11.1	6.0	6.2	17.6	0.0
Cycle Q Clear(g_c), s	12.7	11.1	6.0	6.2	17.6	0.0
Prop In Lane	1.00			0.67	0.81	0.18
Lane Grp Cap(c), veh/h	594	2449	1224	1120	372	0
V/C Ratio(X)	0.22	0.39	0.24	0.25	0.88	0.00
Avail Cap(c_a), veh/h	594	2449	1224	1120	678	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.2	6.5	5.7	5.7	36.1	0.0
Incr Delay (d2), s/veh	0.5	0.3	0.5	0.5	6.9	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	1.2	3.9	2.2	2.1	8.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.7	6.8	6.2	6.3	43.0	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		1093	578		328	
Approach Delay, s/veh		7.0	6.2		43.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		70.0		25.0	70.0
Change Period (Y+Rc), s		5.0		4.5	5.0
Max Green Setting (Gmax), s		48.0		37.5	48.0
Max Q Clear Time (g_c+I1), s		8.2		19.6	14.7
Green Ext Time (p_c), s		4.4		1.0	10.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.7
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
Future Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
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)	0.97		0.89	1.00		0.90				1.00		0.89
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	19	1183	31	24	545	14				22	5	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	687	1343	35	192	2621	67				91	21	136
Arrive On Green	0.74	0.74	0.74	1.00	1.00	1.00				0.16	0.16	0.16
Sat Flow, veh/h	829	1822	48	464	3556	91				577	131	866
Grp Volume(v), veh/h	19	0	1214	24	274	285				60	0	0
Grp Sat Flow(s),veh/h/ln	829	0	1870	464	1791	1856				1574	0	0
Q Serve(g_s), s	0.6	0.0	46.2	3.5	0.0	0.0				3.2	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	46.2	49.7	0.0	0.0				3.2	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.05				0.37		0.55
Lane Grp Cap(c), veh/h	687	0	1378	192	1320	1368				248	0	0
V/C Ratio(X)	0.03	0.00	0.88	0.13	0.21	0.21				0.24	0.00	0.00
Avail Cap(c_a), veh/h	687	0	1378	192	1320	1368				398	0	0
HCM Platoon Ratio	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				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.4	0.0	9.4	16.4	0.0	0.0				35.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	8.3	1.3	0.4	0.3				0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	18.0	0.4	0.1	0.1				1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.4	0.0	17.7	17.7	0.4	0.3				35.5	0.0	0.0
LnGrp LOS	A		B	B	A	A				D		
Approach Vol, veh/h		1233			583						60	
Approach Delay, s/veh		17.5			1.1						35.5	
Approach LOS		B			A						D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	20.0	75.0	75.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	61.0	61.0
Max Q Clear Time (g_c+I1), s	5.2	51.7	48.2
Green Ext Time (p_c), s	0.2	2.6	8.7

Intersection Summary	
HCM 7th Control Delay, s/veh	13.0
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	1127	536	12	6	18
Future Vol, veh/h	18	1127	536	12	6	18
Conflicting Peds, #/hr	0	0	0	95	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	1186	564	13	6	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	672	0	-	0	1903	383
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	1237	-
Critical Hdwy	4.115	-	-	-	6.615	6.915
Critical Hdwy Stg 1	-	-	-	-	5.815	-
Critical Hdwy Stg 2	-	-	-	-	5.415	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	922	-	-	-	68	618
Stage 1	-	-	-	-	476	-
Stage 2	-	-	-	-	275	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	839	-	-	-	55	562
Mov Cap-2 Maneuver	-	-	-	-	55	-
Stage 1	-	-	-	-	423	-
Stage 2	-	-	-	-	250	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.15	0	29.71
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	839	-	-	-	171
HCM Lane V/C Ratio	0.023	-	-	-	0.148
HCM Control Delay (s/veh)	9.4	-	-	-	29.7
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	1101	527	35	8	21
Future Vol, veh/h	32	1101	527	35	8	21
Conflicting Peds, #/hr	0	0	0	96	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	34	1159	555	37	8	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	688	0	-	0	1919	392
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	1250	-
Critical Hdwy	4.115	-	-	-	6.615	6.915
Critical Hdwy Stg 1	-	-	-	-	5.815	-
Critical Hdwy Stg 2	-	-	-	-	5.415	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	910	-	-	-	67	610
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	271	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	827	-	-	-	53	555
Mov Cap-2 Maneuver	-	-	-	-	53	-
Stage 1	-	-	-	-	413	-
Stage 2	-	-	-	-	246	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.27	0	34.27
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	827	-	-	-	153
HCM Lane V/C Ratio	0.041	-	-	-	0.199
HCM Control Delay (s/veh)	9.5	-	-	-	34.3
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	63
Future Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	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)	0.96		0.89	1.00		0.89	0.94		0.89	0.92		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	88	1063	16	19	496	73	29	11	9	67	15	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	639	1275	19	218	2123	310	215	80	53	169	49	131
Arrive On Green	0.69	0.69	0.69	1.00	1.00	1.00	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	816	1848	28	527	3078	449	757	390	258	557	239	640
Grp Volume(v), veh/h	88	0	1079	19	287	282	49	0	0	148	0	0
Grp Sat Flow(s),veh/h/ln	816	0	1876	527	1791	1736	1405	0	0	1436	0	0
Q Serve(g_s), s	3.6	0.0	39.9	2.2	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0
Cycle Q Clear(g_c), s	3.6	0.0	39.9	42.1	0.0	0.0	2.4	0.0	0.0	8.4	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.26	0.59		0.18	0.45		0.45
Lane Grp Cap(c), veh/h	639	0	1294	218	1235	1198	348	0	0	349	0	0
V/C Ratio(X)	0.14	0.00	0.83	0.09	0.23	0.24	0.14	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	639	0	1294	218	1235	1198	397	0	0	399	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.1	0.0	10.8	12.8	0.0	0.0	30.9	0.0	0.0	33.2	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	6.4	0.8	0.4	0.5	0.2	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	0.0	15.8	0.3	0.2	0.2	0.9	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.6	0.0	17.2	13.6	0.4	0.5	31.1	0.0	0.0	34.1	0.0	0.0
LnGrp LOS	A		B	B	A	A	C			C		
Approach Vol, veh/h		1167			588			49			148	
Approach Delay, s/veh		16.3			0.9			31.1			34.1	
Approach LOS		B			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.5		70.5		24.5		70.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.8		62.2		22.8		62.2				
Max Q Clear Time (g_c+I1), s		10.4		44.1		4.4		41.9				
Green Ext Time (p_c), s		0.6		3.6		0.2		10.2				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.4
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1074	9	15	541	17	15
Future Vol, veh/h	1074	9	15	541	17	15
Conflicting Peds, #/hr	0	91	0	0	41	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1131	9	16	569	18	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1231	0	1584	1226
Stage 1	-	-	-	-	1226	-
Stage 2	-	-	-	-	357	-
Critical Hdwy	-	-	4.115	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	-	-	2.2095	-	3.5095	3.3095
Pot Cap-1 Maneuver	-	-	568	-	110	218
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	682	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	519	-	93	199
Mov Cap-2 Maneuver	-	-	-	-	93	-
Stage 1	-	-	-	-	254	-
Stage 2	-	-	-	-	636	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	44.37
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	124	-	-	519	-
HCM Lane V/C Ratio	0.271	-	-	0.03	-
HCM Control Delay (s/veh)	44.4	-	-	12.2	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	1	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	23
Future Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	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)	0.97		0.90	0.99		0.91	0.94		0.95	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	31	1102	14	18	547	39	14	4	23	15	3	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	706	1435	18	465	2606	185	93	39	103	96	33	104
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	814	1854	24	503	3367	239	348	322	857	369	277	861
Grp Volume(v), veh/h	31	0	1116	18	290	296	41	0	0	42	0	0
Grp Sat Flow(s),veh/h/ln	814	0	1878	503	1791	1815	1527	0	0	1507	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.2	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.13	0.34		0.56	0.36		0.57
Lane Grp Cap(c), veh/h	706	0	1453	465	1386	1405	235	0	0	233	0	0
V/C Ratio(X)	0.04	0.00	0.77	0.04	0.21	0.21	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	706	0	1453	465	1386	1405	398	0	0	395	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	37.7	0.0	0.0	37.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.9	0.2	0.3	0.3	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.6	0.0	0.1	0.1	0.9	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.0	3.9	0.2	0.3	0.3	38.0	0.0	0.0	38.1	0.0	0.0
LnGrp LOS	A		A	A	A	A	D			D		
Approach Vol, veh/h		1147			604			41			42	
Approach Delay, s/veh		3.8			0.3			38.0			38.1	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.5		78.5		16.5		78.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		63.0		22.0		63.0				
Max Q Clear Time (g_c+I1), s		4.2		2.0		4.1		2.0				
Green Ext Time (p_c), s		0.1		4.4		0.1		15.7				

Intersection Summary												
HCM 7th Control Delay, s/veh			4.2									
HCM 7th LOS			A									

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	21	1062	0	0	550	37	4	2	65	10	0	20
Future Vol, veh/h	21	1062	0	0	550	37	4	2	65	10	0	20
Conflicting Peds, #/hr	0	0	81	0	0	89	0	0	0	0	0	14
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	22	1118	0	0	579	39	4	2	68	11	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	-	-	-	0	1466	1869	1118	1851	1850	412
Stage 1	-	-	-	-	-	-	1162	1162	-	687	687	-
Stage 2	-	-	-	-	-	-	303	707	-	1163	1162	-
Critical Hdwy	4.115	-	-	-	-	-	7.315	6.515	6.215	7.315	6.515	6.915
Critical Hdwy Stg 1	-	-	-	-	-	-	6.115	5.515	-	6.515	5.515	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.515	5.515	-	6.115	5.515	-
Follow-up Hdwy	2.2095	-	-	-	-	-	3.5095	4.0095	3.3095	3.5095	4.0095	3.3095
Pot Cap-1 Maneuver	895	-	0	0	-	-	98	73	253	52	75	592
Stage 1	-	-	0	0	-	-	238	270	-	406	448	-
Stage 2	-	-	0	0	-	-	684	439	-	238	270	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	819	-	-	-	-	-	90	65	253	32	66	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	90	65	-	32	66	-
Stage 1	-	-	-	-	-	-	232	263	-	371	410	-
Stage 2	-	-	-	-	-	-	649	402	-	167	263	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	30.66	68.55
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	214	819	-	-	-	87
HCM Lane V/C Ratio	0.35	0.027	-	-	-	0.364
HCM Control Delay (s/veh)	30.7	9.5	-	-	-	68.5
HCM Lane LOS	D	A	-	-	-	F
HCM 95th %tile Q(veh)	1.5	0.1	-	-	-	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	1107	566	116	38	21
Future Volume (veh/h)	30	1107	566	116	38	21
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			0.89	1.00	0.96
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	32	1165	596	122	40	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	960	1478	768	156	130	72
Arrive On Green	0.94	1.00	0.27	0.27	0.12	0.12
Sat Flow, veh/h	1795	1885	2986	589	1075	591
Grp Volume(v), veh/h	32	1165	368	350	63	0
Grp Sat Flow(s),veh/h/ln	1795	1885	1791	1690	1693	0
Q Serve(g_s), s	0.0	0.0	18.1	18.2	3.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	18.1	18.2	3.2	0.0
Prop In Lane	1.00			0.35	0.63	0.35
Lane Grp Cap(c), veh/h	960	1478	475	449	205	0
V/C Ratio(X)	0.03	0.79	0.77	0.78	0.31	0.00
Avail Cap(c_a), veh/h	960	1478	886	836	481	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	1.00	0.00
Uniform Delay (d), s/veh	1.2	0.0	32.3	32.3	38.1	0.0
Incr Delay (d2), s/veh	0.0	4.3	11.3	12.3	0.8	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	0.0	1.8	9.1	8.8	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	1.2	4.3	43.6	44.6	38.9	0.0
LnGrp LOS	A	A	D	D	D	
Approach Vol, veh/h		1197	718		63	
Approach Delay, s/veh		4.3	44.1		38.9	
Approach LOS		A	D		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		49.2	29.7		16.0	79.0
Change Period (Y+Rc), s		4.5	* 4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	* 47		27.0	59.0
Max Q Clear Time (g_c+I1), s		2.0	20.2		5.2	2.0
Green Ext Time (p_c), s		0.0	5.0		0.1	16.7

Intersection Summary	
HCM 7th Control Delay, s/veh	19.8
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1145	0	0	527	157	122
Future Volume (veh/h)	1145	0	0	527	157	122
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	1885	0	0	1885	1885	1885
Adj Flow Rate, veh/h	1205	0	0	555	165	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2794	0	0	2794	209	186
Arrive On Green	0.78	0.00	0.00	1.00	0.12	0.12
Sat Flow, veh/h	3770	0	0	3770	1795	1598
Grp Volume(v), veh/h	1205	0	0	555	165	128
Grp Sat Flow(s),veh/h/ln	1791	0	0	1791	1795	1598
Q Serve(g_s), s	11.8	0.0	0.0	0.0	9.5	8.2
Cycle Q Clear(g_c), s	11.8	0.0	0.0	0.0	9.5	8.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2794	0	0	2794	209	186
V/C Ratio(X)	0.43	0.00	0.00	0.20	0.79	0.69
Avail Cap(c_a), veh/h	2794	0	0	2794	508	452
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.48	0.00	0.00	0.99	1.00	1.00
Uniform Delay (d), s/veh	3.9	0.0	0.0	0.0	45.6	45.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	6.6	4.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	0.1	4.6	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.1	0.0	0.0	0.2	52.2	49.5
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	1205			555	293	
Approach Delay, s/veh	4.1			0.2	51.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	88.7			88.7	17.3
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	65.0			65.0	30.0
Max Q Clear Time (g_c+I1), s	13.8			2.0	11.5
Green Ext Time (p_c), s	12.5			4.4	0.8

Intersection Summary		
HCM 7th Control Delay, s/veh	9.7	
HCM 7th LOS	A	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
Future Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
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		0.95
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	0	1885	1885		1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	451	0		480	368	0				337	779	186
Peak Hour Factor	0.95	0.95	0.95		0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1		1	1	0				1	1	1
Cap, veh/h	0	1030			504	2204	0				387	894	213
Arrive On Green	0.00	0.48	0.00		0.47	1.00	0.00				0.29	0.29	0.29
Sat Flow, veh/h	0	3676	1598		1795	3676	0				1355	3132	747
Grp Volume(v), veh/h	0	451	0		480	368	0				452	426	424
Grp Sat Flow(s),veh/h/ln	0	1791	1598		1795	1791	0				1817	1716	1702
Q Serve(g_s), s	0.0	8.8	0.0		27.2	0.0	0.0				25.1	25.1	25.1
Cycle Q Clear(g_c), s	0.0	8.8	0.0		27.2	0.0	0.0				25.1	25.1	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.75		0.44
Lane Grp Cap(c), veh/h	0	1030			504	2204	0				519	490	486
V/C Ratio(X)	0.00	0.44			0.95	0.17	0.00				0.87	0.87	0.87
Avail Cap(c_a), veh/h	0	1030			627	2204	0				574	542	538
HCM Platoon Ratio	1.00	1.67	1.67		1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.88	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.9	0.0		27.5	0.0	0.0				36.0	36.0	36.0
Incr Delay (d2), s/veh	0.0	1.2	0.0		20.7	0.2	0.0				11.8	12.4	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
%ile BackOfQ(50%),veh/ln	0.0	3.5	0.0		12.6	0.1	0.0				12.6	12.0	11.9
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	23.1	0.0		48.1	0.2	0.0				47.8	48.4	48.6
LnGrp LOS		C			D	A					D	D	D
Approach Vol, veh/h		451				848						1302	
Approach Delay, s/veh		23.1				27.3						48.3	
Approach LOS		C				C						D	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	34.8	35.5		35.8		70.2			
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0			
Max Green Setting (Gmax), s	27.6	20.0		33.5		62.0			
Max Q Clear Time (g_c+I1), s	29.2	10.8		27.1		2.0			
Green Ext Time (p_c), s	0.6	1.5		3.2		1.9			

Intersection Summary	
HCM 7th Control Delay, s/veh	37.1
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Future Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.90	1.00		0.93	1.00		0.88	0.97		0.97
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No			No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		192	400	200	46	437	255	166	476	173	79	119	162
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		617	675	338	93	728	547	180	1115	436	145	201	484
Arrive On Green		0.12	0.40	0.40	0.37	0.37	0.37	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h		3483	1136	568	124	1967	1480	1106	3582	1401	315	646	1555
Grp Volume(v), veh/h		192	0	600	116	367	255	166	476	173	198	0	162
Grp Sat Flow(s),veh/h/ln		1742	0	1705	461	1630	1480	1106	1791	1401	961	0	1555
Q Serve(g_s), s		5.3	0.0	29.4	4.8	19.4	13.9	10.8	11.2	10.3	11.0	0.0	8.5
Cycle Q Clear(g_c), s		5.3	0.0	29.4	34.2	19.4	13.9	33.0	11.2	10.3	22.2	0.0	8.5
Prop In Lane		1.00		0.33	0.40		1.00	1.00		1.00	0.40		1.00
Lane Grp Cap(c), veh/h		617	0	1013	218	603	547	180	1115	436	347	0	484
V/C Ratio(X)		0.31	0.00	0.59	0.53	0.61	0.47	0.92	0.43	0.40	0.57	0.00	0.33
Avail Cap(c_a), veh/h		617	0	1013	298	707	642	180	1115	436	347	0	484
HCM Platoon Ratio		0.67	0.67	0.67	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	0.00	1.00
Uniform Delay (d), s/veh		40.8	0.0	21.8	31.6	27.1	25.4	49.4	29.0	28.7	33.7	0.0	28.1
Incr Delay (d2), s/veh		0.3	0.0	2.5	9.1	4.5	2.8	45.0	0.3	0.6	2.2	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		2.4	0.0	13.2	3.5	8.3	5.3	6.7	4.9	3.5	4.8	0.0	3.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		41.1	0.0	24.3	40.7	31.7	28.3	94.4	29.2	29.3	35.9	0.0	28.5
LnGrp LOS		D		C	D	C	C	F	C	C	D		C
Approach Vol, veh/h			792			738			815			360	
Approach Delay, s/veh			28.4			31.9			42.5			32.6	
Approach LOS			C			C			D			C	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	68.0		38.0	23.8	44.2		38.0					
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0					
Max Green Setting (Gmax), s	63.0		33.0	12.0	46.0		33.0					
Max Q Clear Time (g_c+I1), s	31.4		24.2	7.3	36.2		35.0					
Green Ext Time (p_c), s	5.2		1.4	0.2	3.1		0.0					

Intersection Summary	
HCM 7th Control Delay, s/veh	34.2
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	61
Future Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	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)	0.98		0.97	1.00		0.91	1.00		1.00	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	41	606	4	2	674	92	0	2	3	116	2	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	556	1262	8	46	1080	147	0	136	204	240	18	100
Arrive On Green	0.68	0.68	0.68	1.00	1.00	1.00	0.00	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	691	1870	12	1	1601	218	0	681	1021	834	91	502
Grp Volume(v), veh/h	41	0	610	768	0	0	0	0	5	182	0	0
Grp Sat Flow(s),veh/h/ln	691	0	1883	1819	0	0	0	0	1701	1427	0	0
Q Serve(g_s), s	1.6	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.2	8.1	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.2	9.3	0.0	0.0
Prop In Lane	1.00		0.01	0.00		0.12	0.00		0.60	0.64		0.35
Lane Grp Cap(c), veh/h	556	0	1271	1273	0	0	0	0	340	359	0	0
V/C Ratio(X)	0.07	0.00	0.48	0.60	0.00	0.00	0.00	0.00	0.01	0.51	0.00	0.00
Avail Cap(c_a), veh/h	556	0	1271	1273	0	0	0	0	447	447	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.90	0.88	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.5	0.0	6.2	0.0	0.0	0.0	0.0	0.0	25.7	29.2	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.2	1.9	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	4.5	0.7	0.0	0.0	0.0	0.0	0.1	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.7	0.0	7.4	1.9	0.0	0.0	0.0	0.0	25.7	29.6	0.0	0.0
LnGrp LOS	A		A	A					C	C		
Approach Vol, veh/h		651			768			5			182	
Approach Delay, s/veh		7.2			1.9			25.7			29.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	21.0	59.0	21.0	59.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	11.3	2.0	2.2	14.5
Green Ext Time (p_c), s	0.5	4.6	0.0	3.4

Intersection Summary	
HCM 7th Control Delay, s/veh	7.3
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	0	2
Future Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	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)	0.96		0.93	0.98		0.89	1.00		0.91	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	11	453	262	276	557	1	208	0	141	0	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	54	1141	914	539	1158	2	306	4	162	0	0	443
Arrive On Green	1.00	1.00	1.00	0.62	0.62	0.62	0.28	0.00	0.28	0.00	0.00	0.28
Sat Flow, veh/h	14	1854	1485	729	1881	3	842	15	581	0	0	1592
Grp Volume(v), veh/h	464	0	262	276	0	558	349	0	0	0	0	2
Grp Sat Flow(s),veh/h/ln	1868	0	1485	729	0	1884	1439	0	0	0	0	1592
Q Serve(g_s), s	0.0	0.0	0.0	18.7	0.0	12.9	18.1	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	18.7	0.0	12.9	18.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	0.02		1.00	1.00		0.00	0.60		0.40	0.00		1.00
Lane Grp Cap(c), veh/h	1196	0	914	539	0	1160	472	0	0	0	0	443
V/C Ratio(X)	0.39	0.00	0.29	0.51	0.00	0.48	0.74	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1196	0	914	539	0	1160	557	0	0	0	0	527
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.87	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.5	0.0	8.4	27.5	0.0	0.0	0.0	0.0	20.9
Incr Delay (d2), s/veh	0.8	0.0	0.7	3.5	0.0	1.4	4.3	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	0.3	0.0	0.2	3.1	0.0	5.1	6.7	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.8	0.0	0.7	13.0	0.0	9.8	31.8	0.0	0.0	0.0	0.0	20.9
LnGrp LOS	A		A	B		A	C					C
Approach Vol, veh/h		726			834			349			2	
Approach Delay, s/veh		0.8			10.9			31.8			20.9	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.2	26.8	53.2	26.8
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	45.0	* 27	45.0	26.5
Max Q Clear Time (g_c+I1), s	20.7	20.5	2.0	2.1
Green Ext Time (p_c), s	6.7	1.2	4.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

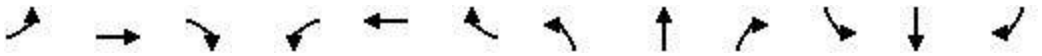
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	758	794	6	0	22
Future Vol, veh/h	0	758	794	6	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	798	836	6	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	421
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.31
Pot Cap-1 Maneuver	0	-	-	-	0	584
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	584
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.42
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	584
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s/veh)	-	-	-	11.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	71
Future Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	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)	0.96		0.91	0.97		0.95	0.86		0.70	0.89		0.67
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	78	464	73	53	200	44	41	280	102	41	228	79
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	233	523	404	600	768	169	247	987	307	264	655	203
Arrive On Green	0.05	0.28	0.28	0.10	0.17	0.17	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1767	1856	1434	1767	1458	321	912	3526	1095	882	2338	724
Grp Volume(v), veh/h	78	464	73	53	0	244	41	280	102	41	165	142
Grp Sat Flow(s),veh/h/ln	1767	1856	1434	1767	0	1779	912	1763	1095	882	1763	1299
Q Serve(g_s), s	3.4	24.0	3.9	0.0	0.0	11.9	3.8	6.2	7.4	3.8	7.4	8.8
Cycle Q Clear(g_c), s	3.4	24.0	3.9	0.0	0.0	11.9	12.6	6.2	7.4	10.0	7.4	8.8
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	233	523	404	600	0	937	247	987	307	264	494	364
V/C Ratio(X)	0.33	0.89	0.18	0.09	0.00	0.26	0.17	0.28	0.33	0.16	0.33	0.39
Avail Cap(c_a), veh/h	315	928	717	600	0	937	247	987	307	264	494	364
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.99	0.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	34.4	27.2	31.8	0.0	24.5	34.2	28.2	28.6	32.1	28.6	29.1
Incr Delay (d2), s/veh	0.8	19.6	1.0	0.1	0.0	0.7	1.4	0.7	2.9	1.2	1.8	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	1.5	13.5	1.4	1.2	0.0	5.8	0.9	2.7	2.2	0.9	3.4	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.8	54.0	28.2	31.9	0.0	25.1	35.6	28.9	31.5	33.3	30.4	32.2
LnGrp LOS	C	D	C	C		C	D	C	C	C	C	C
Approach Vol, veh/h		615			297			423			348	
Approach Delay, s/veh		48.0			26.3			30.2			31.5	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	57.6		33.0	33.8	33.2		33.0				
Change Period (Y+Rc), s	4.5	5.0		5.0	5.0	* 5		5.0				
Max Green Setting (Gmax), s	9.5	48.0		28.0	7.5	* 50		28.0				
Max Q Clear Time (g_c+I1), s	5.4	13.9		14.6	2.0	26.0		12.0				
Green Ext Time (p_c), s	0.0	1.1		1.5	0.0	2.2		1.4				

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)	59	228	260	104	241	62	0	0	0	26	118	27
Future Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
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)	0.94		0.89	1.00		0.91				1.00		0.77
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	66	253	289	116	268	69				29	131	30
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	91	279	299	323	1802	450				125	544	119
Arrive On Green	0.70	0.70	0.70	0.37	1.00	1.00				0.23	0.23	0.23
Sat Flow, veh/h	123	671	719	1767	2733	682				544	2356	514
Grp Volume(v), veh/h	608	0	0	116	170	167				98	0	92
Grp Sat Flow(s),veh/h/ln	1512	0	0	1767	1763	1652				1828	0	1586
Q Serve(g_s), s	27.2	0.0	0.0	4.8	0.0	0.0				4.3	0.0	4.8
Cycle Q Clear(g_c), s	37.0	0.0	0.0	4.8	0.0	0.0				4.3	0.0	4.8
Prop In Lane	0.11		0.48	1.00		0.41				0.30		0.32
Lane Grp Cap(c), veh/h	669	0	0	323	1162	1089				422	0	366
V/C Ratio(X)	0.91	0.00	0.00	0.36	0.15	0.15				0.23	0.00	0.25
Avail Cap(c_a), veh/h	808	0	0	323	1162	1089				457	0	397
HCM Platoon Ratio	1.67	1.67	1.67	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.72	0.00	0.00	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	0.0	27.4	0.0	0.0				31.3	0.0	31.4
Incr Delay (d2), s/veh	14.2	0.0	0.0	0.2	0.3	0.3				0.1	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
%ile BackOfQ(50%),veh/ln	8.9	0.0	0.0	1.9	0.1	0.1				1.9	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	0.0	0.0	27.7	0.3	0.3				31.4	0.0	31.6
LnGrp LOS	C			C	A	A				C		C
Approach Vol, veh/h		608			453						190	
Approach Delay, s/veh		28.5			7.3						31.5	
Approach LOS		C			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	14.3	47.6		28.1		71.9
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	8.5	* 51		25.0		64.0
Max Q Clear Time (g_c+I1), s	6.8	39.0		6.8		2.0
Green Ext Time (p_c), s	0.0	2.6		0.6		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	21.3
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)	10	244	0	7	383	24	2	0	3	22	0	22
Future Volume (veh/h)	10	244	0	7	383	24	2	0	3	22	0	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)	0.98		1.00	0.97		0.93	0.95		0.94	0.94		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	11	271	0	8	426	27	2	0	3	24	0	24
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	95	2221	0	54	2188	137	160	19	193	197	16	159
Arrive On Green	0.22	0.22	0.00	0.67	0.67	0.67	0.23	0.00	0.23	0.23	0.00	0.23
Sat Flow, veh/h	83	3376	0	24	3243	203	487	85	858	633	73	705
Grp Volume(v), veh/h	150	132	0	243	0	218	5	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	1770	1604	0	1837	0	1633	1430	0	0	1411	0	0
Q Serve(g_s), s	0.0	6.6	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	6.4	6.6	0.0	4.9	0.0	5.0	0.2	0.0	0.0	2.4	0.0	0.0
Prop In Lane	0.07		0.00	0.03		0.12	0.40		0.60	0.50		0.50
Lane Grp Cap(c), veh/h	1233	1082	0	1277	0	1102	373	0	0	372	0	0
V/C Ratio(X)	0.12	0.12	0.00	0.19	0.00	0.20	0.01	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1233	1082	0	1277	0	1102	519	0	0	517	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.39	0.39	0.00	0.98	0.00	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.1	15.2	0.0	6.1	0.0	6.1	30.1	0.0	0.0	30.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.3	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.5	0.0	1.9	0.0	1.7	0.1	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.2	15.3	0.0	6.4	0.0	6.5	30.1	0.0	0.0	31.1	0.0	0.0
LnGrp LOS	B	B		A		A	C			C		
Approach Vol, veh/h		282			461			5			48	
Approach Delay, s/veh		15.3			6.5			30.1			31.1	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	27.5	72.5	27.5	72.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	33.0	57.0	33.0	57.0
Max Q Clear Time (g_c+I1), s	4.4	7.0	2.2	8.6
Green Ext Time (p_c), s	0.2	3.3	0.0	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	11.2
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	62
Future Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	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		0.89	1.00		0.91	0.98		0.93	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	48	181	70	309	328	42	63	450	268	14	568	69
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	717	260	417	1202	152	137	848	508	59	1048	125
Arrive On Green	0.04	0.29	0.29	0.12	0.39	0.39	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	3428	2445	888	3428	3111	393	218	2433	1458	27	3007	359
Grp Volume(v), veh/h	48	127	124	309	184	186	210	303	268	348	0	303
Grp Sat Flow(s),veh/h/ln	1714	1763	1570	1714	1763	1742	1047	1604	1458	1813	0	1580
Q Serve(g_s), s	1.0	4.2	4.6	6.6	5.4	5.6	3.9	11.6	11.2	0.0	0.0	11.8
Cycle Q Clear(g_c), s	1.0	4.2	4.6	6.6	5.4	5.6	15.7	11.6	11.2	11.4	0.0	11.8
Prop In Lane	1.00		0.57	1.00		0.23	0.30		1.00	0.04		0.23
Lane Grp Cap(c), veh/h	144	517	460	417	681	673	427	559	508	681	0	551
V/C Ratio(X)	0.33	0.25	0.27	0.74	0.27	0.28	0.49	0.54	0.53	0.51	0.00	0.55
Avail Cap(c_a), veh/h	225	648	577	720	903	892	554	716	651	852	0	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	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	35.5	20.5	20.7	32.3	16.0	16.1	20.2	19.9	19.8	19.9	0.0	20.0
Incr Delay (d2), s/veh	1.4	0.2	0.3	2.6	0.2	0.2	0.9	0.8	0.8	0.6	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.7	1.7	2.9	2.2	2.2	3.2	4.2	3.8	4.8	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	20.7	21.0	34.9	16.2	16.3	21.1	20.7	20.6	20.5	0.0	20.9
LnGrp LOS	D	C	C	C	B	B	C	C	C	C		C
Approach Vol, veh/h		299			679			781			651	
Approach Delay, s/veh		23.4			24.7			20.8			20.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	32.6	8.2	35.4	32.6	15.3	28.3
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	34.0	5.0	39.0	34.0	16.0	* 28
Max Q Clear Time (g_c+I1), s	17.7	3.0	7.6	13.8	8.6	6.6
Green Ext Time (p_c), s	4.1	0.0	2.5	4.1	0.7	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	61	356	548	283	97	63
Future Volume (veh/h)	61	356	548	283	97	63
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			0.92	1.00	0.93
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	68	396	609	314	108	70
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	434	2488	1540	794	180	117
Arrive On Green	0.71	0.71	0.71	0.71	0.18	0.18
Sat Flow, veh/h	599	3618	2274	1124	984	638
Grp Volume(v), veh/h	68	396	492	431	179	0
Grp Sat Flow(s),veh/h/ln	599	1763	1763	1543	1632	0
Q Serve(g_s), s	4.7	3.4	10.3	10.3	9.1	0.0
Cycle Q Clear(g_c), s	15.0	3.4	10.3	10.3	9.1	0.0
Prop In Lane	1.00			0.73	0.60	0.39
Lane Grp Cap(c), veh/h	434	2488	1244	1089	299	0
V/C Ratio(X)	0.16	0.16	0.40	0.40	0.60	0.00
Avail Cap(c_a), veh/h	434	2488	1244	1089	562	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.5	4.4	5.4	5.4	33.7	0.0
Incr Delay (d2), s/veh	0.7	0.1	0.9	1.1	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	0.7	1.1	3.5	3.1	3.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.2	4.5	6.4	6.5	35.6	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		464	923		179	
Approach Delay, s/veh		5.2	6.4		35.6	
Approach LOS		A	A		D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	21.5	68.5	68.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	31.0	49.0	49.0
Max Q Clear Time (g_c+I1), s	11.1	12.3	17.0
Green Ext Time (p_c), s	0.5	8.1	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	9.4
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
Future Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
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)	0.98		0.91	0.98		0.88				1.00		0.91
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	14	470	19	19	870	16				33	1	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	527	1294	52	639	1329	24				91	3	146
Arrive On Green	0.73	0.73	0.73	1.00	1.00	1.00				0.15	0.15	0.15
Sat Flow, veh/h	609	1763	71	878	1811	33				588	18	944
Grp Volume(v), veh/h	14	0	489	19	0	886				87	0	0
Grp Sat Flow(s),veh/h/ln	609	0	1834	878	0	1844				1550	0	0
Q Serve(g_s), s	0.6	0.0	8.7	0.3	0.0	0.0				4.5	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	8.7	9.0	0.0	0.0				4.5	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.02				0.38		0.61
Lane Grp Cap(c), veh/h	527	0	1346	639	0	1354				240	0	0
V/C Ratio(X)	0.03	0.00	0.36	0.03	0.00	0.65				0.36	0.00	0.00
Avail Cap(c_a), veh/h	527	0	1346	639	0	1354				413	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.3	0.0	4.3	0.6	0.0	0.0				34.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.1	0.0	2.5				0.9	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
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.9	0.0	0.0	0.9				1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.3	0.0	5.1	0.7	0.0	2.5				35.0	0.0	0.0
LnGrp LOS	A		A	A		A				C		
Approach Vol, veh/h		503			905						87	
Approach Delay, s/veh		5.1			2.4						35.0	
Approach LOS		A			A						C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	18.9	71.1	71.1
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	56.0	56.0
Max Q Clear Time (g_c+I1), s	6.5	11.0	10.7
Green Ext Time (p_c), s	0.4	9.7	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	5.2
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	438	767	17	6	47
Future Vol, veh/h	15	438	767	17	6	47
Conflicting Peds, #/hr	0	0	0	112	14	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	17	487	852	19	7	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	983	0	-	0	1508	974
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	534	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	698	-	-	-	132	304
Stage 1	-	-	-	-	365	-
Stage 2	-	-	-	-	586	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	624	-	-	-	103	272
Mov Cap-2 Maneuver	-	-	-	-	103	-
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	523	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.36	0	26.06
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	624	-	-	-	229
HCM Lane V/C Ratio	0.027	-	-	-	0.257
HCM Control Delay (s/veh)	10.9	-	-	-	26.1
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	1

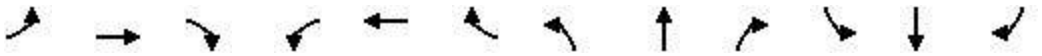
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	428	756	19	11	28
Future Vol, veh/h	16	428	756	19	11	28
Conflicting Peds, #/hr	0	0	0	79	19	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	476	840	21	12	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	940	0	-	0	1460	930
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	530	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	725	-	-	-	142	323
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	588	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	671	-	-	-	118	298
Mov Cap-2 Maneuver	-	-	-	-	118	-
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	544	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.38	0	26.76
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	671	-	-	-	208
HCM Lane V/C Ratio	0.027	-	-	-	0.208
HCM Control Delay (s/veh)	10.5	-	-	-	26.8
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	52
Future Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	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)	0.99		0.93	0.99		0.91	0.95		0.94	0.94		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	41	438	9	23	794	47	9	3	6	43	8	58
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	552	1335	27	686	1272	75	158	58	78	122	37	118
Arrive On Green	0.74	0.74	0.74	1.00	1.00	1.00	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	639	1809	37	925	1723	102	651	383	517	439	249	782
Grp Volume(v), veh/h	41	0	447	23	0	841	18	0	0	109	0	0
Grp Sat Flow(s),veh/h/ln	639	0	1846	925	0	1825	1551	0	0	1470	0	0
Q Serve(g_s), s	1.6	0.0	7.5	0.3	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	7.5	7.8	0.0	0.0	0.8	0.0	0.0	5.9	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.06	0.50		0.33	0.39		0.53
Lane Grp Cap(c), veh/h	552	0	1362	686	0	1347	294	0	0	277	0	0
V/C Ratio(X)	0.07	0.00	0.33	0.03	0.00	0.62	0.06	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	552	0	1362	686	0	1347	438	0	0	424	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	3.3	0.0	4.1	0.4	0.0	0.0	32.8	0.0	0.0	34.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.1	0.0	2.2	0.1	0.0	0.0	0.9	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	0.2	0.0	2.4	0.0	0.0	0.8	0.3	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.6	0.0	4.7	0.5	0.0	2.2	32.9	0.0	0.0	35.8	0.0	0.0
LnGrp LOS	A		A	A		A	C			D		
Approach Vol, veh/h		488			864			18			109	
Approach Delay, s/veh		4.6			2.1			32.9			35.8	
Approach LOS		A			A			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.6		71.4		18.6		71.4				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.8		57.2		22.8		57.2				
Max Q Clear Time (g_c+I1), s		7.9		9.8		2.8		9.5				
Green Ext Time (p_c), s		0.5		8.4		0.0		3.7				

Intersection Summary												
HCM 7th Control Delay, s/veh			5.8									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	431	7	13	773	5	9
Future Vol, veh/h	431	7	13	773	5	9
Conflicting Peds, #/hr	0	69	0	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	479	8	14	859	6	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	556	0	1446	552
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	894	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1010	-	144	532
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	398	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	943	-	132	497
Mov Cap-2 Maneuver	-	-	-	-	132	-
Stage 1	-	-	-	-	537	-
Stage 2	-	-	-	-	390	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.15	20.35
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	250	-	-	943	-
HCM Lane V/C Ratio	0.062	-	-	0.015	-
HCM Control Delay (s/veh)	20.4	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	16
Future Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	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)	0.99		0.93	0.98		0.93	0.94		0.96	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	10	478	1	19	842	31	13	1	17	14	1	18
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	581	1487	3	793	1424	52	92	23	70	92	22	69
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	624	1851	4	887	1772	65	409	266	820	415	259	808
Grp Volume(v), veh/h	10	0	479	19	0	873	31	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	624	0	1854	887	0	1838	1494	0	0	1482	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.04	0.42		0.55	0.42		0.55
Lane Grp Cap(c), veh/h	581	0	1490	793	0	1477	184	0	0	184	0	0
V/C Ratio(X)	0.02	0.00	0.32	0.02	0.00	0.59	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	581	0	1490	793	0	1477	411	0	0	409	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.0	0.0	38.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.1	0.0	1.7	0.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	0.0	0.0	0.7	0.7	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.0	0.6	0.1	0.0	1.7	38.8	0.0	0.0	38.9	0.0	0.0
LnGrp LOS	A		A	A		A	D			D		
Approach Vol, veh/h		489			892			31			33	
Approach Delay, s/veh		0.6			1.7			38.8			38.9	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.7		77.3		12.7		77.3				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		58.0		22.0		58.0				
Max Q Clear Time (g_c+I1), s		3.7		2.0		3.6		2.0				
Green Ext Time (p_c), s		0.1		9.0		0.1		3.6				
Intersection Summary												
HCM 7th Control Delay, s/veh			3.0									
HCM 7th LOS			A									

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	8	450	0	0	783	38	6	1	24	5	0	14
Future Vol, veh/h	8	450	0	0	783	38	6	1	24	5	0	14
Conflicting Peds, #/hr	0	0	81	0	0	48	0	0	1	0	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	500	0	0	870	42	7	1	27	6	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	960	0	-	-	-	0	1404	1478	501	1458	1457	955
Stage 1	-	-	-	-	-	-	518	518	-	939	939	-
Stage 2	-	-	-	-	-	-	886	960	-	519	518	-
Critical Hdwy	4.13	-	-	-	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	-	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	713	-	0	0	-	-	117	125	568	107	129	312
Stage 1	-	-	0	0	-	-	539	532	-	315	341	-
Stage 2	-	-	0	0	-	-	338	334	-	538	532	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	680	-	-	-	-	-	107	118	568	95	121	293
Mov Cap-2 Maneuver	-	-	-	-	-	-	107	118	-	95	121	-
Stage 1	-	-	-	-	-	-	532	525	-	301	326	-
Stage 2	-	-	-	-	-	-	315	318	-	504	525	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	19.05	26.42
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	290	680	-	-	-	189
HCM Lane V/C Ratio	0.119	0.013	-	-	-	0.112
HCM Control Delay (s/veh)	19.1	10.4	-	-	-	26.4
HCM Lane LOS	C	B	-	-	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	-	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	467	813	68	23	8
Future Volume (veh/h)	12	467	813	68	23	8
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			0.96	1.00	0.97
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	13	519	903	76	26	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	377	1506	1249	105	108	38
Arrive On Green	0.05	1.00	0.74	0.74	0.09	0.09
Sat Flow, veh/h	1767	1856	1682	142	1229	425
Grp Volume(v), veh/h	13	519	0	979	36	0
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1824	1702	0
Q Serve(g_s), s	0.1	0.0	0.0	26.8	1.8	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	26.8	1.8	0.0
Prop In Lane	1.00			0.08	0.72	0.25
Lane Grp Cap(c), veh/h	377	1506	0	1354	150	0
V/C Ratio(X)	0.03	0.34	0.00	0.72	0.24	0.00
Avail Cap(c_a), veh/h	490	1506	0	1354	511	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	0.0	6.4	38.2	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	3.4	0.8	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	0.1	0.3	0.0	8.8	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.6	0.6	0.0	9.8	39.0	0.0
LnGrp LOS	A	A		A	D	
Approach Vol, veh/h		532	979		36	
Approach Delay, s/veh		0.8	9.8		39.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		6.2	71.3		12.4	77.6
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	42.0		27.0	54.0
Max Q Clear Time (g_c+I1), s		2.1	28.8		3.8	2.0
Green Ext Time (p_c), s		0.0	6.4		0.1	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	7.4
HCM 7th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	490	0	0	653	228	170
Future Volume (veh/h)	490	0	0	653	228	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	1856	0	0	1856	1856	1856
Adj Flow Rate, veh/h	544	0	0	726	253	189
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	2557	0	0	2557	302	269
Arrive On Green	0.73	0.00	0.00	1.00	0.17	0.17
Sat Flow, veh/h	3711	0	0	3711	1767	1572
Grp Volume(v), veh/h	544	0	0	726	253	189
Grp Sat Flow(s),veh/h/ln	1763	0	0	1763	1767	1572
Q Serve(g_s), s	5.3	0.0	0.0	0.0	14.7	12.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	0.0	14.7	12.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2557	0	0	2557	302	269
V/C Ratio(X)	0.21	0.00	0.00	0.28	0.84	0.70
Avail Cap(c_a), veh/h	2557	0	0	2557	700	623
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.97	1.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	0.0	0.0	42.5	41.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	6.1	3.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.1	6.9	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.9	0.0	0.0	0.3	48.6	44.7
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	544			726	442	
Approach Delay, s/veh	4.9			0.3	47.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	82.9			82.9	23.1
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	53.0			53.0	42.0
Max Q Clear Time (g_c+I1), s	7.3			2.0	16.7
Green Ext Time (p_c), s	4.2			6.1	1.4

Intersection Summary		
HCM 7th Control Delay, s/veh	13.8	
HCM 7th LOS	B	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
Future Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
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		0.94
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	0	1856	1856		1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	347	0		340	548	0				364	753	178
Peak Hour Factor	0.90	0.90	0.90		0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3		3	3	0				3	3	3
Cap, veh/h	0	520			724	2131	0				429	888	210
Arrive On Green	0.00	0.25	0.00		0.82	1.00	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3618	1572		1767	3618	0				1448	2995	707
Grp Volume(v), veh/h	0	347	0		340	548	0				448	424	422
Grp Sat Flow(s),veh/h/ln	0	1763	1572		1767	1763	0				1783	1689	1678
Q Serve(g_s), s	0.0	9.4	0.0		6.0	0.0	0.0				25.1	25.0	25.1
Cycle Q Clear(g_c), s	0.0	9.4	0.0		6.0	0.0	0.0				25.1	25.0	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.81		0.42
Lane Grp Cap(c), veh/h	0	520			724	2131	0				529	501	497
V/C Ratio(X)	0.00	0.67			0.47	0.26	0.00				0.85	0.85	0.85
Avail Cap(c_a), veh/h	0	632			724	2131	0				631	597	594
HCM Platoon Ratio	1.00	1.67	1.67		2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.97	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	37.6	0.0		6.2	0.0	0.0				35.0	35.0	35.0
Incr Delay (d2), s/veh	0.0	6.4	0.0		0.2	0.3	0.0				8.0	8.3	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
%ile BackOfQ(50%),veh/ln	0.0	4.2	0.0		1.7	0.1	0.0				11.8	11.3	11.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	44.0	0.0		6.4	0.3	0.0				43.0	43.4	43.5
LnGrp LOS		D			A	A					D	D	D
Approach Vol, veh/h		347				888						1295	
Approach Delay, s/veh		44.0				2.6						43.3	
Approach LOS		D				A						D	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	8.4	20.6		36.9		69.1			
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0			
Max Green Setting (Gmax), s	3.4	19.0		37.5		58.0			
Max Q Clear Time (g_c+I1), s	8.0	11.4		27.1		2.0			
Green Ext Time (p_c), s	0.5	1.0		4.4		2.9			

Intersection Summary	
HCM 7th Control Delay, s/veh	29.1
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Future Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.98	1.00		0.97	0.97		0.92	1.00		0.90
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	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		254	308	92	19	324	321	144	749	127	0	0	493
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, %		3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h		321	857	256	98	1574	741	309	976	399	0	514	787
Arrive On Green		0.16	1.00	1.00	0.49	0.49	0.49	0.28	0.28	0.28	0.00	0.00	0.28
Sat Flow, veh/h		3428	1363	407	124	3224	1518	871	3526	1442	0	1856	2844
Grp Volume(v), veh/h		254	0	400	180	163	321	144	749	127	0	0	493
Grp Sat Flow(s),veh/h/ln		1714	0	1771	1744	1604	1518	871	1763	1442	0	1856	1422
Q Serve(g_s), s		7.6	0.0	0.0	0.0	6.2	14.5	15.2	20.7	7.4	0.0	0.0	16.1
Cycle Q Clear(g_c), s		7.6	0.0	0.0	5.8	6.2	14.5	15.2	20.7	7.4	0.0	0.0	16.1
Prop In Lane		1.00		0.23	0.11		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h		321	0	1113	889	783	741	309	976	399	0	514	787
V/C Ratio(X)		0.79	0.00	0.36	0.20	0.21	0.43	0.47	0.77	0.32	0.00	0.00	0.63
Avail Cap(c_a), veh/h		453	0	1113	889	783	741	405	1364	558	0	718	1100
HCM Platoon Ratio		1.67	1.67	1.67	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	0.00	0.00	1.00
Uniform Delay (d), s/veh		43.7	0.0	0.0	15.4	15.5	17.6	33.2	35.2	30.4	0.0	0.0	33.5
Incr Delay (d2), s/veh		6.3	0.0	0.9	0.5	0.6	1.8	1.1	1.8	0.5	0.0	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		3.3	0.0	0.3	2.6	2.4	5.4	3.3	9.1	2.6	0.0	0.0	5.6
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		50.0	0.0	0.9	15.9	16.1	19.5	34.3	36.9	30.8	0.0	0.0	34.3
LnGrp LOS		D		A	B	B	B	C	D	C			C
Approach Vol, veh/h			654			664			1020			493	
Approach Delay, s/veh			20.0			17.7			35.8			34.3	
Approach LOS			B			B			D			C	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	71.7		34.3	14.9	56.7		34.3
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	55.0		41.0	14.0	36.0		41.0
Max Q Clear Time (g_c+I1), s	2.0		18.1	9.6	16.5		22.7
Green Ext Time (p_c), s	3.1		2.3	0.4	3.3		6.7

Intersection Summary	
HCM 7th Control Delay, s/veh	27.6
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	0	63
Future Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	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)	0.99		0.98	1.00		0.96	0.96		1.00	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	24	477	2	1	592	100	2	0	0	59	0	70
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	642	1375	6	45	1144	193	251	0	0	137	16	104
Arrive On Green	0.74	0.74	0.74	1.00	1.00	1.00	0.13	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	741	1846	8	0	1535	259	1238	0	0	550	126	802
Grp Volume(v), veh/h	24	0	479	693	0	0	2	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	741	0	1854	1795	0	0	1238	0	0	1478	0	0
Q Serve(g_s), s	0.7	0.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	7.1	0.0	0.0	0.0	0.1	0.0	0.0	6.6	0.0	0.0
Prop In Lane	1.00		0.00	0.00		0.14	1.00		0.00	0.46		0.54
Lane Grp Cap(c), veh/h	642	0	1381	1382	0	0	251	0	0	258	0	0
V/C Ratio(X)	0.04	0.00	0.35	0.50	0.00	0.00	0.01	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	642	0	1381	1382	0	0	420	0	0	449	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.96	0.92	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.7	0.0	3.5	0.0	0.0	0.0	30.3	0.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.7	1.2	0.0	0.0	0.0	0.0	0.0	0.6	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	0.1	0.0	2.2	0.5	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	2.8	0.0	4.2	1.2	0.0	0.0	30.3	0.0	0.0	33.6	0.0	0.0
LnGrp LOS	A		A	A			C			C		
Approach Vol, veh/h		503			693			2			129	
Approach Delay, s/veh		4.1			1.2			30.3			33.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.4	64.6	15.4	64.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	8.6	2.0	2.1	9.1
Green Ext Time (p_c), s	0.4	3.9	0.0	2.4

Intersection Summary	
HCM 7th Control Delay, s/veh	5.5
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	0
Future Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	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)	0.99		0.95	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	3	391	141	123	373	0	320	0	169	0	0	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	957	773	373	960	0	433	0	189	0	699	0
Arrive On Green	0.17	0.17	0.17	0.52	0.52	0.00	0.38	0.00	0.38	0.00	0.00	0.00
Sat Flow, veh/h	2	1851	1495	864	1856	0	952	0	503	0	1856	0
Grp Volume(v), veh/h	394	0	141	123	373	0	489	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1853	0	1495	864	1856	0	1455	0	0	0	1856	0
Q Serve(g_s), s	0.0	0.0	6.5	8.9	9.7	0.0	25.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	15.1	0.0	6.5	24.1	9.7	0.0	25.2	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	0.65		0.35	0.00		0.00
Lane Grp Cap(c), veh/h	1004	0	773	373	960	0	622	0	0	0	699	0
V/C Ratio(X)	0.39	0.00	0.18	0.33	0.39	0.00	0.79	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1004	0	773	373	960	0	820	0	0	0	939	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.00	0.95	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	22.3	0.0	18.7	21.1	11.7	0.0	23.4	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	2.4	1.2	0.0	3.7	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	7.8	0.0	2.4	2.0	4.1	0.0	8.9	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.4	0.0	19.2	23.4	12.9	0.0	27.2	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	C		B	C	B		C					
Approach Vol, veh/h		535			496			489			0	
Approach Delay, s/veh		22.3			15.5			27.2			0.0	
Approach LOS		C			B			C				

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	45.4	34.6	45.4	34.6
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	31.0	* 41	31.0	40.5
Max Q Clear Time (g_c+I1), s	26.1	27.2	17.1	0.0
Green Ext Time (p_c), s	1.4	2.9	2.6	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	21.6
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

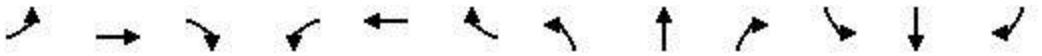
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	675	794	87	0	40
Future Vol, veh/h	0	675	794	87	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	750	882	97	0	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	489
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	522
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	522
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.54
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	522
HCM Lane V/C Ratio	-	-	-	0.085
HCM Control Delay (s/veh)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Future Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	0.96		0.94	0.99		0.93	0.90		0.69	0.94		0.71
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	106	505	76	62	229	64	116	420	159	81	281	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	665	931	740	403	678	189	267	1146	352	254	738	263
Arrive On Green	0.05	0.49	0.49	0.08	0.98	0.98	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1795	1885	1499	1795	1390	388	902	3582	1099	792	2307	822
Grp Volume(v), veh/h	106	505	76	62	0	293	116	420	159	81	213	177
Grp Sat Flow(s),veh/h/ln	1795	1885	1499	1795	0	1778	902	1791	1099	792	1791	1338
Q Serve(g_s), s	2.9	18.5	2.7	1.7	0.0	0.6	11.6	9.0	11.5	8.8	9.2	10.4
Cycle Q Clear(g_c), s	2.9	18.5	2.7	1.7	0.0	0.6	22.0	9.0	11.5	17.8	9.2	10.4
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	665	931	740	403	0	867	267	1146	352	254	573	428
V/C Ratio(X)	0.16	0.54	0.10	0.15	0.00	0.34	0.43	0.37	0.45	0.32	0.37	0.41
Avail Cap(c_a), veh/h	696	931	740	428	0	867	267	1146	352	254	573	428
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	17.5	13.5	12.7	0.0	0.6	35.3	26.2	27.0	33.0	26.2	26.7
Incr Delay (d2), s/veh	0.1	2.3	0.3	0.2	0.0	1.1	5.1	0.9	4.2	3.3	1.8	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	1.2	8.5	1.0	0.7	0.0	0.4	2.9	4.0	3.4	1.9	4.2	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.6	19.8	13.8	12.8	0.0	1.7	40.3	27.1	31.2	36.3	28.1	29.6
LnGrp LOS	B	B	B	B		A	D	C	C	D	C	C
Approach Vol, veh/h		687			355			695			471	
Approach Delay, s/veh		17.8			3.6			30.2			30.1	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	53.8		37.0	8.6	54.4		37.0				
Change Period (Y+Rc), s	4.5	5.0		5.0	4.5	5.0		5.0				
Max Green Setting (Gmax), s	6.5	47.0		32.0	5.5	48.0		32.0				
Max Q Clear Time (g_c+I1), s	4.9	2.6		24.0	3.7	20.5		19.8				
Green Ext Time (p_c), s	0.0	1.3		2.0	0.0	2.5		1.8				

Intersection Summary		
HCM 7th Control Delay, s/veh	22.1	
HCM 7th LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
Future Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
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)	0.95		0.93	1.00		0.93				1.00		0.83
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	55	566	124	76	259	45				71	158	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	78	593	126	301	2012	342				170	366	212
Arrive On Green	0.88	0.88	0.88	0.34	1.00	1.00				0.22	0.22	0.22
Sat Flow, veh/h	91	1353	288	1795	3021	514				757	1634	947
Grp Volume(v), veh/h	745	0	0	76	151	153				173	0	153
Grp Sat Flow(s),veh/h/ln	1732	0	0	1795	1791	1744				1847	0	1491
Q Serve(g_s), s	25.1	0.0	0.0	3.1	0.0	0.0				8.0	0.0	8.9
Cycle Q Clear(g_c), s	37.4	0.0	0.0	3.1	0.0	0.0				8.0	0.0	8.9
Prop In Lane	0.07		0.17	1.00		0.29				0.41		0.64
Lane Grp Cap(c), veh/h	797	0	0	301	1193	1161				414	0	334
V/C Ratio(X)	0.93	0.00	0.00	0.25	0.13	0.13				0.42	0.00	0.46
Avail Cap(c_a), veh/h	929	0	0	301	1193	1161				462	0	373
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.74	0.00	0.00	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	5.6	0.0	0.0	28.7	0.0	0.0				33.2	0.0	33.5
Incr Delay (d2), s/veh	15.5	0.0	0.0	0.2	0.2	0.2				0.3	0.0	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	0.0	1.3	0.1	0.1				3.6	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.1	0.0	0.0	28.8	0.2	0.2				33.5	0.0	33.9
LnGrp LOS	C			C	A	A				C		C
Approach Vol, veh/h		745			380						326	
Approach Delay, s/veh		21.1			5.9						33.7	
Approach LOS		C			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	33.5	49.1		27.4		72.6
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	8.0	* 52		25.0		64.0
Max Q Clear Time (g_c+I1), s	5.1	39.4		10.9		2.0
Green Ext Time (p_c), s	0.0	3.1		1.1		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	20.0
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)	28	574	3	1	313	42	2	0	2	73	0	46
Future Volume (veh/h)	28	574	3	1	313	42	2	0	2	73	0	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)	0.98		0.93	0.99		0.93	0.96		0.94	0.95		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	29	604	3	1	329	44	2	0	2	77	0	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	114	2286	11	37	2091	275	202	17	165	241	13	122
Arrive On Green	0.22	0.22	0.22	0.68	0.68	0.68	0.22	0.00	0.22	0.22	0.00	0.22
Sat Flow, veh/h	110	3371	17	1	3084	405	668	75	743	822	60	550
Grp Volume(v), veh/h	326	0	310	200	0	174	4	0	0	125	0	0
Grp Sat Flow(s),veh/h/ln	1787	0	1711	1884	0	1606	1486	0	0	1432	0	0
Q Serve(g_s), s	0.0	0.0	14.9	0.0	0.0	3.9	0.0	0.0	0.0	6.0	0.0	0.0
Cycle Q Clear(g_c), s	14.2	0.0	14.9	3.8	0.0	3.9	0.2	0.0	0.0	7.2	0.0	0.0
Prop In Lane	0.09		0.01	0.01		0.25	0.50		0.50	0.62		0.38
Lane Grp Cap(c), veh/h	1251	0	1160	1314	0	1089	384	0	0	376	0	0
V/C Ratio(X)	0.26	0.00	0.27	0.15	0.00	0.16	0.01	0.00	0.00	0.33	0.00	0.00
Avail Cap(c_a), veh/h	1251	0	1160	1314	0	1089	661	0	0	656	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.48	0.00	0.48	0.97	0.00	0.97	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.0	0.0	18.3	5.8	0.0	5.8	30.3	0.0	0.0	33.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.2	0.0	0.3	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	0.0	6.9	1.5	0.0	1.3	0.1	0.0	0.0	2.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.3	0.0	18.6	6.0	0.0	6.1	30.4	0.0	0.0	33.5	0.0	0.0
LnGrp LOS	B		B	A		A	C			C		
Approach Vol, veh/h		636			374			4			125	
Approach Delay, s/veh		18.4			6.1			30.4			33.5	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	27.2	72.8	27.2	72.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	42.0	48.0	42.0	48.0
Max Q Clear Time (g_c+I1), s	9.2	5.9	2.2	16.9
Green Ext Time (p_c), s	0.8	2.6	0.0	4.6

Intersection Summary	
HCM 7th Control Delay, s/veh	16.1
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Future Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	0.98		0.91	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	94	516	74	139	288	24	25	687	564	14	360	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	179	856	122	212	990	82	71	1547	663	64	1288	214
Arrive On Green	0.05	0.28	0.28	0.06	0.30	0.30	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	3483	3084	439	3483	3316	273	60	3397	1456	44	2829	469
Grp Volume(v), veh/h	94	298	292	139	154	158	377	335	564	227	0	208
Grp Sat Flow(s),veh/h/ln	1742	1791	1732	1742	1791	1798	1827	1630	1456	1744	0	1598
Q Serve(g_s), s	2.3	12.6	12.8	3.4	5.8	5.9	0.0	12.3	30.1	0.0	0.0	7.1
Cycle Q Clear(g_c), s	2.3	12.6	12.8	3.4	5.8	5.9	11.9	12.3	30.1	6.5	0.0	7.1
Prop In Lane	1.00		0.25	1.00		0.15	0.07		1.00	0.06		0.29
Lane Grp Cap(c), veh/h	179	497	481	212	535	537	876	742	663	838	0	728
V/C Ratio(X)	0.53	0.60	0.61	0.66	0.29	0.29	0.43	0.45	0.85	0.27	0.00	0.29
Avail Cap(c_a), veh/h	239	595	575	319	636	638	1205	1045	934	1130	0	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.4	27.3	27.4	40.1	23.5	23.6	16.2	16.3	21.1	14.7	0.0	14.9
Incr Delay (d2), s/veh	2.4	1.2	1.3	3.4	0.3	0.3	0.3	0.4	5.4	0.2	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	1.0	5.5	5.4	1.6	2.5	2.5	5.0	4.4	10.7	2.7	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.8	28.5	28.7	43.5	23.8	23.9	16.5	16.7	26.5	14.9	0.0	15.1
LnGrp LOS	D	C	C	D	C	C	B	B	C	B		B
Approach Vol, veh/h		684			451			1276			435	
Approach Delay, s/veh		30.6			29.9			21.0			15.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	45.8	9.5	32.1	45.8	11.3	30.2
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	56.0	6.0	31.0	56.0	8.0	* 29
Max Q Clear Time (g_c+I1), s	32.1	4.3	7.9	9.1	5.4	14.8
Green Ext Time (p_c), s	7.7	0.0	1.9	3.1	0.1	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	23.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	917	372	177	254	57
Future Volume (veh/h)	122	917	372	177	254	57
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)	0.99			0.96	1.00	0.90
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	128	965	392	186	267	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	594	2449	1599	746	303	68
Arrive On Green	0.68	0.68	0.68	0.68	0.22	0.22
Sat Flow, veh/h	837	3676	2432	1091	1399	314
Grp Volume(v), veh/h	128	965	299	279	328	0
Grp Sat Flow(s),veh/h/ln	837	1791	1791	1638	1719	0
Q Serve(g_s), s	6.5	11.1	6.0	6.2	17.6	0.0
Cycle Q Clear(g_c), s	12.7	11.1	6.0	6.2	17.6	0.0
Prop In Lane	1.00			0.67	0.81	0.18
Lane Grp Cap(c), veh/h	594	2449	1224	1120	372	0
V/C Ratio(X)	0.22	0.39	0.24	0.25	0.88	0.00
Avail Cap(c_a), veh/h	594	2449	1224	1120	678	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.2	6.5	5.7	5.7	36.1	0.0
Incr Delay (d2), s/veh	0.5	0.3	0.5	0.5	6.9	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	1.2	3.9	2.2	2.1	8.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.7	6.8	6.2	6.3	43.0	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		1093	578		328	
Approach Delay, s/veh		7.0	6.2		43.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		70.0		25.0	70.0
Change Period (Y+Rc), s		5.0		4.5	5.0
Max Green Setting (Gmax), s		48.0		37.5	48.0
Max Q Clear Time (g_c+I1), s		8.2		19.6	14.7
Green Ext Time (p_c), s		4.4		1.0	10.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.7
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
Future Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
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)	0.97		0.89	1.00		0.90				1.00		0.89
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	19	1183	31	24	545	14				22	5	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	679	1343	35	192	1344	35				91	21	136
Arrive On Green	0.74	0.74	0.74	0.98	0.98	0.98				0.16	0.16	0.16
Sat Flow, veh/h	830	1822	48	464	1824	47				577	131	866
Grp Volume(v), veh/h	19	0	1214	24	0	559				60	0	0
Grp Sat Flow(s),veh/h/ln	830	0	1870	464	0	1870				1574	0	0
Q Serve(g_s), s	0.6	0.0	46.2	3.5	0.0	0.9				3.2	0.0	0.0
Cycle Q Clear(g_c), s	1.5	0.0	46.2	49.7	0.0	0.9				3.2	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.03				0.37		0.55
Lane Grp Cap(c), veh/h	679	0	1378	192	0	1379				248	0	0
V/C Ratio(X)	0.03	0.00	0.88	0.13	0.00	0.41				0.24	0.00	0.00
Avail Cap(c_a), veh/h	679	0	1378	192	0	1379				398	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33				1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.6	0.0	9.4	17.3	0.0	0.3				35.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	8.3	1.3	0.0	0.9				0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	18.0	0.4	0.0	0.5				1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.7	0.0	17.7	18.6	0.0	1.1				35.5	0.0	0.0
LnGrp LOS	A		B	B		A				D		
Approach Vol, veh/h		1233			583						60	
Approach Delay, s/veh		17.5			1.9						35.5	
Approach LOS		B			A						D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	20.0	75.0	75.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	61.0	61.0
Max Q Clear Time (g_c+I1), s	5.2	51.7	48.2
Green Ext Time (p_c), s	0.2	2.8	8.7

Intersection Summary	
HCM 7th Control Delay, s/veh	13.2
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	1127	536	12	6	18
Future Vol, veh/h	18	1127	536	12	6	18
Conflicting Peds, #/hr	0	0	0	95	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	1186	564	13	6	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	672	0	-	0	1903	666
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	1237	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	924	-	-	-	76	461
Stage 1	-	-	-	-	513	-
Stage 2	-	-	-	-	275	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	840	-	-	-	62	420
Mov Cap-2 Maneuver	-	-	-	-	62	-
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	250	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.15	0	29.65
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	840	-	-	-	171
HCM Lane V/C Ratio	0.023	-	-	-	0.148
HCM Control Delay (s/veh)	9.4	-	-	-	29.7
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	1101	527	35	8	21
Future Vol, veh/h	32	1101	527	35	8	21
Conflicting Peds, #/hr	0	0	0	96	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	34	1159	555	37	8	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	688	0	-	0	1919	669
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	1250	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	911	-	-	-	74	459
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	271	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	828	-	-	-	59	417
Mov Cap-2 Maneuver	-	-	-	-	59	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	246	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.27	0	33.65
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	828	-	-	-	156
HCM Lane V/C Ratio	0.041	-	-	-	0.196
HCM Control Delay (s/veh)	9.5	-	-	-	33.7
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	63
Future Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	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)	0.96		0.89	1.00		0.89	0.90		0.89	0.92		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	88	1063	16	19	496	73	29	11	9	67	15	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	638	1274	19	217	1086	160	211	78	51	166	48	128
Arrive On Green	0.69	0.69	0.69	1.00	1.00	1.00	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	816	1848	28	527	1576	232	730	379	250	541	231	621
Grp Volume(v), veh/h	88	0	1079	19	0	569	49	0	0	148	0	0
Grp Sat Flow(s),veh/h/ln	816	0	1876	527	0	1808	1359	0	0	1393	0	0
Q Serve(g_s), s	3.6	0.0	40.0	2.2	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0
Cycle Q Clear(g_c), s	3.6	0.0	40.0	42.2	0.0	0.0	2.4	0.0	0.0	8.7	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.13	0.59		0.18	0.45		0.45
Lane Grp Cap(c), veh/h	638	0	1293	217	0	1246	340	0	0	342	0	0
V/C Ratio(X)	0.14	0.00	0.83	0.09	0.00	0.46	0.14	0.00	0.00	0.43	0.00	0.00
Avail Cap(c_a), veh/h	638	0	1293	217	0	1246	386	0	0	388	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	5.1	0.0	10.8	12.9	0.0	0.0	30.9	0.0	0.0	33.3	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	6.5	0.8	0.0	1.2	0.2	0.0	0.0	0.9	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	0.6	0.0	15.8	0.3	0.0	0.4	0.9	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.6	0.0	17.3	13.7	0.0	1.2	31.0	0.0	0.0	34.2	0.0	0.0
LnGrp LOS	A		B	B		A	C			C		
Approach Vol, veh/h		1167			588			49			148	
Approach Delay, s/veh		16.4			1.6			31.0			34.2	
Approach LOS		B			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.5		70.5		24.5		70.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.8		62.2		22.8		62.2				
Max Q Clear Time (g_c+I1), s		10.7		44.2		4.4		42.0				
Green Ext Time (p_c), s		0.7		3.9		0.2		10.1				

Intersection Summary												
HCM 7th Control Delay, s/veh			13.7									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1074	9	15	541	17	15
Future Vol, veh/h	1074	9	15	541	17	15
Conflicting Peds, #/hr	0	91	0	0	41	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1131	9	16	569	18	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1231	0	1868	1226
Stage 1	-	-	-	-	1226	-
Stage 2	-	-	-	-	642	-
Critical Hdwy	-	-	4.11	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.209	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	570	-	80	219
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	526	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	520	-	68	200
Mov Cap-2 Maneuver	-	-	-	-	68	-
Stage 1	-	-	-	-	254	-
Stage 2	-	-	-	-	490	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	59.39
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	99	-	-	520	-
HCM Lane V/C Ratio	0.342	-	-	0.03	-
HCM Control Delay (s/veh)	59.4	-	-	12.1	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	1.3	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	23
Future Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	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)	0.97		0.90	0.99		0.91	0.91		0.95	0.96		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	31	1102	14	18	547	39	14	4	23	15	3	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	706	1435	18	465	1336	95	92	39	102	95	32	101
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	814	1854	24	503	1726	123	343	321	848	359	269	838
Grp Volume(v), veh/h	31	0	1116	18	0	586	41	0	0	42	0	0
Grp Sat Flow(s),veh/h/ln	814	0	1878	503	0	1849	1512	0	0	1466	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.3	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.07	0.34		0.56	0.36		0.57
Lane Grp Cap(c), veh/h	706	0	1453	465	0	1431	233	0	0	228	0	0
V/C Ratio(X)	0.04	0.00	0.77	0.04	0.00	0.41	0.18	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	706	0	1453	465	0	1431	394	0	0	385	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	0.0	0.0	0.0	0.0	0.0	0.0	37.7	0.0	0.0	37.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.9	0.2	0.0	0.9	0.4	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.6	0.0	0.0	0.3	0.9	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.0	3.9	0.2	0.0	0.9	38.0	0.0	0.0	38.1	0.0	0.0
LnGrp LOS	A		A	A		A	D			D		
Approach Vol, veh/h		1147			604			41			42	
Approach Delay, s/veh		3.8			0.8			38.0			38.1	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.5		78.5		16.5		78.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		63.0		22.0		63.0				
Max Q Clear Time (g_c+I1), s		4.3		2.0		4.1		2.0				
Green Ext Time (p_c), s		0.1		5.0		0.1		15.7				

Intersection Summary												
HCM 7th Control Delay, s/veh			4.4									
HCM 7th LOS			A									

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	21	1062	0	0	550	37	4	2	65	10	0	20
Future Vol, veh/h	21	1062	0	0	550	37	4	2	65	10	0	20
Conflicting Peds, #/hr	0	0	81	0	0	89	0	0	0	0	0	14
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	22	1118	0	0	579	39	4	2	68	11	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	-	-	-	0	1755	1869	1118	1851	1850	701
Stage 1	-	-	-	-	-	-	1162	1162	-	687	687	-
Stage 2	-	-	-	-	-	-	593	707	-	1163	1162	-
Critical Hdwy	4.11	-	-	-	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	-	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	896	-	0	0	-	-	67	73	253	57	75	440
Stage 1	-	-	0	0	-	-	239	270	-	438	449	-
Stage 2	-	-	0	0	-	-	494	440	-	238	270	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	820	-	-	-	-	-	61	65	253	36	67	398
Mov Cap-2 Maneuver	-	-	-	-	-	-	61	65	-	36	67	-
Stage 1	-	-	-	-	-	-	232	263	-	401	411	-
Stage 2	-	-	-	-	-	-	461	402	-	168	263	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	33.17	63.74
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	201	820	-	-	-	92
HCM Lane V/C Ratio	0.372	0.027	-	-	-	0.345
HCM Control Delay (s/veh)	33.2	9.5	-	-	-	63.7
HCM Lane LOS	D	A	-	-	-	F
HCM 95th %tile Q(veh)	1.6	0.1	-	-	-	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	1107	566	116	38	21
Future Volume (veh/h)	30	1107	566	116	38	21
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			0.93	1.00	0.96
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	32	1165	596	122	40	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	647	1478	648	133	130	72
Arrive On Green	0.30	0.78	0.43	0.43	0.12	0.12
Sat Flow, veh/h	1795	1885	1495	306	1075	591
Grp Volume(v), veh/h	32	1165	0	718	63	0
Grp Sat Flow(s),veh/h/ln	1795	1885	0	1801	1693	0
Q Serve(g_s), s	0.0	33.2	0.0	35.7	3.2	0.0
Cycle Q Clear(g_c), s	0.0	33.2	0.0	35.7	3.2	0.0
Prop In Lane	1.00			0.17	0.63	0.35
Lane Grp Cap(c), veh/h	647	1478	0	781	205	0
V/C Ratio(X)	0.05	0.79	0.00	0.92	0.31	0.00
Avail Cap(c_a), veh/h	647	1478	0	891	481	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.6	5.8	0.0	25.4	38.1	0.0
Incr Delay (d2), s/veh	0.0	4.3	0.0	17.7	0.8	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	0.5	10.4	0.0	18.3	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	21.7	10.1	0.0	43.1	38.9	0.0
LnGrp LOS	C	B		D	D	
Approach Vol, veh/h		1197	718		63	
Approach Delay, s/veh		10.5	43.1		38.9	
Approach LOS		B	D		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		33.3	45.7		16.0	79.0
Change Period (Y+Rc), s		4.5	* 4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	* 47		27.0	59.0
Max Q Clear Time (g_c+I1), s		2.0	37.7		5.2	35.2
Green Ext Time (p_c), s		0.0	3.5		0.1	11.9

Intersection Summary	
HCM 7th Control Delay, s/veh	23.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1145	0	0	527	157	122
Future Volume (veh/h)	1145	0	0	527	157	122
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	1885	0	0	1885	1885	1885
Adj Flow Rate, veh/h	1205	0	0	555	165	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2794	0	0	2794	209	186
Arrive On Green	0.78	0.00	0.00	1.00	0.12	0.12
Sat Flow, veh/h	3770	0	0	3770	1795	1598
Grp Volume(v), veh/h	1205	0	0	555	165	128
Grp Sat Flow(s),veh/h/ln	1791	0	0	1791	1795	1598
Q Serve(g_s), s	11.8	0.0	0.0	0.0	9.5	8.2
Cycle Q Clear(g_c), s	11.8	0.0	0.0	0.0	9.5	8.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2794	0	0	2794	209	186
V/C Ratio(X)	0.43	0.00	0.00	0.20	0.79	0.69
Avail Cap(c_a), veh/h	2794	0	0	2794	508	452
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.99	1.00	1.00
Uniform Delay (d), s/veh	3.9	0.0	0.0	0.0	45.6	45.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.2	6.6	4.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.0	0.1	4.6	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.4	0.0	0.0	0.2	52.2	49.5
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	1205			555	293	
Approach Delay, s/veh	4.4			0.2	51.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	88.7			88.7	17.3
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	65.0			65.0	30.0
Max Q Clear Time (g_c+I1), s	13.8			2.0	11.5
Green Ext Time (p_c), s	12.5			4.4	0.8

Intersection Summary		
HCM 7th Control Delay, s/veh	9.9	
HCM 7th LOS	A	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
Future Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
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		0.95
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	0	1885	1885		1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	451	0		480	368	0				337	779	186
Peak Hour Factor	0.95	0.95	0.95		0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1		1	1	0				1	1	1
Cap, veh/h	0	1030			504	2204	0				387	894	213
Arrive On Green	0.00	0.48	0.00		0.47	1.00	0.00				0.29	0.29	0.29
Sat Flow, veh/h	0	3676	1598		1795	3676	0				1355	3132	747
Grp Volume(v), veh/h	0	451	0		480	368	0				452	426	424
Grp Sat Flow(s),veh/h/ln	0	1791	1598		1795	1791	0				1817	1716	1702
Q Serve(g_s), s	0.0	8.8	0.0		27.2	0.0	0.0				25.1	25.1	25.1
Cycle Q Clear(g_c), s	0.0	8.8	0.0		27.2	0.0	0.0				25.1	25.1	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.75		0.44
Lane Grp Cap(c), veh/h	0	1030			504	2204	0				519	490	486
V/C Ratio(X)	0.00	0.44			0.95	0.17	0.00				0.87	0.87	0.87
Avail Cap(c_a), veh/h	0	1030			627	2204	0				574	542	538
HCM Platoon Ratio	1.00	1.67	1.67		1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.88	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.9	0.0		27.5	0.0	0.0				36.0	36.0	36.0
Incr Delay (d2), s/veh	0.0	1.2	0.0		20.7	0.2	0.0				11.8	12.4	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
%ile BackOfQ(50%),veh/ln	0.0	3.5	0.0		12.6	0.1	0.0				12.6	12.0	11.9
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	23.1	0.0		48.1	0.2	0.0				47.8	48.4	48.6
LnGrp LOS		C			D	A					D	D	D
Approach Vol, veh/h		451				848						1302	
Approach Delay, s/veh		23.1				27.3						48.3	
Approach LOS		C				C						D	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	34.8	35.5		35.8		70.2			
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0			
Max Green Setting (Gmax), s	27.6	20.0		33.5		62.0			
Max Q Clear Time (g_c+I1), s	29.2	10.8		27.1		2.0			
Green Ext Time (p_c), s	0.6	1.5		3.2		1.9			

Intersection Summary	
HCM 7th Control Delay, s/veh	37.1
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Future Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.90	1.00		0.93	1.00		0.88	0.97		0.97
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No			No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		192	400	200	46	437	255	166	476	173	79	119	162
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		617	675	338	93	728	547	180	1115	436	145	201	484
Arrive On Green		0.12	0.40	0.40	0.37	0.37	0.37	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h		3483	1136	568	124	1967	1480	1106	3582	1401	315	646	1555
Grp Volume(v), veh/h		192	0	600	116	367	255	166	476	173	198	0	162
Grp Sat Flow(s),veh/h/ln		1742	0	1705	461	1630	1480	1106	1791	1401	961	0	1555
Q Serve(g_s), s		5.3	0.0	29.4	4.8	19.4	13.9	10.8	11.2	10.3	11.0	0.0	8.5
Cycle Q Clear(g_c), s		5.3	0.0	29.4	34.2	19.4	13.9	33.0	11.2	10.3	22.2	0.0	8.5
Prop In Lane		1.00		0.33	0.40		1.00	1.00		1.00	0.40		1.00
Lane Grp Cap(c), veh/h		617	0	1013	218	603	547	180	1115	436	347	0	484
V/C Ratio(X)		0.31	0.00	0.59	0.53	0.61	0.47	0.92	0.43	0.40	0.57	0.00	0.33
Avail Cap(c_a), veh/h		617	0	1013	298	707	642	180	1115	436	347	0	484
HCM Platoon Ratio		0.67	0.67	0.67	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	0.00	1.00
Uniform Delay (d), s/veh		40.8	0.0	21.8	31.6	27.1	25.4	49.4	29.0	28.7	33.7	0.0	28.1
Incr Delay (d2), s/veh		0.3	0.0	2.5	9.1	4.5	2.8	45.0	0.3	0.6	2.2	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		2.4	0.0	13.2	3.5	8.3	5.3	6.7	4.9	3.5	4.8	0.0	3.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		41.1	0.0	24.3	40.7	31.7	28.3	94.4	29.2	29.3	35.9	0.0	28.5
LnGrp LOS		D		C	D	C	C	F	C	C	D		C
Approach Vol, veh/h			792			738			815			360	
Approach Delay, s/veh			28.4			31.9			42.5			32.6	
Approach LOS			C			C			D			C	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	68.0		38.0	23.8	44.2		38.0					
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0					
Max Green Setting (Gmax), s	63.0		33.0	12.0	46.0		33.0					
Max Q Clear Time (g_c+I1), s	31.4		24.2	7.3	36.2		35.0					
Green Ext Time (p_c), s	5.2		1.4	0.2	3.1		0.0					

Intersection Summary	
HCM 7th Control Delay, s/veh	34.2
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	61
Future Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	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)	0.98		0.97	1.00		0.91	1.00		1.00	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	41	606	4	2	674	92	0	2	3	116	2	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	556	1262	8	46	1080	147	0	136	204	240	18	100
Arrive On Green	0.68	0.68	0.68	1.00	1.00	1.00	0.00	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	691	1870	12	1	1601	218	0	681	1021	834	91	502
Grp Volume(v), veh/h	41	0	610	768	0	0	0	0	5	182	0	0
Grp Sat Flow(s),veh/h/ln	691	0	1883	1819	0	0	0	0	1701	1427	0	0
Q Serve(g_s), s	1.6	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.2	8.1	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.2	9.3	0.0	0.0
Prop In Lane	1.00		0.01	0.00		0.12	0.00		0.60	0.64		0.35
Lane Grp Cap(c), veh/h	556	0	1271	1273	0	0	0	0	340	359	0	0
V/C Ratio(X)	0.07	0.00	0.48	0.60	0.00	0.00	0.00	0.00	0.01	0.51	0.00	0.00
Avail Cap(c_a), veh/h	556	0	1271	1273	0	0	0	0	447	447	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.90	0.88	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.5	0.0	6.2	0.0	0.0	0.0	0.0	0.0	25.7	29.2	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	1.2	1.9	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	4.5	0.7	0.0	0.0	0.0	0.0	0.1	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.7	0.0	7.4	1.9	0.0	0.0	0.0	0.0	25.7	29.6	0.0	0.0
LnGrp LOS	A		A	A					C	C		
Approach Vol, veh/h		651			768			5			182	
Approach Delay, s/veh		7.2			1.9			25.7			29.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	21.0	59.0	21.0	59.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	11.3	2.0	2.2	14.5
Green Ext Time (p_c), s	0.5	4.6	0.0	3.4

Intersection Summary	
HCM 7th Control Delay, s/veh	7.3
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	0	2
Future Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	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)	0.96		0.93	0.98		0.89	1.00		0.91	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	11	453	262	276	557	1	208	0	141	0	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	54	1141	914	539	1158	2	306	4	162	0	0	443
Arrive On Green	1.00	1.00	1.00	0.62	0.62	0.62	0.28	0.00	0.28	0.00	0.00	0.28
Sat Flow, veh/h	14	1854	1485	729	1881	3	842	15	581	0	0	1592
Grp Volume(v), veh/h	464	0	262	276	0	558	349	0	0	0	0	2
Grp Sat Flow(s),veh/h/ln	1868	0	1485	729	0	1884	1439	0	0	0	0	1592
Q Serve(g_s), s	0.0	0.0	0.0	18.7	0.0	12.9	18.1	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	18.7	0.0	12.9	18.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	0.02		1.00	1.00		0.00	0.60		0.40	0.00		1.00
Lane Grp Cap(c), veh/h	1196	0	914	539	0	1160	472	0	0	0	0	443
V/C Ratio(X)	0.39	0.00	0.29	0.51	0.00	0.48	0.74	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1196	0	914	539	0	1160	557	0	0	0	0	527
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.87	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.5	0.0	8.4	27.5	0.0	0.0	0.0	0.0	20.9
Incr Delay (d2), s/veh	0.8	0.0	0.7	3.5	0.0	1.4	4.3	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	0.3	0.0	0.2	3.1	0.0	5.1	6.7	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.8	0.0	0.7	13.0	0.0	9.8	31.8	0.0	0.0	0.0	0.0	20.9
LnGrp LOS	A		A	B		A	C					C
Approach Vol, veh/h		726			834			349			2	
Approach Delay, s/veh		0.8			10.9			31.8			20.9	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.2	26.8	53.2	26.8
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	45.0	* 27	45.0	26.5
Max Q Clear Time (g_c+I1), s	20.7	20.5	2.0	2.1
Green Ext Time (p_c), s	6.7	1.2	4.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	10.9
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.2

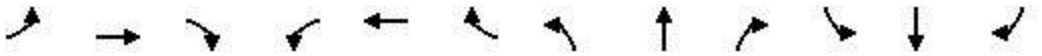
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	758	794	6	0	22
Future Vol, veh/h	0	758	794	6	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	798	836	6	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	421
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.31
Pot Cap-1 Maneuver	0	-	-	-	0	584
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	584
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.42
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	584
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s/veh)	-	-	-	11.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Alternatives 2 (WB Diet), 3 (EB Diet), and 4 (3-Lane Diet) Version 2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	71
Future Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	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		0.91	1.00		0.90	0.92		0.85	0.93		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	78	464	73	53	200	44	41	280	102	41	228	79
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	459	916	370	126	468	101	358	1195	451	359	839	273
Arrive On Green	0.26	0.26	0.26	0.20	0.20	0.20	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1767	3526	1424	638	2367	512	975	3526	1332	928	2476	806
Grp Volume(v), veh/h	78	464	73	151	0	146	41	280	102	41	158	149
Grp Sat Flow(s),veh/h/ln	1767	1763	1424	1824	0	1693	975	1763	1332	928	1763	1519
Q Serve(g_s), s	2.5	8.3	3.0	5.4	0.0	5.6	2.4	4.2	4.0	2.4	4.8	5.3
Cycle Q Clear(g_c), s	2.5	8.3	3.0	5.4	0.0	5.6	7.7	4.2	4.0	6.7	4.8	5.3
Prop In Lane	1.00		1.00	0.35		0.30	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	459	916	370	361	0	335	358	1195	451	359	597	515
V/C Ratio(X)	0.17	0.51	0.20	0.42	0.00	0.43	0.11	0.23	0.23	0.11	0.26	0.29
Avail Cap(c_a), veh/h	910	1816	733	544	0	505	358	1195	451	359	597	515
HCM Platoon Ratio	1.00	1.00	1.00	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	23.3	21.3	25.9	0.0	26.0	20.7	17.5	17.5	19.9	17.7	17.9
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.3	0.6	0.5	1.2	0.6	1.1	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	1.0	3.4	1.0	2.3	0.0	2.2	0.6	1.7	1.3	0.6	2.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	23.4	21.4	26.2	0.0	26.3	21.3	18.0	18.6	20.5	18.8	19.3
LnGrp LOS	C	C	C	C		C	C	B	B	C	B	B
Approach Vol, veh/h		615			297			423			348	
Approach Delay, s/veh		22.9			26.2			18.5			19.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.6		30.0		24.2		30.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		25.0		38.0		25.0				
Max Q Clear Time (g_c+I1), s		7.6		9.7		10.3		8.7				
Green Ext Time (p_c), s		1.0		1.5		2.5		1.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			21.6									
HCM 7th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
Future Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
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)	0.91		0.85	1.00		0.90				1.00		0.80
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	66	253	289	116	268	69				29	131	30
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	122	381	340	454	1659	414				143	623	137
Arrive On Green	0.28	0.28	0.28	0.51	1.00	1.00				0.26	0.26	0.26
Sat Flow, veh/h	251	1359	1213	1767	2729	681				545	2371	520
Grp Volume(v), veh/h	319	0	289	116	170	167				97	0	93
Grp Sat Flow(s),veh/h/ln	1610	0	1213	1767	1763	1647				1828	0	1608
Q Serve(g_s), s	9.5	0.0	19.1	3.1	0.0	0.0				3.5	0.0	3.8
Cycle Q Clear(g_c), s	14.6	0.0	19.1	3.1	0.0	0.0				3.5	0.0	3.8
Prop In Lane	0.21		1.00	1.00		0.41				0.30		0.32
Lane Grp Cap(c), veh/h	503	0	340	454	1072	1001				480	0	422
V/C Ratio(X)	0.63	0.00	0.85	0.26	0.16	0.17				0.20	0.00	0.22
Avail Cap(c_a), veh/h	733	0	521	454	1072	1001				538	0	473
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.91	0.00	0.91	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	27.0	0.0	28.9	16.1	0.0	0.0				24.4	0.0	24.5
Incr Delay (d2), s/veh	5.5	0.0	20.8	0.1	0.3	0.4				0.1	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
%ile BackOfQ(50%),veh/ln	6.3	0.0	7.3	1.2	0.1	0.1				1.5	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.5	0.0	49.7	16.2	0.3	0.4				24.5	0.0	24.6
LnGrp LOS	C		D	B	A	A				C		C
Approach Vol, veh/h		608			453						190	
Approach Delay, s/veh		40.7			4.4						24.5	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.8	29.8		27.3		57.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	8.0	* 37		25.0		49.0
Max Q Clear Time (g_c+I1), s	5.1	21.1		5.8		2.0
Green Ext Time (p_c), s	0.0	2.7		0.6		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	25.1
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)	10	244	0	7	383	24	2	0	3	22	0	22
Future Volume (veh/h)	10	244	0	7	383	24	2	0	3	22	0	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)	0.98		1.00	0.96		0.92	0.96		0.94	0.94		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	11	271	0	8	426	27	2	0	3	24	0	24
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	93	2094	0	57	2056	128	180	23	215	221	19	177
Arrive On Green	0.21	0.21	0.00	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	75	3392	0	21	3248	203	485	91	863	632	78	710
Grp Volume(v), veh/h	150	132	0	244	0	217	5	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	1778	1604	0	1840	0	1632	1439	0	0	1420	0	0
Q Serve(g_s), s	0.0	5.7	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	5.7	0.0	4.7	0.0	4.8	0.2	0.0	0.0	1.9	0.0	0.0
Prop In Lane	0.07		0.00	0.03		0.12	0.40		0.60	0.50		0.50
Lane Grp Cap(c), veh/h	1171	1016	0	1209	0	1033	418	0	0	417	0	0
V/C Ratio(X)	0.13	0.13	0.00	0.20	0.00	0.21	0.01	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	1171	1016	0	1209	0	1033	564	0	0	562	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.00	0.98	0.00	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.5	14.6	0.0	6.6	0.0	6.6	24.0	0.0	0.0	24.7	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.1	0.0	1.8	0.0	1.6	0.1	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	14.8	0.0	7.0	0.0	7.1	24.0	0.0	0.0	24.8	0.0	0.0
LnGrp LOS	B	B		A		A	C			C		
Approach Vol, veh/h		282			461			5			48	
Approach Delay, s/veh		14.7			7.0			24.0			24.8	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.2	58.8	26.2	58.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	45.0	30.0	45.0
Max Q Clear Time (g_c+I1), s	3.9	6.8	2.2	7.7
Green Ext Time (p_c), s	0.2	3.2	0.0	1.9

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)	43	163	63	278	295	38	57	405	241	13	511	62
Future Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	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		0.89	1.00		0.91	0.98		0.93	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	48	181	70	309	328	42	63	450	268	14	568	69
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	717	260	417	1202	152	137	848	508	59	1048	125
Arrive On Green	0.04	0.29	0.29	0.12	0.39	0.39	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	3428	2445	888	3428	3111	393	218	2433	1458	27	3007	359
Grp Volume(v), veh/h	48	127	124	309	184	186	210	303	268	348	0	303
Grp Sat Flow(s),veh/h/ln	1714	1763	1570	1714	1763	1742	1047	1604	1458	1813	0	1580
Q Serve(g_s), s	1.0	4.2	4.6	6.6	5.4	5.6	3.9	11.6	11.2	0.0	0.0	11.8
Cycle Q Clear(g_c), s	1.0	4.2	4.6	6.6	5.4	5.6	15.7	11.6	11.2	11.4	0.0	11.8
Prop In Lane	1.00		0.57	1.00		0.23	0.30		1.00	0.04		0.23
Lane Grp Cap(c), veh/h	144	517	460	417	681	673	427	559	508	681	0	551
V/C Ratio(X)	0.33	0.25	0.27	0.74	0.27	0.28	0.49	0.54	0.53	0.51	0.00	0.55
Avail Cap(c_a), veh/h	225	648	577	720	903	892	554	716	651	852	0	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	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	35.5	20.5	20.7	32.3	16.0	16.1	20.2	19.9	19.8	19.9	0.0	20.0
Incr Delay (d2), s/veh	1.4	0.2	0.3	2.6	0.2	0.2	0.9	0.8	0.8	0.6	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.7	1.7	2.9	2.2	2.2	3.2	4.2	3.8	4.8	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	20.7	21.0	34.9	16.2	16.3	21.1	20.7	20.6	20.5	0.0	20.9
LnGrp LOS	D	C	C	C	B	B	C	C	C	C		C
Approach Vol, veh/h		299			679			781			651	
Approach Delay, s/veh		23.4			24.7			20.8			20.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	32.6	8.2	35.4	32.6	15.3	28.3
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	34.0	5.0	39.0	34.0	16.0	* 28
Max Q Clear Time (g_c+I1), s	17.7	3.0	7.6	13.8	8.6	6.6
Green Ext Time (p_c), s	4.1	0.0	2.5	4.1	0.7	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	61	356	548	283	97	63
Future Volume (veh/h)	61	356	548	283	97	63
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			0.92	1.00	0.93
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	68	396	609	314	108	70
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	362	2488	1540	794	180	117
Arrive On Green	0.71	0.71	0.23	0.23	0.18	0.18
Sat Flow, veh/h	600	3618	2274	1124	984	638
Grp Volume(v), veh/h	68	396	492	431	179	0
Grp Sat Flow(s),veh/h/ln	600	1763	1763	1543	1632	0
Q Serve(g_s), s	6.1	3.4	21.2	21.2	9.1	0.0
Cycle Q Clear(g_c), s	27.3	3.4	21.2	21.2	9.1	0.0
Prop In Lane	1.00			0.73	0.60	0.39
Lane Grp Cap(c), veh/h	362	2488	1244	1089	299	0
V/C Ratio(X)	0.19	0.16	0.40	0.40	0.60	0.00
Avail Cap(c_a), veh/h	362	2488	1244	1089	562	0
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.70	0.70	1.00	0.00
Uniform Delay (d), s/veh	14.3	4.4	18.3	18.3	33.7	0.0
Incr Delay (d2), s/veh	1.1	0.1	0.7	0.8	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	1.1	10.1	8.9	3.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.4	4.5	19.0	19.1	35.6	0.0
LnGrp LOS	B	A	B	B	D	
Approach Vol, veh/h		464	923		179	
Approach Delay, s/veh		6.1	19.0		35.6	
Approach LOS		A	B		D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	21.5	68.5	68.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	31.0	49.0	49.0
Max Q Clear Time (g_c+I1), s	11.1	23.2	29.3
Green Ext Time (p_c), s	0.5	7.4	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	17.1
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
Future Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
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)	0.98		0.91	0.97		0.88				1.00		0.91
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	14	470	19	19	870	16				33	1	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	527	2524	102	718	1329	24				91	3	146
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00				0.15	0.15	0.15
Sat Flow, veh/h	609	3438	139	869	1811	33				588	18	944
Grp Volume(v), veh/h	14	240	249	19	0	886				87	0	0
Grp Sat Flow(s),veh/h/ln	609	1763	1814	869	0	1844				1550	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				4.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				4.5	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.02				0.38		0.61
Lane Grp Cap(c), veh/h	527	1294	1331	718	0	1354				240	0	0
V/C Ratio(X)	0.03	0.19	0.19	0.03	0.00	0.65				0.36	0.00	0.00
Avail Cap(c_a), veh/h	527	1294	1331	718	0	1354				413	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				34.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.1	0.0	2.5				0.9	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
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.0	0.9				1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.3	0.3	0.1	0.0	2.5				35.0	0.0	0.0
LnGrp LOS	A	A	A	A		A				C		
Approach Vol, veh/h		503			905						87	
Approach Delay, s/veh		0.3			2.4						35.0	
Approach LOS		A			A						C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	18.9	71.1	71.1
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	56.0	56.0
Max Q Clear Time (g_c+I1), s	6.5	2.0	2.0
Green Ext Time (p_c), s	0.4	9.9	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	3.6
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	438	767	17	6	47
Future Vol, veh/h	15	438	767	17	6	47
Conflicting Peds, #/hr	0	0	0	112	14	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	17	487	852	19	7	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	983	0	-	0	1264	974
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	291	-
Critical Hdwy	4.145	-	-	-	6.645	6.245
Critical Hdwy Stg 1	-	-	-	-	5.445	-
Critical Hdwy Stg 2	-	-	-	-	5.845	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	695	-	-	-	173	303
Stage 1	-	-	-	-	363	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	621	-	-	-	134	271
Mov Cap-2 Maneuver	-	-	-	-	134	-
Stage 1	-	-	-	-	316	-
Stage 2	-	-	-	-	653	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.36	0	24.53
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	621	-	-	-	243
HCM Lane V/C Ratio	0.027	-	-	-	0.243
HCM Control Delay (s/veh)	11	-	-	-	24.5
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

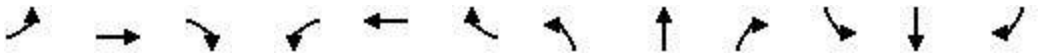
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	428	756	19	11	28
Future Vol, veh/h	16	428	756	19	11	28
Conflicting Peds, #/hr	0	0	0	79	19	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	476	840	21	12	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	940	0	-	0	1222	930
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	292	-
Critical Hdwy	4.145	-	-	-	6.645	6.245
Critical Hdwy Stg 1	-	-	-	-	5.445	-
Critical Hdwy Stg 2	-	-	-	-	5.845	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	722	-	-	-	183	321
Stage 1	-	-	-	-	381	-
Stage 2	-	-	-	-	730	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	668	-	-	-	153	297
Mov Cap-2 Maneuver	-	-	-	-	153	-
Stage 1	-	-	-	-	343	-
Stage 2	-	-	-	-	675	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.38	0	23.79
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	668	-	-	-	235
HCM Lane V/C Ratio	0.027	-	-	-	0.185
HCM Control Delay (s/veh)	10.5	-	-	-	23.8
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	52
Future Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	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)	0.99		0.93	0.98		0.91	0.95		0.96	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	41	438	9	23	794	47	9	3	6	43	8	58
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	552	2604	53	755	1272	75	158	58	78	123	38	119
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	639	3527	72	915	1723	102	654	386	520	444	250	789
Grp Volume(v), veh/h	41	219	228	23	0	841	18	0	0	109	0	0
Grp Sat Flow(s),veh/h/ln	639	1763	1836	915	0	1825	1561	0	0	1482	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.06	0.50		0.33	0.39		0.53
Lane Grp Cap(c), veh/h	552	1302	1356	755	0	1348	295	0	0	279	0	0
V/C Ratio(X)	0.07	0.17	0.17	0.03	0.00	0.62	0.06	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	552	1302	1356	755	0	1348	441	0	0	427	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	0.0	0.0	0.0	0.0	0.0	0.0	32.8	0.0	0.0	34.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.3	0.3	0.1	0.0	2.2	0.1	0.0	0.0	0.9	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	0.0	0.1	0.1	0.0	0.0	0.8	0.3	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.3	0.3	0.3	0.1	0.0	2.2	32.9	0.0	0.0	35.8	0.0	0.0
LnGrp LOS	A	A	A	A		A	C			D		
Approach Vol, veh/h		488			864			18			109	
Approach Delay, s/veh		0.3			2.1			32.9			35.8	
Approach LOS		A			A			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.5		71.5		18.5		71.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.8		57.2		22.8		57.2				
Max Q Clear Time (g_c+I1), s		7.8		2.0		2.8		2.0				
Green Ext Time (p_c), s		0.5		8.5		0.0		3.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			4.4									
HCM 7th LOS			A									

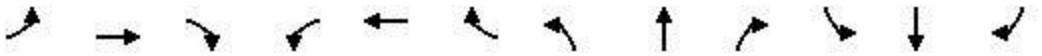
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	431	7	13	773	5	9
Future Vol, veh/h	431	7	13	773	5	9
Conflicting Peds, #/hr	0	69	0	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	479	8	14	859	6	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	556	0	1446	312
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	894	-
Critical Hdwy	-	-	4.145	-	6.645	6.945
Critical Hdwy Stg 1	-	-	-	-	5.845	-
Critical Hdwy Stg 2	-	-	-	-	5.445	-
Follow-up Hdwy	-	-	2.2285	-	3.5285	3.3285
Pot Cap-1 Maneuver	-	-	1007	-	132	682
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	396	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	941	-	121	637
Mov Cap-2 Maneuver	-	-	-	-	121	-
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	388	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.15	20.19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	253	-	-	941	-
HCM Lane V/C Ratio	0.062	-	-	0.015	-
HCM Control Delay (s/veh)	20.2	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	16
Future Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	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)	0.99		0.93	0.98		0.93	0.94		0.98	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	10	478	1	19	842	31	13	1	17	14	1	18
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	581	2900	6	793	1424	52	92	23	71	93	22	69
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	624	3609	8	887	1772	65	412	269	827	417	259	812
Grp Volume(v), veh/h	10	233	246	19	0	873	31	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	624	1763	1853	887	0	1838	1508	0	0	1489	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.04	0.42		0.55	0.42		0.55
Lane Grp Cap(c), veh/h	581	1416	1489	793	0	1477	186	0	0	184	0	0
V/C Ratio(X)	0.02	0.16	0.16	0.02	0.00	0.59	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	581	1416	1489	793	0	1477	414	0	0	411	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.0	0.0	38.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.2	0.1	0.0	1.7	0.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.0	0.7	0.7	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.3	0.2	0.1	0.0	1.7	38.8	0.0	0.0	38.9	0.0	0.0
LnGrp LOS	A	A	A	A		A	D			D		
Approach Vol, veh/h		489			892			31			33	
Approach Delay, s/veh		0.2			1.7			38.8			38.9	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.7		77.3		12.7		77.3				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		58.0		22.0		58.0				
Max Q Clear Time (g_c+I1), s		3.7		2.0		3.6		2.0				
Green Ext Time (p_c), s		0.1		9.0		0.1		3.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			2.9									
HCM 7th LOS			A									

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	8	450	0	0	783	38	6	1	24	5	0	14
Future Vol, veh/h	8	450	0	0	783	38	6	1	24	5	0	14
Conflicting Peds, #/hr	0	0	81	0	0	48	0	0	1	0	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	500	0	0	870	42	7	1	27	6	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	960	0	-	-	-	0	1404	1478	251	1208	1457	955
Stage 1	-	-	-	-	-	-	518	518	-	939	939	-
Stage 2	-	-	-	-	-	-	886	960	-	269	518	-
Critical Hdwy	4.145	-	-	-	-	-	7.345	6.545	6.945	7.345	6.545	6.245
Critical Hdwy Stg 1	-	-	-	-	-	-	6.545	5.545	-	6.145	5.545	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.145	5.545	-	6.545	5.545	-
Follow-up Hdwy	2.2285	-	-	-	-	-	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285
Pot Cap-1 Maneuver	709	-	0	0	-	-	107	124	747	148	128	311
Stage 1	-	-	0	0	-	-	508	530	-	314	340	-
Stage 2	-	-	0	0	-	-	336	332	-	711	530	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	677	-	-	-	-	-	99	117	746	133	121	292
Mov Cap-2 Maneuver	-	-	-	-	-	-	99	117	-	133	121	-
Stage 1	-	-	-	-	-	-	501	523	-	300	324	-
Stage 2	-	-	-	-	-	-	314	317	-	675	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	18.29	22.91
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	305	677	-	-	-	222
HCM Lane V/C Ratio	0.113	0.013	-	-	-	0.095
HCM Control Delay (s/veh)	18.3	10.4	-	-	-	22.9
HCM Lane LOS	C	B	-	-	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	-	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	467	813	68	23	8
Future Volume (veh/h)	12	467	813	68	23	8
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			0.96	1.00	0.97
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	13	519	903	76	26	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	377	2862	1249	105	108	38
Arrive On Green	0.05	1.00	0.74	0.74	0.09	0.09
Sat Flow, veh/h	1767	3618	1682	142	1229	425
Grp Volume(v), veh/h	13	519	0	979	36	0
Grp Sat Flow(s),veh/h/ln	1767	1763	0	1824	1702	0
Q Serve(g_s), s	0.1	0.0	0.0	26.8	1.8	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	26.8	1.8	0.0
Prop In Lane	1.00			0.08	0.72	0.25
Lane Grp Cap(c), veh/h	377	2862	0	1354	150	0
V/C Ratio(X)	0.03	0.18	0.00	0.72	0.24	0.00
Avail Cap(c_a), veh/h	490	2862	0	1354	511	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	0.0	6.4	38.2	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	3.4	0.8	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	0.1	0.1	0.0	8.8	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.6	0.1	0.0	9.8	39.0	0.0
LnGrp LOS	A	A		A	D	
Approach Vol, veh/h		532	979		36	
Approach Delay, s/veh		0.3	9.8		39.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		6.2	71.3		12.4	77.6
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	42.0		27.0	54.0
Max Q Clear Time (g_c+I1), s		2.1	28.8		3.8	2.0
Green Ext Time (p_c), s		0.0	6.4		0.1	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.2
HCM 7th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↰	↱
Traffic Volume (veh/h)	490	0	0	653	228	170
Future Volume (veh/h)	490	0	0	653	228	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	1856	0	0	1856	1856	1856
Adj Flow Rate, veh/h	544	0	0	726	253	189
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	2557	0	0	2557	302	269
Arrive On Green	0.73	0.00	0.00	1.00	0.17	0.17
Sat Flow, veh/h	3711	0	0	3711	1767	1572
Grp Volume(v), veh/h	544	0	0	726	253	189
Grp Sat Flow(s),veh/h/ln	1763	0	0	1763	1767	1572
Q Serve(g_s), s	5.3	0.0	0.0	0.0	14.7	12.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	0.0	14.7	12.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2557	0	0	2557	302	269
V/C Ratio(X)	0.21	0.00	0.00	0.28	0.84	0.70
Avail Cap(c_a), veh/h	2557	0	0	2557	700	623
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.97	1.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	0.0	0.0	42.5	41.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	6.1	3.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.1	6.9	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.9	0.0	0.0	0.3	48.6	44.7
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	544			726	442	
Approach Delay, s/veh	4.9			0.3	47.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	82.9			82.9	23.1
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	53.0			53.0	42.0
Max Q Clear Time (g_c+I1), s	7.3			2.0	16.7
Green Ext Time (p_c), s	4.2			6.1	1.4

Intersection Summary		
HCM 7th Control Delay, s/veh	13.8	
HCM 7th LOS	B	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
Future Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
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		0.94
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	0	1856	1856		1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	347	0		340	548	0				364	753	178
Peak Hour Factor	0.90	0.90	0.90		0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3		3	3	0				3	3	3
Cap, veh/h	0	520			724	2131	0				429	888	210
Arrive On Green	0.00	0.25	0.00		0.14	0.20	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3618	1572		1767	3618	0				1448	2995	707
Grp Volume(v), veh/h	0	347	0		340	548	0				448	424	422
Grp Sat Flow(s),veh/h/ln	0	1763	1572		1767	1763	0				1783	1689	1678
Q Serve(g_s), s	0.0	9.4	0.0		18.8	13.9	0.0				25.1	25.0	25.1
Cycle Q Clear(g_c), s	0.0	9.4	0.0		18.8	13.9	0.0				25.1	25.0	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.81		0.42
Lane Grp Cap(c), veh/h	0	520			724	2131	0				529	501	497
V/C Ratio(X)	0.00	0.67			0.47	0.26	0.00				0.85	0.85	0.85
Avail Cap(c_a), veh/h	0	632			724	2131	0				631	597	594
HCM Platoon Ratio	1.00	1.67	1.67		0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.97	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	37.6	0.0		35.2	22.3	0.0				35.0	35.0	35.0
Incr Delay (d2), s/veh	0.0	6.4	0.0		0.2	0.3	0.0				8.0	8.3	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
%ile BackOfQ(50%),veh/ln	0.0	4.2	0.0		9.0	6.6	0.0				11.8	11.3	11.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	44.0	0.0		35.4	22.6	0.0				43.0	43.4	43.5
LnGrp LOS		D			D	C					D	D	D
Approach Vol, veh/h		347				888						1295	
Approach Delay, s/veh		44.0				27.5						43.3	
Approach LOS		D				C						D	

Timer - Assigned Phs	1	2		4		6							
Phs Duration (G+Y+Rc), s	8.4	20.6		36.9		69.1							
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0							
Max Green Setting (Gmax), s	3.4	19.0		37.5		58.0							
Max Q Clear Time (g_c+I1), s	0.8	11.4		27.1		15.9							
Green Ext Time (p_c), s	0.5	1.0		4.4		2.9							

Intersection Summary	
HCM 7th Control Delay, s/veh	37.9
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Future Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.98	1.00		0.94	0.97		0.92	1.00		0.90
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	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		254	308	92	19	324	321	144	749	127	0	0	493
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, %		3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h		1138	856	256	60	816	369	310	981	401	0	516	791
Arrive On Green		0.44	0.83	0.83	0.25	0.25	0.25	0.28	0.28	0.28	0.00	0.00	0.28
Sat Flow, veh/h		3428	1363	407	92	3285	1485	871	3526	1443	0	1856	2845
Grp Volume(v), veh/h		254	0	400	181	162	321	144	749	127	0	0	493
Grp Sat Flow(s),veh/h/ln		1714	0	1771	1773	1604	1485	871	1763	1443	0	1856	1423
Q Serve(g_s), s		4.9	0.0	5.7	0.0	8.9	22.0	15.2	20.6	7.4	0.0	0.0	16.0
Cycle Q Clear(g_c), s		4.9	0.0	5.7	8.6	8.9	22.0	15.2	20.6	7.4	0.0	0.0	16.0
Prop In Lane		1.00		0.23	0.10		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h		1138	0	1111	478	399	369	310	981	401	0	516	791
V/C Ratio(X)		0.22	0.00	0.36	0.38	0.41	0.87	0.46	0.76	0.32	0.00	0.00	0.62
Avail Cap(c_a), veh/h		1138	0	1111	585	499	462	413	1397	572	0	735	1127
HCM Platoon Ratio		1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh		21.1	0.0	3.7	33.2	33.3	38.2	33.1	35.1	30.3	0.0	0.0	33.4
Incr Delay (d2), s/veh		0.1	0.0	0.9	2.3	3.1	23.4	1.1	1.6	0.4	0.0	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		1.9	0.0	1.9	4.2	3.8	10.4	3.3	9.1	2.6	0.0	0.0	5.6
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		21.2	0.0	4.6	35.5	36.3	61.6	34.2	36.7	30.7	0.0	0.0	34.2
LnGrp LOS		C		A	D	D	E	C	D	C			C
Approach Vol, veh/h			654			664			1020			493	
Approach Delay, s/veh			11.1			48.3			35.6			34.2	
Approach LOS			B			D			D			C	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	71.5		34.5	40.2	31.3		34.5
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	54.0		42.0	16.0	33.0		42.0
Max Q Clear Time (g_c+I1), s	7.7		18.0	6.9	24.0		22.6
Green Ext Time (p_c), s	3.1		2.4	0.6	2.4		6.8

Intersection Summary	
HCM 7th Control Delay, s/veh	32.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	0	63
Future Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	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)	0.99		0.98	1.00		0.96	0.98		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	24	477	2	1	592	100	2	0	0	59	0	70
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	77	1302	5	45	2189	368	253	0	0	138	16	105
Arrive On Green	0.75	0.75	0.75	1.00	1.00	1.00	0.13	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	40	1746	7	0	2934	493	1262	0	0	558	127	812
Grp Volume(v), veh/h	503	0	0	374	0	319	2	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	1794	0	0	1855	0	1573	1262	0	0	1497	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	7.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	6.5	0.0	0.0
Prop In Lane	0.05		0.00	0.00		0.31	1.00		0.00	0.46		0.54
Lane Grp Cap(c), veh/h	1385	0	0	1429	0	1173	253	0	0	259	0	0
V/C Ratio(X)	0.36	0.00	0.00	0.26	0.00	0.27	0.01	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1385	0	0	1429	0	1173	425	0	0	454	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.00	0.92	0.00	0.92	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.5	0.0	0.0	0.0	0.0	0.0	30.4	0.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.6	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	2.3	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.3	0.0	0.0	0.4	0.0	0.5	30.4	0.0	0.0	33.6	0.0	0.0
LnGrp LOS	A			A		A	C			C		
Approach Vol, veh/h		503			693			2			129	
Approach Delay, s/veh		4.3			0.5			30.4			33.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.3	64.7	15.3	64.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	8.5	2.0	2.1	9.6
Green Ext Time (p_c), s	0.4	3.3	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	5.2
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	0
Future Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	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)	0.99		0.95	0.99		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	3	391	141	123	373	0	320	0	169	0	0	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	966	780	536	968	0	429	0	187	0	690	0
Arrive On Green	1.00	1.00	1.00	0.52	0.52	0.00	0.37	0.00	0.37	0.00	0.00	0.00
Sat Flow, veh/h	2	1851	1495	855	1856	0	952	0	503	0	1856	0
Grp Volume(v), veh/h	394	0	141	123	373	0	489	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1854	0	1495	855	1856	0	1455	0	0	0	1856	0
Q Serve(g_s), s	0.0	0.0	0.0	6.4	9.6	0.0	25.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	6.4	9.6	0.0	25.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	0.65		0.35	0.00		0.00
Lane Grp Cap(c), veh/h	1012	0	780	536	968	0	616	0	0	0	690	0
V/C Ratio(X)	0.39	0.00	0.18	0.23	0.39	0.00	0.79	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1012	0	780	536	968	0	747	0	0	0	847	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	0.94	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	10.7	11.5	0.0	23.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	1.0	1.2	0.0	4.9	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	0.3	0.0	0.1	1.3	4.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	1.1	0.0	0.5	11.7	12.6	0.0	28.6	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	A		A	B	B		C					
Approach Vol, veh/h		535			496			489			0	
Approach Delay, s/veh		0.9			12.4			28.6			0.0	
Approach LOS		A			B			C				

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	45.7	34.3	45.7	34.3
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	35.0	* 37	35.0	36.5
Max Q Clear Time (g_c+I1), s	11.6	27.4	2.0	0.0
Green Ext Time (p_c), s	3.3	2.3	3.4	0.0

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.

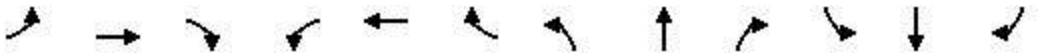
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	675	794	87	0	40
Future Vol, veh/h	0	675	794	87	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	750	882	97	0	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	489
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	522
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	522
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.54
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	522
HCM Lane V/C Ratio	-	-	-	0.085
HCM Control Delay (s/veh)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Future Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.85	0.93		0.80	0.95		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	106	505	76	62	229	64	116	420	159	81	281	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	476	950	379	140	508	138	302	1159	414	277	781	287
Arrive On Green	0.27	0.27	0.27	0.22	0.22	0.22	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1795	3582	1431	625	2261	617	928	3582	1280	800	2412	886
Grp Volume(v), veh/h	106	505	76	184	0	171	116	420	159	81	205	185
Grp Sat Flow(s),veh/h/ln	1795	1791	1431	1854	0	1650	928	1791	1280	800	1791	1507
Q Serve(g_s), s	3.7	9.7	3.3	6.9	0.0	7.2	8.9	7.2	7.7	6.9	7.0	7.6
Cycle Q Clear(g_c), s	3.7	9.7	3.3	6.9	0.0	7.2	16.5	7.2	7.7	14.2	7.0	7.6
Prop In Lane	1.00		1.00	0.34		0.37	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	476	950	379	416	0	370	302	1159	414	277	580	488
V/C Ratio(X)	0.22	0.53	0.20	0.44	0.00	0.46	0.38	0.36	0.38	0.29	0.35	0.38
Avail Cap(c_a), veh/h	827	1650	659	508	0	452	302	1159	414	277	580	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	25.2	22.9	26.8	0.0	27.0	27.3	20.8	21.0	26.2	20.7	21.0
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.3	3.7	0.9	2.7	2.7	1.7	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.1	1.1	3.0	0.0	2.8	2.2	3.1	2.6	1.5	3.1	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.1	25.4	23.0	27.1	0.0	27.3	31.0	21.7	23.7	28.9	22.4	23.2
LnGrp LOS	C	C	C	C		C	C	C	C	C	C	C
Approach Vol, veh/h		687			355			695			471	
Approach Delay, s/veh		24.8			27.2			23.7			23.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	23.0	31.0	26.3	31.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	26.0	37.0	26.0
Max Q Clear Time (g_c+I1), s	9.2	18.5	11.7	16.2
Green Ext Time (p_c), s	1.2	1.8	2.8	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)	52	538	118	72	246	43	0	0	0	67	150	92
Future Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
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)	0.92		0.89	1.00		0.92				1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	55	566	124	76	259	45				71	158	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	95	697	150	496	1872	318				190	412	240
Arrive On Green	0.27	0.27	0.27	0.55	1.00	1.00				0.25	0.25	0.25
Sat Flow, veh/h	172	2551	548	1795	3019	513				760	1644	956
Grp Volume(v), veh/h	397	0	348	76	151	153				173	0	153
Grp Sat Flow(s),veh/h/ln	1733	0	1539	1795	1791	1742				1847	0	1513
Q Serve(g_s), s	12.1	0.0	18.1	1.8	0.0	0.0				6.6	0.0	7.2
Cycle Q Clear(g_c), s	18.2	0.0	18.1	1.8	0.0	0.0				6.6	0.0	7.2
Prop In Lane	0.14		0.36	1.00		0.29				0.41		0.63
Lane Grp Cap(c), veh/h	522	0	420	496	1111	1080				463	0	379
V/C Ratio(X)	0.76	0.00	0.83	0.15	0.14	0.14				0.37	0.00	0.40
Avail Cap(c_a), veh/h	784	0	661	496	1111	1080				543	0	445
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.88	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	29.0	14.1	0.0	0.0				26.3	0.0	26.6
Incr Delay (d2), s/veh	8.9	0.0	15.2	0.1	0.3	0.3				0.2	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	8.2	0.7	0.1	0.1				2.8	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.8	0.0	44.2	14.2	0.3	0.3				26.5	0.0	26.8
LnGrp LOS	D		D	B	A	A				C		C
Approach Vol, veh/h		745			380						326	
Approach Delay, s/veh		40.8			3.1						26.7	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.5	29.2		26.3		58.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	8.0	* 37		25.0		49.0
Max Q Clear Time (g_c+I1), s	3.8	20.2		9.2		2.0
Green Ext Time (p_c), s	0.0	3.1		1.2		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	27.7
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)	28	574	3	1	313	42	2	0	2	73	0	46
Future Volume (veh/h)	28	574	3	1	313	42	2	0	2	73	0	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)	0.98		0.92	0.99		0.93	0.96		0.94	0.96		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	29	604	3	1	329	44	2	0	2	77	0	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	110	2148	11	43	1954	257	231	20	187	273	16	137
Arrive On Green	0.21	0.21	0.21	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	101	3389	17	1	3082	405	673	79	752	824	63	553
Grp Volume(v), veh/h	327	0	309	200	0	174	4	0	0	125	0	0
Grp Sat Flow(s),veh/h/ln	1795	0	1711	1884	0	1604	1504	0	0	1440	0	0
Q Serve(g_s), s	0.0	0.0	12.9	0.0	0.0	3.8	0.0	0.0	0.0	4.6	0.0	0.0
Cycle Q Clear(g_c), s	12.4	0.0	12.9	3.7	0.0	3.8	0.2	0.0	0.0	5.9	0.0	0.0
Prop In Lane	0.09		0.01	0.01		0.25	0.50		0.50	0.62		0.38
Lane Grp Cap(c), veh/h	1184	0	1085	1237	0	1017	437	0	0	426	0	0
V/C Ratio(X)	0.28	0.00	0.28	0.16	0.00	0.17	0.01	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	1184	0	1085	1237	0	1017	634	0	0	625	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.00	0.86	0.97	0.00	0.97	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.2	0.0	17.4	6.4	0.0	6.4	24.1	0.0	0.0	26.1	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.6	0.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	6.0	1.4	0.0	1.3	0.1	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.7	0.0	18.0	6.6	0.0	6.7	24.1	0.0	0.0	26.5	0.0	0.0
LnGrp LOS	B		B	A		A	C			C		
Approach Vol, veh/h		636			374			4			125	
Approach Delay, s/veh		17.8			6.7			24.1			26.5	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.1	58.9	26.1	58.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	33.0	42.0	33.0	42.0
Max Q Clear Time (g_c+I1), s	7.9	5.8	2.2	14.9
Green Ext Time (p_c), s	0.7	2.5	0.0	4.5

Intersection Summary	
HCM 7th Control Delay, s/veh	15.1
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Future Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	0.98		0.91	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	94	516	74	139	288	24	25	687	564	14	360	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	209	871	124	213	901	74	72	1556	667	64	1296	215
Arrive On Green	0.06	0.28	0.28	0.06	0.27	0.27	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	3483	3085	439	3483	3312	273	59	3398	1457	43	2830	470
Grp Volume(v), veh/h	94	298	292	139	154	158	377	335	564	227	0	208
Grp Sat Flow(s),veh/h/ln	1742	1791	1733	1742	1791	1794	1827	1630	1457	1745	0	1598
Q Serve(g_s), s	2.2	12.3	12.4	3.3	5.9	6.0	0.0	12.0	29.3	0.0	0.0	6.9
Cycle Q Clear(g_c), s	2.2	12.3	12.4	3.3	5.9	6.0	11.6	12.0	29.3	6.4	0.0	6.9
Prop In Lane	1.00		0.25	1.00		0.15	0.07		1.00	0.06		0.29
Lane Grp Cap(c), veh/h	209	506	489	213	487	488	882	746	667	844	0	732
V/C Ratio(X)	0.45	0.59	0.60	0.65	0.32	0.32	0.43	0.45	0.85	0.27	0.00	0.28
Avail Cap(c_a), veh/h	244	586	567	326	628	629	1250	1085	970	1171	0	1064
HCM Platoon Ratio	1.00	1.00	1.00	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	38.9	26.4	26.5	39.3	24.8	24.9	15.7	15.8	20.5	14.3	0.0	14.5
Incr Delay (d2), s/veh	1.5	1.2	1.3	3.4	0.4	0.4	0.3	0.4	4.7	0.2	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	1.0	5.3	5.2	1.5	2.5	2.6	4.8	4.3	10.3	2.6	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.4	27.6	27.8	42.6	25.2	25.3	16.1	16.2	25.3	14.5	0.0	14.7
LnGrp LOS	D	C	C	D	C	C	B	B	C	B		B
Approach Vol, veh/h		684			451			1276			435	
Approach Delay, s/veh		29.5			30.6			20.2			14.6	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	45.2	11.1	29.3		45.2	10.2	30.2
Change Period (Y+Rc), s	6.0	6.0	* 6		6.0	5.0	6.0
Max Green Setting (Gmax), s	57.0	6.0	* 30		57.0	8.0	28.0
Max Q Clear Time (g_c+I1), s	31.3	4.2	8.0		8.9	5.3	14.4
Green Ext Time (p_c), s	7.9	0.0	1.9		3.1	0.1	3.2

Intersection Summary	
HCM 7th Control Delay, s/veh	23.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	917	372	177	254	57
Future Volume (veh/h)	122	917	372	177	254	57
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)	0.99			0.96	1.00	0.90
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	128	965	392	186	267	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	647	2449	1599	746	303	68
Arrive On Green	0.68	0.68	1.00	1.00	0.22	0.22
Sat Flow, veh/h	835	3676	2432	1091	1399	314
Grp Volume(v), veh/h	128	965	299	279	328	0
Grp Sat Flow(s),veh/h/ln	835	1791	1791	1638	1719	0
Q Serve(g_s), s	5.4	11.1	0.0	0.0	17.6	0.0
Cycle Q Clear(g_c), s	5.4	11.1	0.0	0.0	17.6	0.0
Prop In Lane	1.00			0.67	0.81	0.18
Lane Grp Cap(c), veh/h	647	2449	1224	1120	372	0
V/C Ratio(X)	0.20	0.39	0.24	0.25	0.88	0.00
Avail Cap(c_a), veh/h	647	2449	1224	1120	678	0
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.91	0.91	1.00	0.00
Uniform Delay (d), s/veh	5.6	6.5	0.0	0.0	36.1	0.0
Incr Delay (d2), s/veh	0.5	0.3	0.4	0.5	6.9	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	3.9	0.1	0.2	8.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.1	6.8	0.4	0.5	43.0	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		1093	578		328	
Approach Delay, s/veh		6.7	0.5		43.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		70.0		25.0	70.0
Change Period (Y+Rc), s		5.0		4.5	5.0
Max Green Setting (Gmax), s		48.0		37.5	48.0
Max Q Clear Time (g_c+I1), s		2.0		19.6	13.1
Green Ext Time (p_c), s		4.4		1.0	10.1

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)	18	1124	29	23	518	13	0	0	0	21	5	31
Future Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
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)	0.97		0.89	0.99		0.90				1.00		0.89
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	19	1183	31	24	545	14				22	5	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	687	2619	69	414	1344	35				91	21	137
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00				0.16	0.16	0.16
Sat Flow, veh/h	829	3553	93	459	1824	47				577	131	866
Grp Volume(v), veh/h	19	596	618	24	0	559				60	0	0
Grp Sat Flow(s),veh/h/ln	829	1791	1855	459	0	1870				1574	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				3.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				3.2	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.03				0.37		0.55
Lane Grp Cap(c), veh/h	687	1320	1368	414	0	1379				248	0	0
V/C Ratio(X)	0.03	0.45	0.45	0.06	0.00	0.41				0.24	0.00	0.00
Avail Cap(c_a), veh/h	687	1320	1368	414	0	1379				431	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				35.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.0	0.9	0.3	0.0	0.9				0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.0	0.0	0.3				1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	1.0	0.9	0.3	0.0	0.9				35.5	0.0	0.0
LnGrp LOS	A	A	A	A		A				D		
Approach Vol, veh/h		1233			583						60	
Approach Delay, s/veh		0.9			0.9						35.5	
Approach LOS		A			A						D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	20.0	75.0	75.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	26.0	59.0	59.0
Max Q Clear Time (g_c+I1), s	5.2	2.0	2.0
Green Ext Time (p_c), s	0.3	5.1	12.6

Intersection Summary	
HCM 7th Control Delay, s/veh	2.0
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	1127	536	12	6	18
Future Vol, veh/h	18	1127	536	12	6	18
Conflicting Peds, #/hr	0	0	0	95	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	1186	564	13	6	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	672	0	-	0	1310	666
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	644	-
Critical Hdwy	4.115	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	922	-	-	-	164	461
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	488	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	839	-	-	-	132	419
Mov Cap-2 Maneuver	-	-	-	-	132	-
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	444	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.15	0	19.59
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	839	-	-	-	272
HCM Lane V/C Ratio	0.023	-	-	-	0.093
HCM Control Delay (s/veh)	9.4	-	-	-	19.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	1101	527	35	8	21
Future Vol, veh/h	32	1101	527	35	8	21
Conflicting Peds, #/hr	0	0	0	96	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	34	1159	555	37	8	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	688	0	-	0	1340	669
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	671	-
Critical Hdwy	4.115	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	910	-	-	-	157	459
Stage 1	-	-	-	-	510	-
Stage 2	-	-	-	-	473	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	827	-	-	-	124	417
Mov Cap-2 Maneuver	-	-	-	-	124	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	430	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.27	0	21.21
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	827	-	-	-	252
HCM Lane V/C Ratio	0.041	-	-	-	0.121
HCM Control Delay (s/veh)	9.5	-	-	-	21.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	63
Future Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	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		0.89	0.99		0.89	0.89		0.93	0.95		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	88	1063	16	19	496	73	29	11	9	67	15	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	430	2483	37	434	1086	160	212	79	52	168	48	130
Arrive On Green	1.00	1.00	1.00	0.23	0.23	0.23	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	849	3604	54	519	1576	232	735	382	252	550	233	630
Grp Volume(v), veh/h	88	528	551	19	0	569	49	0	0	148	0	0
Grp Sat Flow(s),veh/h/ln	849	1791	1868	519	0	1808	1369	0	0	1413	0	0
Q Serve(g_s), s	4.6	0.0	0.0	2.7	0.0	25.8	0.0	0.0	0.0	6.2	0.0	0.0
Cycle Q Clear(g_c), s	30.3	0.0	0.0	2.7	0.0	25.8	2.4	0.0	0.0	8.6	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.13	0.59		0.18	0.45		0.45
Lane Grp Cap(c), veh/h	430	1234	1287	434	0	1246	342	0	0	346	0	0
V/C Ratio(X)	0.20	0.43	0.43	0.04	0.00	0.46	0.14	0.00	0.00	0.43	0.00	0.00
Avail Cap(c_a), veh/h	430	1234	1287	434	0	1246	462	0	0	469	0	0
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	6.0	0.0	0.0	12.5	0.0	21.4	30.8	0.0	0.0	33.3	0.0	0.0
Incr Delay (d2), s/veh	1.1	1.1	1.0	0.2	0.0	1.2	0.2	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	0.8	0.4	0.4	0.3	0.0	12.8	0.9	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.0	1.1	1.0	12.7	0.0	22.6	31.0	0.0	0.0	34.1	0.0	0.0
LnGrp LOS	A	A	A	B		C	C			C		
Approach Vol, veh/h		1167			588			49			148	
Approach Delay, s/veh		1.5			22.3			31.0			34.1	
Approach LOS		A			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.6		70.4		24.6		70.4				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		28.0		57.0		28.0		57.0				
Max Q Clear Time (g_c+I1), s		10.6		27.8		4.4		32.3				
Green Ext Time (p_c), s		0.8		4.5		0.2		8.6				

Intersection Summary												
HCM 7th Control Delay, s/veh			11.0									
HCM 7th LOS			B									

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1074	9	15	541	17	15
Future Vol, veh/h	1074	9	15	541	17	15
Conflicting Peds, #/hr	0	91	0	0	41	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1131	9	16	569	18	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1231	0	1868	661
Stage 1	-	-	-	-	1226	-
Stage 2	-	-	-	-	642	-
Critical Hdwy	-	-	4.115	-	6.615	6.915
Critical Hdwy Stg 1	-	-	-	-	5.815	-
Critical Hdwy Stg 2	-	-	-	-	5.415	-
Follow-up Hdwy	-	-	2.2095	-	3.5095	3.3095
Pot Cap-1 Maneuver	-	-	568	-	72	408
Stage 1	-	-	-	-	243	-
Stage 2	-	-	-	-	525	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	519	-	61	372
Mov Cap-2 Maneuver	-	-	-	-	61	-
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	490	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	57.77
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	101	-	-	519	-
HCM Lane V/C Ratio	0.335	-	-	0.03	-
HCM Control Delay (s/veh)	57.8	-	-	12.2	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	1.3	-	-	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	23
Future Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	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)	0.99		0.90	1.00		0.91	0.91		0.97	0.97		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	31	1102	14	18	547	39	14	4	23	15	3	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	630	2799	36	376	1336	95	93	39	104	95	33	102
Arrive On Green	0.52	0.52	0.52	0.77	0.77	0.77	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	828	3616	46	509	1726	123	347	325	858	362	270	842
Grp Volume(v), veh/h	31	546	570	18	0	586	41	0	0	42	0	0
Grp Sat Flow(s),veh/h/ln	828	1791	1871	509	0	1849	1529	0	0	1473	0	0
Q Serve(g_s), s	2.0	17.5	17.5	1.4	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.0	17.5	17.5	18.9	0.0	10.0	2.1	0.0	0.0	2.3	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.07	0.34		0.56	0.36		0.57
Lane Grp Cap(c), veh/h	630	1386	1448	376	0	1431	235	0	0	229	0	0
V/C Ratio(X)	0.05	0.39	0.39	0.05	0.00	0.41	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	630	1386	1448	376	0	1431	428	0	0	417	0	0
HCM Platoon Ratio	0.67	0.67	0.67	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	10.9	9.4	9.4	8.3	0.0	3.6	37.6	0.0	0.0	37.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.8	0.2	0.0	0.9	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	7.7	8.0	0.2	0.0	3.0	0.9	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.0	10.2	10.2	8.5	0.0	4.4	38.0	0.0	0.0	38.1	0.0	0.0
LnGrp LOS	B	B	B	A		A	D			D		
Approach Vol, veh/h		1147			604			41			42	
Approach Delay, s/veh		10.2			4.5			38.0			38.1	
Approach LOS		B			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.5		78.5		16.5		78.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		24.0		61.0		24.0		61.0				
Max Q Clear Time (g_c+I1), s		4.3		20.9		4.1		19.5				
Green Ext Time (p_c), s		0.2		4.9		0.1		9.9				

Intersection Summary												
HCM 7th Control Delay, s/veh			9.6									
HCM 7th LOS			A									

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	21	1062	0	0	550	37	4	2	65	10	0	20
Future Vol, veh/h	21	1062	0	0	550	37	4	2	65	10	0	20
Conflicting Peds, #/hr	0	0	81	0	0	89	0	0	0	0	0	14
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	22	1118	0	0	579	39	4	2	68	11	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	-	-	-	0	1755	1869	559	1292	1850	701
Stage 1	-	-	-	-	-	-	1162	1162	-	687	687	-
Stage 2	-	-	-	-	-	-	593	707	-	604	1162	-
Critical Hdwy	4.115	-	-	-	-	-	7.315	6.515	6.915	7.315	6.515	6.215
Critical Hdwy Stg 1	-	-	-	-	-	-	6.515	5.515	-	6.115	5.515	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.115	5.515	-	6.515	5.515	-
Follow-up Hdwy	2.2095	-	-	-	-	-	3.5095	4.0095	3.3095	3.5095	4.0095	3.3095
Pot Cap-1 Maneuver	895	-	0	0	-	-	61	73	475	131	75	440
Stage 1	-	-	0	0	-	-	209	270	-	438	448	-
Stage 2	-	-	0	0	-	-	493	439	-	455	270	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	819	-	-	-	-	-	55	65	475	96	66	397
Mov Cap-2 Maneuver	-	-	-	-	-	-	55	65	-	96	66	-
Stage 1	-	-	-	-	-	-	204	263	-	401	410	-
Stage 2	-	-	-	-	-	-	461	402	-	376	263	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	21.27	27.02
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	295	819	-	-	-	195
HCM Lane V/C Ratio	0.253	0.027	-	-	-	0.162
HCM Control Delay (s/veh)	21.3	9.5	-	-	-	27
HCM Lane LOS	C	A	-	-	-	D
HCM 95th %tile Q(veh)	1	0.1	-	-	-	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	1107	566	116	38	21
Future Volume (veh/h)	30	1107	566	116	38	21
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			0.95	1.00	0.96
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	32	1165	596	122	40	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	526	2808	1042	213	130	72
Arrive On Green	0.05	0.78	0.69	0.69	0.12	0.12
Sat Flow, veh/h	1795	3676	1503	308	1075	591
Grp Volume(v), veh/h	32	1165	0	718	63	0
Grp Sat Flow(s),veh/h/ln	1795	1791	0	1810	1693	0
Q Serve(g_s), s	0.4	9.9	0.0	19.1	3.2	0.0
Cycle Q Clear(g_c), s	0.4	9.9	0.0	19.1	3.2	0.0
Prop In Lane	1.00			0.17	0.63	0.35
Lane Grp Cap(c), veh/h	526	2808	0	1256	205	0
V/C Ratio(X)	0.06	0.41	0.00	0.57	0.31	0.00
Avail Cap(c_a), veh/h	591	2808	0	1256	483	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.2	3.3	0.0	7.4	38.1	0.0
Incr Delay (d2), s/veh	0.0	0.5	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
%ile BackOfQ(50%),veh/ln	0.1	2.6	0.0	6.8	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.2	3.7	0.0	9.3	38.9	0.0
LnGrp LOS	A	A		A	D	
Approach Vol, veh/h		1197	718		63	
Approach Delay, s/veh		3.8	9.3		38.9	
Approach LOS		A	A		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		8.6	70.4		16.0	79.0
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	46.9		27.1	58.9
Max Q Clear Time (g_c+I1), s		2.4	21.1		5.2	11.9
Green Ext Time (p_c), s		0.0	5.7		0.1	11.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑	↰	↱
Traffic Volume (veh/h)	1145	0	0	527	157	122
Future Volume (veh/h)	1145	0	0	527	157	122
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	1885	0	0	1885	1885	1885
Adj Flow Rate, veh/h	1205	0	0	555	165	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2794	0	0	2794	209	186
Arrive On Green	0.78	0.00	0.00	1.00	0.12	0.12
Sat Flow, veh/h	3770	0	0	3770	1795	1598
Grp Volume(v), veh/h	1205	0	0	555	165	128
Grp Sat Flow(s),veh/h/ln	1791	0	0	1791	1795	1598
Q Serve(g_s), s	11.8	0.0	0.0	0.0	9.5	8.2
Cycle Q Clear(g_c), s	11.8	0.0	0.0	0.0	9.5	8.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2794	0	0	2794	209	186
V/C Ratio(X)	0.43	0.00	0.00	0.20	0.79	0.69
Avail Cap(c_a), veh/h	2794	0	0	2794	508	452
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.99	1.00	1.00
Uniform Delay (d), s/veh	3.9	0.0	0.0	0.0	45.6	45.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.2	6.6	4.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.0	0.1	4.6	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.4	0.0	0.0	0.2	52.2	49.5
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	1205			555	293	
Approach Delay, s/veh	4.4			0.2	51.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	88.7			88.7	17.3
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	65.0			65.0	30.0
Max Q Clear Time (g_c+I1), s	13.8			2.0	11.5
Green Ext Time (p_c), s	12.5			4.4	0.8

Intersection Summary		
HCM 7th Control Delay, s/veh	9.9	
HCM 7th LOS	A	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
Future Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
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		0.95
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	0	1885	1885		1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	451	0		480	368	0				337	779	186
Peak Hour Factor	0.95	0.95	0.95		0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1		1	1	0				1	1	1
Cap, veh/h	0	589			725	2204	0				387	894	213
Arrive On Green	0.00	0.27	0.00		0.67	1.00	0.00				0.29	0.29	0.29
Sat Flow, veh/h	0	3676	1598		1795	3676	0				1355	3132	747
Grp Volume(v), veh/h	0	451	0		480	368	0				452	426	424
Grp Sat Flow(s),veh/h/ln	0	1791	1598		1795	1791	0				1817	1716	1702
Q Serve(g_s), s	0.0	12.3	0.0		16.7	0.0	0.0				25.1	25.1	25.1
Cycle Q Clear(g_c), s	0.0	12.3	0.0		16.7	0.0	0.0				25.1	25.1	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.75		0.44
Lane Grp Cap(c), veh/h	0	589			725	2204	0				519	490	486
V/C Ratio(X)	0.00	0.77			0.66	0.17	0.00				0.87	0.87	0.87
Avail Cap(c_a), veh/h	0	676			725	2204	0				574	542	538
HCM Platoon Ratio	1.00	1.67	1.67		1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.88	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	36.6	0.0		13.0	0.0	0.0				36.0	36.0	36.0
Incr Delay (d2), s/veh	0.0	8.1	0.0		1.8	0.2	0.0				11.8	12.4	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
%ile BackOfQ(50%),veh/ln	0.0	5.5	0.0		4.9	0.1	0.0				12.6	12.0	11.9
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	44.7	0.0		14.8	0.2	0.0				47.8	48.4	48.6
LnGrp LOS		D			B	A					D	D	D
Approach Vol, veh/h		451				848						1302	
Approach Delay, s/veh		44.7				8.5						48.3	
Approach LOS		D				A						D	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	47.8	22.4	35.8	70.2
Change Period (Y+Rc), s	5.0	5.0	5.5	5.0
Max Green Setting (Gmax), s	37.8	20.0	33.5	62.0
Max Q Clear Time (g_c+I1), s	18.7	14.3	27.1	2.0
Green Ext Time (p_c), s	0.7	1.1	3.2	1.9

Intersection Summary	
HCM 7th Control Delay, s/veh	34.7
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Future Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.90	0.91		0.89	1.00		0.88	0.97		0.97
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No			No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		192	400	200	46	437	255	166	476	173	79	119	162
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		1103	675	338	89	690	328	180	1115	436	145	201	484
Arrive On Green		0.63	1.00	1.00	0.23	0.23	0.23	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h		3483	1136	568	209	2991	1421	1106	3582	1401	315	646	1555
Grp Volume(v), veh/h		192	0	600	241	242	255	166	476	173	198	0	162
Grp Sat Flow(s),veh/h/ln		1742	0	1705	1571	1630	1421	1106	1791	1401	961	0	1555
Q Serve(g_s), s		2.4	0.0	0.0	7.8	14.2	17.8	10.8	11.2	10.3	11.0	0.0	8.5
Cycle Q Clear(g_c), s		2.4	0.0	0.0	13.9	14.2	17.8	33.0	11.2	10.3	22.2	0.0	8.5
Prop In Lane		1.00		0.33	0.19		1.00	1.00		1.00	0.40		1.00
Lane Grp Cap(c), veh/h		1103	0	1013	403	376	328	180	1115	436	347	0	484
V/C Ratio(X)		0.17	0.00	0.59	0.60	0.64	0.78	0.92	0.43	0.40	0.57	0.00	0.33
Avail Cap(c_a), veh/h		1103	0	1013	701	707	616	180	1115	436	347	0	484
HCM Platoon Ratio		2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	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		13.7	0.0	0.0	36.3	36.9	38.2	49.4	29.0	28.7	33.7	0.0	28.1
Incr Delay (d2), s/veh		0.1	0.0	2.5	6.4	8.3	16.6	45.0	0.3	0.6	2.2	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		0.9	0.0	0.7	6.3	6.6	7.7	6.7	4.9	3.5	4.8	0.0	3.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		13.8	0.0	2.5	42.7	45.1	54.8	94.4	29.2	29.3	35.9	0.0	28.5
LnGrp LOS		B		A	D	D	D	F	C	C	D		C
Approach Vol, veh/h			792			738			815			360	
Approach Delay, s/veh			5.3			47.7			42.5			32.6	
Approach LOS			A			D			D			C	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	68.0		38.0	38.6	29.4		38.0					
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0					
Max Green Setting (Gmax), s	63.0		33.0	12.0	46.0		33.0					
Max Q Clear Time (g_c+I1), s	2.0		24.2	4.4	19.8		35.0					
Green Ext Time (p_c), s	5.5		1.4	0.4	4.6		0.0					

Intersection Summary	
HCM 7th Control Delay, s/veh	31.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	61
Future Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	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)	0.98		0.97	1.00		0.91	1.00		1.00	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	41	606	4	2	674	92	0	2	3	116	2	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	91	1149	7	46	2069	281	0	135	203	243	19	102
Arrive On Green	0.68	0.68	0.68	1.00	1.00	1.00	0.00	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	63	1699	11	1	3058	416	0	681	1021	852	94	513
Grp Volume(v), veh/h	651	0	0	416	0	352	0	0	5	182	0	0
Grp Sat Flow(s),veh/h/ln	1773	0	0	1884	0	1592	0	0	1701	1460	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	7.9	0.0	0.0
Cycle Q Clear(g_c), s	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	9.0	0.0	0.0
Prop In Lane	0.06		0.01	0.00		0.26	0.00		0.60	0.64		0.35
Lane Grp Cap(c), veh/h	1248	0	0	1320	0	1077	0	0	338	363	0	0
V/C Ratio(X)	0.52	0.00	0.00	0.32	0.00	0.33	0.00	0.00	0.01	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1248	0	0	1320	0	1077	0	0	447	456	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.00	0.88	0.00	0.88	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.8	29.2	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.6	0.0	0.7	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.1	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.8	0.0	0.0	0.6	0.0	0.7	0.0	0.0	25.8	29.6	0.0	0.0
LnGrp LOS	A			A		A			C	C		
Approach Vol, veh/h		651			768			5			182	
Approach Delay, s/veh		7.8			0.6			25.8			29.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	20.9	59.1	20.9	59.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	11.0	2.0	2.2	15.7
Green Ext Time (p_c), s	0.5	3.8	0.0	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	0	2
Future Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	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)	0.96		0.93	0.98		0.89	1.00		0.91	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	11	453	262	276	557	1	208	0	141	0	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	55	1147	918	541	1163	2	304	4	160	0	0	439
Arrive On Green	1.00	1.00	1.00	0.62	0.62	0.62	0.28	0.00	0.28	0.00	0.00	0.28
Sat Flow, veh/h	14	1854	1485	729	1881	3	844	14	582	0	0	1594
Grp Volume(v), veh/h	464	0	262	276	0	558	349	0	0	0	0	2
Grp Sat Flow(s),veh/h/ln	1868	0	1485	729	0	1884	1440	0	0	0	0	1594
Q Serve(g_s), s	0.0	0.0	0.0	18.6	0.0	12.8	18.2	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	18.6	0.0	12.8	18.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	0.02		1.00	1.00		0.00	0.60		0.40	0.00		1.00
Lane Grp Cap(c), veh/h	1201	0	918	541	0	1165	468	0	0	0	0	439
V/C Ratio(X)	0.39	0.00	0.29	0.51	0.00	0.48	0.75	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1201	0	918	541	0	1165	504	0	0	0	0	468
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.00	0.81	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.4	0.0	8.3	27.7	0.0	0.0	0.0	0.0	21.0
Incr Delay (d2), s/veh	0.8	0.0	0.6	3.4	0.0	1.4	5.6	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	0.3	0.0	0.2	3.1	0.0	5.1	6.9	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.8	0.0	0.6	12.8	0.0	9.7	33.3	0.0	0.0	0.0	0.0	21.0
LnGrp LOS	A		A	B		A	C					C
Approach Vol, veh/h		726			834			349			2	
Approach Delay, s/veh		0.7			10.7			33.3			21.0	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.5	26.5	53.5	26.5
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	48.0	* 24	48.0	23.5
Max Q Clear Time (g_c+I1), s	20.6	20.5	2.0	2.1
Green Ext Time (p_c), s	7.0	0.7	4.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

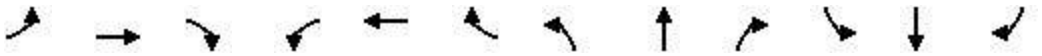
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	758	794	6	0	22
Future Vol, veh/h	0	758	794	6	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	798	836	6	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	421
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.31
Pot Cap-1 Maneuver	0	-	-	-	0	584
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	584
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.42
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	584
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s/veh)	-	-	-	11.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	71
Future Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	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		0.91	1.00		0.90	0.92		0.85	0.93		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	78	464	73	53	200	44	41	280	102	41	228	79
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	459	916	370	126	468	101	358	1195	451	359	839	273
Arrive On Green	0.26	0.26	0.26	0.20	0.20	0.20	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1767	3526	1424	638	2367	512	975	3526	1332	928	2476	806
Grp Volume(v), veh/h	78	464	73	151	0	146	41	280	102	41	158	149
Grp Sat Flow(s),veh/h/ln	1767	1763	1424	1824	0	1693	975	1763	1332	928	1763	1519
Q Serve(g_s), s	2.5	8.3	3.0	5.4	0.0	5.6	2.4	4.2	4.0	2.4	4.8	5.3
Cycle Q Clear(g_c), s	2.5	8.3	3.0	5.4	0.0	5.6	7.7	4.2	4.0	6.7	4.8	5.3
Prop In Lane	1.00		1.00	0.35		0.30	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	459	916	370	361	0	335	358	1195	451	359	597	515
V/C Ratio(X)	0.17	0.51	0.20	0.42	0.00	0.43	0.11	0.23	0.23	0.11	0.26	0.29
Avail Cap(c_a), veh/h	910	1816	733	544	0	505	358	1195	451	359	597	515
HCM Platoon Ratio	1.00	1.00	1.00	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	23.3	21.3	25.9	0.0	26.0	20.7	17.5	17.5	19.9	17.7	17.9
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.3	0.6	0.5	1.2	0.6	1.1	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	1.0	3.4	1.0	2.3	0.0	2.2	0.6	1.7	1.3	0.6	2.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	23.4	21.4	26.2	0.0	26.3	21.3	18.0	18.6	20.5	18.8	19.3
LnGrp LOS	C	C	C	C		C	C	B	B	C	B	B
Approach Vol, veh/h		615			297			423			348	
Approach Delay, s/veh		22.9			26.2			18.5			19.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.6		30.0		24.2		30.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		25.0		38.0		25.0				
Max Q Clear Time (g_c+I1), s		7.6		9.7		10.3		8.7				
Green Ext Time (p_c), s		1.0		1.5		2.5		1.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			21.6									
HCM 7th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
Future Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
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)	0.91		0.85	1.00		0.90				1.00		0.80
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	66	253	289	116	268	69				29	131	30
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	122	381	340	454	1659	414				143	623	137
Arrive On Green	0.28	0.28	0.28	0.51	1.00	1.00				0.26	0.26	0.26
Sat Flow, veh/h	251	1359	1213	1767	2729	681				545	2371	520
Grp Volume(v), veh/h	319	0	289	116	170	167				97	0	93
Grp Sat Flow(s),veh/h/ln	1610	0	1213	1767	1763	1647				1828	0	1608
Q Serve(g_s), s	9.5	0.0	19.1	3.1	0.0	0.0				3.5	0.0	3.8
Cycle Q Clear(g_c), s	14.6	0.0	19.1	3.1	0.0	0.0				3.5	0.0	3.8
Prop In Lane	0.21		1.00	1.00		0.41				0.30		0.32
Lane Grp Cap(c), veh/h	503	0	340	454	1072	1001				480	0	422
V/C Ratio(X)	0.63	0.00	0.85	0.26	0.16	0.17				0.20	0.00	0.22
Avail Cap(c_a), veh/h	733	0	521	454	1072	1001				538	0	473
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.91	0.00	0.91	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	27.0	0.0	28.9	16.1	0.0	0.0				24.4	0.0	24.5
Incr Delay (d2), s/veh	5.5	0.0	20.8	0.1	0.3	0.4				0.1	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
%ile BackOfQ(50%),veh/ln	6.3	0.0	7.3	1.2	0.1	0.1				1.5	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.5	0.0	49.7	16.2	0.3	0.4				24.5	0.0	24.6
LnGrp LOS	C		D	B	A	A				C		C
Approach Vol, veh/h		608			453						190	
Approach Delay, s/veh		40.7			4.4						24.5	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.8	29.8		27.3		57.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	8.0	* 37		25.0		49.0
Max Q Clear Time (g_c+I1), s	5.1	21.1		5.8		2.0
Green Ext Time (p_c), s	0.0	2.7		0.6		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	25.1
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)	10	244	0	7	383	24	2	0	3	22	0	22
Future Volume (veh/h)	10	244	0	7	383	24	2	0	3	22	0	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)	0.98		1.00	0.96		0.92	0.96		0.94	0.94		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	11	271	0	8	426	27	2	0	3	24	0	24
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	93	2094	0	57	2056	128	180	23	215	221	19	177
Arrive On Green	0.21	0.21	0.00	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	75	3392	0	21	3248	203	485	91	863	632	78	710
Grp Volume(v), veh/h	150	132	0	244	0	217	5	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	1778	1604	0	1840	0	1632	1439	0	0	1420	0	0
Q Serve(g_s), s	0.0	5.7	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	5.7	0.0	4.7	0.0	4.8	0.2	0.0	0.0	1.9	0.0	0.0
Prop In Lane	0.07		0.00	0.03		0.12	0.40		0.60	0.50		0.50
Lane Grp Cap(c), veh/h	1171	1016	0	1209	0	1033	418	0	0	417	0	0
V/C Ratio(X)	0.13	0.13	0.00	0.20	0.00	0.21	0.01	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	1171	1016	0	1209	0	1033	564	0	0	562	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.00	0.98	0.00	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.5	14.6	0.0	6.6	0.0	6.6	24.0	0.0	0.0	24.7	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.1	0.0	1.8	0.0	1.6	0.1	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	14.8	0.0	7.0	0.0	7.1	24.0	0.0	0.0	24.8	0.0	0.0
LnGrp LOS	B	B		A		A	C			C		
Approach Vol, veh/h		282			461			5			48	
Approach Delay, s/veh		14.7			7.0			24.0			24.8	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.2	58.8	26.2	58.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	45.0	30.0	45.0
Max Q Clear Time (g_c+I1), s	3.9	6.8	2.2	7.7
Green Ext Time (p_c), s	0.2	3.2	0.0	1.9

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)	43	163	63	278	295	38	57	405	241	13	511	62
Future Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	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		0.89	1.00		0.91	0.98		0.93	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	48	181	70	309	328	42	63	450	268	14	568	69
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	717	260	417	1202	152	137	848	508	59	1048	125
Arrive On Green	0.04	0.29	0.29	0.12	0.39	0.39	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	3428	2445	888	3428	3111	393	218	2433	1458	27	3007	359
Grp Volume(v), veh/h	48	127	124	309	184	186	210	303	268	348	0	303
Grp Sat Flow(s),veh/h/ln	1714	1763	1570	1714	1763	1742	1047	1604	1458	1813	0	1580
Q Serve(g_s), s	1.0	4.2	4.6	6.6	5.4	5.6	3.9	11.6	11.2	0.0	0.0	11.8
Cycle Q Clear(g_c), s	1.0	4.2	4.6	6.6	5.4	5.6	15.7	11.6	11.2	11.4	0.0	11.8
Prop In Lane	1.00		0.57	1.00		0.23	0.30		1.00	0.04		0.23
Lane Grp Cap(c), veh/h	144	517	460	417	681	673	427	559	508	681	0	551
V/C Ratio(X)	0.33	0.25	0.27	0.74	0.27	0.28	0.49	0.54	0.53	0.51	0.00	0.55
Avail Cap(c_a), veh/h	225	648	577	720	903	892	554	716	651	852	0	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	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	35.5	20.5	20.7	32.3	16.0	16.1	20.2	19.9	19.8	19.9	0.0	20.0
Incr Delay (d2), s/veh	1.4	0.2	0.3	2.6	0.2	0.2	0.9	0.8	0.8	0.6	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.7	1.7	2.9	2.2	2.2	3.2	4.2	3.8	4.8	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	20.7	21.0	34.9	16.2	16.3	21.1	20.7	20.6	20.5	0.0	20.9
LnGrp LOS	D	C	C	C	B	B	C	C	C	C		C
Approach Vol, veh/h		299			679			781			651	
Approach Delay, s/veh		23.4			24.7			20.8			20.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	32.6	8.2	35.4	32.6	15.3	28.3
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	34.0	5.0	39.0	34.0	16.0	* 28
Max Q Clear Time (g_c+I1), s	17.7	3.0	7.6	13.8	8.6	6.6
Green Ext Time (p_c), s	4.1	0.0	2.5	4.1	0.7	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	61	356	548	283	97	63
Future Volume (veh/h)	61	356	548	283	97	63
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			0.92	1.00	0.93
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	68	396	609	314	108	70
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	434	2488	1540	794	180	117
Arrive On Green	0.71	0.71	0.71	0.71	0.18	0.18
Sat Flow, veh/h	599	3618	2274	1124	984	638
Grp Volume(v), veh/h	68	396	492	431	179	0
Grp Sat Flow(s),veh/h/ln	599	1763	1763	1543	1632	0
Q Serve(g_s), s	4.7	3.4	10.3	10.3	9.1	0.0
Cycle Q Clear(g_c), s	15.0	3.4	10.3	10.3	9.1	0.0
Prop In Lane	1.00			0.73	0.60	0.39
Lane Grp Cap(c), veh/h	434	2488	1244	1089	299	0
V/C Ratio(X)	0.16	0.16	0.40	0.40	0.60	0.00
Avail Cap(c_a), veh/h	434	2488	1244	1089	562	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.5	4.4	5.4	5.4	33.7	0.0
Incr Delay (d2), s/veh	0.7	0.1	0.9	1.1	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	0.7	1.1	3.5	3.1	3.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.2	4.5	6.4	6.5	35.6	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		464	923		179	
Approach Delay, s/veh		5.2	6.4		35.6	
Approach LOS		A	A		D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	21.5	68.5	68.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	31.0	49.0	49.0
Max Q Clear Time (g_c+I1), s	11.1	12.3	17.0
Green Ext Time (p_c), s	0.5	8.1	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	9.4
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
Future Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
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)	0.98		0.91	0.98		0.88				1.00		0.91
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	14	470	19	19	870	16				33	1	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	527	1293	52	639	2591	48				91	3	146
Arrive On Green	0.73	0.73	0.73	1.00	1.00	1.00				0.16	0.16	0.16
Sat Flow, veh/h	609	1763	71	878	3531	65				588	18	944
Grp Volume(v), veh/h	14	0	489	19	434	452				87	0	0
Grp Sat Flow(s),veh/h/ln	609	0	1834	878	1763	1833				1550	0	0
Q Serve(g_s), s	0.6	0.0	8.7	0.3	0.0	0.0				4.5	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	8.7	9.0	0.0	0.0				4.5	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.04				0.38		0.61
Lane Grp Cap(c), veh/h	527	0	1346	639	1294	1345				240	0	0
V/C Ratio(X)	0.03	0.00	0.36	0.03	0.34	0.34				0.36	0.00	0.00
Avail Cap(c_a), veh/h	527	0	1346	639	1294	1345				482	0	0
HCM Platoon Ratio	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				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.3	0.0	4.3	0.6	0.0	0.0				34.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.1	0.7	0.7				0.9	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
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.9	0.0	0.3	0.3				1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.4	0.0	5.1	0.7	0.7	0.7				35.0	0.0	0.0
LnGrp LOS	A		A	A	A	A				C		
Approach Vol, veh/h		503			905						87	
Approach Delay, s/veh		5.1			0.7						35.0	
Approach LOS		A			A						C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	19.0	71.0	71.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	28.0	52.0	52.0
Max Q Clear Time (g_c+I1), s	6.5	11.0	10.7
Green Ext Time (p_c), s	0.4	7.4	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	4.2
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	438	767	17	6	47
Future Vol, veh/h	15	438	767	17	6	47
Conflicting Peds, #/hr	0	0	0	112	14	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	17	487	852	19	7	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	983	0	-	0	1508	548
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	534	-
Critical Hdwy	4.145	-	-	-	6.645	6.945
Critical Hdwy Stg 1	-	-	-	-	5.845	-
Critical Hdwy Stg 2	-	-	-	-	5.445	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	695	-	-	-	121	479
Stage 1	-	-	-	-	326	-
Stage 2	-	-	-	-	584	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	621	-	-	-	94	428
Mov Cap-2 Maneuver	-	-	-	-	94	-
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	522	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.36	0	19.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	621	-	-	-	305
HCM Lane V/C Ratio	0.027	-	-	-	0.193
HCM Control Delay (s/veh)	11	-	-	-	19.6
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7

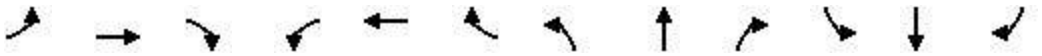
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	428	756	19	11	28
Future Vol, veh/h	16	428	756	19	11	28
Conflicting Peds, #/hr	0	0	0	79	19	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	476	840	21	12	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	940	0	-	0	1460	510
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	530	-
Critical Hdwy	4.145	-	-	-	6.645	6.945
Critical Hdwy Stg 1	-	-	-	-	5.845	-
Critical Hdwy Stg 2	-	-	-	-	5.445	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	722	-	-	-	130	507
Stage 1	-	-	-	-	344	-
Stage 2	-	-	-	-	587	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	668	-	-	-	108	469
Mov Cap-2 Maneuver	-	-	-	-	108	-
Stage 1	-	-	-	-	309	-
Stage 2	-	-	-	-	543	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.38	0	23.15
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	668	-	-	-	241
HCM Lane V/C Ratio	0.027	-	-	-	0.18
HCM Control Delay (s/veh)	10.5	-	-	-	23.1
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	52
Future Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	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)	0.99		0.93	0.99		0.91	0.97		0.94	0.94		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	41	438	9	23	794	47	9	3	6	43	8	58
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	552	1335	27	686	2481	147	159	58	79	123	38	120
Arrive On Green	0.74	0.74	0.74	1.00	1.00	1.00	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	639	1809	37	925	3360	199	657	386	521	445	252	793
Grp Volume(v), veh/h	41	0	447	23	416	425	18	0	0	109	0	0
Grp Sat Flow(s),veh/h/ln	639	0	1846	925	1763	1796	1564	0	0	1491	0	0
Q Serve(g_s), s	1.6	0.0	7.5	0.3	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	7.5	7.8	0.0	0.0	0.8	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.11	0.50		0.33	0.39		0.53
Lane Grp Cap(c), veh/h	552	0	1363	686	1301	1326	296	0	0	280	0	0
V/C Ratio(X)	0.07	0.00	0.33	0.03	0.32	0.32	0.06	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	552	0	1363	686	1301	1326	524	0	0	512	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.3	0.0	4.1	0.4	0.0	0.0	32.8	0.0	0.0	34.8	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.1	0.6	0.6	0.1	0.0	0.0	0.9	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	0.2	0.0	2.4	0.0	0.2	0.2	0.3	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.6	0.0	4.7	0.5	0.6	0.6	32.9	0.0	0.0	35.7	0.0	0.0
LnGrp LOS	A		A	A	A	A	C			D		
Approach Vol, veh/h		488			864			18			109	
Approach Delay, s/veh		4.6			0.6			32.9			35.7	
Approach LOS		A			A			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.6		71.4		18.6		71.4				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		28.0		52.0		28.0		52.0				
Max Q Clear Time (g_c+I1), s		7.8		9.8		2.8		9.5				
Green Ext Time (p_c), s		0.6		6.6		0.0		3.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	4.9
HCM 7th LOS	A

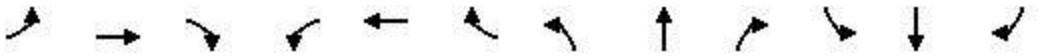
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	431	7	13	773	5	9
Future Vol, veh/h	431	7	13	773	5	9
Conflicting Peds, #/hr	0	69	0	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	479	8	14	859	6	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	556	0	1016	552
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	464	-
Critical Hdwy	-	-	4.145	-	6.645	6.245
Critical Hdwy Stg 1	-	-	-	-	5.445	-
Critical Hdwy Stg 2	-	-	-	-	5.845	-
Follow-up Hdwy	-	-	2.2285	-	3.5285	3.3285
Pot Cap-1 Maneuver	-	-	1007	-	247	530
Stage 1	-	-	-	-	573	-
Stage 2	-	-	-	-	598	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	941	-	226	495
Mov Cap-2 Maneuver	-	-	-	-	226	-
Stage 1	-	-	-	-	536	-
Stage 2	-	-	-	-	585	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.15	15.85
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	347	-	-	941	-
HCM Lane V/C Ratio	0.045	-	-	0.015	-
HCM Control Delay (s/veh)	15.8	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	16
Future Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	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)	0.99		0.93	0.98		0.93	0.97		0.96	0.96		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	10	478	1	19	842	31	13	1	17	14	1	18
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	543	1487	3	793	2777	102	92	23	70	93	22	70
Arrive On Green	1.00	1.00	1.00	0.80	0.80	0.80	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	626	1851	4	887	3456	127	413	267	825	421	263	821
Grp Volume(v), veh/h	10	0	479	19	429	444	31	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	626	0	1854	887	1763	1821	1505	0	0	1504	0	0
Q Serve(g_s), s	0.1	0.0	0.0	0.4	5.7	5.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.8	0.0	0.0	0.4	5.7	5.7	1.6	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.07	0.42		0.55	0.42		0.55
Lane Grp Cap(c), veh/h	543	0	1490	793	1416	1463	185	0	0	185	0	0
V/C Ratio(X)	0.02	0.00	0.32	0.02	0.30	0.30	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	543	0	1490	793	1416	1463	430	0	0	430	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.2	0.0	0.0	1.8	2.3	2.3	38.4	0.0	0.0	38.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.1	0.6	0.5	0.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	0.1	1.4	1.4	0.7	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.3	0.0	0.6	1.8	2.8	2.8	38.8	0.0	0.0	38.9	0.0	0.0
LnGrp LOS	A		A	A	A	A	D			D		
Approach Vol, veh/h		489			892			31			33	
Approach Delay, s/veh		0.6			2.8			38.8			38.9	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.7		77.3		12.7		77.3				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		23.0		57.0		23.0		57.0				
Max Q Clear Time (g_c+I1), s		3.7		7.7		3.6		7.8				
Green Ext Time (p_c), s		0.1		7.0		0.1		3.6				
Intersection Summary												
HCM 7th Control Delay, s/veh			3.7									
HCM 7th LOS			A									

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	8	450	0	0	783	38	6	1	24	5	0	14
Future Vol, veh/h	8	450	0	0	783	38	6	1	24	5	0	14
Conflicting Peds, #/hr	0	0	81	0	0	48	0	0	1	0	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	500	0	0	870	42	7	1	27	6	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	960	0	-	-	-	0	969	1478	501	1458	1457	520
Stage 1	-	-	-	-	-	-	518	518	-	939	939	-
Stage 2	-	-	-	-	-	-	451	960	-	519	518	-
Critical Hdwy	4.145	-	-	-	-	-	7.345	6.545	6.245	7.345	6.545	6.945
Critical Hdwy Stg 1	-	-	-	-	-	-	6.145	5.545	-	6.545	5.545	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.545	5.545	-	6.145	5.545	-
Follow-up Hdwy	2.2285	-	-	-	-	-	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285
Pot Cap-1 Maneuver	709	-	0	0	-	-	219	124	567	98	128	500
Stage 1	-	-	0	0	-	-	538	530	-	283	340	-
Stage 2	-	-	0	0	-	-	556	332	-	537	530	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	677	-	-	-	-	-	206	117	566	87	121	469
Mov Cap-2 Maneuver	-	-	-	-	-	-	206	117	-	87	121	-
Stage 1	-	-	-	-	-	-	530	523	-	270	324	-
Stage 2	-	-	-	-	-	-	529	317	-	503	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	15.21	23.33
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	387	677	-	-	-	217
HCM Lane V/C Ratio	0.089	0.013	-	-	-	0.097
HCM Control Delay (s/veh)	15.2	10.4	-	-	-	23.3
HCM Lane LOS	C	B	-	-	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	-	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	467	813	68	23	8
Future Volume (veh/h)	12	467	813	68	23	8
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			0.93	1.00	0.97
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	13	519	903	76	26	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	861	1506	1118	94	108	38
Arrive On Green	0.56	1.00	0.34	0.34	0.09	0.09
Sat Flow, veh/h	1767	1856	3363	275	1229	425
Grp Volume(v), veh/h	13	519	487	492	36	0
Grp Sat Flow(s),veh/h/ln	1767	1856	1763	1783	1702	0
Q Serve(g_s), s	0.0	0.0	22.6	22.6	1.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	22.6	22.6	1.8	0.0
Prop In Lane	1.00			0.15	0.72	0.25
Lane Grp Cap(c), veh/h	861	1506	602	609	150	0
V/C Ratio(X)	0.02	0.34	0.81	0.81	0.24	0.00
Avail Cap(c_a), veh/h	861	1506	823	832	511	0
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.92	0.92	1.00	0.00
Uniform Delay (d), s/veh	9.1	0.0	26.9	26.9	38.2	0.0
Incr Delay (d2), s/veh	0.0	0.6	10.3	10.2	0.8	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	0.1	0.3	10.9	11.0	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.1	0.6	37.3	37.1	39.0	0.0
LnGrp LOS	A	A	D	D	D	
Approach Vol, veh/h		532	979		36	
Approach Delay, s/veh		0.8	37.2		39.0	
Approach LOS		A	D		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		42.3	35.3		12.4	77.6
Change Period (Y+Rc), s		4.5	* 4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	* 42		27.0	54.0
Max Q Clear Time (g_c+I1), s		2.0	24.6		3.8	2.0
Green Ext Time (p_c), s		0.0	6.2		0.1	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	24.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	490	0	0	653	228	170
Future Volume (veh/h)	490	0	0	653	228	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	1856	0	0	1856	1856	1856
Adj Flow Rate, veh/h	544	0	0	726	253	189
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	2557	0	0	2557	302	269
Arrive On Green	0.73	0.00	0.00	1.00	0.17	0.17
Sat Flow, veh/h	3711	0	0	3711	1767	1572
Grp Volume(v), veh/h	544	0	0	726	253	189
Grp Sat Flow(s),veh/h/ln	1763	0	0	1763	1767	1572
Q Serve(g_s), s	5.3	0.0	0.0	0.0	14.7	12.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	0.0	14.7	12.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2557	0	0	2557	302	269
V/C Ratio(X)	0.21	0.00	0.00	0.28	0.84	0.70
Avail Cap(c_a), veh/h	2557	0	0	2557	700	623
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	0.00	0.97	1.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	0.0	0.0	42.5	41.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	6.1	3.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.1	6.9	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.9	0.0	0.0	0.3	48.6	44.7
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	544			726	442	
Approach Delay, s/veh	4.9			0.3	47.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	82.9			82.9	23.1
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	53.0			53.0	42.0
Max Q Clear Time (g_c+I1), s	7.3			2.0	16.7
Green Ext Time (p_c), s	4.2			6.1	1.4

Intersection Summary		
HCM 7th Control Delay, s/veh	13.8	
HCM 7th LOS	B	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
Future Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
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		0.94
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	0	1856	1856		1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	347	0		340	548	0				364	753	178
Peak Hour Factor	0.90	0.90	0.90		0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3		3	3	0				3	3	3
Cap, veh/h	0	520			724	2131	0				429	888	210
Arrive On Green	0.00	0.25	0.00		0.14	0.20	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3618	1572		1767	3618	0				1448	2995	707
Grp Volume(v), veh/h	0	347	0		340	548	0				448	424	422
Grp Sat Flow(s),veh/h/ln	0	1763	1572		1767	1763	0				1783	1689	1678
Q Serve(g_s), s	0.0	9.4	0.0		18.8	13.9	0.0				25.1	25.0	25.1
Cycle Q Clear(g_c), s	0.0	9.4	0.0		18.8	13.9	0.0				25.1	25.0	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.81		0.42
Lane Grp Cap(c), veh/h	0	520			724	2131	0				529	501	497
V/C Ratio(X)	0.00	0.67			0.47	0.26	0.00				0.85	0.85	0.85
Avail Cap(c_a), veh/h	0	632			724	2131	0				631	597	594
HCM Platoon Ratio	1.00	1.67	1.67		0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.97	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	37.6	0.0		35.2	22.3	0.0				35.0	35.0	35.0
Incr Delay (d2), s/veh	0.0	6.4	0.0		0.2	0.3	0.0				8.0	8.3	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
%ile BackOfQ(50%),veh/ln	0.0	4.2	0.0		9.0	6.6	0.0				11.8	11.3	11.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	44.0	0.0		35.4	22.6	0.0				43.0	43.4	43.5
LnGrp LOS		D			D	C					D	D	D
Approach Vol, veh/h		347				888						1295	
Approach Delay, s/veh		44.0				27.5						43.3	
Approach LOS		D				C						D	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	8.4	20.6		36.9		69.1			
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0			
Max Green Setting (Gmax), s	4.0	19.0		37.5		58.0			
Max Q Clear Time (g_c+I1), s	0.8	11.4		27.1		15.9			
Green Ext Time (p_c), s	0.5	1.0		4.4		2.9			

Intersection Summary	
HCM 7th Control Delay, s/veh	37.9
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Future Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.98	1.00		0.94	0.97		0.92	1.00		0.90
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	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		254	308	92	19	324	321	144	749	127	0	0	493
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, %		3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h		1138	856	256	60	816	369	310	981	401	0	516	791
Arrive On Green		0.44	0.83	0.83	0.25	0.25	0.25	0.28	0.28	0.28	0.00	0.00	0.28
Sat Flow, veh/h		3428	1363	407	92	3285	1485	871	3526	1443	0	1856	2845
Grp Volume(v), veh/h		254	0	400	181	162	321	144	749	127	0	0	493
Grp Sat Flow(s),veh/h/ln		1714	0	1771	1773	1604	1485	871	1763	1443	0	1856	1423
Q Serve(g_s), s		4.9	0.0	5.7	0.0	8.9	22.0	15.2	20.6	7.4	0.0	0.0	16.0
Cycle Q Clear(g_c), s		4.9	0.0	5.7	8.6	8.9	22.0	15.2	20.6	7.4	0.0	0.0	16.0
Prop In Lane		1.00		0.23	0.10		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h		1138	0	1111	478	399	369	310	981	401	0	516	791
V/C Ratio(X)		0.22	0.00	0.36	0.38	0.41	0.87	0.46	0.76	0.32	0.00	0.00	0.62
Avail Cap(c_a), veh/h		1138	0	1111	585	499	462	413	1397	572	0	735	1127
HCM Platoon Ratio		1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh		21.1	0.0	3.7	33.2	33.3	38.2	33.1	35.1	30.3	0.0	0.0	33.4
Incr Delay (d2), s/veh		0.1	0.0	0.9	2.3	3.1	23.4	1.1	1.6	0.4	0.0	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		1.9	0.0	1.9	4.2	3.8	10.4	3.3	9.1	2.6	0.0	0.0	5.6
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		21.2	0.0	4.6	35.5	36.3	61.6	34.2	36.7	30.7	0.0	0.0	34.2
LnGrp LOS		C		A	D	D	E	C	D	C			C
Approach Vol, veh/h			654			664			1020			493	
Approach Delay, s/veh			11.1			48.3			35.6			34.2	
Approach LOS			B			D			D			C	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	71.5		34.5	40.2	31.3		34.5
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	54.0		42.0	16.0	33.0		42.0
Max Q Clear Time (g_c+I1), s	7.7		18.0	6.9	24.0		22.6
Green Ext Time (p_c), s	3.1		2.4	0.6	2.4		6.8

Intersection Summary	
HCM 7th Control Delay, s/veh	32.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	0	63
Future Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	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)	0.99		0.98	1.00		0.96	0.98		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	24	477	2	1	592	100	2	0	0	59	0	70
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	77	1302	5	45	2189	368	253	0	0	138	16	105
Arrive On Green	0.75	0.75	0.75	1.00	1.00	1.00	0.13	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	40	1746	7	0	2934	493	1262	0	0	558	127	812
Grp Volume(v), veh/h	503	0	0	374	0	319	2	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	1794	0	0	1855	0	1573	1262	0	0	1497	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	7.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	6.5	0.0	0.0
Prop In Lane	0.05		0.00	0.00		0.31	1.00		0.00	0.46		0.54
Lane Grp Cap(c), veh/h	1385	0	0	1429	0	1173	253	0	0	259	0	0
V/C Ratio(X)	0.36	0.00	0.00	0.26	0.00	0.27	0.01	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1385	0	0	1429	0	1173	425	0	0	454	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.00	0.92	0.00	0.92	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.5	0.0	0.0	0.0	0.0	0.0	30.4	0.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.6	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	2.3	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.3	0.0	0.0	0.4	0.0	0.5	30.4	0.0	0.0	33.6	0.0	0.0
LnGrp LOS	A			A		A	C			C		
Approach Vol, veh/h		503			693			2			129	
Approach Delay, s/veh		4.3			0.5			30.4			33.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.3	64.7	15.3	64.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	8.5	2.0	2.1	9.6
Green Ext Time (p_c), s	0.4	3.3	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	5.2
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	0
Future Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	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)	0.99		0.95	0.99		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	3	391	141	123	373	0	320	0	169	0	0	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	966	780	536	968	0	429	0	187	0	690	0
Arrive On Green	1.00	1.00	1.00	0.52	0.52	0.00	0.37	0.00	0.37	0.00	0.00	0.00
Sat Flow, veh/h	2	1851	1495	855	1856	0	952	0	503	0	1856	0
Grp Volume(v), veh/h	394	0	141	123	373	0	489	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1854	0	1495	855	1856	0	1455	0	0	0	1856	0
Q Serve(g_s), s	0.0	0.0	0.0	6.4	9.6	0.0	25.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	6.4	9.6	0.0	25.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	0.65		0.35	0.00		0.00
Lane Grp Cap(c), veh/h	1012	0	780	536	968	0	616	0	0	0	690	0
V/C Ratio(X)	0.39	0.00	0.18	0.23	0.39	0.00	0.79	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1012	0	780	536	968	0	747	0	0	0	847	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	0.94	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	10.7	11.5	0.0	23.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	1.0	1.2	0.0	4.9	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	0.3	0.0	0.1	1.3	4.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	1.1	0.0	0.5	11.7	12.6	0.0	28.6	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	A		A	B	B		C					
Approach Vol, veh/h		535			496			489			0	
Approach Delay, s/veh		0.9			12.4			28.6			0.0	
Approach LOS		A			B			C				

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	45.7	34.3	45.7	34.3
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	35.0	* 37	35.0	36.5
Max Q Clear Time (g_c+I1), s	11.6	27.4	2.0	0.0
Green Ext Time (p_c), s	3.3	2.3	3.4	0.0

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.

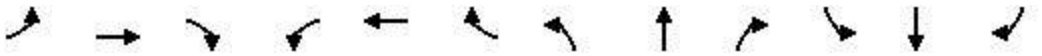
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	675	794	87	0	40
Future Vol, veh/h	0	675	794	87	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	750	882	97	0	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	489
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	522
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	522
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.54
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	522
HCM Lane V/C Ratio	-	-	-	0.085
HCM Control Delay (s/veh)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Future Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.85	0.93		0.80	0.95		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	106	505	76	62	229	64	116	420	159	81	281	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	476	950	379	140	508	138	302	1159	414	277	781	287
Arrive On Green	0.27	0.27	0.27	0.22	0.22	0.22	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1795	3582	1431	625	2261	617	928	3582	1280	800	2412	886
Grp Volume(v), veh/h	106	505	76	184	0	171	116	420	159	81	205	185
Grp Sat Flow(s),veh/h/ln	1795	1791	1431	1854	0	1650	928	1791	1280	800	1791	1507
Q Serve(g_s), s	3.7	9.7	3.3	6.9	0.0	7.2	8.9	7.2	7.7	6.9	7.0	7.6
Cycle Q Clear(g_c), s	3.7	9.7	3.3	6.9	0.0	7.2	16.5	7.2	7.7	14.2	7.0	7.6
Prop In Lane	1.00		1.00	0.34		0.37	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	476	950	379	416	0	370	302	1159	414	277	580	488
V/C Ratio(X)	0.22	0.53	0.20	0.44	0.00	0.46	0.38	0.36	0.38	0.29	0.35	0.38
Avail Cap(c_a), veh/h	827	1650	659	508	0	452	302	1159	414	277	580	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	25.2	22.9	26.8	0.0	27.0	27.3	20.8	21.0	26.2	20.7	21.0
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.3	3.7	0.9	2.7	2.7	1.7	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.1	1.1	3.0	0.0	2.8	2.2	3.1	2.6	1.5	3.1	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.1	25.4	23.0	27.1	0.0	27.3	31.0	21.7	23.7	28.9	22.4	23.2
LnGrp LOS	C	C	C	C		C	C	C	C	C	C	C
Approach Vol, veh/h		687			355			695			471	
Approach Delay, s/veh		24.8			27.2			23.7			23.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	23.0	31.0	26.3	31.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	26.0	37.0	26.0
Max Q Clear Time (g_c+I1), s	9.2	18.5	11.7	16.2
Green Ext Time (p_c), s	1.2	1.8	2.8	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)	52	538	118	72	246	43	0	0	0	67	150	92
Future Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
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)	0.92		0.89	1.00		0.92				1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	55	566	124	76	259	45				71	158	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	95	697	150	496	1872	318				190	412	240
Arrive On Green	0.27	0.27	0.27	0.55	1.00	1.00				0.25	0.25	0.25
Sat Flow, veh/h	172	2551	548	1795	3019	513				760	1644	956
Grp Volume(v), veh/h	397	0	348	76	151	153				173	0	153
Grp Sat Flow(s),veh/h/ln	1733	0	1539	1795	1791	1742				1847	0	1513
Q Serve(g_s), s	12.1	0.0	18.1	1.8	0.0	0.0				6.6	0.0	7.2
Cycle Q Clear(g_c), s	18.2	0.0	18.1	1.8	0.0	0.0				6.6	0.0	7.2
Prop In Lane	0.14		0.36	1.00		0.29				0.41		0.63
Lane Grp Cap(c), veh/h	522	0	420	496	1111	1080				463	0	379
V/C Ratio(X)	0.76	0.00	0.83	0.15	0.14	0.14				0.37	0.00	0.40
Avail Cap(c_a), veh/h	784	0	661	496	1111	1080				543	0	445
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.88	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	29.0	14.1	0.0	0.0				26.3	0.0	26.6
Incr Delay (d2), s/veh	8.9	0.0	15.2	0.1	0.3	0.3				0.2	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	8.2	0.7	0.1	0.1				2.8	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.8	0.0	44.2	14.2	0.3	0.3				26.5	0.0	26.8
LnGrp LOS	D		D	B	A	A				C		C
Approach Vol, veh/h		745			380						326	
Approach Delay, s/veh		40.8			3.1						26.7	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.5	29.2		26.3		58.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	8.0	* 37		25.0		49.0
Max Q Clear Time (g_c+I1), s	3.8	20.2		9.2		2.0
Green Ext Time (p_c), s	0.0	3.1		1.2		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	27.7
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)	28	574	3	1	313	42	2	0	2	73	0	46
Future Volume (veh/h)	28	574	3	1	313	42	2	0	2	73	0	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)	0.98		0.92	0.99		0.93	0.96		0.94	0.96		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	29	604	3	1	329	44	2	0	2	77	0	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	110	2148	11	43	1954	257	231	20	187	273	16	137
Arrive On Green	0.21	0.21	0.21	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	101	3389	17	1	3082	405	673	79	752	824	63	553
Grp Volume(v), veh/h	327	0	309	200	0	174	4	0	0	125	0	0
Grp Sat Flow(s),veh/h/ln	1795	0	1711	1884	0	1604	1504	0	0	1440	0	0
Q Serve(g_s), s	0.0	0.0	12.9	0.0	0.0	3.8	0.0	0.0	0.0	4.6	0.0	0.0
Cycle Q Clear(g_c), s	12.4	0.0	12.9	3.7	0.0	3.8	0.2	0.0	0.0	5.9	0.0	0.0
Prop In Lane	0.09		0.01	0.01		0.25	0.50		0.50	0.62		0.38
Lane Grp Cap(c), veh/h	1184	0	1085	1237	0	1017	437	0	0	426	0	0
V/C Ratio(X)	0.28	0.00	0.28	0.16	0.00	0.17	0.01	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	1184	0	1085	1237	0	1017	634	0	0	625	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.00	0.86	0.97	0.00	0.97	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.2	0.0	17.4	6.4	0.0	6.4	24.1	0.0	0.0	26.1	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.6	0.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	6.0	1.4	0.0	1.3	0.1	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.7	0.0	18.0	6.6	0.0	6.7	24.1	0.0	0.0	26.5	0.0	0.0
LnGrp LOS	B		B	A		A	C			C		
Approach Vol, veh/h		636			374			4			125	
Approach Delay, s/veh		17.8			6.7			24.1			26.5	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.1	58.9	26.1	58.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	33.0	42.0	33.0	42.0
Max Q Clear Time (g_c+I1), s	7.9	5.8	2.2	14.9
Green Ext Time (p_c), s	0.7	2.5	0.0	4.5

Intersection Summary	
HCM 7th Control Delay, s/veh	15.1
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Future Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	0.98		0.91	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	94	516	74	139	288	24	25	687	564	14	360	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	179	856	122	212	990	82	71	1547	663	64	1288	214
Arrive On Green	0.05	0.28	0.28	0.06	0.30	0.30	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	3483	3084	439	3483	3316	273	60	3397	1456	44	2829	469
Grp Volume(v), veh/h	94	298	292	139	154	158	377	335	564	227	0	208
Grp Sat Flow(s),veh/h/ln	1742	1791	1732	1742	1791	1798	1827	1630	1456	1744	0	1598
Q Serve(g_s), s	2.3	12.6	12.8	3.4	5.8	5.9	0.0	12.3	30.1	0.0	0.0	7.1
Cycle Q Clear(g_c), s	2.3	12.6	12.8	3.4	5.8	5.9	11.9	12.3	30.1	6.5	0.0	7.1
Prop In Lane	1.00		0.25	1.00		0.15	0.07		1.00	0.06		0.29
Lane Grp Cap(c), veh/h	179	497	481	212	535	537	876	742	663	838	0	728
V/C Ratio(X)	0.53	0.60	0.61	0.66	0.29	0.29	0.43	0.45	0.85	0.27	0.00	0.29
Avail Cap(c_a), veh/h	239	595	575	319	636	638	1205	1045	934	1130	0	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.4	27.3	27.4	40.1	23.5	23.6	16.2	16.3	21.1	14.7	0.0	14.9
Incr Delay (d2), s/veh	2.4	1.2	1.3	3.4	0.3	0.3	0.3	0.4	5.4	0.2	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	1.0	5.5	5.4	1.6	2.5	2.5	5.0	4.4	10.7	2.7	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.8	28.5	28.7	43.5	23.8	23.9	16.5	16.7	26.5	14.9	0.0	15.1
LnGrp LOS	D	C	C	D	C	C	B	B	C	B		B
Approach Vol, veh/h		684			451			1276			435	
Approach Delay, s/veh		30.6			29.9			21.0			15.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	45.8	9.5	32.1	45.8	11.3	30.2
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	56.0	6.0	31.0	56.0	8.0	* 29
Max Q Clear Time (g_c+I1), s	32.1	4.3	7.9	9.1	5.4	14.8
Green Ext Time (p_c), s	7.7	0.0	1.9	3.1	0.1	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	23.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	917	372	177	254	57
Future Volume (veh/h)	122	917	372	177	254	57
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)	0.99			0.96	1.00	0.90
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	128	965	392	186	267	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	594	2449	1599	746	303	68
Arrive On Green	0.68	0.68	0.68	0.68	0.22	0.22
Sat Flow, veh/h	837	3676	2432	1091	1399	314
Grp Volume(v), veh/h	128	965	299	279	328	0
Grp Sat Flow(s),veh/h/ln	837	1791	1791	1638	1719	0
Q Serve(g_s), s	6.5	11.1	6.0	6.2	17.6	0.0
Cycle Q Clear(g_c), s	12.7	11.1	6.0	6.2	17.6	0.0
Prop In Lane	1.00			0.67	0.81	0.18
Lane Grp Cap(c), veh/h	594	2449	1224	1120	372	0
V/C Ratio(X)	0.22	0.39	0.24	0.25	0.88	0.00
Avail Cap(c_a), veh/h	594	2449	1224	1120	678	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.2	6.5	5.7	5.7	36.1	0.0
Incr Delay (d2), s/veh	0.5	0.3	0.5	0.5	6.9	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	1.2	3.9	2.2	2.1	8.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.7	6.8	6.2	6.3	43.0	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		1093	578		328	
Approach Delay, s/veh		7.0	6.2		43.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		70.0		25.0	70.0
Change Period (Y+Rc), s		5.0		4.5	5.0
Max Green Setting (Gmax), s		48.0		37.5	48.0
Max Q Clear Time (g_c+I1), s		8.2		19.6	14.7
Green Ext Time (p_c), s		4.4		1.0	10.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.7
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
Future Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
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)	0.97		0.89	1.00		0.90				1.00		0.89
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	19	1183	31	24	545	14				22	5	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	687	1343	35	192	2621	67				91	21	136
Arrive On Green	0.74	0.74	0.74	1.00	1.00	1.00				0.16	0.16	0.16
Sat Flow, veh/h	829	1822	48	464	3556	91				577	131	866
Grp Volume(v), veh/h	19	0	1214	24	274	285				60	0	0
Grp Sat Flow(s),veh/h/ln	829	0	1870	464	1791	1856				1574	0	0
Q Serve(g_s), s	0.6	0.0	46.2	3.5	0.0	0.0				3.2	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	46.2	49.7	0.0	0.0				3.2	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.05				0.37		0.55
Lane Grp Cap(c), veh/h	687	0	1378	192	1320	1368				248	0	0
V/C Ratio(X)	0.03	0.00	0.88	0.13	0.21	0.21				0.24	0.00	0.00
Avail Cap(c_a), veh/h	687	0	1378	192	1320	1368				398	0	0
HCM Platoon Ratio	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				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.4	0.0	9.4	16.4	0.0	0.0				35.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	8.3	1.3	0.4	0.3				0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	18.0	0.4	0.1	0.1				1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.4	0.0	17.7	17.7	0.4	0.3				35.5	0.0	0.0
LnGrp LOS	A		B	B	A	A				D		
Approach Vol, veh/h		1233			583						60	
Approach Delay, s/veh		17.5			1.1						35.5	
Approach LOS		B			A						D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	20.0	75.0	75.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	61.0	61.0
Max Q Clear Time (g_c+I1), s	5.2	51.7	48.2
Green Ext Time (p_c), s	0.2	2.6	8.7

Intersection Summary	
HCM 7th Control Delay, s/veh	13.0
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	1127	536	12	6	18
Future Vol, veh/h	18	1127	536	12	6	18
Conflicting Peds, #/hr	0	0	0	95	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	1186	564	13	6	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	672	0	-	0	1903	383
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	1237	-
Critical Hdwy	4.115	-	-	-	6.615	6.915
Critical Hdwy Stg 1	-	-	-	-	5.815	-
Critical Hdwy Stg 2	-	-	-	-	5.415	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	922	-	-	-	68	618
Stage 1	-	-	-	-	476	-
Stage 2	-	-	-	-	275	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	839	-	-	-	55	562
Mov Cap-2 Maneuver	-	-	-	-	55	-
Stage 1	-	-	-	-	423	-
Stage 2	-	-	-	-	250	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.15	0	29.71
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	839	-	-	-	171
HCM Lane V/C Ratio	0.023	-	-	-	0.148
HCM Control Delay (s/veh)	9.4	-	-	-	29.7
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

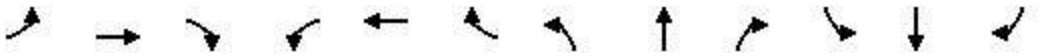
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	1101	527	35	8	21
Future Vol, veh/h	32	1101	527	35	8	21
Conflicting Peds, #/hr	0	0	0	96	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	34	1159	555	37	8	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	688	0	-	0	1919	392
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	1250	-
Critical Hdwy	4.115	-	-	-	6.615	6.915
Critical Hdwy Stg 1	-	-	-	-	5.815	-
Critical Hdwy Stg 2	-	-	-	-	5.415	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	910	-	-	-	67	610
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	271	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	827	-	-	-	53	555
Mov Cap-2 Maneuver	-	-	-	-	53	-
Stage 1	-	-	-	-	413	-
Stage 2	-	-	-	-	246	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.27	0	34.27
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	827	-	-	-	153
HCM Lane V/C Ratio	0.041	-	-	-	0.199
HCM Control Delay (s/veh)	9.5	-	-	-	34.3
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	63
Future Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	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)	0.96		0.89	1.00		0.89	0.94		0.89	0.92		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	88	1063	16	19	496	73	29	11	9	67	15	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	639	1275	19	218	2123	310	215	80	53	169	49	131
Arrive On Green	0.69	0.69	0.69	1.00	1.00	1.00	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	816	1848	28	527	3078	449	757	390	258	557	239	640
Grp Volume(v), veh/h	88	0	1079	19	287	282	49	0	0	148	0	0
Grp Sat Flow(s),veh/h/ln	816	0	1876	527	1791	1736	1405	0	0	1436	0	0
Q Serve(g_s), s	3.6	0.0	39.9	2.2	0.0	0.0	0.0	0.0	0.0	6.0	0.0	0.0
Cycle Q Clear(g_c), s	3.6	0.0	39.9	42.1	0.0	0.0	2.4	0.0	0.0	8.4	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.26	0.59		0.18	0.45		0.45
Lane Grp Cap(c), veh/h	639	0	1294	218	1235	1198	348	0	0	349	0	0
V/C Ratio(X)	0.14	0.00	0.83	0.09	0.23	0.24	0.14	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	639	0	1294	218	1235	1198	397	0	0	399	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.1	0.0	10.8	12.8	0.0	0.0	30.9	0.0	0.0	33.2	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	6.4	0.8	0.4	0.5	0.2	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	0.0	15.8	0.3	0.2	0.2	0.9	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.6	0.0	17.2	13.6	0.4	0.5	31.1	0.0	0.0	34.1	0.0	0.0
LnGrp LOS	A		B	B	A	A	C			C		
Approach Vol, veh/h		1167			588			49			148	
Approach Delay, s/veh		16.3			0.9			31.1			34.1	
Approach LOS		B			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.5		70.5		24.5		70.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.8		62.2		22.8		62.2				
Max Q Clear Time (g_c+I1), s		10.4		44.1		4.4		41.9				
Green Ext Time (p_c), s		0.6		3.6		0.2		10.2				

Intersection Summary												
HCM 7th Control Delay, s/veh			13.4									
HCM 7th LOS			B									

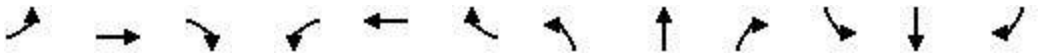
Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1074	9	15	541	17	15
Future Vol, veh/h	1074	9	15	541	17	15
Conflicting Peds, #/hr	0	91	0	0	41	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1131	9	16	569	18	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1231	0	1584	1226
Stage 1	-	-	-	-	1226	-
Stage 2	-	-	-	-	357	-
Critical Hdwy	-	-	4.115	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	-	-	2.2095	-	3.5095	3.3095
Pot Cap-1 Maneuver	-	-	568	-	110	218
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	682	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	519	-	93	199
Mov Cap-2 Maneuver	-	-	-	-	93	-
Stage 1	-	-	-	-	254	-
Stage 2	-	-	-	-	636	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	44.37
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	124	-	-	519	-
HCM Lane V/C Ratio	0.271	-	-	0.03	-
HCM Control Delay (s/veh)	44.4	-	-	12.2	-
HCM Lane LOS	E	-	-	B	-
HCM 95th %tile Q(veh)	1	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	23
Future Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	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)	0.97		0.90	0.99		0.91	0.94		0.95	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	31	1102	14	18	547	39	14	4	23	15	3	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	706	1435	18	465	2606	185	93	39	103	96	33	104
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	814	1854	24	503	3367	239	348	322	857	369	277	861
Grp Volume(v), veh/h	31	0	1116	18	290	296	41	0	0	42	0	0
Grp Sat Flow(s),veh/h/ln	814	0	1878	503	1791	1815	1527	0	0	1507	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.2	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.13	0.34		0.56	0.36		0.57
Lane Grp Cap(c), veh/h	706	0	1453	465	1386	1405	235	0	0	233	0	0
V/C Ratio(X)	0.04	0.00	0.77	0.04	0.21	0.21	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	706	0	1453	465	1386	1405	398	0	0	395	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	37.7	0.0	0.0	37.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.9	0.2	0.3	0.3	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.6	0.0	0.1	0.1	0.9	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.0	3.9	0.2	0.3	0.3	38.0	0.0	0.0	38.1	0.0	0.0
LnGrp LOS	A		A	A	A	A	D			D		
Approach Vol, veh/h		1147			604			41			42	
Approach Delay, s/veh		3.8			0.3			38.0			38.1	
Approach LOS		A			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.5		78.5		16.5		78.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		63.0		22.0		63.0				
Max Q Clear Time (g_c+I1), s		4.2		2.0		4.1		2.0				
Green Ext Time (p_c), s		0.1		4.4		0.1		15.7				

Intersection Summary												
HCM 7th Control Delay, s/veh			4.2									
HCM 7th LOS			A									

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	21	1062	0	0	550	37	4	2	65	10	0	20
Future Vol, veh/h	21	1062	0	0	550	37	4	2	65	10	0	20
Conflicting Peds, #/hr	0	0	81	0	0	89	0	0	0	0	0	14
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	22	1118	0	0	579	39	4	2	68	11	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	-	-	-	0	1466	1869	1118	1851	1850	412
Stage 1	-	-	-	-	-	-	1162	1162	-	687	687	-
Stage 2	-	-	-	-	-	-	303	707	-	1163	1162	-
Critical Hdwy	4.115	-	-	-	-	-	7.315	6.515	6.215	7.315	6.515	6.915
Critical Hdwy Stg 1	-	-	-	-	-	-	6.115	5.515	-	6.515	5.515	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.515	5.515	-	6.115	5.515	-
Follow-up Hdwy	2.2095	-	-	-	-	-	3.5095	4.0095	3.3095	3.5095	4.0095	3.3095
Pot Cap-1 Maneuver	895	-	0	0	-	-	98	73	253	52	75	592
Stage 1	-	-	0	0	-	-	238	270	-	406	448	-
Stage 2	-	-	0	0	-	-	684	439	-	238	270	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	819	-	-	-	-	-	90	65	253	32	66	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	90	65	-	32	66	-
Stage 1	-	-	-	-	-	-	232	263	-	371	410	-
Stage 2	-	-	-	-	-	-	649	402	-	167	263	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	30.66	68.55
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	214	819	-	-	-	87
HCM Lane V/C Ratio	0.35	0.027	-	-	-	0.364
HCM Control Delay (s/veh)	30.7	9.5	-	-	-	68.5
HCM Lane LOS	D	A	-	-	-	F
HCM 95th %tile Q(veh)	1.5	0.1	-	-	-	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	1107	566	116	38	21
Future Volume (veh/h)	30	1107	566	116	38	21
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			0.89	1.00	0.96
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	32	1165	596	122	40	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	960	1478	768	156	130	72
Arrive On Green	0.94	1.00	0.27	0.27	0.12	0.12
Sat Flow, veh/h	1795	1885	2986	589	1075	591
Grp Volume(v), veh/h	32	1165	368	350	63	0
Grp Sat Flow(s),veh/h/ln	1795	1885	1791	1690	1693	0
Q Serve(g_s), s	0.0	0.0	18.1	18.2	3.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	18.1	18.2	3.2	0.0
Prop In Lane	1.00			0.35	0.63	0.35
Lane Grp Cap(c), veh/h	960	1478	475	449	205	0
V/C Ratio(X)	0.03	0.79	0.77	0.78	0.31	0.00
Avail Cap(c_a), veh/h	960	1478	886	836	481	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	1.00	0.00
Uniform Delay (d), s/veh	1.2	0.0	32.3	32.3	38.1	0.0
Incr Delay (d2), s/veh	0.0	4.3	11.3	12.3	0.8	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	0.0	1.8	9.1	8.8	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	1.2	4.3	43.6	44.6	38.9	0.0
LnGrp LOS	A	A	D	D	D	
Approach Vol, veh/h		1197	718		63	
Approach Delay, s/veh		4.3	44.1		38.9	
Approach LOS		A	D		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		49.2	29.7		16.0	79.0
Change Period (Y+Rc), s		4.5	* 4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	* 47		27.0	59.0
Max Q Clear Time (g_c+I1), s		2.0	20.2		5.2	2.0
Green Ext Time (p_c), s		0.0	5.0		0.1	16.7

Intersection Summary	
HCM 7th Control Delay, s/veh	19.8
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1145	0	0	527	157	122
Future Volume (veh/h)	1145	0	0	527	157	122
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	1885	0	0	1885	1885	1885
Adj Flow Rate, veh/h	1205	0	0	555	165	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2794	0	0	2794	209	186
Arrive On Green	0.78	0.00	0.00	1.00	0.12	0.12
Sat Flow, veh/h	3770	0	0	3770	1795	1598
Grp Volume(v), veh/h	1205	0	0	555	165	128
Grp Sat Flow(s),veh/h/ln	1791	0	0	1791	1795	1598
Q Serve(g_s), s	11.8	0.0	0.0	0.0	9.5	8.2
Cycle Q Clear(g_c), s	11.8	0.0	0.0	0.0	9.5	8.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2794	0	0	2794	209	186
V/C Ratio(X)	0.43	0.00	0.00	0.20	0.79	0.69
Avail Cap(c_a), veh/h	2794	0	0	2794	508	452
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	0.48	0.00	0.00	0.99	1.00	1.00
Uniform Delay (d), s/veh	3.9	0.0	0.0	0.0	45.6	45.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	6.6	4.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	0.0	0.1	4.6	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.1	0.0	0.0	0.2	52.2	49.5
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	1205			555	293	
Approach Delay, s/veh	4.1			0.2	51.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	88.7			88.7	17.3
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	65.0			65.0	30.0
Max Q Clear Time (g_c+I1), s	13.8			2.0	11.5
Green Ext Time (p_c), s	12.5			4.4	0.8

Intersection Summary		
HCM 7th Control Delay, s/veh	9.7	
HCM 7th LOS	A	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
Future Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
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		0.95
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	0	1885	1885		1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	451	0		480	368	0				337	779	186
Peak Hour Factor	0.95	0.95	0.95		0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1		1	1	0				1	1	1
Cap, veh/h	0	589			725	2204	0				387	894	213
Arrive On Green	0.00	0.27	0.00		0.67	1.00	0.00				0.29	0.29	0.29
Sat Flow, veh/h	0	3676	1598		1795	3676	0				1355	3132	747
Grp Volume(v), veh/h	0	451	0		480	368	0				452	426	424
Grp Sat Flow(s),veh/h/ln	0	1791	1598		1795	1791	0				1817	1716	1702
Q Serve(g_s), s	0.0	12.3	0.0		16.7	0.0	0.0				25.1	25.1	25.1
Cycle Q Clear(g_c), s	0.0	12.3	0.0		16.7	0.0	0.0				25.1	25.1	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.75		0.44
Lane Grp Cap(c), veh/h	0	589			725	2204	0				519	490	486
V/C Ratio(X)	0.00	0.77			0.66	0.17	0.00				0.87	0.87	0.87
Avail Cap(c_a), veh/h	0	676			725	2204	0				574	542	538
HCM Platoon Ratio	1.00	1.67	1.67		1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.88	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	36.6	0.0		13.0	0.0	0.0				36.0	36.0	36.0
Incr Delay (d2), s/veh	0.0	8.1	0.0		1.8	0.2	0.0				11.8	12.4	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
%ile BackOfQ(50%),veh/ln	0.0	5.5	0.0		4.9	0.1	0.0				12.6	12.0	11.9
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	44.7	0.0		14.8	0.2	0.0				47.8	48.4	48.6
LnGrp LOS		D			B	A					D	D	D
Approach Vol, veh/h		451				848						1302	
Approach Delay, s/veh		44.7				8.5						48.3	
Approach LOS		D				A						D	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	7.8	22.4		35.8		70.2			
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0			
Max Green Setting (Gmax), s	2.8	20.0		33.5		62.0			
Max Q Clear Time (g_c+I1), s	18.7	14.3		27.1		2.0			
Green Ext Time (p_c), s	0.7	1.1		3.2		1.9			

Intersection Summary	
HCM 7th Control Delay, s/veh	34.7
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Future Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.90	0.91		0.89	1.00		0.88	0.97		0.97
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No			No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		192	400	200	46	437	255	166	476	173	79	119	162
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		1103	675	338	89	690	328	180	1115	436	145	201	484
Arrive On Green		0.63	1.00	1.00	0.23	0.23	0.23	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h		3483	1136	568	209	2991	1421	1106	3582	1401	315	646	1555
Grp Volume(v), veh/h		192	0	600	241	242	255	166	476	173	198	0	162
Grp Sat Flow(s),veh/h/ln		1742	0	1705	1571	1630	1421	1106	1791	1401	961	0	1555
Q Serve(g_s), s		2.4	0.0	0.0	7.8	14.2	17.8	10.8	11.2	10.3	11.0	0.0	8.5
Cycle Q Clear(g_c), s		2.4	0.0	0.0	13.9	14.2	17.8	33.0	11.2	10.3	22.2	0.0	8.5
Prop In Lane		1.00		0.33	0.19		1.00	1.00		1.00	0.40		1.00
Lane Grp Cap(c), veh/h		1103	0	1013	403	376	328	180	1115	436	347	0	484
V/C Ratio(X)		0.17	0.00	0.59	0.60	0.64	0.78	0.92	0.43	0.40	0.57	0.00	0.33
Avail Cap(c_a), veh/h		1103	0	1013	701	707	616	180	1115	436	347	0	484
HCM Platoon Ratio		2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	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		13.7	0.0	0.0	36.3	36.9	38.2	49.4	29.0	28.7	33.7	0.0	28.1
Incr Delay (d2), s/veh		0.1	0.0	2.5	6.4	8.3	16.6	45.0	0.3	0.6	2.2	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		0.9	0.0	0.7	6.3	6.6	7.7	6.7	4.9	3.5	4.8	0.0	3.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		13.8	0.0	2.5	42.7	45.1	54.8	94.4	29.2	29.3	35.9	0.0	28.5
LnGrp LOS		B		A	D	D	D	F	C	C	D		C
Approach Vol, veh/h			792			738			815			360	
Approach Delay, s/veh			5.3			47.7			42.5			32.6	
Approach LOS			A			D			D			C	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	68.0		38.0	38.6	29.4		38.0					
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0					
Max Green Setting (Gmax), s	63.0		33.0	12.0	46.0		33.0					
Max Q Clear Time (g_c+I1), s	2.0		24.2	4.4	19.8		35.0					
Green Ext Time (p_c), s	5.5		1.4	0.4	4.6		0.0					

Intersection Summary	
HCM 7th Control Delay, s/veh	31.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	61
Future Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	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)	0.98		0.97	1.00		0.91	1.00		1.00	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	41	606	4	2	674	92	0	2	3	116	2	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	91	1149	7	46	2069	281	0	135	203	243	19	102
Arrive On Green	0.68	0.68	0.68	1.00	1.00	1.00	0.00	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	63	1699	11	1	3058	416	0	681	1021	852	94	513
Grp Volume(v), veh/h	651	0	0	416	0	352	0	0	5	182	0	0
Grp Sat Flow(s),veh/h/ln	1773	0	0	1884	0	1592	0	0	1701	1460	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	7.9	0.0	0.0
Cycle Q Clear(g_c), s	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	9.0	0.0	0.0
Prop In Lane	0.06		0.01	0.00		0.26	0.00		0.60	0.64		0.35
Lane Grp Cap(c), veh/h	1248	0	0	1320	0	1077	0	0	338	363	0	0
V/C Ratio(X)	0.52	0.00	0.00	0.32	0.00	0.33	0.00	0.00	0.01	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1248	0	0	1320	0	1077	0	0	447	456	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.00	0.88	0.00	0.88	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.8	29.2	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.6	0.0	0.7	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.1	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.8	0.0	0.0	0.6	0.0	0.7	0.0	0.0	25.8	29.6	0.0	0.0
LnGrp LOS	A			A		A			C	C		
Approach Vol, veh/h		651			768			5			182	
Approach Delay, s/veh		7.8			0.6			25.8			29.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	20.9	59.1	20.9	59.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	11.0	2.0	2.2	15.7
Green Ext Time (p_c), s	0.5	3.8	0.0	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	0	2
Future Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	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)	0.96		0.93	0.98		0.89	1.00		0.91	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	11	453	262	276	557	1	208	0	141	0	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	55	1147	918	541	1163	2	304	4	160	0	0	439
Arrive On Green	1.00	1.00	1.00	0.62	0.62	0.62	0.28	0.00	0.28	0.00	0.00	0.28
Sat Flow, veh/h	14	1854	1485	729	1881	3	844	14	582	0	0	1594
Grp Volume(v), veh/h	464	0	262	276	0	558	349	0	0	0	0	2
Grp Sat Flow(s),veh/h/ln	1868	0	1485	729	0	1884	1440	0	0	0	0	1594
Q Serve(g_s), s	0.0	0.0	0.0	18.6	0.0	12.8	18.2	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	18.6	0.0	12.8	18.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	0.02		1.00	1.00		0.00	0.60		0.40	0.00		1.00
Lane Grp Cap(c), veh/h	1201	0	918	541	0	1165	468	0	0	0	0	439
V/C Ratio(X)	0.39	0.00	0.29	0.51	0.00	0.48	0.75	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1201	0	918	541	0	1165	504	0	0	0	0	468
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.00	0.81	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.4	0.0	8.3	27.7	0.0	0.0	0.0	0.0	21.0
Incr Delay (d2), s/veh	0.8	0.0	0.6	3.4	0.0	1.4	5.6	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	0.3	0.0	0.2	3.1	0.0	5.1	6.9	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.8	0.0	0.6	12.8	0.0	9.7	33.3	0.0	0.0	0.0	0.0	21.0
LnGrp LOS	A		A	B		A	C					C
Approach Vol, veh/h		726			834			349			2	
Approach Delay, s/veh		0.7			10.7			33.3			21.0	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.5	26.5	53.5	26.5
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	48.0	* 24	48.0	23.5
Max Q Clear Time (g_c+I1), s	20.6	20.5	2.0	2.1
Green Ext Time (p_c), s	7.0	0.7	4.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

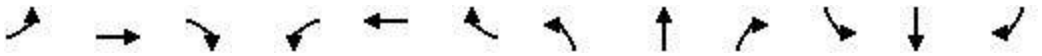
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	758	794	6	0	22
Future Vol, veh/h	0	758	794	6	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	798	836	6	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	421
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.31
Pot Cap-1 Maneuver	0	-	-	-	0	584
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	584
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.42
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	584
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s/veh)	-	-	-	11.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	71
Future Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	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		0.91	1.00		0.90	0.92		0.85	0.93		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	78	464	73	53	200	44	41	280	102	41	228	79
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	459	916	370	126	468	101	358	1195	451	359	839	273
Arrive On Green	0.26	0.26	0.26	0.20	0.20	0.20	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1767	3526	1424	638	2367	512	975	3526	1332	928	2476	806
Grp Volume(v), veh/h	78	464	73	151	0	146	41	280	102	41	158	149
Grp Sat Flow(s),veh/h/ln	1767	1763	1424	1824	0	1693	975	1763	1332	928	1763	1519
Q Serve(g_s), s	2.5	8.3	3.0	5.4	0.0	5.6	2.4	4.2	4.0	2.4	4.8	5.3
Cycle Q Clear(g_c), s	2.5	8.3	3.0	5.4	0.0	5.6	7.7	4.2	4.0	6.7	4.8	5.3
Prop In Lane	1.00		1.00	0.35		0.30	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	459	916	370	361	0	335	358	1195	451	359	597	515
V/C Ratio(X)	0.17	0.51	0.20	0.42	0.00	0.43	0.11	0.23	0.23	0.11	0.26	0.29
Avail Cap(c_a), veh/h	910	1816	733	544	0	505	358	1195	451	359	597	515
HCM Platoon Ratio	1.00	1.00	1.00	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	23.3	21.3	25.9	0.0	26.0	20.7	17.5	17.5	19.9	17.7	17.9
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.3	0.6	0.5	1.2	0.6	1.1	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	1.0	3.4	1.0	2.3	0.0	2.2	0.6	1.7	1.3	0.6	2.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	23.4	21.4	26.2	0.0	26.3	21.3	18.0	18.6	20.5	18.8	19.3
LnGrp LOS	C	C	C	C		C	C	B	B	C	B	B
Approach Vol, veh/h		615			297			423			348	
Approach Delay, s/veh		22.9			26.2			18.5			19.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.6		30.0		24.2		30.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		25.0		38.0		25.0				
Max Q Clear Time (g_c+I1), s		7.6		9.7		10.3		8.7				
Green Ext Time (p_c), s		1.0		1.5		2.5		1.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			21.6									
HCM 7th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
Future Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
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)	0.91		0.85	1.00		0.90				1.00		0.80
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	66	253	289	116	268	69				29	131	30
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	122	381	340	454	1659	414				143	623	137
Arrive On Green	0.28	0.28	0.28	0.51	1.00	1.00				0.26	0.26	0.26
Sat Flow, veh/h	251	1359	1213	1767	2729	681				545	2371	520
Grp Volume(v), veh/h	319	0	289	116	170	167				97	0	93
Grp Sat Flow(s),veh/h/ln	1610	0	1213	1767	1763	1647				1828	0	1608
Q Serve(g_s), s	9.5	0.0	19.1	3.1	0.0	0.0				3.5	0.0	3.8
Cycle Q Clear(g_c), s	14.6	0.0	19.1	3.1	0.0	0.0				3.5	0.0	3.8
Prop In Lane	0.21		1.00	1.00		0.41				0.30		0.32
Lane Grp Cap(c), veh/h	503	0	340	454	1072	1001				480	0	422
V/C Ratio(X)	0.63	0.00	0.85	0.26	0.16	0.17				0.20	0.00	0.22
Avail Cap(c_a), veh/h	733	0	521	454	1072	1001				538	0	473
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.91	0.00	0.91	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	27.0	0.0	28.9	16.1	0.0	0.0				24.4	0.0	24.5
Incr Delay (d2), s/veh	5.5	0.0	20.8	0.1	0.3	0.4				0.1	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
%ile BackOfQ(50%),veh/ln	6.3	0.0	7.3	1.2	0.1	0.1				1.5	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.5	0.0	49.7	16.2	0.3	0.4				24.5	0.0	24.6
LnGrp LOS	C		D	B	A	A				C		C
Approach Vol, veh/h		608			453						190	
Approach Delay, s/veh		40.7			4.4						24.5	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.8	29.8		27.3		57.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	8.0	* 37		25.0		49.0
Max Q Clear Time (g_c+I1), s	5.1	21.1		5.8		2.0
Green Ext Time (p_c), s	0.0	2.7		0.6		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	25.1
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)	10	244	0	7	383	24	2	0	3	22	0	22
Future Volume (veh/h)	10	244	0	7	383	24	2	0	3	22	0	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)	0.98		1.00	0.96		0.92	0.96		0.94	0.94		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	11	271	0	8	426	27	2	0	3	24	0	24
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	93	2094	0	57	2056	128	180	23	215	221	19	177
Arrive On Green	0.21	0.21	0.00	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	75	3392	0	21	3248	203	485	91	863	632	78	710
Grp Volume(v), veh/h	150	132	0	244	0	217	5	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	1778	1604	0	1840	0	1632	1439	0	0	1420	0	0
Q Serve(g_s), s	0.0	5.7	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	5.7	0.0	4.7	0.0	4.8	0.2	0.0	0.0	1.9	0.0	0.0
Prop In Lane	0.07		0.00	0.03		0.12	0.40		0.60	0.50		0.50
Lane Grp Cap(c), veh/h	1171	1016	0	1209	0	1033	418	0	0	417	0	0
V/C Ratio(X)	0.13	0.13	0.00	0.20	0.00	0.21	0.01	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	1171	1016	0	1209	0	1033	564	0	0	562	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.00	0.98	0.00	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.5	14.6	0.0	6.6	0.0	6.6	24.0	0.0	0.0	24.7	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.1	0.0	1.8	0.0	1.6	0.1	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	14.8	0.0	7.0	0.0	7.1	24.0	0.0	0.0	24.8	0.0	0.0
LnGrp LOS	B	B		A		A	C			C		
Approach Vol, veh/h		282			461			5			48	
Approach Delay, s/veh		14.7			7.0			24.0			24.8	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.2	58.8	26.2	58.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	45.0	30.0	45.0
Max Q Clear Time (g_c+I1), s	3.9	6.8	2.2	7.7
Green Ext Time (p_c), s	0.2	3.2	0.0	1.9

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)	43	163	63	278	295	38	57	405	241	13	511	62
Future Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	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		0.89	1.00		0.91	0.98		0.93	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	48	181	70	309	328	42	63	450	268	14	568	69
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	717	260	417	1202	152	137	848	508	59	1048	125
Arrive On Green	0.04	0.29	0.29	0.12	0.39	0.39	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	3428	2445	888	3428	3111	393	218	2433	1458	27	3007	359
Grp Volume(v), veh/h	48	127	124	309	184	186	210	303	268	348	0	303
Grp Sat Flow(s),veh/h/ln	1714	1763	1570	1714	1763	1742	1047	1604	1458	1813	0	1580
Q Serve(g_s), s	1.0	4.2	4.6	6.6	5.4	5.6	3.9	11.6	11.2	0.0	0.0	11.8
Cycle Q Clear(g_c), s	1.0	4.2	4.6	6.6	5.4	5.6	15.7	11.6	11.2	11.4	0.0	11.8
Prop In Lane	1.00		0.57	1.00		0.23	0.30		1.00	0.04		0.23
Lane Grp Cap(c), veh/h	144	517	460	417	681	673	427	559	508	681	0	551
V/C Ratio(X)	0.33	0.25	0.27	0.74	0.27	0.28	0.49	0.54	0.53	0.51	0.00	0.55
Avail Cap(c_a), veh/h	225	648	577	720	903	892	554	716	651	852	0	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	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	35.5	20.5	20.7	32.3	16.0	16.1	20.2	19.9	19.8	19.9	0.0	20.0
Incr Delay (d2), s/veh	1.4	0.2	0.3	2.6	0.2	0.2	0.9	0.8	0.8	0.6	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.7	1.7	2.9	2.2	2.2	3.2	4.2	3.8	4.8	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	20.7	21.0	34.9	16.2	16.3	21.1	20.7	20.6	20.5	0.0	20.9
LnGrp LOS	D	C	C	C	B	B	C	C	C	C		C
Approach Vol, veh/h		299			679			781			651	
Approach Delay, s/veh		23.4			24.7			20.8			20.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	32.6	8.2	35.4	32.6	15.3	28.3
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	34.0	5.0	39.0	34.0	16.0	* 28
Max Q Clear Time (g_c+I1), s	17.7	3.0	7.6	13.8	8.6	6.6
Green Ext Time (p_c), s	4.1	0.0	2.5	4.1	0.7	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	61	356	548	283	97	63
Future Volume (veh/h)	61	356	548	283	97	63
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			0.92	1.00	0.93
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	68	396	609	314	108	70
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	434	2488	1540	794	180	117
Arrive On Green	0.71	0.71	0.71	0.71	0.18	0.18
Sat Flow, veh/h	599	3618	2274	1124	984	638
Grp Volume(v), veh/h	68	396	492	431	179	0
Grp Sat Flow(s),veh/h/ln	599	1763	1763	1543	1632	0
Q Serve(g_s), s	4.7	3.4	10.3	10.3	9.1	0.0
Cycle Q Clear(g_c), s	15.0	3.4	10.3	10.3	9.1	0.0
Prop In Lane	1.00			0.73	0.60	0.39
Lane Grp Cap(c), veh/h	434	2488	1244	1089	299	0
V/C Ratio(X)	0.16	0.16	0.40	0.40	0.60	0.00
Avail Cap(c_a), veh/h	434	2488	1244	1089	562	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.5	4.4	5.4	5.4	33.7	0.0
Incr Delay (d2), s/veh	0.7	0.1	0.9	1.1	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	0.7	1.1	3.5	3.1	3.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.2	4.5	6.4	6.5	35.6	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		464	923		179	
Approach Delay, s/veh		5.2	6.4		35.6	
Approach LOS		A	A		D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	21.5	68.5	68.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	31.0	49.0	49.0
Max Q Clear Time (g_c+I1), s	11.1	12.3	17.0
Green Ext Time (p_c), s	0.5	8.1	3.8

Intersection Summary	
HCM 7th Control Delay, s/veh	9.4
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
Future Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
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)	0.98		0.91	0.98		0.88				1.00		0.91
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	14	470	19	19	870	16				33	1	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	527	1294	52	639	1329	24				91	3	146
Arrive On Green	0.73	0.73	0.73	1.00	1.00	1.00				0.15	0.15	0.15
Sat Flow, veh/h	609	1763	71	878	1811	33				588	18	944
Grp Volume(v), veh/h	14	0	489	19	0	886				87	0	0
Grp Sat Flow(s),veh/h/ln	609	0	1834	878	0	1844				1550	0	0
Q Serve(g_s), s	0.6	0.0	8.7	0.3	0.0	0.0				4.5	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	8.7	9.0	0.0	0.0				4.5	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.02				0.38		0.61
Lane Grp Cap(c), veh/h	527	0	1346	639	0	1354				240	0	0
V/C Ratio(X)	0.03	0.00	0.36	0.03	0.00	0.65				0.36	0.00	0.00
Avail Cap(c_a), veh/h	527	0	1346	639	0	1354				413	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.3	0.0	4.3	0.6	0.0	0.0				34.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.1	0.0	2.5				0.9	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
%ile BackOfQ(50%),veh/ln	0.1	0.0	2.9	0.0	0.0	0.9				1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.3	0.0	5.1	0.7	0.0	2.5				35.0	0.0	0.0
LnGrp LOS	A		A	A		A				C		
Approach Vol, veh/h		503			905						87	
Approach Delay, s/veh		5.1			2.4						35.0	
Approach LOS		A			A						C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	18.9	71.1	71.1
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	56.0	56.0
Max Q Clear Time (g_c+I1), s	6.5	11.0	10.7
Green Ext Time (p_c), s	0.4	9.7	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	5.2
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	438	767	17	6	47
Future Vol, veh/h	15	438	767	17	6	47
Conflicting Peds, #/hr	0	0	0	112	14	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	17	487	852	19	7	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	983	0	-	0	1508	974
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	534	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	698	-	-	-	132	304
Stage 1	-	-	-	-	365	-
Stage 2	-	-	-	-	586	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	624	-	-	-	103	272
Mov Cap-2 Maneuver	-	-	-	-	103	-
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	523	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.36	0	26.06
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	624	-	-	-	229
HCM Lane V/C Ratio	0.027	-	-	-	0.257
HCM Control Delay (s/veh)	10.9	-	-	-	26.1
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	1

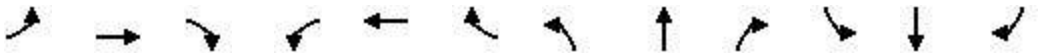
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	428	756	19	11	28
Future Vol, veh/h	16	428	756	19	11	28
Conflicting Peds, #/hr	0	0	0	79	19	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	476	840	21	12	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	940	0	-	0	1460	930
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	530	-
Critical Hdwy	4.13	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	725	-	-	-	142	323
Stage 1	-	-	-	-	383	-
Stage 2	-	-	-	-	588	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	671	-	-	-	118	298
Mov Cap-2 Maneuver	-	-	-	-	118	-
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	544	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.38	0	26.76
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	671	-	-	-	208
HCM Lane V/C Ratio	0.027	-	-	-	0.208
HCM Control Delay (s/veh)	10.5	-	-	-	26.8
HCM Lane LOS	B	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	52
Future Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	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)	0.99		0.93	0.99		0.91	0.95		0.94	0.94		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	41	438	9	23	794	47	9	3	6	43	8	58
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	552	1335	27	686	1272	75	158	58	78	122	37	118
Arrive On Green	0.74	0.74	0.74	1.00	1.00	1.00	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	639	1809	37	925	1723	102	651	383	517	439	249	782
Grp Volume(v), veh/h	41	0	447	23	0	841	18	0	0	109	0	0
Grp Sat Flow(s),veh/h/ln	639	0	1846	925	0	1825	1551	0	0	1470	0	0
Q Serve(g_s), s	1.6	0.0	7.5	0.3	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	7.5	7.8	0.0	0.0	0.8	0.0	0.0	5.9	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.06	0.50		0.33	0.39		0.53
Lane Grp Cap(c), veh/h	552	0	1362	686	0	1347	294	0	0	277	0	0
V/C Ratio(X)	0.07	0.00	0.33	0.03	0.00	0.62	0.06	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	552	0	1362	686	0	1347	438	0	0	424	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	3.3	0.0	4.1	0.4	0.0	0.0	32.8	0.0	0.0	34.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.1	0.0	2.2	0.1	0.0	0.0	0.9	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	0.2	0.0	2.4	0.0	0.0	0.8	0.3	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.6	0.0	4.7	0.5	0.0	2.2	32.9	0.0	0.0	35.8	0.0	0.0
LnGrp LOS	A		A	A		A	C			D		
Approach Vol, veh/h		488			864			18			109	
Approach Delay, s/veh		4.6			2.1			32.9			35.8	
Approach LOS		A			A			C			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.6		71.4		18.6		71.4				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.8		57.2		22.8		57.2				
Max Q Clear Time (g_c+I1), s		7.9		9.8		2.8		9.5				
Green Ext Time (p_c), s		0.5		8.4		0.0		3.7				
Intersection Summary												
HCM 7th Control Delay, s/veh			5.8									
HCM 7th LOS			A									

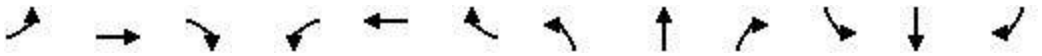
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	431	7	13	773	5	9
Future Vol, veh/h	431	7	13	773	5	9
Conflicting Peds, #/hr	0	69	0	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	479	8	14	859	6	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	556	0	1446	552
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	894	-
Critical Hdwy	-	-	4.13	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	5.43	-
Follow-up Hdwy	-	-	2.227	-	3.527	3.327
Pot Cap-1 Maneuver	-	-	1010	-	144	532
Stage 1	-	-	-	-	575	-
Stage 2	-	-	-	-	398	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	943	-	132	497
Mov Cap-2 Maneuver	-	-	-	-	132	-
Stage 1	-	-	-	-	537	-
Stage 2	-	-	-	-	390	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.15	20.35
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	250	-	-	943	-
HCM Lane V/C Ratio	0.062	-	-	0.015	-
HCM Control Delay (s/veh)	20.4	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	16
Future Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	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)	0.99		0.93	0.98		0.93	0.94		0.96	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	10	478	1	19	842	31	13	1	17	14	1	18
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	581	1487	3	793	1424	52	92	23	70	92	22	69
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	624	1851	4	887	1772	65	409	266	820	415	259	808
Grp Volume(v), veh/h	10	0	479	19	0	873	31	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	624	0	1854	887	0	1838	1494	0	0	1482	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.04	0.42		0.55	0.42		0.55
Lane Grp Cap(c), veh/h	581	0	1490	793	0	1477	184	0	0	184	0	0
V/C Ratio(X)	0.02	0.00	0.32	0.02	0.00	0.59	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	581	0	1490	793	0	1477	411	0	0	409	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.0	0.0	38.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.1	0.0	1.7	0.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	0.0	0.0	0.7	0.7	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.0	0.6	0.1	0.0	1.7	38.8	0.0	0.0	38.9	0.0	0.0
LnGrp LOS	A		A	A		A	D			D		
Approach Vol, veh/h		489			892			31			33	
Approach Delay, s/veh		0.6			1.7			38.8			38.9	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.7		77.3		12.7		77.3				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		58.0		22.0		58.0				
Max Q Clear Time (g_c+I1), s		3.7		2.0		3.6		2.0				
Green Ext Time (p_c), s		0.1		9.0		0.1		3.6				
Intersection Summary												
HCM 7th Control Delay, s/veh			3.0									
HCM 7th LOS			A									

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	8	450	0	0	783	38	6	1	24	5	0	14
Future Vol, veh/h	8	450	0	0	783	38	6	1	24	5	0	14
Conflicting Peds, #/hr	0	0	81	0	0	48	0	0	1	0	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	500	0	0	870	42	7	1	27	6	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	960	0	-	-	-	0	1404	1478	501	1458	1457	955
Stage 1	-	-	-	-	-	-	518	518	-	939	939	-
Stage 2	-	-	-	-	-	-	886	960	-	519	518	-
Critical Hdwy	4.13	-	-	-	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	-	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	713	-	0	0	-	-	117	125	568	107	129	312
Stage 1	-	-	0	0	-	-	539	532	-	315	341	-
Stage 2	-	-	0	0	-	-	338	334	-	538	532	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	680	-	-	-	-	-	107	118	568	95	121	293
Mov Cap-2 Maneuver	-	-	-	-	-	-	107	118	-	95	121	-
Stage 1	-	-	-	-	-	-	532	525	-	301	326	-
Stage 2	-	-	-	-	-	-	315	318	-	504	525	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	19.05	26.42
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	290	680	-	-	-	189
HCM Lane V/C Ratio	0.119	0.013	-	-	-	0.112
HCM Control Delay (s/veh)	19.1	10.4	-	-	-	26.4
HCM Lane LOS	C	B	-	-	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	-	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	467	813	68	23	8
Future Volume (veh/h)	12	467	813	68	23	8
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			0.96	1.00	0.97
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	13	519	903	76	26	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	377	1506	1249	105	108	38
Arrive On Green	0.03	1.00	0.74	0.74	0.09	0.09
Sat Flow, veh/h	1767	1856	1682	142	1229	425
Grp Volume(v), veh/h	13	519	0	979	36	0
Grp Sat Flow(s),veh/h/ln	1767	1856	0	1824	1702	0
Q Serve(g_s), s	0.1	0.0	0.0	26.8	1.8	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	26.8	1.8	0.0
Prop In Lane	1.00			0.08	0.72	0.25
Lane Grp Cap(c), veh/h	377	1506	0	1354	150	0
V/C Ratio(X)	0.03	0.34	0.00	0.72	0.24	0.00
Avail Cap(c_a), veh/h	490	1506	0	1354	511	0
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.7	0.0	0.0	6.4	38.2	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	3.4	0.8	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	0.1	0.3	0.0	8.8	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.7	0.6	0.0	9.8	39.0	0.0
LnGrp LOS	A	A		A	D	
Approach Vol, veh/h		532	979		36	
Approach Delay, s/veh		0.8	9.8		39.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		6.2	71.3		12.4	77.6
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	42.0		27.0	54.0
Max Q Clear Time (g_c+I1), s		2.1	28.8		3.8	2.0
Green Ext Time (p_c), s		0.0	6.4		0.1	3.9

Intersection Summary	
HCM 7th Control Delay, s/veh	7.4
HCM 7th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	490	0	0	653	228	170
Future Volume (veh/h)	490	0	0	653	228	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	1856	0	0	1856	1856	1856
Adj Flow Rate, veh/h	544	0	0	726	253	189
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	2557	0	0	2557	302	269
Arrive On Green	0.73	0.00	0.00	1.00	0.17	0.17
Sat Flow, veh/h	3711	0	0	3711	1767	1572
Grp Volume(v), veh/h	544	0	0	726	253	189
Grp Sat Flow(s),veh/h/ln	1763	0	0	1763	1767	1572
Q Serve(g_s), s	5.3	0.0	0.0	0.0	14.7	12.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	0.0	14.7	12.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2557	0	0	2557	302	269
V/C Ratio(X)	0.21	0.00	0.00	0.28	0.84	0.70
Avail Cap(c_a), veh/h	2557	0	0	2557	700	623
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.97	1.00	1.00
Uniform Delay (d), s/veh	4.7	0.0	0.0	0.0	42.5	41.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	6.1	3.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	0.1	6.9	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.9	0.0	0.0	0.3	48.6	44.7
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	544			726	442	
Approach Delay, s/veh	4.9			0.3	47.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	82.9			82.9	23.1
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	53.0			53.0	42.0
Max Q Clear Time (g_c+I1), s	7.3			2.0	16.7
Green Ext Time (p_c), s	4.2			6.1	1.4

Intersection Summary		
HCM 7th Control Delay, s/veh	13.8	
HCM 7th LOS	B	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
Future Volume (veh/h)	0	312	348	35	306	493	0	0	0	0	328	678	160
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		0.94
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	0	1856	1856		1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	347	0		340	548	0				364	753	178
Peak Hour Factor	0.90	0.90	0.90		0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3		3	3	0				3	3	3
Cap, veh/h	0	520			724	2131	0				429	888	210
Arrive On Green	0.00	0.25	0.00		0.14	0.20	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3618	1572		1767	3618	0				1448	2995	707
Grp Volume(v), veh/h	0	347	0		340	548	0				448	424	422
Grp Sat Flow(s),veh/h/ln	0	1763	1572		1767	1763	0				1783	1689	1678
Q Serve(g_s), s	0.0	9.4	0.0		18.8	13.9	0.0				25.1	25.0	25.1
Cycle Q Clear(g_c), s	0.0	9.4	0.0		18.8	13.9	0.0				25.1	25.0	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.81		0.42
Lane Grp Cap(c), veh/h	0	520			724	2131	0				529	501	497
V/C Ratio(X)	0.00	0.67			0.47	0.26	0.00				0.85	0.85	0.85
Avail Cap(c_a), veh/h	0	632			724	2131	0				631	597	594
HCM Platoon Ratio	1.00	1.67	1.67		0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.97	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	37.6	0.0		35.2	22.3	0.0				35.0	35.0	35.0
Incr Delay (d2), s/veh	0.0	6.4	0.0		0.2	0.3	0.0				8.0	8.3	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
%ile BackOfQ(50%),veh/ln	0.0	4.2	0.0		9.0	6.6	0.0				11.8	11.3	11.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	44.0	0.0		35.4	22.6	0.0				43.0	43.4	43.5
LnGrp LOS		D			D	C					D	D	D
Approach Vol, veh/h		347				888						1295	
Approach Delay, s/veh		44.0				27.5						43.3	
Approach LOS		D				C						D	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	8.4	20.6		36.9		69.1			
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0			
Max Green Setting (Gmax), s	3.4	19.0		37.5		58.0			
Max Q Clear Time (g_c+I1), s	0.8	11.4		27.1		15.9			
Green Ext Time (p_c), s	0.5	1.0		4.4		2.9			

Intersection Summary	
HCM 7th Control Delay, s/veh	37.9
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Future Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.98	1.00		0.94	0.97		0.92	1.00		0.90
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	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		254	308	92	19	324	321	144	749	127	0	0	493
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, %		3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h		1138	856	256	60	816	369	310	981	401	0	516	791
Arrive On Green		0.44	0.83	0.83	0.25	0.25	0.25	0.28	0.28	0.28	0.00	0.00	0.28
Sat Flow, veh/h		3428	1363	407	92	3285	1485	871	3526	1443	0	1856	2845
Grp Volume(v), veh/h		254	0	400	181	162	321	144	749	127	0	0	493
Grp Sat Flow(s),veh/h/ln		1714	0	1771	1773	1604	1485	871	1763	1443	0	1856	1423
Q Serve(g_s), s		4.9	0.0	5.7	0.0	8.9	22.0	15.2	20.6	7.4	0.0	0.0	16.0
Cycle Q Clear(g_c), s		4.9	0.0	5.7	8.6	8.9	22.0	15.2	20.6	7.4	0.0	0.0	16.0
Prop In Lane		1.00		0.23	0.10		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h		1138	0	1111	478	399	369	310	981	401	0	516	791
V/C Ratio(X)		0.22	0.00	0.36	0.38	0.41	0.87	0.46	0.76	0.32	0.00	0.00	0.62
Avail Cap(c_a), veh/h		1138	0	1111	585	499	462	413	1397	572	0	735	1127
HCM Platoon Ratio		1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh		21.1	0.0	3.7	33.2	33.3	38.2	33.1	35.1	30.3	0.0	0.0	33.4
Incr Delay (d2), s/veh		0.1	0.0	0.9	2.3	3.1	23.4	1.1	1.6	0.4	0.0	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		1.9	0.0	1.9	4.2	3.8	10.4	3.3	9.1	2.6	0.0	0.0	5.6
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		21.2	0.0	4.6	35.5	36.3	61.6	34.2	36.7	30.7	0.0	0.0	34.2
LnGrp LOS		C		A	D	D	E	C	D	C			C
Approach Vol, veh/h			654			664			1020			493	
Approach Delay, s/veh			11.1			48.3			35.6			34.2	
Approach LOS			B			D			D			C	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	71.5		34.5	40.2	31.3		34.5
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	54.0		42.0	16.0	33.0		42.0
Max Q Clear Time (g_c+I1), s	7.7		18.0	6.9	24.0		22.6
Green Ext Time (p_c), s	3.1		2.4	0.6	2.4		6.8

Intersection Summary	
HCM 7th Control Delay, s/veh	32.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	0	63
Future Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	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)	0.99		0.98	1.00		0.96	0.98		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	24	477	2	1	592	100	2	0	0	59	0	70
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	77	1302	5	45	2189	368	253	0	0	138	16	105
Arrive On Green	0.75	0.75	0.75	1.00	1.00	1.00	0.13	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	40	1746	7	0	2934	493	1262	0	0	558	127	812
Grp Volume(v), veh/h	503	0	0	374	0	319	2	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	1794	0	0	1855	0	1573	1262	0	0	1497	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	7.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	6.5	0.0	0.0
Prop In Lane	0.05		0.00	0.00		0.31	1.00		0.00	0.46		0.54
Lane Grp Cap(c), veh/h	1385	0	0	1429	0	1173	253	0	0	259	0	0
V/C Ratio(X)	0.36	0.00	0.00	0.26	0.00	0.27	0.01	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1385	0	0	1429	0	1173	425	0	0	454	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.00	0.92	0.00	0.92	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.5	0.0	0.0	0.0	0.0	0.0	30.4	0.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.6	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	2.3	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.3	0.0	0.0	0.4	0.0	0.5	30.4	0.0	0.0	33.6	0.0	0.0
LnGrp LOS	A			A		A	C			C		
Approach Vol, veh/h		503			693			2			129	
Approach Delay, s/veh		4.3			0.5			30.4			33.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.3	64.7	15.3	64.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	8.5	2.0	2.1	9.6
Green Ext Time (p_c), s	0.4	3.3	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	5.2
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	0
Future Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	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)	0.99		0.95	0.99		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	3	391	141	123	373	0	320	0	169	0	0	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	966	780	536	968	0	429	0	187	0	690	0
Arrive On Green	1.00	1.00	1.00	0.52	0.52	0.00	0.37	0.00	0.37	0.00	0.00	0.00
Sat Flow, veh/h	2	1851	1495	855	1856	0	952	0	503	0	1856	0
Grp Volume(v), veh/h	394	0	141	123	373	0	489	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1854	0	1495	855	1856	0	1455	0	0	0	1856	0
Q Serve(g_s), s	0.0	0.0	0.0	6.4	9.6	0.0	25.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	6.4	9.6	0.0	25.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	0.65		0.35	0.00		0.00
Lane Grp Cap(c), veh/h	1012	0	780	536	968	0	616	0	0	0	690	0
V/C Ratio(X)	0.39	0.00	0.18	0.23	0.39	0.00	0.79	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1012	0	780	536	968	0	747	0	0	0	847	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	0.94	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	10.7	11.5	0.0	23.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	1.0	1.2	0.0	4.9	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	0.3	0.0	0.1	1.3	4.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	1.1	0.0	0.5	11.7	12.6	0.0	28.6	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	A		A	B	B		C					
Approach Vol, veh/h		535			496			489			0	
Approach Delay, s/veh		0.9			12.4			28.6			0.0	
Approach LOS		A			B			C				

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	45.7	34.3	45.7	34.3
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	35.0	* 37	35.0	36.5
Max Q Clear Time (g_c+I1), s	11.6	27.4	2.0	0.0
Green Ext Time (p_c), s	3.3	2.3	3.4	0.0

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.

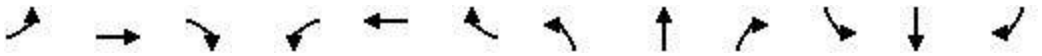
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	675	794	87	0	40
Future Vol, veh/h	0	675	794	87	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	750	882	97	0	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	489
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	522
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	522
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.54
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	522
HCM Lane V/C Ratio	-	-	-	0.085
HCM Control Delay (s/veh)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Future Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.85	0.93		0.80	0.95		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	106	505	76	62	229	64	116	420	159	81	281	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	476	950	379	140	508	138	302	1159	414	277	781	287
Arrive On Green	0.27	0.27	0.27	0.22	0.22	0.22	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1795	3582	1431	625	2261	617	928	3582	1280	800	2412	886
Grp Volume(v), veh/h	106	505	76	184	0	171	116	420	159	81	205	185
Grp Sat Flow(s),veh/h/ln	1795	1791	1431	1854	0	1650	928	1791	1280	800	1791	1507
Q Serve(g_s), s	3.7	9.7	3.3	6.9	0.0	7.2	8.9	7.2	7.7	6.9	7.0	7.6
Cycle Q Clear(g_c), s	3.7	9.7	3.3	6.9	0.0	7.2	16.5	7.2	7.7	14.2	7.0	7.6
Prop In Lane	1.00		1.00	0.34		0.37	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	476	950	379	416	0	370	302	1159	414	277	580	488
V/C Ratio(X)	0.22	0.53	0.20	0.44	0.00	0.46	0.38	0.36	0.38	0.29	0.35	0.38
Avail Cap(c_a), veh/h	827	1650	659	508	0	452	302	1159	414	277	580	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	25.2	22.9	26.8	0.0	27.0	27.3	20.8	21.0	26.2	20.7	21.0
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.3	3.7	0.9	2.7	2.7	1.7	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.1	1.1	3.0	0.0	2.8	2.2	3.1	2.6	1.5	3.1	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.1	25.4	23.0	27.1	0.0	27.3	31.0	21.7	23.7	28.9	22.4	23.2
LnGrp LOS	C	C	C	C		C	C	C	C	C	C	C
Approach Vol, veh/h		687			355			695			471	
Approach Delay, s/veh		24.8			27.2			23.7			23.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		31.0		26.3		31.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		26.0		37.0		26.0				
Max Q Clear Time (g_c+I1), s		9.2		18.5		11.7		16.2				
Green Ext Time (p_c), s		1.2		1.8		2.8		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)	52	538	118	72	246	43	0	0	0	67	150	92
Future Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
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)	0.92		0.89	1.00		0.92				1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	55	566	124	76	259	45				71	158	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	95	697	150	496	1872	318				190	412	240
Arrive On Green	0.27	0.27	0.27	0.55	1.00	1.00				0.25	0.25	0.25
Sat Flow, veh/h	172	2551	548	1795	3019	513				760	1644	956
Grp Volume(v), veh/h	397	0	348	76	151	153				173	0	153
Grp Sat Flow(s),veh/h/ln	1733	0	1539	1795	1791	1742				1847	0	1513
Q Serve(g_s), s	12.1	0.0	18.1	1.8	0.0	0.0				6.6	0.0	7.2
Cycle Q Clear(g_c), s	18.2	0.0	18.1	1.8	0.0	0.0				6.6	0.0	7.2
Prop In Lane	0.14		0.36	1.00		0.29				0.41		0.63
Lane Grp Cap(c), veh/h	522	0	420	496	1111	1080				463	0	379
V/C Ratio(X)	0.76	0.00	0.83	0.15	0.14	0.14				0.37	0.00	0.40
Avail Cap(c_a), veh/h	784	0	661	496	1111	1080				543	0	445
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.88	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	29.0	14.1	0.0	0.0				26.3	0.0	26.6
Incr Delay (d2), s/veh	8.9	0.0	15.2	0.1	0.3	0.3				0.2	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	8.2	0.7	0.1	0.1				2.8	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.8	0.0	44.2	14.2	0.3	0.3				26.5	0.0	26.8
LnGrp LOS	D		D	B	A	A				C		C
Approach Vol, veh/h		745			380						326	
Approach Delay, s/veh		40.8			3.1						26.7	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.5	29.2		26.3		58.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	8.0	* 37		25.0		49.0
Max Q Clear Time (g_c+I1), s	3.8	20.2		9.2		2.0
Green Ext Time (p_c), s	0.0	3.1		1.2		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	27.7
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)	28	574	3	1	313	42	2	0	2	73	0	46
Future Volume (veh/h)	28	574	3	1	313	42	2	0	2	73	0	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)	0.98		0.92	0.99		0.93	0.96		0.94	0.96		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	29	604	3	1	329	44	2	0	2	77	0	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	110	2148	11	43	1954	257	231	20	187	273	16	137
Arrive On Green	0.21	0.21	0.21	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	101	3389	17	1	3082	405	673	79	752	824	63	553
Grp Volume(v), veh/h	327	0	309	200	0	174	4	0	0	125	0	0
Grp Sat Flow(s),veh/h/ln	1795	0	1711	1884	0	1604	1504	0	0	1440	0	0
Q Serve(g_s), s	0.0	0.0	12.9	0.0	0.0	3.8	0.0	0.0	0.0	4.6	0.0	0.0
Cycle Q Clear(g_c), s	12.4	0.0	12.9	3.7	0.0	3.8	0.2	0.0	0.0	5.9	0.0	0.0
Prop In Lane	0.09		0.01	0.01		0.25	0.50		0.50	0.62		0.38
Lane Grp Cap(c), veh/h	1184	0	1085	1237	0	1017	437	0	0	426	0	0
V/C Ratio(X)	0.28	0.00	0.28	0.16	0.00	0.17	0.01	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	1184	0	1085	1237	0	1017	634	0	0	625	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.00	0.86	0.97	0.00	0.97	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.2	0.0	17.4	6.4	0.0	6.4	24.1	0.0	0.0	26.1	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.6	0.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	6.0	1.4	0.0	1.3	0.1	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.7	0.0	18.0	6.6	0.0	6.7	24.1	0.0	0.0	26.5	0.0	0.0
LnGrp LOS	B		B	A		A	C			C		
Approach Vol, veh/h		636			374			4			125	
Approach Delay, s/veh		17.8			6.7			24.1			26.5	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.1	58.9	26.1	58.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	33.0	42.0	33.0	42.0
Max Q Clear Time (g_c+I1), s	7.9	5.8	2.2	14.9
Green Ext Time (p_c), s	0.7	2.5	0.0	4.5

Intersection Summary	
HCM 7th Control Delay, s/veh	15.1
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Future Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	0.98		0.91	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	94	516	74	139	288	24	25	687	564	14	360	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	179	856	122	212	990	82	71	1547	663	64	1288	214
Arrive On Green	0.05	0.28	0.28	0.06	0.30	0.30	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	3483	3084	439	3483	3316	273	60	3397	1456	44	2829	469
Grp Volume(v), veh/h	94	298	292	139	154	158	377	335	564	227	0	208
Grp Sat Flow(s),veh/h/ln	1742	1791	1732	1742	1791	1798	1827	1630	1456	1744	0	1598
Q Serve(g_s), s	2.3	12.6	12.8	3.4	5.8	5.9	0.0	12.3	30.1	0.0	0.0	7.1
Cycle Q Clear(g_c), s	2.3	12.6	12.8	3.4	5.8	5.9	11.9	12.3	30.1	6.5	0.0	7.1
Prop In Lane	1.00		0.25	1.00		0.15	0.07		1.00	0.06		0.29
Lane Grp Cap(c), veh/h	179	497	481	212	535	537	876	742	663	838	0	728
V/C Ratio(X)	0.53	0.60	0.61	0.66	0.29	0.29	0.43	0.45	0.85	0.27	0.00	0.29
Avail Cap(c_a), veh/h	239	595	575	319	636	638	1205	1045	934	1130	0	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.4	27.3	27.4	40.1	23.5	23.6	16.2	16.3	21.1	14.7	0.0	14.9
Incr Delay (d2), s/veh	2.4	1.2	1.3	3.4	0.3	0.3	0.3	0.4	5.4	0.2	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	1.0	5.5	5.4	1.6	2.5	2.5	5.0	4.4	10.7	2.7	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.8	28.5	28.7	43.5	23.8	23.9	16.5	16.7	26.5	14.9	0.0	15.1
LnGrp LOS	D	C	C	D	C	C	B	B	C	B		B
Approach Vol, veh/h		684			451			1276			435	
Approach Delay, s/veh		30.6			29.9			21.0			15.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	45.8	9.5	32.1		45.8	11.3	30.2
Change Period (Y+Rc), s	6.0	5.0	6.0		6.0	6.0	* 6
Max Green Setting (Gmax), s	56.0	6.0	31.0		56.0	8.0	* 29
Max Q Clear Time (g_c+I1), s	32.1	4.3	7.9		9.1	5.4	14.8
Green Ext Time (p_c), s	7.7	0.0	1.9		3.1	0.1	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	23.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	917	372	177	254	57
Future Volume (veh/h)	122	917	372	177	254	57
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)	0.99			0.96	1.00	0.90
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	128	965	392	186	267	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	594	2449	1599	746	303	68
Arrive On Green	0.68	0.68	0.68	0.68	0.22	0.22
Sat Flow, veh/h	837	3676	2432	1091	1399	314
Grp Volume(v), veh/h	128	965	299	279	328	0
Grp Sat Flow(s),veh/h/ln	837	1791	1791	1638	1719	0
Q Serve(g_s), s	6.5	11.1	6.0	6.2	17.6	0.0
Cycle Q Clear(g_c), s	12.7	11.1	6.0	6.2	17.6	0.0
Prop In Lane	1.00			0.67	0.81	0.18
Lane Grp Cap(c), veh/h	594	2449	1224	1120	372	0
V/C Ratio(X)	0.22	0.39	0.24	0.25	0.88	0.00
Avail Cap(c_a), veh/h	594	2449	1224	1120	678	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	8.2	6.5	5.7	5.7	36.1	0.0
Incr Delay (d2), s/veh	0.5	0.3	0.5	0.5	6.9	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	1.2	3.9	2.2	2.1	8.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	8.7	6.8	6.2	6.3	43.0	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		1093	578		328	
Approach Delay, s/veh		7.0	6.2		43.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		70.0		25.0	70.0
Change Period (Y+Rc), s		5.0		4.5	5.0
Max Green Setting (Gmax), s		48.0		37.5	48.0
Max Q Clear Time (g_c+I1), s		8.2		19.6	14.7
Green Ext Time (p_c), s		4.4		1.0	10.0

Intersection Summary	
HCM 7th Control Delay, s/veh	12.7
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
Future Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
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)	0.97		0.89	1.00		0.90				1.00		0.89
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	19	1183	31	24	545	14				22	5	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	679	1343	35	192	1344	35				91	21	136
Arrive On Green	0.74	0.74	0.74	0.98	0.98	0.98				0.16	0.16	0.16
Sat Flow, veh/h	830	1822	48	464	1824	47				577	131	866
Grp Volume(v), veh/h	19	0	1214	24	0	559				60	0	0
Grp Sat Flow(s),veh/h/ln	830	0	1870	464	0	1870				1574	0	0
Q Serve(g_s), s	0.6	0.0	46.2	3.5	0.0	0.9				3.2	0.0	0.0
Cycle Q Clear(g_c), s	1.5	0.0	46.2	49.7	0.0	0.9				3.2	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.03				0.37		0.55
Lane Grp Cap(c), veh/h	679	0	1378	192	0	1379				248	0	0
V/C Ratio(X)	0.03	0.00	0.88	0.13	0.00	0.41				0.24	0.00	0.00
Avail Cap(c_a), veh/h	679	0	1378	192	0	1379				398	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33				1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.6	0.0	9.4	17.3	0.0	0.3				35.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	8.3	1.3	0.0	0.9				0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	18.0	0.4	0.0	0.5				1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.7	0.0	17.7	18.6	0.0	1.1				35.5	0.0	0.0
LnGrp LOS	A		B	B		A				D		
Approach Vol, veh/h		1233			583						60	
Approach Delay, s/veh		17.5			1.9						35.5	
Approach LOS		B			A						D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	20.0	75.0	75.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	61.0	61.0
Max Q Clear Time (g_c+I1), s	5.2	51.7	48.2
Green Ext Time (p_c), s	0.2	2.8	8.7

Intersection Summary	
HCM 7th Control Delay, s/veh	13.2
HCM 7th LOS	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	1127	536	12	6	18
Future Vol, veh/h	18	1127	536	12	6	18
Conflicting Peds, #/hr	0	0	0	95	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	1186	564	13	6	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	672	0	-	0	1903	666
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	1237	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	924	-	-	-	76	461
Stage 1	-	-	-	-	513	-
Stage 2	-	-	-	-	275	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	840	-	-	-	62	420
Mov Cap-2 Maneuver	-	-	-	-	62	-
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	250	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.15	0	29.65
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	840	-	-	-	171
HCM Lane V/C Ratio	0.023	-	-	-	0.148
HCM Control Delay (s/veh)	9.4	-	-	-	29.7
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

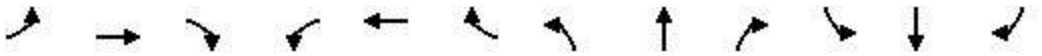
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	1101	527	35	8	21
Future Vol, veh/h	32	1101	527	35	8	21
Conflicting Peds, #/hr	0	0	0	96	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	34	1159	555	37	8	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	688	0	-	0	1919	669
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	1250	-
Critical Hdwy	4.11	-	-	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	2.209	-	-	-	3.509	3.309
Pot Cap-1 Maneuver	911	-	-	-	74	459
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	271	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	828	-	-	-	59	417
Mov Cap-2 Maneuver	-	-	-	-	59	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	246	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.27	0	33.65
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	828	-	-	-	156
HCM Lane V/C Ratio	0.041	-	-	-	0.196
HCM Control Delay (s/veh)	9.5	-	-	-	33.7
HCM Lane LOS	A	-	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	63
Future Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	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)	0.96		0.89	1.00		0.89	0.90		0.89	0.92		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	88	1063	16	19	496	73	29	11	9	67	15	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	638	1274	19	217	1086	160	211	78	51	166	48	128
Arrive On Green	0.69	0.69	0.69	1.00	1.00	1.00	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	816	1848	28	527	1576	232	730	379	250	541	231	621
Grp Volume(v), veh/h	88	0	1079	19	0	569	49	0	0	148	0	0
Grp Sat Flow(s),veh/h/ln	816	0	1876	527	0	1808	1359	0	0	1393	0	0
Q Serve(g_s), s	3.6	0.0	40.0	2.2	0.0	0.0	0.0	0.0	0.0	6.3	0.0	0.0
Cycle Q Clear(g_c), s	3.6	0.0	40.0	42.2	0.0	0.0	2.4	0.0	0.0	8.7	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.13	0.59		0.18	0.45		0.45
Lane Grp Cap(c), veh/h	638	0	1293	217	0	1246	340	0	0	342	0	0
V/C Ratio(X)	0.14	0.00	0.83	0.09	0.00	0.46	0.14	0.00	0.00	0.43	0.00	0.00
Avail Cap(c_a), veh/h	638	0	1293	217	0	1246	386	0	0	388	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	5.1	0.0	10.8	12.9	0.0	0.0	30.9	0.0	0.0	33.3	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	6.5	0.8	0.0	1.2	0.2	0.0	0.0	0.9	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	0.6	0.0	15.8	0.3	0.0	0.4	0.9	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.6	0.0	17.3	13.7	0.0	1.2	31.0	0.0	0.0	34.2	0.0	0.0
LnGrp LOS	A		B	B		A	C			C		
Approach Vol, veh/h		1167			588			49			148	
Approach Delay, s/veh		16.4			1.6			31.0			34.2	
Approach LOS		B			A			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.5		70.5		24.5		70.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.8		62.2		22.8		62.2				
Max Q Clear Time (g_c+I1), s		10.7		44.2		4.4		42.0				
Green Ext Time (p_c), s		0.7		3.9		0.2		10.1				

Intersection Summary	
HCM 7th Control Delay, s/veh	13.7
HCM 7th LOS	B

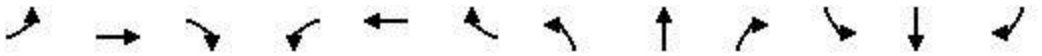
Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1074	9	15	541	17	15
Future Vol, veh/h	1074	9	15	541	17	15
Conflicting Peds, #/hr	0	91	0	0	41	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1131	9	16	569	18	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1231	0	1868	1226
Stage 1	-	-	-	-	1226	-
Stage 2	-	-	-	-	642	-
Critical Hdwy	-	-	4.11	-	6.41	6.21
Critical Hdwy Stg 1	-	-	-	-	5.41	-
Critical Hdwy Stg 2	-	-	-	-	5.41	-
Follow-up Hdwy	-	-	2.209	-	3.509	3.309
Pot Cap-1 Maneuver	-	-	570	-	80	219
Stage 1	-	-	-	-	278	-
Stage 2	-	-	-	-	526	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	520	-	68	200
Mov Cap-2 Maneuver	-	-	-	-	68	-
Stage 1	-	-	-	-	254	-
Stage 2	-	-	-	-	490	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	59.39
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	99	-	-	520	-
HCM Lane V/C Ratio	0.342	-	-	0.03	-
HCM Control Delay (s/veh)	59.4	-	-	12.1	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	1.3	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	23
Future Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	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)	0.97		0.90	0.99		0.91	0.91		0.95	0.96		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	31	1102	14	18	547	39	14	4	23	15	3	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	706	1435	18	465	1336	95	92	39	102	95	32	101
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	814	1854	24	503	1726	123	343	321	848	359	269	838
Grp Volume(v), veh/h	31	0	1116	18	0	586	41	0	0	42	0	0
Grp Sat Flow(s),veh/h/ln	814	0	1878	503	0	1849	1512	0	0	1466	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	2.3	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.07	0.34		0.56	0.36		0.57
Lane Grp Cap(c), veh/h	706	0	1453	465	0	1431	233	0	0	228	0	0
V/C Ratio(X)	0.04	0.00	0.77	0.04	0.00	0.41	0.18	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	706	0	1453	465	0	1431	394	0	0	385	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	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	0.0	0.0	0.0	0.0	0.0	0.0	37.7	0.0	0.0	37.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.9	0.2	0.0	0.9	0.4	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.6	0.0	0.0	0.3	0.9	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.0	3.9	0.2	0.0	0.9	38.0	0.0	0.0	38.1	0.0	0.0
LnGrp LOS	A		A	A		A	D			D		
Approach Vol, veh/h		1147			604			41			42	
Approach Delay, s/veh		3.8			0.8			38.0			38.1	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.5		78.5		16.5		78.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		63.0		22.0		63.0				
Max Q Clear Time (g_c+I1), s		4.3		2.0		4.1		2.0				
Green Ext Time (p_c), s		0.1		5.0		0.1		15.7				
Intersection Summary												
HCM 7th Control Delay, s/veh			4.4									
HCM 7th LOS			A									

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	21	1062	0	0	550	37	4	2	65	10	0	20
Future Vol, veh/h	21	1062	0	0	550	37	4	2	65	10	0	20
Conflicting Peds, #/hr	0	0	81	0	0	89	0	0	0	0	0	14
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	22	1118	0	0	579	39	4	2	68	11	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	-	-	-	0	1755	1869	1118	1851	1850	701
Stage 1	-	-	-	-	-	-	1162	1162	-	687	687	-
Stage 2	-	-	-	-	-	-	593	707	-	1163	1162	-
Critical Hdwy	4.11	-	-	-	-	-	7.11	6.51	6.21	7.11	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.51	-	6.11	5.51	-
Follow-up Hdwy	2.209	-	-	-	-	-	3.509	4.009	3.309	3.509	4.009	3.309
Pot Cap-1 Maneuver	896	-	0	0	-	-	67	73	253	57	75	440
Stage 1	-	-	0	0	-	-	239	270	-	438	449	-
Stage 2	-	-	0	0	-	-	494	440	-	238	270	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	820	-	-	-	-	-	61	65	253	36	67	398
Mov Cap-2 Maneuver	-	-	-	-	-	-	61	65	-	36	67	-
Stage 1	-	-	-	-	-	-	232	263	-	401	411	-
Stage 2	-	-	-	-	-	-	461	402	-	168	263	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	33.17	63.74
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	201	820	-	-	-	92
HCM Lane V/C Ratio	0.372	0.027	-	-	-	0.345
HCM Control Delay (s/veh)	33.2	9.5	-	-	-	63.7
HCM Lane LOS	D	A	-	-	-	F
HCM 95th %tile Q(veh)	1.6	0.1	-	-	-	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	1107	566	116	38	21
Future Volume (veh/h)	30	1107	566	116	38	21
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			0.93	1.00	0.96
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	32	1165	596	122	40	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	647	1478	648	133	130	72
Arrive On Green	0.61	1.00	0.43	0.43	0.12	0.12
Sat Flow, veh/h	1795	1885	1495	306	1075	591
Grp Volume(v), veh/h	32	1165	0	718	63	0
Grp Sat Flow(s),veh/h/ln	1795	1885	0	1801	1693	0
Q Serve(g_s), s	0.0	0.0	0.0	35.7	3.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	35.7	3.2	0.0
Prop In Lane	1.00			0.17	0.63	0.35
Lane Grp Cap(c), veh/h	647	1478	0	781	205	0
V/C Ratio(X)	0.05	0.79	0.00	0.92	0.31	0.00
Avail Cap(c_a), veh/h	647	1478	0	891	481	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.0	0.0	0.0	25.4	38.1	0.0
Incr Delay (d2), s/veh	0.0	4.3	0.0	17.7	0.8	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	0.3	1.8	0.0	18.3	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	12.0	4.3	0.0	43.1	38.9	0.0
LnGrp LOS	B	A		D	D	
Approach Vol, veh/h		1197	718		63	
Approach Delay, s/veh		4.5	43.1		38.9	
Approach LOS		A	D		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		33.3	45.7		16.0	79.0
Change Period (Y+Rc), s		4.5	* 4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	* 47		27.0	59.0
Max Q Clear Time (g_c+I1), s		2.0	37.7		5.2	2.0
Green Ext Time (p_c), s		0.0	3.5		0.1	16.7

Intersection Summary	
HCM 7th Control Delay, s/veh	19.6
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1145	0	0	527	157	122
Future Volume (veh/h)	1145	0	0	527	157	122
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	1885	0	0	1885	1885	1885
Adj Flow Rate, veh/h	1205	0	0	555	165	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2794	0	0	2794	209	186
Arrive On Green	0.78	0.00	0.00	1.00	0.12	0.12
Sat Flow, veh/h	3770	0	0	3770	1795	1598
Grp Volume(v), veh/h	1205	0	0	555	165	128
Grp Sat Flow(s),veh/h/ln	1791	0	0	1791	1795	1598
Q Serve(g_s), s	11.8	0.0	0.0	0.0	9.5	8.2
Cycle Q Clear(g_c), s	11.8	0.0	0.0	0.0	9.5	8.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2794	0	0	2794	209	186
V/C Ratio(X)	0.43	0.00	0.00	0.20	0.79	0.69
Avail Cap(c_a), veh/h	2794	0	0	2794	508	452
HCM Platoon Ratio	1.00	1.00	1.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.99	1.00	1.00
Uniform Delay (d), s/veh	3.9	0.0	0.0	0.0	45.6	45.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.2	6.6	4.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.0	0.1	4.6	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	4.4	0.0	0.0	0.2	52.2	49.5
LnGrp LOS	A			A	D	D
Approach Vol, veh/h	1205			555	293	
Approach Delay, s/veh	4.4			0.2	51.0	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	88.7			88.7	17.3
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	65.0			65.0	30.0
Max Q Clear Time (g_c+I1), s	13.8			2.0	11.5
Green Ext Time (p_c), s	12.5			4.4	0.8

Intersection Summary		
HCM 7th Control Delay, s/veh	9.9	
HCM 7th LOS	A	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
Future Volume (veh/h)	0	428	839	10	456	350	0	0	0	0	320	740	177
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		0.95
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	0	1885	1885		1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	451	0		480	368	0				337	779	186
Peak Hour Factor	0.95	0.95	0.95		0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1		1	1	0				1	1	1
Cap, veh/h	0	589			725	2204	0				387	894	213
Arrive On Green	0.00	0.27	0.00		0.67	1.00	0.00				0.29	0.29	0.29
Sat Flow, veh/h	0	3676	1598		1795	3676	0				1355	3132	747
Grp Volume(v), veh/h	0	451	0		480	368	0				452	426	424
Grp Sat Flow(s),veh/h/ln	0	1791	1598		1795	1791	0				1817	1716	1702
Q Serve(g_s), s	0.0	12.3	0.0		16.7	0.0	0.0				25.1	25.1	25.1
Cycle Q Clear(g_c), s	0.0	12.3	0.0		16.7	0.0	0.0				25.1	25.1	25.1
Prop In Lane	0.00		1.00		1.00		0.00				0.75		0.44
Lane Grp Cap(c), veh/h	0	589			725	2204	0				519	490	486
V/C Ratio(X)	0.00	0.77			0.66	0.17	0.00				0.87	0.87	0.87
Avail Cap(c_a), veh/h	0	676			725	2204	0				574	542	538
HCM Platoon Ratio	1.00	1.67	1.67		1.67	1.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.88	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	36.6	0.0		13.0	0.0	0.0				36.0	36.0	36.0
Incr Delay (d2), s/veh	0.0	8.1	0.0		1.8	0.2	0.0				11.8	12.4	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
%ile BackOfQ(50%),veh/ln	0.0	5.5	0.0		4.9	0.1	0.0				12.6	12.0	11.9
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	44.7	0.0		14.8	0.2	0.0				47.8	48.4	48.6
LnGrp LOS		D			B	A					D	D	D
Approach Vol, veh/h		451				848						1302	
Approach Delay, s/veh		44.7				8.5						48.3	
Approach LOS		D				A						D	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	17.8	22.4		35.8		70.2			
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0			
Max Green Setting (Gmax), s	12.8	20.0		33.5		62.0			
Max Q Clear Time (g_c+I1), s	18.7	14.3		27.1		2.0			
Green Ext Time (p_c), s	0.7	1.1		3.2		1.9			

Intersection Summary	
HCM 7th Control Delay, s/veh	34.7
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Future Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.90	0.91		0.89	1.00		0.88	0.97		0.97
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No			No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		192	400	200	46	437	255	166	476	173	79	119	162
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		1103	675	338	89	690	328	180	1115	436	145	201	484
Arrive On Green		0.63	1.00	1.00	0.23	0.23	0.23	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h		3483	1136	568	209	2991	1421	1106	3582	1401	315	646	1555
Grp Volume(v), veh/h		192	0	600	241	242	255	166	476	173	198	0	162
Grp Sat Flow(s),veh/h/ln		1742	0	1705	1571	1630	1421	1106	1791	1401	961	0	1555
Q Serve(g_s), s		2.4	0.0	0.0	7.8	14.2	17.8	10.8	11.2	10.3	11.0	0.0	8.5
Cycle Q Clear(g_c), s		2.4	0.0	0.0	13.9	14.2	17.8	33.0	11.2	10.3	22.2	0.0	8.5
Prop In Lane		1.00		0.33	0.19		1.00	1.00		1.00	0.40		1.00
Lane Grp Cap(c), veh/h		1103	0	1013	403	376	328	180	1115	436	347	0	484
V/C Ratio(X)		0.17	0.00	0.59	0.60	0.64	0.78	0.92	0.43	0.40	0.57	0.00	0.33
Avail Cap(c_a), veh/h		1103	0	1013	701	707	616	180	1115	436	347	0	484
HCM Platoon Ratio		2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	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		13.7	0.0	0.0	36.3	36.9	38.2	49.4	29.0	28.7	33.7	0.0	28.1
Incr Delay (d2), s/veh		0.1	0.0	2.5	6.4	8.3	16.6	45.0	0.3	0.6	2.2	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		0.9	0.0	0.7	6.3	6.6	7.7	6.7	4.9	3.5	4.8	0.0	3.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		13.8	0.0	2.5	42.7	45.1	54.8	94.4	29.2	29.3	35.9	0.0	28.5
LnGrp LOS		B		A	D	D	D	F	C	C	D		C
Approach Vol, veh/h			792			738			815			360	
Approach Delay, s/veh			5.3			47.7			42.5			32.6	
Approach LOS			A			D			D			C	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	68.0		38.0	38.6	29.4		38.0					
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0					
Max Green Setting (Gmax), s	63.0		33.0	12.0	46.0		33.0					
Max Q Clear Time (g_c+I1), s	2.0		24.2	4.4	19.8		35.0					
Green Ext Time (p_c), s	5.5		1.4	0.4	4.6		0.0					

Intersection Summary	
HCM 7th Control Delay, s/veh	31.7
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	61
Future Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	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)	0.98		0.97	1.00		0.91	1.00		1.00	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	41	606	4	2	674	92	0	2	3	116	2	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	91	1149	7	46	2069	281	0	135	203	243	19	102
Arrive On Green	0.68	0.68	0.68	1.00	1.00	1.00	0.00	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	63	1699	11	1	3058	416	0	681	1021	852	94	513
Grp Volume(v), veh/h	651	0	0	416	0	352	0	0	5	182	0	0
Grp Sat Flow(s),veh/h/ln	1773	0	0	1884	0	1592	0	0	1701	1460	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	7.9	0.0	0.0
Cycle Q Clear(g_c), s	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	9.0	0.0	0.0
Prop In Lane	0.06		0.01	0.00		0.26	0.00		0.60	0.64		0.35
Lane Grp Cap(c), veh/h	1248	0	0	1320	0	1077	0	0	338	363	0	0
V/C Ratio(X)	0.52	0.00	0.00	0.32	0.00	0.33	0.00	0.00	0.01	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1248	0	0	1320	0	1077	0	0	447	456	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.00	0.88	0.00	0.88	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.8	29.2	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.6	0.0	0.7	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.1	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.8	0.0	0.0	0.6	0.0	0.7	0.0	0.0	25.8	29.6	0.0	0.0
LnGrp LOS	A			A		A			C	C		
Approach Vol, veh/h		651			768			5			182	
Approach Delay, s/veh		7.8			0.6			25.8			29.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	20.9	59.1	20.9	59.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	11.0	2.0	2.2	15.7
Green Ext Time (p_c), s	0.5	3.8	0.0	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	0	2
Future Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	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)	0.96		0.93	0.98		0.89	1.00		0.91	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	11	453	262	276	557	1	208	0	141	0	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	55	1147	918	541	1163	2	304	4	160	0	0	439
Arrive On Green	1.00	1.00	1.00	0.62	0.62	0.62	0.28	0.00	0.28	0.00	0.00	0.28
Sat Flow, veh/h	14	1854	1485	729	1881	3	844	14	582	0	0	1594
Grp Volume(v), veh/h	464	0	262	276	0	558	349	0	0	0	0	2
Grp Sat Flow(s),veh/h/ln	1868	0	1485	729	0	1884	1440	0	0	0	0	1594
Q Serve(g_s), s	0.0	0.0	0.0	18.6	0.0	12.8	18.2	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	18.6	0.0	12.8	18.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	0.02		1.00	1.00		0.00	0.60		0.40	0.00		1.00
Lane Grp Cap(c), veh/h	1201	0	918	541	0	1165	468	0	0	0	0	439
V/C Ratio(X)	0.39	0.00	0.29	0.51	0.00	0.48	0.75	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1201	0	918	541	0	1165	504	0	0	0	0	468
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.00	0.81	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.4	0.0	8.3	27.7	0.0	0.0	0.0	0.0	21.0
Incr Delay (d2), s/veh	0.8	0.0	0.6	3.4	0.0	1.4	5.6	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	0.3	0.0	0.2	3.1	0.0	5.1	6.9	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.8	0.0	0.6	12.8	0.0	9.7	33.3	0.0	0.0	0.0	0.0	21.0
LnGrp LOS	A		A	B		A	C					C
Approach Vol, veh/h		726			834			349			2	
Approach Delay, s/veh		0.7			10.7			33.3			21.0	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.5	26.5	53.5	26.5
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	48.0	* 24	48.0	23.5
Max Q Clear Time (g_c+I1), s	20.6	20.5	2.0	2.1
Green Ext Time (p_c), s	7.0	0.7	4.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	758	794	6	0	22
Future Vol, veh/h	0	758	794	6	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	798	836	6	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	421
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.31
Pot Cap-1 Maneuver	0	-	-	-	0	584
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	584
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.42
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	584
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s/veh)	-	-	-	11.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Attachment C:
95th Percentile Queue Summary Tables

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 1		Alt 3 (EB Diet) VERSION 1		Alt 4 (3-Lane Diet) VERSION 1	
			Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM
1	Broadway & Grand Ave	NBL	*140*	53	*140*	59	*140*	48	*140*	49
		NBT	*150*	133	*150*	131	*150*	125	*150*	**159**
		NBR	*100*	50	*100*	91	*100*	96	*100*	**113**
		SBL	*100*	54	*100*	66	*100*	**109**	*100*	**104**
		SBT	*200*	98	*200*	88	*200*	128	*200*	**210**
		SBTR	*200*	85	*200*	78	*200*	112	*200*	187
		EBL	*200*	74	*200*	**266**	*200*	**291**	*200*	**260**
		EBT	*260*	203	*260*	**587**	*260*	**676**	*260*	**678**
		EBR	*25*	**122**	*25*	**143**	*25*	**147**	*25*	**147**
		WBL	-	-	*290*	82	*290*	83	*290*	78
		WBLT	*290*	122	-	-	*290*	-	-	-
		WBTR	*290*	136	*290*	195	*290*	179	*290*	181
2	Webster St & Grand Ave	SBLT	*135*	103	*135*	124	*135*	122	*135*	128
		SBTR	*135*	53	*135*	89	*135*	83	*135*	80
		EBLT	*290*	154	-	-	-	-	-	-
		EBLTR	-	-	*290*	**312**	*290*	**317**	*290*	**313**
		EBTR	*290*	216	-	-	-	-	-	-
		WBL	*205*	129	*205*	137	*205*	152	*205*	139
		WBT	*255*	56	*255*	41	*255*	31	*255*	48
		WBTR	*255*	86	*255*	140	*255*	128	*255*	134
3	Valdez St & Grand Ave	NBLTR	*90*	21	*90*	19	*90*	22	*90*	23
		SBLT	*130*	44	-	-	-	-	-	-
		SBLTR	-	-	*130*	68	*130*	67	*130*	63
		SBR	*25*	**47**	-	-	-	-	-	-
		EBL	*130*	19	-	-	-	-	-	-
		EBLT	-	-	*255*	84	*255*	72	*255*	69
		EBT	*255*	42	-	-	-	-	-	-
		EBTR	*255*	35	*255*	69	*255*	70	*255*	65
		WBL	*150*	20	-	-	-	-	-	-
		WBLT	-	-	*470*	108	*470*	117	*470*	124
		WBT	*470*	125	-	-	-	-	-	-
		WBTR	*470*	132	*470*	148	*470*	150	*470*	160
4	Harrison St & Grand Ave	NBLT	*495*	240	*495*	256	*495*	255	*495*	244
		NBT	*495*	211	*495*	228	*495*	218	*495*	217
		NBR	*495*	97	*495*	98	*495*	90	*495*	95
		SBLT	*600*	205	*600*	206	*600*	208	*600*	221
		SBT	*600*	-	-	-	-	-	-	-
		SBTR	*600*	182	*600*	182	*600*	183	*600*	195
		EBL	*275*	53	*275*	57	*275*	56	*275*	57
		EBT	*470*	98	*470*	100	*470*	100	*470*	87
		EBTR	*470*	115	*470*	116	*470*	122	*470*	118
		WBL	*225*	143	*225*	139	*225*	144	*225*	153
		WBT	*430*	123	*430*	104	*430*	124	*430*	120
		WBTR	*430*	138	*430*	142	*430*	149	*430*	153
5	Bay Place & Grand Ave	SBLR	*135*	**155**	*135*	**145**	*135*	**151**	*135*	**166**
		EBL	*80*	70	*80*	77	*80*	73	*80*	70
		EBT	*430*	101	*430*	95	*430*	99	*430*	93
		WBT	*350*	147	*350*	156	*350*	136	*350*	160
		WBTR	*350*	153	*350*	171	*350*	139	*350*	170

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 1		Alt 3 (EB Diet) VERSION 1		Alt 4 (3-Lane Diet) VERSION 1	
			Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM
6	Park View Terrace/Bellevue Ave & Grand Ave	SBLTR	*775*	83	*775*	99	*775*	99	*775*	94
		EBL	*125*	23	*125*	23	*125*	27	*125*	30
		EBT	*350*	72	*350*	72	-	-	-	-
		EBTR	-	-	*350*	85	*350*	163	*350*	180
		EBR	*100*	4	-	-	-	-	-	-
		WBL	*100*	38	*100*	61	*100*	54	*100*	58
		WBT	*250*	189	-	-	*250*	145	-	-
		WBTR	-	-	*250*	**316**	*250*	170	*250*	**303**
		WBR	*60*	37	-	-	-	-	-	-
7	Lennox Ave & Grand Ave	SBLR	*675*	54	*675*	68	*675*	62	*675*	70
		EBL	*100*	29	*100*	34	*100*	29	*100*	33
		EBT	*225*	30	*225*	27	*225*	41	*225*	35
		WBT	*300*	54	-	-	*300*	48	-	-
		WBTR	-	-	*300*	132	*300*	45	*300*	121
		WBR	*30*	7	-	-	-	-	-	-
8	Lee St & Grand Ave	SBLR	*630*	48	*630*	49	*630*	50	*630*	54
		EBL	*240*	29	*240*	33	*240*	29	*240*	36
		EBT	*300*	35	*300*	34	*300*	49	*300*	38
		WBT	*240*	62	-	-	*240*	55	-	-
		WBTR	*240*	62	*240*	75	*240*	68	*240*	77
9	Perkins St & Grand Ave	NBLTR	*480*	30	*480*	33	*480*	31	*480*	30
		SBLTR	*260*	87	*260*	94	*260*	86	*260*	98
		EBL	*160*	40	*160*	48	*160*	51	*160*	55
		EBT	*240*	94	*240*	84	-	-	-	-
		EBTR	-	-	*240*	108	*240*	182	*240*	179
		EBR	*50*	21	-	-	-	-	-	-
		WBL	*175*	25	*175*	28	*175*	42	*175*	43
		WBT	*250*	175	-	-	*250*	179	-	-
		WBTR	-	-	*250*	**268**	*250*	192	*250*	**264**
		WBR	*50*	**75**	-	-	-	-	-	-
10	Ellita Ave & Grand Ave	NBLR	*350*	35	*350*	39	*350*	37	*350*	38
		EBT	*250*	14	*250*	18	-	-	-	-
		EBTR	*250*	15	*250*	17	*250*	23	*250*	30
		WBL	*100*	24	*100*	23	*100*	24	*100*	22
		WBT	*265*	22	*265*	68	*265*	19	*265*	79
11	Staten Ave & Grand Ave	NBLTR	*320*	48	*320*	53	*320*	49	*320*	50
		SBLTR	*260*	49	*260*	52	*260*	52	*260*	53
		EBL	*100*	27	*100*	25	*100*	27	*100*	26
		EBT	*265*	79	*265*	76	-	-	-	-
		EBTR	*265*	101	*265*	83	*265*	172	*265*	151
		WBL	*75*	35	*75*	50	*75*	35	*75*	39
		WBT	*240*	149	-	-	*240*	143	-	-
		WBTR	*240*	170	*240*	239	*240*	149	*240*	230
12	Bellevue Ave & Grand Ave	NBLTR	*515*	47	*515*	51	*515*	54	*515*	57
		SBLTR	*590*	44	*590*	45	*590*	43	*590*	45
		EBL	*90*	21	*90*	26	*90*	21	*90*	23
		EBT	*240*	36	*240*	18	*240*	48	*240*	40
		WBT	*230*	41	-	-	*230*	39	-	-
		WBTR	*230*	50	*230*	130	*230*	45	*230*	110

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 1		Alt 3 (EB Diet) VERSION 1		Alt 4 (3-Lane Diet) VERSION 1	
			Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM
13	Euclid Ave & Grand Ave	SBLR	*130*	43	*130*	50	*130*	56	*130*	59
		EBL	*150*	29	*150*	38	*150*	42	*150*	37
		EBT	*230*	116	*230*	134	*230*	192	*230*	207
		WBT	*585*	182	-	-	*585*	159	-	-
		WBTR	-	-	*585*	410	*585*	190	*585*	371
		WBR	*40*	**84**	-	-	-	-	-	-
14	El Embarcadero & Grand Ave	NBL	*85*	**178**	*85*	**178**	*85*	**175**	*85*	**183**
		NBR	*275*	257	*275*	238	*275*	210	*275*	245
		EBT	*585*	149	*585*	183	*585*	148	*585*	154
		EBTR	*585*	200	-	-	-	-	-	-
		WBL	*90*	**134**	-	-	-	-	-	-
		WBT	*330*	197	*330*	279	*330*	169	*330*	266
15	MacArthur Blvd & Grand Ave	SBLT	*395*	369	*395*	379	*395*	369	*395*	360
		SBT	*395*	329	*395*	337	*395*	335	*395*	319
		SBTR	*395*	270	*395*	275	*395*	270	*395*	269
		EBT	*330*	178	*330*	177	*330*	180	*330*	164
		EBR	*145*	25	*145*	80	*145*	84	*145*	78
		WBUL	*180*	**250**	*180*	**289**	*180*	**287**	*180*	**289**
		WBL	*180*	-	-	-	-	-	-	-
		WBT	*445*	215	*445*	283	*445*	252	*445*	285
16	Santa Clara Ave /Lake Park Ave & Grand Ave	NBL	*215*	**332**	*215*	156	*215*	189	*215*	181
		NBT	*400*	**608**	*400*	230	*400*	311	*400*	245
		NBR	*75*	**183**	*75*	**142**	*75*	**159**	*75*	**152**
		SBLTR	*1,500*	292	*1,500*	223	*1,500*	249	*1,500*	249
		SBR	*380*	269	*380*	203	*380*	225	*380*	224
		EBUL	*115*	**208**	*115*	**196**	*115*	**184**	*115*	**187**
		EBL	-	-	*115*	**233**	*115*	**197**	*115*	**217**
		EBLT	*420*	261	-	-	-	-	-	-
		EBTR	*420*	206	*420*	305	*420*	315	*420*	294
		WBL	-	-	-	-	*100*	-	-	-
		WBLT	*410*	159	*410*	149	*410*	154	*410*	163
		WBT	*410*	278	*250*	199	*250*	204	*250*	225
		WBTR	-	-	-	-	*250*	-	-	-
		WBR	*80*	**165**	*50*	**162**	*50*	**159**	*50*	**161**
17	Mid-Block Ped Crossing & Grand Ave	EBT	*370*	86	*370*	104	*370*	104	*370*	106
		WBT	*355*	114	*355*	182	*355*	178	*355*	183
18	Elwood Ave & Grand Ave	NBLTR	*60*	13	*60*	13	*60*	14	*60*	12
		SBLTR	*160*	107	*160*	95	*160*	91	*160*	101
		EBL	-	-	*100*	37	*100*	55	*100*	57
		EBLT	*400*	195	-	-	-	-	-	-
		EBTR	*400*	71	*400*	197	*400*	200	*400*	212
		WBLT	*155*	93	-	-	-	-	-	-
		WBLTR	-	-	*155*	**193**	*155*	**185**	*155*	**188**
		WBTR	*155*	**160**	-	-	-	-	-	-
19	Mandana Blvd & Grand Ave	NBLTR	*235*	**295**	*235*	**300**	*235*	**306**	*235*	**314**
		SBLTR	*50*	0	*50*	0	*50*	0	*50*	0
		EBL	*55*	11	-	-	-	-	-	-
		EBLT	-	-	*145*	**187**	*145*	**183**	*145*	**188**
		EBT	*145*	**175**	-	-	-	-	-	-
		EBR	*145*	68	*145*	69	*145*	73	*145*	69
		WBL	*150*	121	*300*	107	*300*	106	*300*	130
		WBTR	*415*	194	*415*	209	*415*	190	*415*	221

Notes:
Bold = Exceeds storage; **Red** = Queue exceeds 1,100 ft; **Orange** = Queue exceeds 500 ft.

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 1		Alt 3 (EB Diet) VERSION 1		Alt 4 (3-Lane Diet) VERSION 1	
			Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM
1	Broadway & Grand Ave	NBL	*140*	119	*140*	123	*140*	**142**	*140*	131
		NBT	*150*	**164**	*150*	**196**	*150*	**199**	*150*	**201**
		NBR	*100*	77	*100*	**146**	*100*	**141**	*100*	**149**
		SBL	*100*	99	*100*	**172**	*100*	**157**	*100*	**213**
		SBT	*200*	118	*200*	**319**	*200*	**217**	*200*	**507**
		SBTR	*200*	122	*200*	**296**	*200*	198	*200*	**472**
		EBL	*200*	95	*200*	**281**	*200*	**290**	*200*	**300**
		EBT	*260*	202	*260*	**636**	*260*	**722**	*260*	**702**
		EBR	*25*	**123**	*25*	**148**	*25*	**137**	*25*	**146**
		WBL	-	-	*290*	77	*290*	75	*290*	68
		WBLT	*290*	147	-	-	*290*	-	-	-
		WBTR	*290*	165	*290*	239	*290*	232	*290*	208
2	Webster St & Grand Ave	SBLT	*135*	**137**	*135*	**174**	*135*	**166**	*135*	**171**
		SBTR	*135*	98	*135*	**156**	*135*	**155**	*135*	**152**
		EBLT	*290*	236	-	-	-	-	-	-
		EBLTR	-	-	*290*	**321**	*290*	**311**	*290*	**310**
		EBTR	*290*	237	-	-	-	-	-	-
		WBL	*205*	100	*205*	109	*205*	105	*205*	115
		WBT	*255*	66	*255*	53	*255*	52	*255*	31
		WBTR	*255*	101	*255*	172	*255*	159	*255*	127
3	Valdez St & Grand Ave	NBLTR	*90*	19	*90*	18	*90*	17	*90*	22
		SBLT	*130*	92	-	-	-	-	-	-
		SBLTR	-	-	*130*	122	*130*	122	*130*	118
		SBR	*25*	**61**	-	-	-	-	-	-
		EBL	*130*	30	-	-	-	-	-	-
		EBLT	-	-	*255*	163	*255*	156	*255*	118
		EBT	*255*	105	-	-	-	-	-	-
		EBTR	*255*	108	*255*	160	*255*	162	*255*	117
		WBL	*150*	5	-	-	-	-	-	-
		WBLT	-	-	*470*	94	*470*	101	*470*	111
		WBT	*470*	113	-	-	-	-	-	-
		WBTR	*470*	131	*470*	144	*470*	149	*470*	161
4	Harrison St & Grand Ave	NBLT	*495*	237	*495*	236	*495*	248	*495*	229
		NBT	*495*	208	*495*	209	*495*	280	*495*	206
		NBR	*495*	281	*495*	307	*495*	417	*495*	295
		SBLT	*600*	155	*600*	167	*600*	155	*600*	153
		SBT	*600*	-	-	-	-	-	-	-
		SBTR	*600*	113	*600*	131	*600*	125	*600*	110
		EBL	*275*	78	*275*	73	*275*	178	*275*	78
		EBT	*470*	234	*470*	226	*470*	342	*470*	230
		EBTR	*470*	244	*470*	238	*470*	358	*470*	249
		WBL	*225*	97	*225*	94	*225*	103	*225*	96
		WBT	*430*	134	*430*	122	*430*	128	*430*	129
		WBTR	*430*	155	*430*	151	*430*	161	*430*	161
5	Bay Place & Grand Ave	SBLR	*135*	**279**	*135*	**291**	*135*	**705**	*135*	**580**
		EBL	*80*	**137**	*80*	**119**	*80*	**222**	*80*	**200**
		EBT	*430*	232	*430*	218	*430*	**527**	*430*	420
		WBT	*350*	133	*350*	126	*350*	166	*350*	136
		WBTR	*350*	157	*350*	167	*350*	197	*350*	161

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 1		Alt 3 (EB Diet) VERSION 1		Alt 4 (3-Lane Diet) VERSION 1	
			Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM
6	Park View Terrace/Bellevue Ave & Grand Ave	SBLTR	*775*	70	*775*	79	*775*	81	*775*	75
		EBL	*125*	49	*125*	49	*125*	94	*125*	90
		EBT	*350*	221	*350*	230	-	-	-	-
		EBTR	-	-	*350*	239	*350*	283	*350*	288
		EBR	*100*	41	-	-	-	-	-	-
		WBL	*100*	51	*100*	92	*100*	58	*100*	77
		WBT	*250*	156	-	-	*250*	122	-	-
		WBTR	-	-	*250*	**285**	*250*	152	*250*	**271**
		WBR	*60*	52	-	-	-	-	-	-
7	Lennox Ave & Grand Ave	SBLR	*675*	39	*675*	45	*675*	47	*675*	50
		EBL	*100*	31	*100*	30	*100*	34	*100*	31
		EBT	*225*	87	*225*	63	*225*	134	*225*	158
		WBT	*300*	31	-	-	*300*	24	-	-
		WBTR	-	-	*300*	70	*300*	31	*300*	69
		WBR	*30*	0	-	-	-	-	-	-
8	Lee St & Grand Ave	SBLR	*630*	40	*630*	39	*630*	47	*630*	54
		EBL	*240*	40	*240*	45	*240*	55	*240*	55
		EBT	*300*	102	*300*	71	*300*	249	*300*	241
		WBT	*240*	35	-	-	*240*	38	-	-
		WBTR	*240*	47	*240*	63	*240*	50	*240*	67
9	Perkins St & Grand Ave	NBLTR	*480*	63	*480*	56	*480*	65	*480*	68
		SBLTR	*260*	134	*260*	132	*260*	144	*260*	130
		EBL	*160*	72	*160*	75	*160*	109	*160*	98
		EBT	*240*	196	*240*	164	-	-	-	-
		EBTR	-	-	*240*	186	*240*	**297**	*240*	**288**
		EBR	*50*	36	-	-	-	-	-	-
		WBL	*175*	26	*175*	35	*175*	33	*175*	41
		WBT	*250*	142	-	-	*250*	112	-	-
		WBTR	-	-	*250*	**270**	*250*	141	*250*	227
		WBR	*50*	**78**	-	-	-	-	-	-
10	Ellita Ave & Grand Ave	NBLR	*350*	59	*350*	58	*350*	62	*350*	64
		EBT	*250*	80	*250*	81	-	-	-	-
		EBTR	*250*	89	*250*	86	*250*	219	*250*	210
		WBL	*100*	33	*100*	33	*100*	41	*100*	41
		WBT	*265*	58	*265*	96	*265*	45	*265*	75
11	Staten Ave & Grand Ave	NBLTR	*320*	58	*320*	63	*320*	64	*320*	61
		SBLTR	*260*	53	*260*	57	*260*	58	*260*	61
		EBL	*100*	53	*100*	55	*100*	100	*100*	75
		EBT	*265*	138	*265*	196	-	-	-	-
		EBTR	*265*	162	*265*	213	*265*	**331**	*265*	**333**
		WBL	*75*	39	*75*	46	*75*	44	*75*	56
		WBT	*240*	92	-	-	*240*	102	-	-
		WBTR	*240*	113	*240*	198	*240*	123	*240*	209
12	Bellevue Ave & Grand Ave	NBLTR	*515*	88	*515*	82	*515*	157	*515*	226
		SBLTR	*590*	52	*590*	50	*590*	76	*590*	88
		EBL	*90*	40	*90*	38	*90*	49	*90*	44
		EBT	*240*	124	*240*	71	*240*	235	*240*	**259**
		WBT	*230*	28	-	-	*230*	16	-	-
		WBTR	*230*	38	*230*	58	*230*	25	*230*	67

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 1		Alt 3 (EB Diet) VERSION 1		Alt 4 (3-Lane Diet) VERSION 1	
			Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM
13	Euclid Ave & Grand Ave	SBLR	*130*	69	*130*	75	*130*	79	*130*	71
		EBL	*150*	103	*150*	58	*150*	77	*150*	121
		EBT	*230*	**298**	*230*	219	*230*	**345**	*230*	**351**
		WBT	*585*	143	-	-	*585*	125	-	-
		WBTR	-	-	*585*	325	*585*	163	*585*	312
		WBR	*40*	**73**	-	-	-	-	-	-
14	El Embarcadero & Grand Ave	NBL	*85*	**148**	*85*	**157**	*85*	**159**	*85*	**149**
		NBR	*275*	147	*275*	175	*275*	179	*275*	163
		EBT	*585*	**704**	*585*	366	*585*	337	*585*	320
		EBTR	*585*	**706**	-	-	-	-	-	-
		WBL	*90*	**178**	-	-	-	-	-	-
		WBT	*330*	208	*330*	202	*330*	132	*330*	198
15	MacArthur Blvd & Grand Ave	SBLT	*395*	347	*395*	**403**	*395*	358	*395*	363
		SBT	*395*	314	*395*	375	*395*	324	*395*	327
		SBTR	*395*	273	*395*	319	*395*	274	*395*	281
		EBT	*330*	187	*330*	**353**	*330*	**341**	*330*	**334**
		EBR	*145*	81	*145*	**300**	*145*	**288**	*145*	**291**
		WBUL	*180*	**280**	*180*	**298**	*180*	**287**	*180*	**289**
		WBL	*180*	-	-	-	-	-	-	-
		WBT	*445*	250	*445*	305	*445*	274	*445*	297
16	Santa Clara Ave /Lake Park Ave & Grand Ave	NBL	*215*	186	*215*	192	*215*	190	*215*	184
		NBT	*400*	218	*400*	227	*400*	220	*400*	204
		NBR	*75*	**171**	*75*	**168**	*75*	**167**	*75*	**167**
		SBLTR	*1,500*	195	*1,500*	234	*1,500*	230	*1,500*	243
		SBR	*380*	175	*380*	208	*380*	208	*380*	217
		EBUL	*115*	**184**	*115*	105	*115*	104	*115*	104
		EBL	-	-	*115*	**125**	*115*	**122**	*115*	115
		EBLT	*420*	250	-	-	-	-	-	-
		EBTR	*420*	253	*420*	299	*420*	281	*420*	287
		WBL	-	-	-	-	*100*	-	-	-
		WBLT	*410*	237	*410*	236	*410*	213	*410*	246
		WBT	*410*	274	*250*	**263**	*250*	238	*250*	**265**
		WBTR	-	-	-	-	*250*	-	-	-
		WBR	*80*	**169**	*50*	**169**	*50*	**169**	*50*	**168**
17	Mid-Block Ped Crossing & Grand Ave	EBT	*370*	166	*370*	171	*370*	174	*370*	177
		WBT	*355*	203	*355*	**407**	*355*	**416**	*355*	**419**
18	Elwood Ave & Grand Ave	NBLTR	*60*	21	*60*	22	*60*	20	*60*	21
		SBLTR	*160*	145	*160*	150	*160*	**161**	*160*	144
		EBL	-	-	*100*	**109**	*100*	**102**	*100*	90
		EBLT	*400*	254	-	-	-	-	-	-
		EBTR	*400*	144	*400*	287	*400*	318	*400*	284
		WBLT	*155*	113	-	-	-	-	-	-
		WBLTR	-	-	*155*	**194**	*155*	**193**	*155*	**198**
		WBTR	*155*	150	-	-	-	-	-	-
19	Mandana Blvd & Grand Ave	NBLTR	*235*	**252**	*235*	**303**	*235*	**326**	*235*	**336**
		SBLTR	*50*	11	*50*	11	*50*	10	*50*	10
		EBL	*55*	37	-	-	-	-	-	-
		EBLT	-	-	*145*	**184**	*145*	**182**	*145*	**183**
		EBT	*145*	**182**	-	-	-	-	-	-
		EBR	*145*	110	*145*	88	*145*	86	*145*	92
		WBL	*150*	**237**	*300*	278	*300*	**301**	*300*	**317**
		WBTR	*415*	**420**	*415*	321	*415*	384	*415*	377

Notes:
Bold = Exceeds storage; **Red** = Queue exceeds 1,100 ft; **Orange** = Queue exceeds 500 ft.

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 2		Alt 3 (EB Diet) VERSION 2		Alt 4 (3-Lane Diet) VERSION 2	
			Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM
1	Broadway & Grand Ave	NBL	*140*	53	*140*	54	*140*	55	*140*	54
		NBT	*150*	133	*150*	129	*150*	123	*150*	133
		NBR	*100*	50	*100*	52	*100*	60	*100*	57
		SBL	*100*	54	*100*	64	*100*	51	*100*	49
		SBT	*200*	98	*200*	94	*200*	93	*200*	99
		SBTR	*200*	85	*200*	91	*200*	84	*200*	81
		EBL	*200*	74	*200*	66	*200*	77	*200*	67
		EBT	*260*	203	*260*	191	*260*	204	*260*	202
		EBR	*25*	**122**	*25*	**123**	*25*	**107**	*25*	**123**
		WBLT	*290*	122	*290*	121	*290*	120	*290*	114
		WBTR	*290*	136	*290*	127	*290*	132	*290*	124
2	Webster St & Grand Ave	SBLT	*135*	103	*135*	116	*135*	113	*135*	105
		SBTR	*135*	53	*135*	77	*135*	73	*135*	68
		EBLT	*290*	154	*290*	178	*290*	191	*290*	186
		EBTR	*290*	216	*290*	242	*290*	259	*290*	256
		WBL	*205*	129	*205*	131	*205*	131	*205*	133
		WBT	*255*	56	*255*	68	*255*	76	*255*	62
		WBTR	*255*	86	*255*	101	*255*	89	*255*	91
3	Valdez St & Grand Ave	NBLTR	*90*	21	*90*	23	*90*	19	*90*	18
		SBLT	*130*	44	-	-	-	-	-	-
		SBLTR	-	-	*130*	66	*130*	66	*130*	65
		SBR	*25*	**47**	-	-	-	-	-	-
		EBL	*130*	19	-	-	-	-	-	-
		EBLT	-	-	*255*	78	*255*	74	*255*	77
		EBT	*255*	42	-	-	-	-	-	-
		EBTR	*255*	35	*255*	67	*255*	71	*255*	72
		WBL	*150*	20	-	-	-	-	-	-
		WBLT	-	-	*470*	143	*470*	131	*470*	134
		WBT	*470*	125	-	-	-	-	-	-
		WBTR	*470*	132	*470*	150	*470*	130	*470*	127
4	Harrison St & Grand Ave	NBLT	*495*	240	*495*	256	*495*	251	*495*	253
		NBT	*495*	211	*495*	227	*495*	220	*495*	228
		NBR	*495*	97	*495*	97	*495*	92	*495*	94
		SBLT	*600*	205	*600*	218	*600*	211	*600*	211
		SBTR	*600*	182	*600*	190	*600*	185	*600*	195
		EBL	*275*	53	*275*	57	*275*	57	*275*	56
		EBT	*470*	98	*470*	98	*470*	100	*470*	101
		EBTR	*470*	115	*470*	116	*470*	120	*470*	125
		WBL	*225*	143	*225*	142	*225*	142	*225*	144
		WBT	*430*	123	*430*	121	*430*	120	*430*	123
		WBTR	*430*	138	*430*	139	*430*	130	*430*	136
5	Bay Place & Grand Ave	SBLR	*135*	**155**	*135*	**140**	*135*	**151**	*135*	**150**
		EBL	*80*	70	*80*	79	*80*	75	*80*	77
		EBT	*430*	101	*430*	99	*430*	103	*430*	99
		WBT	*350*	147	*350*	174	*350*	142	*350*	154
		WBTR	*350*	153	*350*	164	*350*	150	*350*	139

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 2		Alt 3 (EB Diet) VERSION 2		Alt 4 (3-Lane Diet) VERSION 2	
			Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM
6	Park View Terrace/Bellevue Ave & Grand Ave	SBLTR	*775*	83	*775*	107	*775*	100	*775*	99
		EBL	*125*	23	*125*	24	*125*	28	*125*	51
		EBT	*350*	72	*350*	84	-	-	-	-
		EBTR	-	-	*350*	90	*350*	159	*350*	185
		EBR	*100*	4	-	-	-	-	-	-
		WBL	*100*	38	*100*	58	*100*	33	*100*	58
		WBT	*250*	189	-	-	*250*	136	-	-
		WBTR	-	-	*250*	**319**	*250*	155	*250*	**302**
		WBR	*60*	37	-	-	-	-	-	-
7	Lennox Ave & Grand Ave	SBLR	*675*	54	*675*	68	*675*	57	*675*	67
		EBL	*100*	29	*100*	36	*100*	29	*100*	37
		EBT	*225*	30	*225*	26	*225*	47	*225*	28
		WBT	*300*	54	-	-	*300*	32	-	-
		WBTR	-	-	*300*	159	*300*	38	*300*	124
		WBR	*30*	7	-	-	-	-	-	-
8	Lee St & Grand Ave	SBLR	*630*	48	*630*	49	*630*	48	*630*	49
		EBL	*240*	29	*240*	35	*240*	26	*240*	35
		EBT	*300*	35	*300*	21	*300*	63	*300*	51
		WBT	*240*	62	-	-	*240*	38	-	-
		WBTR	*240*	62	*240*	89	*240*	40	*240*	70
9	Perkins St & Grand Ave	NBLTR	*480*	30	*480*	33	*480*	29	*480*	32
		SBLTR	*260*	87	*260*	99	*260*	94	*260*	99
		EBL	*160*	40	*160*	53	*160*	52	*160*	56
		EBT	*240*	94	*240*	79	-	-	-	-
		EBTR	-	-	*240*	98	*240*	205	*240*	206
		EBR	*50*	21	-	-	-	-	-	-
		WBL	*175*	25	*175*	28	*175*	29	*175*	61
		WBT	*250*	175	-	-	*250*	116	-	-
		WBTR	-	-	*250*	**289**	*250*	131	*250*	**266**
		WBR	*50*	**75**	-	-	-	-	-	-
10	Ellita Ave & Grand Ave	NBLR	*350*	35	*350*	39	*350*	36	*350*	36
		EBT	*250*	14	*250*	14	-	-	-	-
		EBTR	*250*	15	*250*	15	*250*	24	*250*	26
		WBL	*100*	24	*100*	23	*100*	25	*100*	29
		WBT	*265*	22	*265*	82	*265*	32	*265*	72
11	Staten Ave & Grand Ave	NBLTR	*320*	48	*320*	50	*320*	49	*320*	50
		SBLTR	*260*	49	*260*	54	*260*	54	*260*	55
		EBL	*100*	27	*100*	30	*100*	30	*100*	35
		EBT	*265*	79	*265*	77	-	-	-	-
		EBTR	*265*	101	*265*	84	*265*	135	*265*	148
		WBL	*75*	35	*75*	52	*75*	38	*75*	39
		WBT	*240*	149	-	-	*240*	122	-	-
		WBTR	*240*	170	*240*	232	*240*	129	*240*	231
12	Bellevue Ave & Grand Ave	NBLTR	*515*	47	*515*	54	*515*	52	*515*	54
		SBLTR	*590*	44	*590*	45	*590*	44	*590*	42
		EBL	*90*	21	*90*	25	*90*	22	*90*	27
		EBT	*240*	36	*240*	22	*240*	59	*240*	43
		WBT	*230*	41	-	-	*230*	31	-	-
		WBTR	*230*	50	*230*	122	*230*	51	*230*	126

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 2		Alt 3 (EB Diet) VERSION 2		Alt 4 (3-Lane Diet) VERSION 2	
			Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM
13	Euclid Ave & Grand Ave	SBLR	*130*	43	*130*	56	*130*	55	*130*	63
		EBL	*150*	29	*150*	37	*150*	42	*150*	52
		EBT	*230*	116	*230*	135	*230*	225	*230*	222
		WBT	*585*	182	-	-	*585*	168	-	-
		WBTR	-	-	*585*	406	*585*	198	*585*	375
		WBR	*40*	**84**	-	-	-	-	-	-
14	El Embarcadero & Grand Ave	NBL	*85*	**178**	*85*	**186**	*85*	**185**	*85*	**185**
		NBR	*275*	257	*275*	239	*275*	237	*275*	249
		EBT	*585*	149	*585*	182	*585*	160	*585*	169
		EBTR	*585*	200	-	-	-	-	-	-
		WBL	*90*	**134**	-	-	-	-	-	-
		WBT	*330*	197	*330*	271	*330*	149	*330*	256
15	MacArthur Blvd & Grand Ave	SBLT	*395*	369	*395*	369	*395*	364	*395*	360
		SBT	*395*	329	*395*	333	*395*	330	*395*	321
		SBTR	*395*	270	*395*	282	*395*	276	*395*	271
		EBT	*330*	178	*330*	165	*330*	171	*330*	169
		EBR	*145*	25	*145*	68	*145*	67	*145*	79
		WBUL	*180*	**250**	*180*	**286**	*180*	**291**	*180*	**289**
		WBT	*445*	215	*445*	285	*445*	246	*445*	276
16	Santa Clara Ave /Lake Park Ave & Grand Ave	NBL	*215*	**332**	*215*	**228**	*215*	193	*215*	204
		NBT	*400*	**608**	*400*	294	*400*	244	*400*	256
		NBR	*75*	**183**	*75*	**171**	*75*	**158**	*75*	**170**
		SBLTR	*1,500*	292	*1,500*	234	*1,500*	213	*1,500*	226
		SBR	*380*	269	*380*	-	*380*	-	*380*	-
		EBUL	*115*	**208**	*115*	**159**	*115*	**157**	*115*	**167**
		EBL	-	-	*115*	**176**	*115*	**167**	*115*	**185**
		EBLT	*420*	261	-	-	-	-	-	-
		EBTR	*420*	206	*420*	215	*420*	237	*420*	192
		WBLT	*410*	159	*410*	163	*410*	161	*410*	161
		WBT	*410*	278	-	224	*410*	226	*410*	218
		WBR	*80*	**165**	*50*	**166**	*50*	**168**	*50*	**165**
17	Mid-Block Ped Crossing & Grand Ave	EBT	*370*	86	*370*	140	*370*	131	*370*	131
		WBT	*355*	114	*355*	125	*355*	114	*355*	118
18	Elwood Ave & Grand Ave	NBLTR	*60*	13	*60*	13	*60*	13	*60*	14
		SBLTR	*160*	107	*160*	91	*160*	86	*160*	97
		EBLT	*400*	195	-	-	-	-	-	-
		EBLTR	-	-	*400*	212	*400*	232	*400*	203
		EBTR	*400*	71	-	-	-	-	-	-
		WBLT	*155*	93	*155*	86	*155*	85	*155*	88
		WBTR	*155*	**160**	*155*	140	*155*	150	*155*	**156**
19	Mandana Blvd & Grand Ave	NBLTR	*235*	**295**	*235*	**292**	*235*	**314**	*235*	**301**
		SBLTR	*50*	0	*50*	0	*50*	0	*50*	0
		EBL	*55*	11	-	-	-	-	-	-
		EBLT	-	-	*145*	**169**	*145*	**168**	*145*	**176**
		EBT	*145*	**175**	-	-	-	-	-	-
		EBR	*145*	68	*145*	67	*145*	66	*145*	62
		WBL	*150*	121	*150*	112	*150*	120	*150*	112
		WBTR	*415*	194	*415*	207	*415*	196	*415*	192

Notes:
Bold = Exceeds storage; **Red** = Queue exceeds 1,100 ft; **Orange** = Queue exceeds 500 ft.

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 2		Alt 3 (EB Diet) VERSION 2		Alt 4 (3-Lane Diet) VERSION 2	
			Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM
1	Broadway & Grand Ave	NBL	*140*	119	*140*	125	*140*	121	*140*	136
		NBT	*150*	**164**	*150*	**164**	*150*	**171**	*150*	**162**
		NBR	*100*	77	*100*	72	*100*	82	*100*	75
		SBL	*100*	99	*100*	98	*100*	98	*100*	94
		SBT	*200*	118	*200*	124	*200*	122	*200*	122
		SBTR	*200*	122	*200*	132	*200*	127	*200*	131
		EBL	*200*	95	*200*	98	*200*	92	*200*	85
		EBT	*260*	202	*260*	179	*260*	178	*260*	178
		EBR	*25*	**123**	*25*	**113**	*25*	**121**	*25*	**122**
		WBLT	*290*	147	*290*	146	*290*	146	*290*	146
		WBTR	*290*	165	*290*	159	*290*	158	*290*	165
2	Webster St & Grand Ave	SBLT	*135*	**137**	*135*	**147**	*135*	**147**	*135*	**149**
		SBTR	*135*	98	*135*	128	*135*	126	*135*	130
		EBLT	*290*	236	*290*	220	*290*	230	*290*	228
		EBTR	*290*	237	*290*	234	*290*	245	*290*	239
		WBL	*205*	100	*205*	103	*205*	109	*205*	95
		WBT	*255*	66	*255*	85	*255*	94	*255*	89
		WBTR	*255*	101	*255*	117	*255*	120	*255*	117
3	Valdez St & Grand Ave	NBLTR	*90*	19	*90*	19	*90*	18	*90*	17
		SBLT	*130*	92	-	-	-	-	-	-
		SBLTR	-	-	*130*	117	*130*	120	*130*	110
		SBR	*25*	**61**	-	-	-	-	-	-
		EBL	*130*	30	-	-	-	-	-	-
		EBLT	-	-	*255*	188	*255*	181	*255*	183
		EBT	*255*	105	-	-	-	-	-	-
		EBTR	*255*	108	*255*	187	*255*	185	*255*	179
		WBL	*150*	5	-	-	-	-	-	-
		WBLT	-	-	*470*	118	*470*	113	*470*	108
		WBT	*470*	113	-	-	-	-	-	-
		WBTR	*470*	131	*470*	132	*470*	125	*470*	124
4	Harrison St & Grand Ave	NBLT	*495*	237	*495*	230	*495*	228	*495*	227
		NBT	*495*	208	*495*	198	*495*	201	*495*	199
		NBR	*495*	281	*495*	284	*495*	305	*495*	320
		SBLT	*600*	155	*600*	158	*600*	148	*600*	162
		SBTR	*600*	113	*600*	110	*600*	109	*600*	125
		EBL	*275*	78	*275*	76	*275*	91	*275*	78
		EBT	*470*	234	*470*	239	*470*	251	*470*	246
		EBTR	*470*	244	*470*	253	*470*	267	*470*	250
		WBL	*225*	97	*225*	102	*225*	98	*225*	99
		WBT	*430*	134	*430*	140	*430*	138	*430*	131
		WBTR	*430*	155	*430*	152	*430*	154	*430*	148
5	Bay Place & Grand Ave	SBLR	*135*	**279**	*135*	**281**	*135*	**653**	*135*	**641**
		EBL	*80*	**137**	*80*	**139**	*80*	**213**	*80*	**212**
		EBT	*430*	232	*430*	238	*430*	**480**	*430*	**472**
		WBT	*350*	133	*350*	126	*350*	163	*350*	144
		WBTR	*350*	157	*350*	150	*350*	178	*350*	162

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 2		Alt 3 (EB Diet) VERSION 2		Alt 4 (3-Lane Diet) VERSION 2	
			Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM
6	Park View Terrace/Bellevue Ave & Grand Ave	SBLTR	*775*	70	*775*	78	*775*	81	*775*	86
		EBL	*125*	49	*125*	41	*125*	85	*125*	79
		EBT	*350*	221	*350*	230	-	-	-	-
		EBTR	-	-	*350*	241	*350*	286	*350*	296
		EBR	*100*	41	-	-	-	-	-	-
		WBL	*100*	51	*100*	70	*100*	61	*100*	79
		WBT	*250*	156	-	-	*250*	126	-	-
		WBTR	-	-	*250*	**254**	*250*	146	*250*	**272**
		WBR	*60*	52	-	-	-	-	-	-
7	Lennox Ave & Grand Ave	SBLR	*675*	39	*675*	44	*675*	53	*675*	50
		EBL	*100*	31	*100*	34	*100*	31	*100*	37
		EBT	*225*	87	*225*	58	*225*	162	*225*	166
		WBT	*300*	31	-	-	*300*	25	-	-
		WBTR	-	-	*300*	53	*300*	27	*300*	73
		WBR	*30*	0	-	-	-	-	-	-
8	Lee St & Grand Ave	SBLR	*630*	40	*630*	41	*630*	57	*630*	51
		EBL	*240*	40	*240*	42	*240*	52	*240*	46
		EBT	*300*	102	*300*	68	*300*	266	*300*	273
		WBT	*240*	35	-	-	*240*	26	-	-
		WBTR	*240*	47	*240*	69	*240*	44	*240*	66
9	Perkins St & Grand Ave	NBLTR	*480*	63	*480*	64	*480*	68	*480*	65
		SBLTR	*260*	134	*260*	129	*260*	143	*260*	133
		EBL	*160*	72	*160*	71	*160*	110	*160*	133
		EBT	*240*	196	*240*	168	-	-	-	-
		EBTR	-	-	*240*	188	*240*	**297**	*240*	**298**
		EBR	*50*	36	-	-	-	-	-	-
		WBL	*175*	26	*175*	47	*175*	36	*175*	68
		WBT	*250*	142	-	-	*250*	109	-	-
		WBTR	-	-	*250*	**282**	*250*	139	*250*	**254**
		WBR	*50*	**78**	-	-	-	-	-	-
10	Ellita Ave & Grand Ave	NBLR	*350*	59	*350*	60	*350*	65	*350*	77
		EBT	*250*	80	*250*	72	-	-	-	-
		EBTR	*250*	89	*250*	81	*250*	216	*250*	239
		WBL	*100*	33	*100*	28	*100*	37	*100*	40
		WBT	*265*	58	*265*	86	*265*	40	*265*	86
11	Staten Ave & Grand Ave	NBLTR	*320*	58	*320*	59	*320*	69	*320*	63
		SBLTR	*260*	53	*260*	57	*260*	63	*260*	60
		EBL	*100*	53	*100*	58	*100*	76	*100*	88
		EBT	*265*	138	*265*	191	-	-	-	-
		EBTR	*265*	162	*265*	214	*265*	**333**	*265*	**344**
		WBL	*75*	39	*75*	47	*75*	43	*75*	53
		WBT	*240*	92	-	-	*240*	104	-	-
		WBTR	*240*	113	*240*	193	*240*	120	*240*	214
12	Bellevue Ave & Grand Ave	NBLTR	*515*	88	*515*	72	*515*	181	*515*	144
		SBLTR	*590*	52	*590*	53	*590*	74	*590*	63
		EBL	*90*	40	*90*	36	*90*	59	*90*	65
		EBT	*240*	124	*240*	78	*240*	225	*240*	**244**
		WBT	*230*	28	-	-	*230*	23	-	-
		WBTR	*230*	38	*230*	57	*230*	30	*230*	84

#	Intersection	Movement	95th Percentile Queues (ft)							
			Alt 1 No Build		Alt 2 (WB Diet) VERSION 2		Alt 3 (EB Diet) VERSION 2		Alt 4 (3-Lane Diet) VERSION 2	
			Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM
13	Euclid Ave & Grand Ave	SBLR	*130*	69	*130*	80	*130*	71	*130*	69
		EBL	*150*	103	*150*	63	*150*	107	*150*	96
		EBT	*230*	**298**	*230*	**233**	*230*	**348**	*230*	**347**
		WBT	*585*	143	-	-	*585*	135	-	-
		WBTR	-	-	*585*	323	*585*	176	*585*	325
		WBR	*40*	**73**	-	-	-	-	-	-
14	El Embarcadero & Grand Ave	NBL	*85*	**148**	*85*	**167**	*85*	**149**	*85*	**150**
		NBR	*275*	147	*275*	231	*275*	175	*275*	171
		EBT	*585*	**704**	*585*	387	*585*	354	*585*	306
		EBTR	*585*	**706**	-	-	-	-	-	-
		WBL	*90*	**178**	-	-	-	-	-	-
		WBT	*330*	208	*330*	199	*330*	114	*330*	193
15	MacArthur Blvd & Grand Ave	SBLT	*395*	347	*395*	357	*395*	371	*395*	356
		SBT	*395*	314	*395*	324	*395*	342	*395*	324
		SBTR	*395*	273	*395*	273	*395*	304	*395*	274
		EBT	*330*	187	*330*	**382**	*330*	**341**	*330*	**338**
		EBR	*145*	81	*145*	**318**	*145*	**293**	*145*	**294**
		WBUL	*180*	**280**	*180*	**295**	*180*	**296**	*180*	**298**
		WBT	*445*	250	*445*	305	*445*	278	*445*	297
16	Santa Clara Ave /Lake Park Ave & Grand Ave	NBL	*215*	186	*215*	176	*215*	183	*215*	182
		NBT	*400*	218	*400*	266	*400*	217	*400*	220
		NBR	*75*	**171**	*75*	**165**	*75*	**166**	*75*	**167**
		SBLTR	*1,500*	195	*1,500*	238	*1,500*	231	*1,500*	216
		SBR	*380*	175	*380*	-	*380*	-	*380*	-
		EBUL	*115*	**184**	*115*	107	*115*	109	*115*	114
		EBL	-	-	*115*	**127**	*115*	**123**	*115*	**130**
		EBLT	*420*	250	-	-	-	-	-	-
		EBTR	*420*	253	*420*	270	*420*	264	*420*	231
		WBLT	*410*	237	*410*	261	*410*	251	*410*	260
		WBT	*410*	274	-	265	*410*	263	*410*	269
		WBR	*80*	**169**	*50*	**176**	*50*	**176**	*50*	**178**
17	Mid-Block Ped Crossing & Grand Ave	EBT	*370*	166	*370*	272	*370*	268	*370*	278
		WBT	*355*	203	*355*	219	*355*	212	*355*	271
18	Elwood Ave & Grand Ave	NBLTR	*60*	21	*60*	18	*60*	19	*60*	20
		SBLTR	*160*	145	*160*	**163**	*160*	137	*160*	144
		EBLT	*400*	254	-	-	-	-	-	-
		EBLTR	-	-	*400*	361	*400*	335	*400*	348
		EBTR	*400*	144	-	-	-	-	-	-
		WBLT	*155*	113	*155*	103	*155*	98	*155*	111
		WBTR	*155*	150	*155*	142	*155*	139	*155*	140
19	Mandana Blvd & Grand Ave	NBLTR	*235*	**252**	*235*	**246**	*235*	**245**	*235*	**264**
		SBLTR	*50*	11	*50*	13	*50*	12	*50*	12
		EBL	*55*	37	-	-	-	-	-	-
		EBLT	-	-	*145*	**183**	*145*	**178**	*145*	**179**
		EBT	*145*	**182**	-	-	-	-	-	-
		EBR	*145*	110	*145*	93	*145*	94	*145*	89
		WBL	*150*	**237**	*150*	**244**	*150*	**241**	*150*	**221**
		WBTR	*415*	**420**	*415*	**447**	*415*	**426**	*415*	362

Notes:
Bold = Exceeds storage; **Red** = Queue exceeds 1,100 ft; **Orange** = Queue exceeds 500 ft.

Attachment D:
SimTraffic Queueing Reports

Alternative 1 No Build

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	107	189	236	115	143	169	62	141	118	70	66	112
Average Queue (ft)	30	75	125	52	67	82	22	76	31	22	22	54
95th Queue (ft)	74	144	203	122	122	136	53	133	85	50	54	98
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)	0	0	54	8				0	0	0	0	1
Queuing Penalty (veh)	0	0	36	16				0	0	0	0	0

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	115
Average Queue (ft)	38
95th Queue (ft)	85
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	178	243	160	78	103	121	73
Average Queue (ft)	82	113	68	17	37	58	22
95th Queue (ft)	154	216	129	56	86	103	53
Link Distance (ft)	248	248		278	278	1014	1014
Upstream Blk Time (%)		0					
Queuing Penalty (veh)		1					
Storage Bay Dist (ft)			205				
Storage Blk Time (%)			0				
Queuing Penalty (veh)			0				

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	33	65	53	33	154	161	32	60	67
Average Queue (ft)	4	12	9	4	58	63	4	14	17
95th Queue (ft)	19	42	35	20	125	132	21	44	47
Link Distance (ft)		278	278		494	494	674	1093	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	130			150					25
Storage Blk Time (%)					0			10	3
Queuing Penalty (veh)					0			2	1

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	40	61	114	147	142	160	143	158	263	224	116	231
Average Queue (ft)	5	27	48	59	70	93	62	77	162	106	53	137
95th Queue (ft)	23	53	98	115	125	143	123	138	240	211	97	205
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)					0							
Queuing Penalty (veh)					0							

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	207
Average Queue (ft)	97
95th Queue (ft)	182
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	82	114	122	198	218	188
Average Queue (ft)	34	39	53	54	64	85
95th Queue (ft)	70	91	101	147	153	155
Link Distance (ft)		463	463	374	374	667
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	80					
Storage Blk Time (%)	1	1				
Queuing Penalty (veh)	1	1				

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	SB
Directions Served	L	T	T	R	L	T	T	R	LTR
Maximum Queue (ft)	35	86	96	6	55	234	239	65	98
Average Queue (ft)	6	26	30	1	9	75	86	5	42
95th Queue (ft)	23	69	72	4	38	172	189	37	83
Link Distance (ft)		374	374			270	270		718
Upstream Blk Time (%)						0	0		
Queuing Penalty (veh)						0	1		
Storage Bay Dist (ft)	125			100	100			60	
Storage Blk Time (%)		0	0			4	10		
Queuing Penalty (veh)		0	0			1	1		

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	R	LR
Maximum Queue (ft)	42	38	58	92	91	11	71
Average Queue (ft)	7	3	5	11	9	1	27
95th Queue (ft)	29	18	30	54	49	7	54
Link Distance (ft)		270	270	297	297		801
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	100					30	
Storage Blk Time (%)					1	0	
Queuing Penalty (veh)					0	0	

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	35	36	60	122	115	63
Average Queue (ft)	7	3	7	11	12	23
95th Queue (ft)	29	20	35	62	62	48
Link Distance (ft)		297	297	230	230	1025
Upstream Blk Time (%)				0		
Queuing Penalty (veh)				0		
Storage Bay Dist (ft)	240					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	LTR	LTR
Maximum Queue (ft)	58	84	110	36	40	210	220	115	42	120
Average Queue (ft)	15	26	43	3	7	72	79	18	9	44
95th Queue (ft)	40	66	94	21	25	165	175	75	30	87
Link Distance (ft)		230	230			265	265		498	1033
Upstream Blk Time (%)						0	0			
Queuing Penalty (veh)						0	0			
Storage Bay Dist (ft)	160			50	175			50		
Storage Blk Time (%)			7			1	11	0		
Queuing Penalty (veh)			1			0	4	0		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	EB	WB	WB	WB	NB
Directions Served	T	TR	L	T	T	LR
Maximum Queue (ft)	27	28	31	36	40	33
Average Queue (ft)	1	1	5	2	2	11
95th Queue (ft)	14	15	24	18	22	35
Link Distance (ft)	265	265		292	292	1062
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)			100			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	35	108	128	57	207	218	55	57
Average Queue (ft)	6	28	39	8	53	64	20	20
95th Queue (ft)	27	79	101	35	149	170	48	49
Link Distance (ft)		292	292		239	239	961	1052
Upstream Blk Time (%)					0	0		
Queuing Penalty (veh)					0	0		
Storage Bay Dist (ft)	100			75				
Storage Blk Time (%)		0			4			
Queuing Penalty (veh)		0			1			

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	T	TR	LTR	LTR
Maximum Queue (ft)	32	44	71	80	95	50	48
Average Queue (ft)	4	4	7	8	10	22	17
95th Queue (ft)	21	21	36	41	50	47	44
Link Distance (ft)		239	239	267	267	955	1064
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	90						
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	R	LR
Maximum Queue (ft)	33	116	143	204	216	154	52
Average Queue (ft)	7	35	51	74	86	21	17
95th Queue (ft)	29	88	116	167	182	84	43
Link Distance (ft)		267	267	580	580		1104
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	150					65	
Storage Blk Time (%)		0			10	0	
Queuing Penalty (veh)		0			7	0	

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	L	R
Maximum Queue (ft)	178	238	167	224	243	174	351
Average Queue (ft)	71	108	72	90	105	113	115
95th Queue (ft)	149	200	134	184	197	178	257
Link Distance (ft)	580	580		304	304		432
Upstream Blk Time (%)				0	0		0
Queuing Penalty (veh)				0	0		0
Storage Bay Dist (ft)			90			85	
Storage Blk Time (%)			8	6		23	3
Queuing Penalty (veh)			26	6		39	7

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	186	164	52	260	233	218	414	380	308
Average Queue (ft)	101	67	3	162	125	107	246	212	168
95th Queue (ft)	178	139	25	250	215	190	369	329	270
Link Distance (ft)	304	304		184	184	184	1848	1848	1848
Upstream Blk Time (%)				7	2	1			
Queuing Penalty (veh)				19	6	2			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		1	0						
Queuing Penalty (veh)		1	0						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	LT	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	204	302	256	192	243	140	81	164	297	626	590	165
Average Queue (ft)	132	164	109	86	167	122	4	28	178	274	257	84
95th Queue (ft)	208	261	206	159	278	165	45	114	332	608	568	183
Link Distance (ft)		235	235	162	162		183	183		1344	1344	
Upstream Blk Time (%)		2	0	1	17		0	0				
Queuing Penalty (veh)		8	1	3	50		0	1				
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	15	25			26	51			31	2	33	5
Queuing Penalty (veh)	39	51			76	75			104	3	38	16

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	333	302
Average Queue (ft)	162	150
95th Queue (ft)	292	269
Link Distance (ft)	1069	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		380
Storage Blk Time (%)	1	1
Queuing Penalty (veh)	1	1

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	137	90	94	180
Average Queue (ft)	21	11	17	32
95th Queue (ft)	86	49	64	114
Link Distance (ft)	183	183	392	392
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	261	102	116	165	21	139
Average Queue (ft)	83	24	44	87	2	54
95th Queue (ft)	195	71	93	160	13	107
Link Distance (ft)	392	392	149	149	268	1453
Upstream Blk Time (%)			0	1		
Queuing Penalty (veh)			0	3		
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB
Directions Served	L	T	R	L	TR	LTR
Maximum Queue (ft)	32	165	80	176	248	374
Average Queue (ft)	1	96	32	53	101	182
95th Queue (ft)	11	175	68	121	194	295
Link Distance (ft)		149	149		2234	1432
Upstream Blk Time (%)		3				
Queuing Penalty (veh)		7				
Storage Bay Dist (ft)	55			150		
Storage Blk Time (%)		19		0	2	
Queuing Penalty (veh)		1		1	3	

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	107	32	80	94	72
Average Queue (ft)	7	1	6	9	26
95th Queue (ft)	55	21	44	52	56
Link Distance (ft)	184	184	235	235	200
Upstream Blk Time (%)	0				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 666

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	119	211	240	115	167	190	144	191	167	105	123	137
Average Queue (ft)	46	117	124	53	85	100	63	100	70	35	48	68
95th Queue (ft)	95	178	202	123	147	165	119	164	137	77	99	118
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)		0	56	9			0	2	2	0	3	3
Queuing Penalty (veh)		0	40	21			0	2	3	1	4	2

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	150
Average Queue (ft)	61
95th Queue (ft)	122
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	258	254	121	86	131	158	126
Average Queue (ft)	130	131	53	22	43	86	46
95th Queue (ft)	236	237	100	66	101	137	98
Link Distance (ft)	248	248		278	278	1014	1014
Upstream Blk Time (%)	0	1					
Queuing Penalty (veh)	2	2					
Storage Bay Dist (ft)			205				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LT	R
Maximum Queue (ft)	39	157	156	6	157	177	28	120	84
Average Queue (ft)	9	37	33	0	44	56	3	44	26
95th Queue (ft)	30	105	108	5	113	131	19	92	61
Link Distance (ft)		278	278		494	494	674	1093	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	130			150					25
Storage Blk Time (%)		0			0			31	6
Queuing Penalty (veh)		0			0			14	4

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	65	87	260	273	104	120	153	171	262	231	339	178
Average Queue (ft)	20	45	147	155	36	61	70	91	159	113	152	95
95th Queue (ft)	52	78	234	244	83	97	134	155	237	208	281	155
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)			0									
Queuing Penalty (veh)			0									

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	151
Average Queue (ft)	51
95th Queue (ft)	113
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	169	291	292	174	193	322
Average Queue (ft)	66	112	124	62	76	172
95th Queue (ft)	137	228	232	133	157	279
Link Distance (ft)		463	463	374	374	667
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	80					
Storage Blk Time (%)	5	11				
Queuing Penalty (veh)	23	13				

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	SB
Directions Served	L	T	T	R	L	T	T	R	LTR
Maximum Queue (ft)	85	287	283	83	71	155	185	92	85
Average Queue (ft)	10	101	105	4	17	62	81	10	34
95th Queue (ft)	49	219	221	41	51	126	156	52	70
Link Distance (ft)		374	374			270	270		718
Upstream Blk Time (%)		0	0						
Queuing Penalty (veh)		0	0						
Storage Bay Dist (ft)	125			100	100			60	
Storage Blk Time (%)		4	7			2	10	0	
Queuing Penalty (veh)		1	2			0	1	0	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	R	LR
Maximum Queue (ft)	37	153	156	58	60	5	44
Average Queue (ft)	8	16	17	4	5	0	16
95th Queue (ft)	31	85	87	28	31	0	39
Link Distance (ft)		270	270	297	297		801
Upstream Blk Time (%)		0	0				
Queuing Penalty (veh)		0	0				
Storage Bay Dist (ft)	100					30	
Storage Blk Time (%)		0			1	0	
Queuing Penalty (veh)		0			0	0	

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	44	140	158	64	84	46
Average Queue (ft)	13	21	26	6	10	17
95th Queue (ft)	40	91	102	35	47	40
Link Distance (ft)		297	297	230	230	1025
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	240					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	LTR	LTR
Maximum Queue (ft)	120	207	232	69	35	134	174	116	81	167
Average Queue (ft)	27	67	80	4	8	59	73	27	26	69
95th Queue (ft)	72	174	196	36	26	119	142	78	63	134
Link Distance (ft)		230	230			265	265		498	1033
Upstream Blk Time (%)		0	1							
Queuing Penalty (veh)		1	3							
Storage Bay Dist (ft)	160			50	175			50		
Storage Blk Time (%)	0	1	11	0			15	1		
Queuing Penalty (veh)	0	1	2	0			10	2		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	EB	WB	WB	WB	NB
Directions Served	T	TR	L	T	T	LR
Maximum Queue (ft)	130	129	40	67	93	74
Average Queue (ft)	20	25	8	10	15	26
95th Queue (ft)	80	89	33	42	58	59
Link Distance (ft)	265	265		292	292	1062
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			100			
Storage Blk Time (%)				0		
Queuing Penalty (veh)				0		

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	76	194	233	49	121	140	67	62
Average Queue (ft)	16	48	60	13	36	49	25	24
95th Queue (ft)	53	138	162	39	92	113	58	53
Link Distance (ft)		292	292		239	239	961	1052
Upstream Blk Time (%)		0	0					
Queuing Penalty (veh)		0	0					
Storage Bay Dist (ft)	100			75				
Storage Blk Time (%)		2		0	2			
Queuing Penalty (veh)		0		0	0			

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	T	TR	LTR	LTR
Maximum Queue (ft)	54	141	174	56	78	121	59
Average Queue (ft)	10	22	32	4	7	46	22
95th Queue (ft)	40	102	124	28	38	88	52
Link Distance (ft)		239	239	267	267	955	1064
Upstream Blk Time (%)		0	0				
Queuing Penalty (veh)		0	1				
Storage Bay Dist (ft)	90						
Storage Blk Time (%)		2					
Queuing Penalty (veh)		0					

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	L	T	T	T	T	R	LR
Maximum Queue (ft)	136	258	278	162	186	124	92
Average Queue (ft)	26	116	140	50	66	24	31
95th Queue (ft)	103	279	298	120	143	73	69
Link Distance (ft)		267	267	580	580		1104
Upstream Blk Time (%)		3	5				
Queuing Penalty (veh)		17	28				
Storage Bay Dist (ft)	150					65	
Storage Blk Time (%)		11			7	0	
Queuing Penalty (veh)		3			8	1	

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	WB	WB	WB	NB	NB
Directions Served	T	TR	L	T	T	L	R
Maximum Queue (ft)	606	614	179	270	235	164	198
Average Queue (ft)	387	455	109	77	62	89	70
95th Queue (ft)	704	706	178	208	170	148	147
Link Distance (ft)	580	580		304	304		432
Upstream Blk Time (%)	7	10		0	0		
Queuing Penalty (veh)	41	55		1	0		
Storage Bay Dist (ft)			90			85	
Storage Blk Time (%)			22	2		15	2
Queuing Penalty (veh)			58	4		19	3

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	230	253	174	259	249	215	414	365	302
Average Queue (ft)	99	94	12	187	153	124	242	210	177
95th Queue (ft)	185	187	81	280	250	208	347	314	273
Link Distance (ft)	304	304		184	184	184	1848	1848	1848
Upstream Blk Time (%)	0	0		16	5	1			
Queuing Penalty (veh)	0	0		44	15	3			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		2	0						
Queuing Penalty (veh)		8	0						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	LT	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	200	288	284	232	238	140	120	158	228	263	252	165
Average Queue (ft)	92	145	129	143	177	122	12	28	104	126	126	96
95th Queue (ft)	184	250	253	237	274	169	72	112	186	208	218	171
Link Distance (ft)		235	235	162	162		183	183		1344	1344	
Upstream Blk Time (%)		2	2	9	16		0	1				
Queuing Penalty (veh)		8	8	31	57		1	2				
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	5	21			38	45			1	0	18	16
Queuing Penalty (veh)	14	21			91	93			2	1	30	36

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	216	198
Average Queue (ft)	115	84
95th Queue (ft)	195	175
Link Distance (ft)	1069	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		380
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	EB	B56	B56	WB	WB
Directions Served	T	T	T	T	T	T
Maximum Queue (ft)	210	166	2	5	175	224
Average Queue (ft)	80	64	0	0	67	101
95th Queue (ft)	166	140	2	5	147	203
Link Distance (ft)	183	183	162	162	392	392
Upstream Blk Time (%)	0	0				
Queuing Penalty (veh)	1	0				
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	311	183	134	164	36	183
Average Queue (ft)	132	63	61	88	4	79
95th Queue (ft)	254	144	113	150	21	145
Link Distance (ft)	392	392	149	149	268	1453
Upstream Blk Time (%)	0	0	0	1		
Queuing Penalty (veh)	0	0	1	3		
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	R	L	TR	LTR	LTR
Maximum Queue (ft)	59	164	135	239	482	295	15
Average Queue (ft)	8	102	58	139	182	148	1
95th Queue (ft)	37	182	110	237	420	252	11
Link Distance (ft)		149	149		2240	1432	197
Upstream Blk Time (%)	0	3	0				
Queuing Penalty (veh)	0	11	0				
Storage Bay Dist (ft)	55			150			
Storage Blk Time (%)	0	17		14	7		
Queuing Penalty (veh)	0	2		76	19		

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	81	66	84	101	42
Average Queue (ft)	6	4	8	8	17
95th Queue (ft)	52	44	44	52	43
Link Distance (ft)	184	184	235	235	200
Upstream Blk Time (%)	0	0		0	
Queuing Penalty (veh)	0	0		0	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 978

Alternatives 2 (WB Diet), 3 (EB Diet), and 4 (3-Lane Diet) Version 1

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	T	R	L	T	TR
Maximum Queue (ft)	290	677	115	106	228	84	168	162	122	82	103	107
Average Queue (ft)	88	324	60	35	102	22	66	34	36	25	43	33
95th Queue (ft)	266	587	143	82	195	59	131	116	91	66	88	78
Link Distance (ft)		1866		252	252		854	854			1232	1232
Upstream Blk Time (%)					0							
Queuing Penalty (veh)					0							
Storage Bay Dist (ft)	200		25			140			100	100		
Storage Blk Time (%)		64	5			0	0	2	2	2	1	
Queuing Penalty (veh)		87	23			0	0	2	3	2	0	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	WB	WB	WB	SB	SB
Directions Served	LTR	L	T	TR	LT	TR
Maximum Queue (ft)	273	154	66	175	143	118
Average Queue (ft)	249	76	10	58	70	37
95th Queue (ft)	312	137	41	140	124	89
Link Distance (ft)	252		290	290	1014	1014
Upstream Blk Time (%)	24					
Queuing Penalty (veh)	132					
Storage Bay Dist (ft)		205				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	107	92	143	181	31	88
Average Queue (ft)	34	23	46	68	4	29
95th Queue (ft)	84	69	108	148	19	68
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	41	63	112	131	142	157	129	161	290	254	118	220
Average Queue (ft)	4	26	53	65	72	92	52	77	166	114	53	139
95th Queue (ft)	23	57	100	116	126	139	104	142	256	228	98	206
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	204
Average Queue (ft)	101
95th Queue (ft)	182
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	90	113	115	189	207	179
Average Queue (ft)	38	34	46	69	79	80
95th Queue (ft)	77	85	95	156	171	145
Link Distance (ft)		463	463	374	374	667
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	80					
Storage Blk Time (%)	1	1				
Queuing Penalty (veh)	2	0				

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	TR	L	TR	LTR
Maximum Queue (ft)	30	99	114	114	284	120
Average Queue (ft)	7	27	35	12	179	50
95th Queue (ft)	23	72	85	61	316	99
Link Distance (ft)		374	374		271	717
Upstream Blk Time (%)					2	
Queuing Penalty (veh)					17	
Storage Bay Dist (ft)	125			100		
Storage Blk Time (%)		0			16	
Queuing Penalty (veh)		0			3	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	37	39	57	221	87
Average Queue (ft)	10	2	4	38	35
95th Queue (ft)	34	18	27	132	68
Link Distance (ft)		271	271	298	821
Upstream Blk Time (%)				0	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)	100				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	42	44	79	121	55
Average Queue (ft)	8	2	5	18	24
95th Queue (ft)	33	23	34	75	49
Link Distance (ft)		298	298	235	1038
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	240				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Perkins Street & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	61	107	136	40	285	42	123
Average Queue (ft)	20	35	50	7	118	10	48
95th Queue (ft)	48	84	108	28	268	33	94
Link Distance (ft)		235	235		272	510	1057
Upstream Blk Time (%)					1		
Queuing Penalty (veh)					5		
Storage Bay Dist (ft)	160			175			
Storage Blk Time (%)					4		
Queuing Penalty (veh)					1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	L	T	LR
Maximum Queue (ft)	31	34	36	121	40
Average Queue (ft)	2	2	5	13	13
95th Queue (ft)	18	17	23	68	39
Link Distance (ft)	272	272		292	1062
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	38	96	100	104	250	65	63
Average Queue (ft)	6	27	33	10	90	23	21
95th Queue (ft)	25	76	83	50	239	53	52
Link Distance (ft)		292	292		239	961	1064
Upstream Blk Time (%)					1		
Queuing Penalty (veh)					9		
Storage Bay Dist (ft)	100			75			
Storage Blk Time (%)		0			7		
Queuing Penalty (veh)		0			1		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	34	36	35	202	63	50
Average Queue (ft)	6	2	3	34	23	17
95th Queue (ft)	26	16	18	130	51	45
Link Distance (ft)		239	239	267	955	1076
Upstream Blk Time (%)				0		
Queuing Penalty (veh)				0		
Storage Bay Dist (ft)	90					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	EB	WB	B20	B20	SB
Directions Served	L	T	T	TR	T		LR
Maximum Queue (ft)	46	151	149	368	291	30	66
Average Queue (ft)	12	56	69	278	71	1	20
95th Queue (ft)	38	122	134	410	244	13	50
Link Distance (ft)		267	267	267	272	272	1127
Upstream Blk Time (%)				15	2		
Queuing Penalty (veh)				136	9		
Storage Bay Dist (ft)	150						
Storage Blk Time (%)		0					
Queuing Penalty (veh)		0					

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	T	L	R
Maximum Queue (ft)	172	221	309	276	172	310
Average Queue (ft)	51	83	150	66	117	112
95th Queue (ft)	131	183	279	209	178	238
Link Distance (ft)	272	272	304	304		439
Upstream Blk Time (%)		0	1	0		
Queuing Penalty (veh)		0	2	0		
Storage Bay Dist (ft)					85	
Storage Blk Time (%)					26	3
Queuing Penalty (veh)					44	7

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	199	225	160	274	271	188	440	387	318
Average Queue (ft)	96	91	13	211	196	136	256	219	177
95th Queue (ft)	177	177	80	289	283	236	379	337	275
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)		0		20	13	1			
Queuing Penalty (veh)		0		57	36	4			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		3	0						
Queuing Penalty (veh)		9	0						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	UL	L	TR	LT	T	R	L	T	T	R	LTR	R
Maximum Queue (ft)	201	284	309	184	250	140	186	250	258	165	255	244
Average Queue (ft)	116	129	176	89	107	104	84	139	133	60	145	107
95th Queue (ft)	196	233	305	149	199	162	156	223	230	142	223	203
Link Distance (ft)		234	234	290	290			1350	1350		1060	
Upstream Blk Time (%)		1	4		0							
Queuing Penalty (veh)		5	13		1							
Storage Bay Dist (ft)	115					50	215			75		380
Storage Blk Time (%)	15	16			38	31	0	1	19	3		
Queuing Penalty (veh)	17	33			110	46	0	1	22	9		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB
Directions Served	T	T	T
Maximum Queue (ft)	126	130	268
Average Queue (ft)	29	10	48
95th Queue (ft)	104	62	182
Link Distance (ft)	52	290	391
Upstream Blk Time (%)	4		0
Queuing Penalty (veh)	20		0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	53	257	168	23	120
Average Queue (ft)	12	91	105	2	48
95th Queue (ft)	37	197	193	13	95
Link Distance (ft)		391	152	268	1466
Upstream Blk Time (%)			4		
Queuing Penalty (veh)			22		
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		6			
Queuing Penalty (veh)		1			

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	LT	R	L	TR	LTR
Maximum Queue (ft)	165	81	154	246	342
Average Queue (ft)	110	34	51	115	185
95th Queue (ft)	187	69	107	209	300
Link Distance (ft)	152	152		2258	1432
Upstream Blk Time (%)	5				
Queuing Penalty (veh)	12				
Storage Bay Dist (ft)			300		
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	46	72	140	150	62
Average Queue (ft)	2	4	23	28	25
95th Queue (ft)	21	35	95	110	55
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)		0	0	0	
Queuing Penalty (veh)		0	0	1	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 905

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	T	R	L	T	TR
Maximum Queue (ft)	290	685	115	98	256	159	224	242	174	167	290	263
Average Queue (ft)	99	342	67	37	139	63	99	81	65	79	107	92
95th Queue (ft)	281	636	148	77	239	123	178	196	146	172	319	296
Link Distance (ft)		1866		252	252		854	854			1232	1232
Upstream Blk Time (%)					1							
Queuing Penalty (veh)					1							
Storage Bay Dist (ft)	200		25			140			100	100		
Storage Blk Time (%)	0	62	6			2	1	3	8	24	4	
Queuing Penalty (veh)	0	108	35			3	2	5	17	32	3	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	WB	WB	WB	SB	SB
Directions Served	LTR	L	T	TR	LT	TR
Maximum Queue (ft)	275	131	72	220	202	193
Average Queue (ft)	247	54	16	79	104	83
95th Queue (ft)	321	109	53	172	174	156
Link Distance (ft)	252		290	290	1014	1014
Upstream Blk Time (%)	20					
Queuing Penalty (veh)	145					
Storage Bay Dist (ft)		205				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	182	182	129	191	31	146
Average Queue (ft)	86	74	33	62	3	67
95th Queue (ft)	163	160	94	144	18	122
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	60	81	256	270	89	101	147	165	264	227	376	180
Average Queue (ft)	17	42	137	145	34	61	61	87	162	112	163	99
95th Queue (ft)	48	73	226	238	76	94	122	151	236	209	307	167
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)			0									
Queuing Penalty (veh)			0									

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	162
Average Queue (ft)	58
95th Queue (ft)	131
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	158	253	262	163	209	355
Average Queue (ft)	57	106	117	58	80	171
95th Queue (ft)	119	209	218	126	167	291
Link Distance (ft)		463	463	374	374	667
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	80					
Storage Blk Time (%)	3	10				
Queuing Penalty (veh)	14	12				

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	TR	L	TR	LTR
Maximum Queue (ft)	88	286	287	164	276	104
Average Queue (ft)	9	111	119	23	158	37
95th Queue (ft)	49	230	239	92	285	79
Link Distance (ft)		374	374		271	717
Upstream Blk Time (%)		0			1	
Queuing Penalty (veh)		0			3	
Storage Bay Dist (ft)	125			100		
Storage Blk Time (%)		6			15	
Queuing Penalty (veh)		1			3	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	37	114	115	113	52
Average Queue (ft)	8	12	12	18	17
95th Queue (ft)	30	61	63	70	45
Link Distance (ft)		271	271	298	821
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	53	107	116	107	42
Average Queue (ft)	15	15	17	16	17
95th Queue (ft)	45	64	71	63	39
Link Distance (ft)		298	298	235	1038
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	240				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	96	208	222	42	279	70	157
Average Queue (ft)	33	68	83	11	152	24	69
95th Queue (ft)	75	164	186	35	270	56	132
Link Distance (ft)		235	235		272	510	1057
Upstream Blk Time (%)		0	0		1		
Queuing Penalty (veh)		1	1		3		
Storage Bay Dist (ft)	160			175			
Storage Blk Time (%)		1			5		
Queuing Penalty (veh)		1			1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	L	T	LR
Maximum Queue (ft)	128	126	49	142	65
Average Queue (ft)	21	24	8	28	26
95th Queue (ft)	81	86	33	96	58
Link Distance (ft)	272	272		292	1062
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		
Storage Blk Time (%)				1	
Queuing Penalty (veh)				0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	82	254	265	68	236	86	70
Average Queue (ft)	17	80	89	13	84	26	24
95th Queue (ft)	55	196	213	46	198	63	57
Link Distance (ft)		292	292		239	961	1064
Upstream Blk Time (%)		0	0		0		
Queuing Penalty (veh)		0	0		2		
Storage Bay Dist (ft)	100			75			
Storage Blk Time (%)		3		0	8		
Queuing Penalty (veh)		1		1	1		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	46	90	109	103	98	57
Average Queue (ft)	12	12	15	11	41	20
95th Queue (ft)	38	57	71	58	82	50
Link Distance (ft)		239	239	267	955	1076
Upstream Blk Time (%)			0			
Queuing Penalty (veh)			0			
Storage Bay Dist (ft)	90					
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	EB	WB	B20	B20	SB
Directions Served	L	T	T	TR	T		LR
Maximum Queue (ft)	75	228	236	346	142	7	87
Average Queue (ft)	21	78	95	166	9	0	36
95th Queue (ft)	58	200	219	325	73	5	75
Link Distance (ft)		267	267	268	259	259	1128
Upstream Blk Time (%)		1	1	3	0		
Queuing Penalty (veh)		5	6	19	0		
Storage Bay Dist (ft)	150						
Storage Blk Time (%)		4					
Queuing Penalty (veh)		1					

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	311	333	133	195	262	179	166	211
Average Queue (ft)	147	206	17	29	101	27	93	89
95th Queue (ft)	316	366	125	145	202	107	157	175
Link Distance (ft)	259	259	268	268	304	304		437
Upstream Blk Time (%)	4	12	1	1	0			
Queuing Penalty (veh)	24	67	6	6	0			
Storage Bay Dist (ft)							85	
Storage Blk Time (%)							16	8
Queuing Penalty (veh)							20	13

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	340	349	235	265	268	186	424	400	351
Average Queue (ft)	149	211	144	232	213	138	270	244	203
95th Queue (ft)	304	353	300	298	305	247	403	375	319
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)	1	3		45	31	1			
Queuing Penalty (veh)	8	22		122	85	4			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		21	1						
Queuing Penalty (veh)		177	2						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	NB	NB	NB	NB	SB
Directions Served	UL	L	TR	LT	T	R	T	L	T	T	R	LTR
Maximum Queue (ft)	121	146	310	293	314	140	28	212	248	275	165	262
Average Queue (ft)	56	78	163	135	147	101	1	108	123	126	90	145
95th Queue (ft)	105	125	299	236	263	169	15	192	208	227	168	234
Link Distance (ft)		234	234	287	287		55		1350	1350		1061
Upstream Blk Time (%)			5	0	1		0					
Queuing Penalty (veh)			18	1	2		1					
Storage Bay Dist (ft)	115					50		215			75	
Storage Blk Time (%)	0	2			38	17		1	0	16	15	
Queuing Penalty (veh)	0	2			93	36		3	0	26	33	

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	241
Average Queue (ft)	97
95th Queue (ft)	208
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	380
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB
Directions Served	T	T	T
Maximum Queue (ft)	132	257	407
Average Queue (ft)	97	63	201
95th Queue (ft)	171	188	407
Link Distance (ft)	55	287	391
Upstream Blk Time (%)	25	0	2
Queuing Penalty (veh)	158	2	12
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	165	343	167	36	176
Average Queue (ft)	34	146	134	4	83
95th Queue (ft)	109	287	194	22	150
Link Distance (ft)		391	152	268	1466
Upstream Blk Time (%)		0	7		
Queuing Penalty (veh)		1	52		
Storage Bay Dist (ft)	100				
Storage Blk Time (%)	0	13			
Queuing Penalty (veh)	0	5			

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	L	TR	LTR	LTR
Maximum Queue (ft)	164	107	307	360	366	26
Average Queue (ft)	108	49	148	172	169	1
95th Queue (ft)	184	88	278	321	303	11
Link Distance (ft)	152	152		2246	1432	199
Upstream Blk Time (%)	3					
Queuing Penalty (veh)	12					
Storage Bay Dist (ft)			300			
Storage Blk Time (%)			1	2		
Queuing Penalty (veh)			7	5		

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	15	120	242	230	75
Average Queue (ft)	1	11	66	64	22
95th Queue (ft)	11	70	195	203	68
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)		0	1	2	
Queuing Penalty (veh)		1	5	7	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 1466

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	T	R	L	T	TR
Maximum Queue (ft)	290	771	115	112	210	64	150	159	119	121	161	156
Average Queue (ft)	98	365	64	35	91	19	64	35	36	37	53	39
95th Queue (ft)	291	676	147	83	179	48	125	120	96	109	128	112
Link Distance (ft)		1866		252	252		854	854			1232	1232
Upstream Blk Time (%)					0							
Queuing Penalty (veh)					0							
Storage Bay Dist (ft)	200		25			140			100	100		
Storage Blk Time (%)		66	5				0	1	3	9	2	
Queuing Penalty (veh)		90	24				0	1	4	9	1	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	WB	WB	WB	SB	SB
Directions Served	LTR	L	T	TR	LT	TR
Maximum Queue (ft)	274	172	48	160	139	114
Average Queue (ft)	250	81	7	53	69	34
95th Queue (ft)	317	152	31	128	122	83
Link Distance (ft)	252		290	290	1014	1014
Upstream Blk Time (%)	26					
Queuing Penalty (veh)	143					
Storage Bay Dist (ft)		205				
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	81	90	145	178	31	83
Average Queue (ft)	30	24	47	71	4	29
95th Queue (ft)	72	70	117	150	22	67
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	35	63	118	143	142	164	157	179	275	230	123	241
Average Queue (ft)	5	27	52	67	72	94	62	85	165	110	48	138
95th Queue (ft)	23	56	100	122	128	144	124	149	255	218	90	208
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	208
Average Queue (ft)	98
95th Queue (ft)	183
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	B20	B20	SB
Directions Served	L	T	T	T	TR	T	T	LR
Maximum Queue (ft)	91	111	123	181	174	6	19	184
Average Queue (ft)	36	37	49	56	62	0	0	82
95th Queue (ft)	73	91	99	136	139	5	5	151
Link Distance (ft)		463	463	155	155	167	167	667
Upstream Blk Time (%)				1	1			
Queuing Penalty (veh)				2	2			
Storage Bay Dist (ft)	80							
Storage Blk Time (%)	1	1						
Queuing Penalty (veh)	2	1						

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	WB	SB
Directions Served	L	TR	T		L	T	TR	LTR
Maximum Queue (ft)	43	209	117	71	87	186	208	122
Average Queue (ft)	6	72	17	4	12	62	79	50
95th Queue (ft)	27	163	70	33	54	145	170	99
Link Distance (ft)		167	155	155		271	271	715
Upstream Blk Time (%)		1	0	0		0	0	
Queuing Penalty (veh)		4	0	0		0	0	
Storage Bay Dist (ft)	125				100			
Storage Blk Time (%)		2				3		
Queuing Penalty (veh)		0				1		

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	40	89	96	96	82
Average Queue (ft)	6	7	8	8	30
95th Queue (ft)	29	41	48	45	62
Link Distance (ft)		271	298	298	808
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	37	95	104	125	68
Average Queue (ft)	7	9	11	13	24
95th Queue (ft)	29	49	55	68	50
Link Distance (ft)		298	236	236	1025
Upstream Blk Time (%)			0		
Queuing Penalty (veh)			0		
Storage Bay Dist (ft)	240				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	71	229	58	227	238	41	117
Average Queue (ft)	20	86	10	81	90	10	43
95th Queue (ft)	51	182	42	179	192	31	86
Link Distance (ft)		236		269	269	523	1045
Upstream Blk Time (%)		0	0	0	0		
Queuing Penalty (veh)		1	0	0	0		
Storage Bay Dist (ft)	160		175				
Storage Blk Time (%)		1		1			
Queuing Penalty (veh)		1		0			

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	WB	WB	WB	NB
Directions Served	TR	L	T	T	LR
Maximum Queue (ft)	48	35	35	32	36
Average Queue (ft)	3	5	2	2	12
95th Queue (ft)	23	24	17	19	37
Link Distance (ft)	269		291	291	1074
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		100			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	35	246	48	184	179	58	63
Average Queue (ft)	6	68	8	54	59	20	20
95th Queue (ft)	27	172	35	143	149	49	52
Link Distance (ft)		291		239	239	973	1052
Upstream Blk Time (%)		0		0	0		
Queuing Penalty (veh)		0		0	0		
Storage Bay Dist (ft)	100		75				
Storage Blk Time (%)		4		3			
Queuing Penalty (veh)		0		1			

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	33	85	80	84	72	52
Average Queue (ft)	4	9	7	8	23	16
95th Queue (ft)	21	48	39	45	54	43
Link Distance (ft)		239	267	267	968	1064
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	90					
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	58	241	204	230	69
Average Queue (ft)	9	76	63	86	23
95th Queue (ft)	42	192	159	190	56
Link Distance (ft)		267	592	592	1117
Upstream Blk Time (%)		0			
Queuing Penalty (veh)		1			
Storage Bay Dist (ft)	150				
Storage Blk Time (%)		2			
Queuing Penalty (veh)		0			

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	T	L	R
Maximum Queue (ft)	151	182	172	202	174	286
Average Queue (ft)	45	74	66	87	116	103
95th Queue (ft)	113	148	143	169	175	210
Link Distance (ft)	592	592	304	304		439
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)					85	
Storage Blk Time (%)					25	3
Queuing Penalty (veh)					42	8

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	201	243	152	273	250	222	415	384	297
Average Queue (ft)	91	89	12	199	157	120	253	218	170
95th Queue (ft)	169	180	84	287	252	212	369	335	270
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)		0		17	7	1			
Queuing Penalty (veh)		0		48	20	3			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		2	0						
Queuing Penalty (veh)		8	0						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	UL	L	TR	LT	T	R	L	T	T	R	LTR	R
Maximum Queue (ft)	202	236	320	200	259	140	234	292	390	165	276	250
Average Queue (ft)	110	117	195	87	109	103	94	154	154	67	161	125
95th Queue (ft)	184	197	315	154	204	159	189	247	311	159	249	225
Link Distance (ft)		234	234	285	285			1350	1350		1061	
Upstream Blk Time (%)		0	5	0	0				0			
Queuing Penalty (veh)		1	17	0	1				0			
Storage Bay Dist (ft)	115					50	215			75		380
Storage Blk Time (%)	10	11			36	30	2	2	24	3		
Queuing Penalty (veh)	12	23			104	44	7	3	27	9		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB
Directions Served	T	T	T
Maximum Queue (ft)	131	113	279
Average Queue (ft)	28	6	49
95th Queue (ft)	104	48	178
Link Distance (ft)	56	285	391
Upstream Blk Time (%)	3		
Queuing Penalty (veh)	16		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	92	246	165	23	117
Average Queue (ft)	15	93	101	2	45
95th Queue (ft)	55	200	185	14	91
Link Distance (ft)		391	152	268	1466
Upstream Blk Time (%)			3		
Queuing Penalty (veh)			17		
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		6			
Queuing Penalty (veh)		1			

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	LT	R	L	TR	LTR
Maximum Queue (ft)	165	85	146	224	375
Average Queue (ft)	106	36	52	104	189
95th Queue (ft)	183	73	106	190	306
Link Distance (ft)	152	152		2237	1432
Upstream Blk Time (%)	4				
Queuing Penalty (veh)	10				
Storage Bay Dist (ft)			300		
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	11	79	157	159	75
Average Queue (ft)	0	7	22	22	27
95th Queue (ft)	8	49	101	104	58
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)		0	0	0	
Queuing Penalty (veh)		0	1	1	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 712

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	T	R	L	T	TR
Maximum Queue (ft)	290	842	115	94	256	175	240	236	159	164	254	238
Average Queue (ft)	104	370	55	36	136	72	105	83	65	71	84	74
95th Queue (ft)	290	722	137	75	232	142	199	196	141	157	217	198
Link Distance (ft)		1866		252	252		854	854			1232	1232
Upstream Blk Time (%)					1							
Queuing Penalty (veh)					2							
Storage Bay Dist (ft)	200		25			140			100	100		
Storage Blk Time (%)		62	5			3	2	5	8	21	5	
Queuing Penalty (veh)		107	29			6	3	7	17	28	4	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	WB	WB	WB	SB	SB
Directions Served	LTR	L	T	TR	LT	TR
Maximum Queue (ft)	276	133	80	185	195	182
Average Queue (ft)	251	53	15	70	102	82
95th Queue (ft)	311	105	52	159	166	155
Link Distance (ft)	252		290	290	1014	1014
Upstream Blk Time (%)	20					
Queuing Penalty (veh)	142					
Storage Bay Dist (ft)		205				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	178	168	130	202	27	157
Average Queue (ft)	81	78	35	60	3	63
95th Queue (ft)	156	162	101	149	17	122
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	65	200	369	383	99	116	150	183	282	343	489	176
Average Queue (ft)	18	60	178	194	36	64	65	95	157	117	197	95
95th Queue (ft)	49	178	342	358	85	103	128	161	248	280	417	155
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)			0	0						0	0	
Queuing Penalty (veh)			1	1						0	0	
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)		0	6									
Queuing Penalty (veh)		0	6									

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	150
Average Queue (ft)	55
95th Queue (ft)	125
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	B20	SB
Directions Served	L	T	T	T	TR	T	LR
Maximum Queue (ft)	170	471	474	181	219	14	678
Average Queue (ft)	120	289	300	87	109	1	364
95th Queue (ft)	222	520	527	166	197	10	705
Link Distance (ft)		463	463	154	154	167	667
Upstream Blk Time (%)		3	5	1	2		14
Queuing Penalty (veh)		16	24	2	6		0
Storage Bay Dist (ft)	80						
Storage Blk Time (%)	6	62					
Queuing Penalty (veh)	27	76					

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	WB	SB
Directions Served	L	TR	T		L	T	TR	LTR
Maximum Queue (ft)	151	254	200	204	68	166	188	97
Average Queue (ft)	18	231	181	177	24	57	78	39
95th Queue (ft)	94	283	225	237	58	122	152	81
Link Distance (ft)		167	154	154		271	271	714
Upstream Blk Time (%)	0	30	36	28			0	
Queuing Penalty (veh)	0	352	210	167			0	
Storage Bay Dist (ft)	125				100			
Storage Blk Time (%)		31			0	2		
Queuing Penalty (veh)		6			0	0		

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	38	223	51	62	55
Average Queue (ft)	10	35	4	5	20
95th Queue (ft)	34	134	24	31	47
Link Distance (ft)		271	298	298	808
Upstream Blk Time (%)		0			
Queuing Penalty (veh)		0			
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		1			
Queuing Penalty (veh)		0			

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	77	293	74	86	56
Average Queue (ft)	15	89	7	11	20
95th Queue (ft)	55	249	38	50	47
Link Distance (ft)		298	236	236	1025
Upstream Blk Time (%)	0	0			
Queuing Penalty (veh)	0	2			
Storage Bay Dist (ft)	240				
Storage Blk Time (%)		1			
Queuing Penalty (veh)		0			

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	189	250	45	143	177	81	165
Average Queue (ft)	37	164	10	48	70	29	75
95th Queue (ft)	109	297	33	112	141	65	144
Link Distance (ft)		236		269	269	523	1045
Upstream Blk Time (%)	0	4					
Queuing Penalty (veh)	0	42					
Storage Bay Dist (ft)	160		175				
Storage Blk Time (%)		11		0			
Queuing Penalty (veh)		9		0			

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	WB	WB	WB	NB
Directions Served	TR	L	T	T	LR
Maximum Queue (ft)	277	52	51	80	76
Average Queue (ft)	81	12	6	10	29
95th Queue (ft)	219	41	29	45	62
Link Distance (ft)	269		291	291	1074
Upstream Blk Time (%)	0				
Queuing Penalty (veh)	4				
Storage Bay Dist (ft)		100			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	146	304	64	127	149	76	65
Average Queue (ft)	25	190	14	43	56	28	26
95th Queue (ft)	100	331	44	102	123	64	58
Link Distance (ft)		291		239	239	973	1052
Upstream Blk Time (%)		2					
Queuing Penalty (veh)		19					
Storage Bay Dist (ft)	100		75				
Storage Blk Time (%)	0	17	0	2			
Queuing Penalty (veh)	1	5	0	0			

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	80	249	34	51	199	95
Average Queue (ft)	12	82	2	4	65	29
95th Queue (ft)	49	235	16	25	157	76
Link Distance (ft)		239	267	267	968	1064
Upstream Blk Time (%)		1				
Queuing Penalty (veh)		9				
Storage Bay Dist (ft)	90					
Storage Blk Time (%)		6				
Queuing Penalty (veh)		1				

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	109	278	155	192	100
Average Queue (ft)	21	200	54	81	37
95th Queue (ft)	77	345	125	163	79
Link Distance (ft)		267	592	592	1117
Upstream Blk Time (%)		5			
Queuing Penalty (veh)		58			
Storage Bay Dist (ft)	150				
Storage Blk Time (%)		15			
Queuing Penalty (veh)		5			

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	T	L	R
Maximum Queue (ft)	323	396	138	165	170	229
Average Queue (ft)	110	172	46	69	93	88
95th Queue (ft)	258	337	108	132	159	179
Link Distance (ft)	592	592	304	304		439
Upstream Blk Time (%)	0	0				
Queuing Penalty (veh)	0	0				
Storage Bay Dist (ft)					85	
Storage Blk Time (%)					15	8
Queuing Penalty (veh)					18	13

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	319	350	235	266	257	242	392	365	311
Average Queue (ft)	135	200	131	227	173	117	260	230	194
95th Queue (ft)	280	341	288	287	274	222	358	324	274
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)	1	2		40	17	1			
Queuing Penalty (veh)	4	15		109	47	2			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		21	1						
Queuing Penalty (veh)		176	2						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	UL	L	TR	LT	T	R	L	T	T	R	LTR	R
Maximum Queue (ft)	129	151	307	253	265	140	216	250	271	165	260	234
Average Queue (ft)	56	77	157	130	139	105	106	121	123	92	144	97
95th Queue (ft)	104	122	281	213	238	169	190	200	220	167	230	208
Link Distance (ft)		234	234	285	285			1350	1350		1061	
Upstream Blk Time (%)			3	0	0							
Queuing Penalty (veh)			13	1	0							
Storage Bay Dist (ft)	115					50	215			75		380
Storage Blk Time (%)	0	2			38	19	1	1	17	15		
Queuing Penalty (veh)	0	2			93	38	2	1	28	34		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB
Directions Served	T	T	T
Maximum Queue (ft)	139	255	410
Average Queue (ft)	107	64	220
95th Queue (ft)	174	187	416
Link Distance (ft)	57	285	391
Upstream Blk Time (%)	28	0	2
Queuing Penalty (veh)	170	1	13
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	153	376	168	29	200
Average Queue (ft)	32	164	134	4	87
95th Queue (ft)	102	318	193	20	161
Link Distance (ft)		391	152	268	1466
Upstream Blk Time (%)		0	8		
Queuing Penalty (veh)		2	55		
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		15			
Queuing Penalty (veh)		6			

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	L	TR	LTR	LTR
Maximum Queue (ft)	165	106	291	442	334	19
Average Queue (ft)	110	47	155	183	169	1
95th Queue (ft)	182	86	301	384	326	10
Link Distance (ft)	152	152		2242	1432	199
Upstream Blk Time (%)	4	0				
Queuing Penalty (veh)	13	0				
Storage Bay Dist (ft)			300			
Storage Blk Time (%)			4	2		
Queuing Penalty (veh)			22	6		

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	11	110	179	192	54
Average Queue (ft)	0	8	34	27	19
95th Queue (ft)	8	55	129	125	48
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)		0	0	0	
Queuing Penalty (veh)		0	1	2	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 2278

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	T	R	L	T	TR
Maximum Queue (ft)	289	727	115	104	218	65	176	165	112	96	160	146
Average Queue (ft)	83	356	64	35	91	20	68	42	40	34	65	48
95th Queue (ft)	260	678	147	78	181	49	150	159	113	104	210	187
Link Distance (ft)		1866		252	252		854	854			1232	1232
Upstream Blk Time (%)					0							
Queuing Penalty (veh)					0							
Storage Bay Dist (ft)	200		25			140			100	100		
Storage Blk Time (%)		65	5				0	1	7	7	6	
Queuing Penalty (veh)		89	26				0	1	9	8	2	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	WB	WB	WB	SB	SB
Directions Served	LTR	L	T	TR	LT	TR
Maximum Queue (ft)	273	164	71	186	151	110
Average Queue (ft)	249	77	10	54	69	33
95th Queue (ft)	313	139	48	134	128	80
Link Distance (ft)	252		290	290	1014	1014
Upstream Blk Time (%)	25					
Queuing Penalty (veh)	140					
Storage Bay Dist (ft)		205				
Storage Blk Time (%)		0	0			
Queuing Penalty (veh)		0	0			

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	84	92	169	200	33	73
Average Queue (ft)	27	21	49	70	5	27
95th Queue (ft)	69	65	124	160	23	63
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	39	61	100	137	164	188	139	176	260	219	125	258
Average Queue (ft)	6	28	47	66	75	97	59	84	160	107	52	142
95th Queue (ft)	25	57	87	118	133	153	120	153	244	217	95	221
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)					0	0						
Queuing Penalty (veh)					0	0						

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	223
Average Queue (ft)	106
95th Queue (ft)	195
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	B20	B20	SB
Directions Served	L	T	T	T	TR	T	T	LR
Maximum Queue (ft)	86	95	107	186	210	8	17	217
Average Queue (ft)	36	37	46	73	79	0	1	91
95th Queue (ft)	70	83	93	160	170	8	9	166
Link Distance (ft)		463	463	155	155	167	167	667
Upstream Blk Time (%)				1	1			
Queuing Penalty (veh)				3	6			
Storage Bay Dist (ft)	80							
Storage Blk Time (%)	1	1						
Queuing Penalty (veh)	2	0						

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	SB
Directions Served	L	TR	T		L	TR	LTR
Maximum Queue (ft)	62	219	90	71	111	282	123
Average Queue (ft)	7	80	15	5	12	160	48
95th Queue (ft)	30	180	60	35	58	303	94
Link Distance (ft)		167	155	155		271	715
Upstream Blk Time (%)	0	1				2	
Queuing Penalty (veh)	0	7				12	
Storage Bay Dist (ft)	125				100		
Storage Blk Time (%)		3				13	
Queuing Penalty (veh)		0				2	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	44	74	172	87
Average Queue (ft)	9	5	35	36
95th Queue (ft)	33	35	121	70
Link Distance (ft)		271	298	821
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	100			
Storage Blk Time (%)		0		
Queuing Penalty (veh)		0		

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	44	72	121	67
Average Queue (ft)	10	6	18	24
95th Queue (ft)	36	38	77	54
Link Distance (ft)		298	238	1038
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	240			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	63	213	59	285	41	133
Average Queue (ft)	22	89	10	117	8	48
95th Queue (ft)	55	179	43	264	30	98
Link Distance (ft)		238		272	523	1057
Upstream Blk Time (%)		0	0	1		
Queuing Penalty (veh)		0	0	5		
Storage Bay Dist (ft)	160		175			
Storage Blk Time (%)		1		4		
Queuing Penalty (veh)		1		1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	67	36	142	41
Average Queue (ft)	4	4	16	12
95th Queue (ft)	30	22	79	38
Link Distance (ft)	272		291	1074
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100		
Storage Blk Time (%)			1	
Queuing Penalty (veh)			0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	31	200	64	250	56	60
Average Queue (ft)	6	58	8	98	21	23
95th Queue (ft)	26	151	39	230	50	53
Link Distance (ft)		291		239	973	1064
Upstream Blk Time (%)		0		1		
Queuing Penalty (veh)		0		7		
Storage Bay Dist (ft)	100		75			
Storage Blk Time (%)		3		8		
Queuing Penalty (veh)		0		1		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	L	T	TR	LTR	LTR
Maximum Queue (ft)	35	79	186	75	50
Average Queue (ft)	5	7	25	25	17
95th Queue (ft)	23	40	110	57	45
Link Distance (ft)		239	267	968	1076
Upstream Blk Time (%)			0		
Queuing Penalty (veh)			0		
Storage Bay Dist (ft)	90				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	WB	B50	B50	SB
Directions Served	L	T	TR	T		LR
Maximum Queue (ft)	48	247	349	172	14	77
Average Queue (ft)	11	88	179	20	1	26
95th Queue (ft)	37	207	371	106	10	59
Link Distance (ft)		267	270	277	277	1129
Upstream Blk Time (%)		0	5	0		
Queuing Penalty (veh)		0	43	1		
Storage Bay Dist (ft)	150					
Storage Blk Time (%)		3				
Queuing Penalty (veh)		0				

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	T	L	R
Maximum Queue (ft)	149	169	283	245	174	311
Average Queue (ft)	53	79	144	55	117	115
95th Queue (ft)	126	154	266	192	183	245
Link Distance (ft)	277	277	304	304		438
Upstream Blk Time (%)			0	0		0
Queuing Penalty (veh)			0	0		0
Storage Bay Dist (ft)					85	
Storage Blk Time (%)					26	3
Queuing Penalty (veh)					44	6

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	196	202	161	276	272	193	416	364	303
Average Queue (ft)	88	86	12	211	191	130	248	212	171
95th Queue (ft)	163	164	78	289	285	235	360	319	269
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)		0		20	13	1			
Queuing Penalty (veh)		0		57	35	4			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		2	0						
Queuing Penalty (veh)		7	0						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	NB	NB	NB	NB	SB
Directions Served	UL	L	TR	LT	T	R	T	L	T	T	R	LTR
Maximum Queue (ft)	198	266	310	205	281	140	28	233	296	307	164	276
Average Queue (ft)	111	122	176	90	116	103	1	97	151	145	65	158
95th Queue (ft)	187	217	294	163	225	161	18	181	237	245	152	249
Link Distance (ft)		234	234	284	284		58		1350	1350		1061
Upstream Blk Time (%)		1	4	0	0		0					
Queuing Penalty (veh)		2	12	0	1		1					
Storage Bay Dist (ft)	115					50		215			75	
Storage Blk Time (%)	12	12			35	30		1	1	23	3	
Queuing Penalty (veh)	13	24			101	43		4	2	27	12	

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	243
Average Queue (ft)	123
95th Queue (ft)	224
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	380
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB
Directions Served	T	T	T
Maximum Queue (ft)	129	54	267
Average Queue (ft)	30	5	53
95th Queue (ft)	106	35	183
Link Distance (ft)	58	284	391
Upstream Blk Time (%)	3		0
Queuing Penalty (veh)	16		0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	81	274	166	20	129
Average Queue (ft)	14	93	102	2	50
95th Queue (ft)	57	212	188	12	101
Link Distance (ft)		391	152	268	1466
Upstream Blk Time (%)		0	3		
Queuing Penalty (veh)		0	18		
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		6			
Queuing Penalty (veh)		1			

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	LT	R	L	TR	LTR
Maximum Queue (ft)	165	78	192	282	388
Average Queue (ft)	113	34	56	113	189
95th Queue (ft)	188	69	130	221	314
Link Distance (ft)	152	152		2237	1432
Upstream Blk Time (%)	5				
Queuing Penalty (veh)	12				
Storage Bay Dist (ft)			300		
Storage Blk Time (%)				1	
Queuing Penalty (veh)				1	

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	13	54	192	203	81
Average Queue (ft)	0	4	30	34	29
95th Queue (ft)	9	31	125	136	64
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)			0	0	
Queuing Penalty (veh)			1	1	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 816

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	T	T	R	L	T	TR
Maximum Queue (ft)	290	827	115	83	242	152	203	239	171	183	520	497
Average Queue (ft)	110	368	63	34	110	68	106	90	69	106	178	161
95th Queue (ft)	300	702	146	68	208	131	182	201	149	213	507	472
Link Distance (ft)		1866		252	252		854	854			1232	1232
Upstream Blk Time (%)					0							
Queuing Penalty (veh)					1							
Storage Bay Dist (ft)	200		25			140			100	100		
Storage Blk Time (%)		63	7			1	2	4	12	45	4	
Queuing Penalty (veh)		109	38			3	2	6	23	60	4	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	WB	WB	WB	SB	SB
Directions Served	LTR	L	T	TR	LT	TR
Maximum Queue (ft)	276	141	50	184	182	171
Average Queue (ft)	256	60	8	49	106	82
95th Queue (ft)	310	115	31	127	171	152
Link Distance (ft)	252		290	290	1014	1014
Upstream Blk Time (%)	23					
Queuing Penalty (veh)	162					
Storage Bay Dist (ft)		205				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	154	148	140	200	32	141
Average Queue (ft)	52	42	40	68	4	63
95th Queue (ft)	118	117	111	161	22	118
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	67	86	255	274	92	110	147	184	243	218	349	175
Average Queue (ft)	18	45	144	159	36	63	67	96	159	110	164	90
95th Queue (ft)	48	78	230	249	77	96	129	161	229	206	295	153
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)			0									
Queuing Penalty (veh)			0									

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	144
Average Queue (ft)	49
95th Queue (ft)	110
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	B20	SB
Directions Served	L	T	T	T	TR	T	LR
Maximum Queue (ft)	169	393	398	154	190	10	569
Average Queue (ft)	98	216	227	65	83	0	283
95th Queue (ft)	200	410	420	136	161	8	580
Link Distance (ft)		463	463	154	154	167	667
Upstream Blk Time (%)		1	1	0	1		6
Queuing Penalty (veh)		3	5	1	2		0
Storage Bay Dist (ft)	80						
Storage Blk Time (%)	8	47					
Queuing Penalty (veh)	36	58					

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	SB
Directions Served	L	TR	T		L	TR	LTR
Maximum Queue (ft)	166	258	204	203	126	273	85
Average Queue (ft)	17	228	179	173	26	154	35
95th Queue (ft)	90	288	231	243	77	271	75
Link Distance (ft)		167	154	154		271	714
Upstream Blk Time (%)	0	28	32	22		0	
Queuing Penalty (veh)	0	334	191	130		3	
Storage Bay Dist (ft)	125				100		
Storage Blk Time (%)		29			0	14	
Queuing Penalty (veh)		5			0	3	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	35	234	131	58
Average Queue (ft)	8	40	15	20
95th Queue (ft)	31	158	69	50
Link Distance (ft)		271	298	821
Upstream Blk Time (%)		0		
Queuing Penalty (veh)		1		
Storage Bay Dist (ft)	100			
Storage Blk Time (%)		2		
Queuing Penalty (veh)		0		

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	78	284	111	69
Average Queue (ft)	17	80	15	20
95th Queue (ft)	55	241	67	54
Link Distance (ft)		298	238	1038
Upstream Blk Time (%)		0		
Queuing Penalty (veh)		3		
Storage Bay Dist (ft)	240			
Storage Blk Time (%)		2		
Queuing Penalty (veh)		1		

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	161	250	61	265	83	162
Average Queue (ft)	37	156	14	119	31	64
95th Queue (ft)	98	288	41	227	68	130
Link Distance (ft)		238		272	523	1057
Upstream Blk Time (%)	0	3		0		
Queuing Penalty (veh)	0	35		1		
Storage Bay Dist (ft)	160		175			
Storage Blk Time (%)		10		3		
Queuing Penalty (veh)		8		1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	260	52	123	85
Average Queue (ft)	82	12	19	26
95th Queue (ft)	210	41	75	64
Link Distance (ft)	272		291	1074
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	3			
Storage Bay Dist (ft)		100		
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	134	301	87	243	74	72
Average Queue (ft)	20	189	19	90	27	27
95th Queue (ft)	75	333	56	209	61	61
Link Distance (ft)		291		239	973	1064
Upstream Blk Time (%)		2		0		
Queuing Penalty (veh)		19		3		
Storage Bay Dist (ft)	100		75			
Storage Blk Time (%)		18	0	8		
Queuing Penalty (veh)		5	1	1		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	L	T	TR	LTR	LTR
Maximum Queue (ft)	63	250	127	198	107
Average Queue (ft)	11	106	13	80	34
95th Queue (ft)	44	259	67	226	88
Link Distance (ft)		239	267	968	1076
Upstream Blk Time (%)		1			
Queuing Penalty (veh)		9			
Storage Bay Dist (ft)	90				
Storage Blk Time (%)		8			
Queuing Penalty (veh)		2			

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	WB	B21	SB
Directions Served	L	T	TR	T	LR
Maximum Queue (ft)	204	278	328	77	88
Average Queue (ft)	33	217	155	5	34
95th Queue (ft)	121	351	312	50	71
Link Distance (ft)		267	264	266	1124
Upstream Blk Time (%)		5	3		
Queuing Penalty (veh)		58	19		
Storage Bay Dist (ft)	150				
Storage Blk Time (%)		17			
Queuing Penalty (veh)		5			

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	B21	B21	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	268	317	25	50	228	171	171	216
Average Queue (ft)	109	168	1	5	100	26	88	83
95th Queue (ft)	252	320	27	47	198	103	149	163
Link Distance (ft)	266	266	264	264	304	304		437
Upstream Blk Time (%)	1	3		0	0			
Queuing Penalty (veh)	4	20		0	0			
Storage Bay Dist (ft)							85	
Storage Blk Time (%)							14	8
Queuing Penalty (veh)							17	12

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	311	344	235	267	267	189	404	370	322
Average Queue (ft)	131	197	135	235	217	139	260	228	192
95th Queue (ft)	264	334	291	289	297	250	363	327	281
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)	1	2		43	28	2			
Queuing Penalty (veh)	5	15		118	77	6			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		20	1						
Queuing Penalty (veh)		165	3						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	NB	NB	NB	NB	SB
Directions Served	UL	L	TR	LT	T	R	T	L	T	T	R	LTR
Maximum Queue (ft)	128	138	313	304	304	140	28	224	217	243	165	266
Average Queue (ft)	55	72	154	137	147	101	2	101	122	119	89	152
95th Queue (ft)	104	115	287	246	265	168	20	184	190	204	167	243
Link Distance (ft)		234	234	279	279		62		1350	1350		1061
Upstream Blk Time (%)		0	3	1	1		0					
Queuing Penalty (veh)		0	13	3	4		3					
Storage Bay Dist (ft)	115					50		215			75	
Storage Blk Time (%)	1	1			39	19		1	0	16	16	0
Queuing Penalty (veh)	1	1			94	39		2	0	27	36	0

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB
Directions Served	R
Maximum Queue (ft)	238
Average Queue (ft)	105
95th Queue (ft)	217
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	380
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB
Directions Served	T	T	T
Maximum Queue (ft)	152	233	407
Average Queue (ft)	109	58	219
95th Queue (ft)	177	183	419
Link Distance (ft)	62	279	391
Upstream Blk Time (%)	23	0	2
Queuing Penalty (veh)	144	2	13
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	186	337	167	32	171
Average Queue (ft)	29	142	135	4	82
95th Queue (ft)	90	284	198	21	144
Link Distance (ft)		391	152	268	1466
Upstream Blk Time (%)		0	8		
Queuing Penalty (veh)		2	60		
Storage Bay Dist (ft)	100				
Storage Blk Time (%)	0	12			
Queuing Penalty (veh)	1	5			

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	L	TR	LTR	LTR
Maximum Queue (ft)	165	113	341	486	430	16
Average Queue (ft)	109	51	161	183	174	1
95th Queue (ft)	183	92	317	377	336	10
Link Distance (ft)	152	152		2242	1432	199
Upstream Blk Time (%)	3	0				
Queuing Penalty (veh)	12	0				
Storage Bay Dist (ft)			300			
Storage Blk Time (%)			3	3		
Queuing Penalty (veh)			17	7		

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	22	105	219	224	85
Average Queue (ft)	1	7	57	51	22
95th Queue (ft)	10	48	179	179	64
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)		0	0	1	
Queuing Penalty (veh)		0	2	6	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 2286

Alternatives 2 (WB Diet), 3 (EB Diet), and 4 (3-Lane Diet) Version 2

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	82	158	220	115	147	151	63	148	118	70	87	116
Average Queue (ft)	30	75	113	54	65	77	22	75	33	22	25	52
95th Queue (ft)	66	136	191	123	121	127	54	129	85	52	64	94
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)		0	52	8				0	0	0	1	1
Queuing Penalty (veh)		0	35	17				0	0	0	1	0

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	116
Average Queue (ft)	40
95th Queue (ft)	91
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	212	261	162	102	135	143	106
Average Queue (ft)	91	141	73	22	42	63	31
95th Queue (ft)	178	242	131	68	101	116	77
Link Distance (ft)	248	248		290	290	1014	1014
Upstream Blk Time (%)	0	1					
Queuing Penalty (veh)	0	3					
Storage Bay Dist (ft)			205				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	108	97	177	184	33	80
Average Queue (ft)	30	20	67	71	5	28
95th Queue (ft)	78	67	143	150	23	66
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	40	72	118	131	151	165	150	158	291	250	123	253
Average Queue (ft)	6	27	51	65	71	92	62	76	164	111	53	141
95th Queue (ft)	25	57	98	116	128	142	121	139	256	227	97	218
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)						0						
Queuing Penalty (veh)						0						

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	219
Average Queue (ft)	102
95th Queue (ft)	190
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	99	109	119	207	203	170
Average Queue (ft)	38	35	49	74	78	78
95th Queue (ft)	79	86	99	174	164	140
Link Distance (ft)		463	463	374	374	667
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	80					
Storage Blk Time (%)	2	1				
Queuing Penalty (veh)	3	1				

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	TR	L	TR	LTR
Maximum Queue (ft)	34	116	120	114	284	130
Average Queue (ft)	6	32	39	12	192	53
95th Queue (ft)	24	84	90	58	319	107
Link Distance (ft)		374	374		271	717
Upstream Blk Time (%)					2	
Queuing Penalty (veh)					19	
Storage Bay Dist (ft)	125			100		
Storage Blk Time (%)		0			18	
Queuing Penalty (veh)		0			3	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	42	42	53	244	90
Average Queue (ft)	10	3	3	46	33
95th Queue (ft)	36	22	26	159	68
Link Distance (ft)		271	271	298	821
Upstream Blk Time (%)				0	
Queuing Penalty (veh)				1	
Storage Bay Dist (ft)	100				
Storage Blk Time (%)	0				
Queuing Penalty (veh)	0				

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	44	33	46	146	57
Average Queue (ft)	10	2	3	21	23
95th Queue (ft)	35	15	21	89	49
Link Distance (ft)		298	298	235	1038
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	240				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Perkins Street & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	77	110	122	42	286	46	127
Average Queue (ft)	21	33	49	8	134	10	50
95th Queue (ft)	53	79	98	28	289	33	99
Link Distance (ft)		235	235		272	510	1057
Upstream Blk Time (%)					1		
Queuing Penalty (veh)					9		
Storage Bay Dist (ft)	160			175			
Storage Blk Time (%)		0			5		
Queuing Penalty (veh)		0			1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	L	T	LR
Maximum Queue (ft)	25	32	31	133	45
Average Queue (ft)	1	1	5	19	13
95th Queue (ft)	14	15	23	82	39
Link Distance (ft)	272	272		292	1062
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	35	105	115	87	252	58	69
Average Queue (ft)	8	27	29	10	85	20	23
95th Queue (ft)	30	77	84	52	232	50	54
Link Distance (ft)		292	292		239	961	1064
Upstream Blk Time (%)					1		
Queuing Penalty (veh)					8		
Storage Bay Dist (ft)	100			75			
Storage Blk Time (%)		0			7		
Queuing Penalty (veh)		0			1		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	33	24	51	170	66	52
Average Queue (ft)	6	2	3	34	24	16
95th Queue (ft)	25	13	22	122	54	45
Link Distance (ft)		239	239	267	955	1076
Upstream Blk Time (%)				0		
Queuing Penalty (veh)				0		
Storage Bay Dist (ft)	90					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	EB	WB	B20	B20	SB
Directions Served	L	T	T	TR	T		LR
Maximum Queue (ft)	46	139	161	359	298	53	68
Average Queue (ft)	11	57	71	281	82	2	22
95th Queue (ft)	37	117	135	406	271	31	56
Link Distance (ft)		267	267	267	272	272	1127
Upstream Blk Time (%)				16	3	0	
Queuing Penalty (veh)				145	13	0	
Storage Bay Dist (ft)	150						
Storage Blk Time (%)		0					
Queuing Penalty (veh)		0					

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	B20	WB	WB	NB	NB
Directions Served	T	T	T	T	T	L	R
Maximum Queue (ft)	172	230	3	301	278	174	298
Average Queue (ft)	51	84	0	133	58	120	114
95th Queue (ft)	133	182	3	271	207	186	239
Link Distance (ft)	272	272	267	304	304		439
Upstream Blk Time (%)	0	0		2	1		0
Queuing Penalty (veh)	0	0		5	4		0
Storage Bay Dist (ft)						85	
Storage Blk Time (%)						26	4
Queuing Penalty (veh)						44	9

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	208	206	164	266	266	186	424	389	337
Average Queue (ft)	85	87	9	217	189	130	246	215	174
95th Queue (ft)	165	162	68	286	285	235	369	333	282
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)				24	11	2			
Queuing Penalty (veh)				68	31	5			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		2	0						
Queuing Penalty (veh)		7	0						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	L	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	192	230	268	184	233	140	8	71	253	320	328	165
Average Queue (ft)	93	101	107	95	124	108	0	5	113	168	159	76
95th Queue (ft)	159	176	215	163	224	166	8	36	228	294	285	171
Link Distance (ft)		234	234	162	162		183	183		1350	1350	
Upstream Blk Time (%)		0	1	1	5			0				
Queuing Penalty (veh)		1	3	3	17			0				
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	5	7			33	33			6	2	24	4
Queuing Penalty (veh)	6	14			94	49			22	2	28	13

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	278	250
Average Queue (ft)	144	124
95th Queue (ft)	234	218
Link Distance (ft)	1064	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		380
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	199	12	100	157
Average Queue (ft)	42	0	19	38
95th Queue (ft)	140	7	70	125
Link Distance (ft)	183	162	391	391
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	2			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	TR	LTR	LTR
Maximum Queue (ft)	274	103	161	21	124
Average Queue (ft)	102	39	74	2	44
95th Queue (ft)	212	86	140	13	91
Link Distance (ft)	391	150	150	273	1458
Upstream Blk Time (%)	0	0	0		
Queuing Penalty (veh)	0	0	1		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	LT	R	L	TR	LTR
Maximum Queue (ft)	164	82	164	262	339
Average Queue (ft)	93	31	53	108	183
95th Queue (ft)	169	67	112	207	292
Link Distance (ft)	150	150		2258	1429
Upstream Blk Time (%)	3				
Queuing Penalty (veh)	6				
Storage Bay Dist (ft)			150		
Storage Blk Time (%)			0	3	
Queuing Penalty (veh)			1	4	

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	2	12	155	166	78
Average Queue (ft)	0	1	28	27	30
95th Queue (ft)	2	10	108	111	68
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)			0	0	
Queuing Penalty (veh)			1	1	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 697

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	133	190	206	115	179	183	150	180	155	105	112	150
Average Queue (ft)	44	107	110	48	83	100	69	104	70	33	48	69
95th Queue (ft)	98	168	179	113	146	159	125	164	136	72	98	124
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)	0	0	52	9			1	2	2	0	3	3
Queuing Penalty (veh)	0	0	37	21			2	2	3	1	4	2

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	146
Average Queue (ft)	68
95th Queue (ft)	132
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	236	262	131	114	142	173	145
Average Queue (ft)	123	132	50	34	53	88	69
95th Queue (ft)	220	234	103	85	117	147	128
Link Distance (ft)	248	248		290	290	1014	1014
Upstream Blk Time (%)	0	0					
Queuing Penalty (veh)	0	2					
Storage Bay Dist (ft)			205				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	221	204	150	173	31	143
Average Queue (ft)	92	85	47	57	3	62
95th Queue (ft)	188	187	118	132	19	117
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	70	88	256	282	98	119	159	169	254	219	336	180
Average Queue (ft)	17	44	149	158	36	61	78	90	154	104	161	94
95th Queue (ft)	48	76	239	253	82	102	140	152	230	198	284	158
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)			0									
Queuing Penalty (veh)			0									

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	148
Average Queue (ft)	48
95th Queue (ft)	110
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	170	276	283	156	187	324
Average Queue (ft)	66	118	127	59	71	173
95th Queue (ft)	139	231	238	126	150	281
Link Distance (ft)		463	463	374	374	667
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	80					
Storage Blk Time (%)	4	12				
Queuing Penalty (veh)	19	14				

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	TR	L	TR	LTR
Maximum Queue (ft)	69	278	295	134	270	96
Average Queue (ft)	8	110	117	21	134	37
95th Queue (ft)	41	230	241	70	254	78
Link Distance (ft)		374	374		271	717
Upstream Blk Time (%)			0		1	
Queuing Penalty (veh)			0		3	
Storage Bay Dist (ft)	125			100		
Storage Blk Time (%)		5			11	
Queuing Penalty (veh)		1			3	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	40	114	107	89	46
Average Queue (ft)	9	9	12	11	18
95th Queue (ft)	34	52	58	53	44
Link Distance (ft)		271	271	298	821
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	49	96	114	115	52
Average Queue (ft)	14	13	17	17	17
95th Queue (ft)	42	55	68	69	41
Link Distance (ft)		298	298	235	1038
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	240				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	97	212	228	72	285	79	170
Average Queue (ft)	30	73	86	13	162	27	65
95th Queue (ft)	71	168	188	47	282	64	129
Link Distance (ft)		235	235		272	510	1057
Upstream Blk Time (%)		0	0		1		
Queuing Penalty (veh)		0	1		4		
Storage Bay Dist (ft)	160			175			
Storage Blk Time (%)	0	1			6		
Queuing Penalty (veh)	0	1			1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	L	T	LR
Maximum Queue (ft)	119	124	35	124	72
Average Queue (ft)	19	23	7	25	26
95th Queue (ft)	72	81	28	86	60
Link Distance (ft)	272	272		292	1062
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	85	234	251	76	220	73	76
Average Queue (ft)	20	90	102	12	86	26	24
95th Queue (ft)	58	191	214	47	193	59	57
Link Distance (ft)		292	292		239	961	1064
Upstream Blk Time (%)		0	0		0		
Queuing Penalty (veh)		0	0		1		
Storage Bay Dist (ft)	100			75			
Storage Blk Time (%)		5			8		
Queuing Penalty (veh)		1			1		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	47	117	135	120	91	61
Average Queue (ft)	11	12	17	9	38	23
95th Queue (ft)	36	65	78	57	72	53
Link Distance (ft)		239	239	267	955	1076
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	90					
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	EB	WB	B20	SB
Directions Served	L	T	T	TR	T	LR
Maximum Queue (ft)	112	252	270	336	56	91
Average Queue (ft)	20	84	101	160	3	38
95th Queue (ft)	63	216	233	323	25	80
Link Distance (ft)		267	267	268	259	1128
Upstream Blk Time (%)		0	1	2		
Queuing Penalty (veh)		2	5	16		
Storage Bay Dist (ft)	150					
Storage Blk Time (%)		4				
Queuing Penalty (veh)		1				

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	NB	NB
Directions Served	T	T	T	T	T	T	L	R
Maximum Queue (ft)	333	338	188	230	247	165	173	299
Average Queue (ft)	179	226	37	48	96	19	94	105
95th Queue (ft)	363	387	178	197	199	93	167	231
Link Distance (ft)	259	259	268	268	304	304		437
Upstream Blk Time (%)	8	19	1	2	0	0		1
Queuing Penalty (veh)	45	110	8	10	0	0		0
Storage Bay Dist (ft)							85	
Storage Blk Time (%)							14	16
Queuing Penalty (veh)							17	25

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	342	356	235	277	261	187	388	356	302
Average Queue (ft)	183	243	164	238	187	108	259	226	190
95th Queue (ft)	348	382	318	295	305	232	357	324	273
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)	3	7		35	15	1			
Queuing Penalty (veh)	20	47		95	40	3			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		34	2						
Queuing Penalty (veh)		285	3						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	L	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	127	149	300	241	242	140	151	178	215	338	248	165
Average Queue (ft)	54	77	130	164	164	112	31	37	100	126	119	92
95th Queue (ft)	107	127	270	261	265	176	131	147	176	266	210	165
Link Distance (ft)		234	234	162	162		183	183		1350	1350	
Upstream Blk Time (%)			3	24	18		2	3		0		
Queuing Penalty (veh)			11	82	62		8	10		0		
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	0	2			44	20			1	0	15	15
Queuing Penalty (veh)	0	2			106	42			2	0	25	35

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	260	235
Average Queue (ft)	139	98
95th Queue (ft)	238	210
Link Distance (ft)	1064	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		380
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	251	132	200	255
Average Queue (ft)	142	14	68	102
95th Queue (ft)	272	81	162	219
Link Distance (ft)	183	162	391	391
Upstream Blk Time (%)	9	0		0
Queuing Penalty (veh)	54	3		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	TR	LTR	LTR
Maximum Queue (ft)	391	127	157	29	208
Average Queue (ft)	198	56	82	4	86
95th Queue (ft)	361	103	142	18	163
Link Distance (ft)	391	150	150	273	1458
Upstream Blk Time (%)	1	0	0		
Queuing Penalty (veh)	4	0	2		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	L	TR	LTR	LTR
Maximum Queue (ft)	165	111	239	595	287	28
Average Queue (ft)	111	52	140	191	143	2
95th Queue (ft)	183	93	244	447	246	13
Link Distance (ft)	150	150		2246	1429	198
Upstream Blk Time (%)	3	0				
Queuing Penalty (veh)	11	0				
Storage Bay Dist (ft)			150			
Storage Blk Time (%)			14	6		
Queuing Penalty (veh)			76	15		

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	5	107	199	203	57
Average Queue (ft)	0	7	56	40	19
95th Queue (ft)	5	54	161	152	48
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)		0	0	1	
Queuing Penalty (veh)		0	1	2	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 1409

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	99	200	255	115	142	153	75	142	120	89	68	109
Average Queue (ft)	32	76	118	45	63	77	23	73	31	25	20	51
95th Queue (ft)	77	145	204	107	120	132	55	123	80	60	51	93
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)		0	52	7				0	0	0	0	1
Queuing Penalty (veh)		0	35	15				0	0	0	0	0

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	103
Average Queue (ft)	39
95th Queue (ft)	84
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	224	259	173	110	106	136	108
Average Queue (ft)	102	147	67	25	40	63	30
95th Queue (ft)	191	259	131	76	89	113	73
Link Distance (ft)	248	248		290	290	1014	1014
Upstream Blk Time (%)	0	1		0			
Queuing Penalty (veh)	0	4		0			
Storage Bay Dist (ft)			205				
Storage Blk Time (%)			0				
Queuing Penalty (veh)			0				

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	100	107	168	163	32	81
Average Queue (ft)	30	23	60	63	3	28
95th Queue (ft)	74	71	131	130	19	66
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	44	66	126	144	154	167	146	144	278	228	117	232
Average Queue (ft)	6	27	48	65	74	92	60	73	165	111	51	144
95th Queue (ft)	26	57	100	120	132	142	120	130	251	220	92	211
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	201
Average Queue (ft)	105
95th Queue (ft)	185
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	B20	B20	SB
Directions Served	L	T	T	T	TR	T	T	LR
Maximum Queue (ft)	92	108	129	180	202	14	30	178
Average Queue (ft)	36	37	50	57	65	0	1	83
95th Queue (ft)	75	87	103	142	150	8	15	151
Link Distance (ft)		463	463	155	155	167	167	667
Upstream Blk Time (%)				1	1			
Queuing Penalty (veh)				3	4			
Storage Bay Dist (ft)	80							
Storage Blk Time (%)	1	1						
Queuing Penalty (veh)	1	1						

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	WB	SB
Directions Served	L	TR	T		L	T	TR	LTR
Maximum Queue (ft)	46	219	111	66	53	168	190	121
Average Queue (ft)	6	70	18	5	8	61	74	50
95th Queue (ft)	28	159	71	33	33	136	155	100
Link Distance (ft)		167	155	155		271	271	715
Upstream Blk Time (%)		1	0					
Queuing Penalty (veh)		4	0					
Storage Bay Dist (ft)	125				100			
Storage Blk Time (%)		2			0	2		
Queuing Penalty (veh)		0			0	0		

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	38	93	60	71	64
Average Queue (ft)	7	7	5	7	30
95th Queue (ft)	29	47	32	38	57
Link Distance (ft)		271	298	298	808
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	38	124	73	68	56
Average Queue (ft)	6	11	7	8	22
95th Queue (ft)	26	63	38	40	48
Link Distance (ft)		298	236	236	1025
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	240				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	73	241	46	158	179	40	122
Average Queue (ft)	19	103	8	42	53	8	45
95th Queue (ft)	52	205	29	116	131	29	94
Link Distance (ft)		236		269	269	523	1045
Upstream Blk Time (%)		0		0	0		
Queuing Penalty (veh)		1		0	0		
Storage Bay Dist (ft)	160		175				
Storage Blk Time (%)		3		0			
Queuing Penalty (veh)		1		0			

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	WB	WB	WB	NB
Directions Served	TR	L	T	T	LR
Maximum Queue (ft)	42	35	59	72	34
Average Queue (ft)	3	5	3	4	11
95th Queue (ft)	24	25	27	32	36
Link Distance (ft)	269		291	291	1074
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		100			
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	47	205	68	180	181	60	65
Average Queue (ft)	5	44	10	44	48	19	22
95th Queue (ft)	30	135	38	122	129	49	54
Link Distance (ft)		291		239	239	973	1052
Upstream Blk Time (%)		0		0	0		
Queuing Penalty (veh)		0		0	0		
Storage Bay Dist (ft)	100		75				
Storage Blk Time (%)		2		3			
Queuing Penalty (veh)		0		1			

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	28	115	67	99	65	50
Average Queue (ft)	5	11	5	9	23	17
95th Queue (ft)	22	59	31	51	52	44
Link Distance (ft)		239	267	267	968	1064
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	90					
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	83	270	214	244	65
Average Queue (ft)	9	95	71	88	21
95th Queue (ft)	42	225	168	198	55
Link Distance (ft)		267	592	592	1117
Upstream Blk Time (%)		0			
Queuing Penalty (veh)		2			
Storage Bay Dist (ft)	150				
Storage Blk Time (%)		3			
Queuing Penalty (veh)		0			

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	T	L	R
Maximum Queue (ft)	158	218	185	197	174	296
Average Queue (ft)	48	74	51	65	120	114
95th Queue (ft)	120	160	129	149	185	237
Link Distance (ft)	592	592	304	304		439
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)					85	
Storage Blk Time (%)					26	3
Queuing Penalty (veh)					44	8

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	189	201	144	271	254	212	417	403	315
Average Queue (ft)	83	89	10	207	150	126	250	212	171
95th Queue (ft)	160	171	67	291	246	208	364	330	276
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)		0		22	6	1			
Queuing Penalty (veh)		0		63	15	3			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		2	0						
Queuing Penalty (veh)		9	0						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	L	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	180	198	276	183	233	140	18	85	224	278	298	165
Average Queue (ft)	91	98	116	97	127	110	1	5	103	152	145	68
95th Queue (ft)	157	167	237	161	226	168	16	40	193	234	244	158
Link Distance (ft)		234	234	162	162		183	183		1350	1350	
Upstream Blk Time (%)		0	1	1	5							
Queuing Penalty (veh)		0	5	3	17							
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	6	7			36	33			1	1	22	4
Queuing Penalty (veh)	6	14			104	48			5	2	25	14

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	240	229
Average Queue (ft)	137	119
95th Queue (ft)	213	198
Link Distance (ft)	1064	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		380
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	194	3	99	174
Average Queue (ft)	38	0	16	31
95th Queue (ft)	131	3	62	114
Link Distance (ft)	183	162	391	391
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	2			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	TR	LTR	LTR
Maximum Queue (ft)	289	112	157	26	127
Average Queue (ft)	109	39	79	2	42
95th Queue (ft)	232	85	150	13	86
Link Distance (ft)	391	150	150	273	1458
Upstream Blk Time (%)	0	0	1		
Queuing Penalty (veh)	0	0	2		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	LT	R	L	TR	LTR
Maximum Queue (ft)	164	80	180	250	354
Average Queue (ft)	95	30	54	102	185
95th Queue (ft)	168	66	120	196	314
Link Distance (ft)	150	150		2237	1429
Upstream Blk Time (%)	2				
Queuing Penalty (veh)	5				
Storage Bay Dist (ft)			150		
Storage Blk Time (%)			0	2	
Queuing Penalty (veh)			0	3	

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	2	34	157	150	65
Average Queue (ft)	0	1	20	14	27
95th Queue (ft)	2	20	88	75	53
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)			0	0	
Queuing Penalty (veh)			0	0	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 471

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	115	190	196	115	169	189	141	188	171	113	109	137
Average Queue (ft)	43	106	113	53	80	98	67	106	70	37	49	70
95th Queue (ft)	92	166	178	121	146	158	121	171	140	82	98	122
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)					0	0						
Queuing Penalty (veh)					0	0						
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)		0	52	9			0	2	2	0	3	3
Queuing Penalty (veh)		0	38	21			1	3	3	0	4	2

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	150
Average Queue (ft)	66
95th Queue (ft)	127
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	246	267	130	130	155	171	156
Average Queue (ft)	122	136	55	36	53	90	65
95th Queue (ft)	230	245	109	94	120	147	126
Link Distance (ft)	248	248		290	290	1014	1014
Upstream Blk Time (%)	0	1					
Queuing Penalty (veh)	2	3					
Storage Bay Dist (ft)			205				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	215	214	144	146	33	155
Average Queue (ft)	85	83	46	56	3	62
95th Queue (ft)	181	185	113	125	18	120
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	63	115	281	302	97	103	155	170	251	237	371	167
Average Queue (ft)	20	46	152	168	38	63	76	91	155	103	164	90
95th Queue (ft)	52	91	251	267	83	98	138	154	228	201	305	148
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)			1									
Queuing Penalty (veh)			1									

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	136
Average Queue (ft)	49
95th Queue (ft)	109
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	B20	B20	SB
Directions Served	L	T	T	T	TR	T	T	LR
Maximum Queue (ft)	170	455	469	176	195	2	4	643
Average Queue (ft)	113	252	260	82	91	0	0	321
95th Queue (ft)	213	468	480	163	178	2	6	653
Link Distance (ft)		463	463	154	154	167	167	667
Upstream Blk Time (%)		1	2	0	1			12
Queuing Penalty (veh)		5	10	1	3			0
Storage Bay Dist (ft)	80							
Storage Blk Time (%)	7	54						
Queuing Penalty (veh)	32	66						

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	WB	SB
Directions Served	L	TR	T		L	T	TR	LTR
Maximum Queue (ft)	151	255	207	213	67	151	168	91
Average Queue (ft)	16	229	179	176	26	59	75	39
95th Queue (ft)	85	286	227	244	61	126	146	81
Link Distance (ft)		167	154	154		271	271	714
Upstream Blk Time (%)	0	28	32	23				
Queuing Penalty (veh)	0	330	190	137				
Storage Bay Dist (ft)	125				100			
Storage Blk Time (%)		29			0	2		
Queuing Penalty (veh)		5			0	1		

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	38	245	49	51	64
Average Queue (ft)	8	41	4	4	21
95th Queue (ft)	31	162	25	27	53
Link Distance (ft)		271	298	298	808
Upstream Blk Time (%)		0			
Queuing Penalty (veh)		2			
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		2			
Queuing Penalty (veh)		0			

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	99	300	41	75	69
Average Queue (ft)	13	91	5	9	23
95th Queue (ft)	52	266	26	44	57
Link Distance (ft)		298	236	236	1025
Upstream Blk Time (%)		1			
Queuing Penalty (veh)		7			
Storage Bay Dist (ft)	240				
Storage Blk Time (%)		2			
Queuing Penalty (veh)		1			

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	184	250	49	138	164	84	188
Average Queue (ft)	37	151	12	48	71	29	72
95th Queue (ft)	110	297	36	109	139	68	143
Link Distance (ft)		236		269	269	523	1045
Upstream Blk Time (%)	0	4					
Queuing Penalty (veh)	0	44					
Storage Bay Dist (ft)	160		175				
Storage Blk Time (%)		11		0			
Queuing Penalty (veh)		9		0			

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	WB	WB	WB	NB
Directions Served	TR	L	T	T	LR
Maximum Queue (ft)	265	48	52	71	81
Average Queue (ft)	84	11	6	8	29
95th Queue (ft)	216	37	31	40	65
Link Distance (ft)	269		291	291	1074
Upstream Blk Time (%)	0				
Queuing Penalty (veh)	2				
Storage Bay Dist (ft)		100			
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	130	301	52	144	154	84	80
Average Queue (ft)	19	175	15	39	51	30	28
95th Queue (ft)	76	333	43	104	120	69	63
Link Distance (ft)		291		239	239	973	1052
Upstream Blk Time (%)		1			0		
Queuing Penalty (veh)		16			0		
Storage Bay Dist (ft)	100		75				
Storage Blk Time (%)		15	0	2			
Queuing Penalty (veh)		4	0	0			

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	109	249	41	56	194	90
Average Queue (ft)	13	86	4	5	76	28
95th Queue (ft)	59	225	23	30	181	74
Link Distance (ft)		239	267	267	968	1064
Upstream Blk Time (%)		1				
Queuing Penalty (veh)		6				
Storage Bay Dist (ft)	90					
Storage Blk Time (%)		6				
Queuing Penalty (veh)		1				

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	219	277	182	215	91
Average Queue (ft)	26	207	57	85	36
95th Queue (ft)	107	348	135	176	71
Link Distance (ft)		267	592	592	1117
Upstream Blk Time (%)		6			
Queuing Penalty (veh)		66			
Storage Bay Dist (ft)	150				
Storage Blk Time (%)		16			
Queuing Penalty (veh)		5			

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	T	L	R
Maximum Queue (ft)	317	387	114	143	168	224
Average Queue (ft)	109	176	34	54	88	89
95th Queue (ft)	261	354	85	114	149	175
Link Distance (ft)	592	592	304	304		439
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)					85	
Storage Blk Time (%)					13	9
Queuing Penalty (veh)					15	14

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	312	346	235	274	258	203	416	379	339
Average Queue (ft)	142	204	132	238	163	112	267	237	202
95th Queue (ft)	281	341	293	296	278	209	371	342	304
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)	1	4		38	13	0			
Queuing Penalty (veh)	5	25		103	35	1			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		25	1						
Queuing Penalty (veh)		206	2						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	L	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	126	144	290	235	236	140	154	165	223	247	272	164
Average Queue (ft)	55	76	124	157	162	108	23	27	104	124	124	91
95th Queue (ft)	109	123	264	251	263	176	112	120	183	201	217	166
Link Distance (ft)		234	234	162	162		183	183		1350	1350	
Upstream Blk Time (%)			3	18	16		1	2				
Queuing Penalty (veh)			11	65	57		5	6				
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	0	2			42	19			1	0	17	16
Queuing Penalty (veh)	0	2			103	40			2	1	27	36

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	255	222
Average Queue (ft)	141	103
95th Queue (ft)	231	209
Link Distance (ft)	1064	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		380
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	255	78	197	248
Average Queue (ft)	143	5	69	101
95th Queue (ft)	268	42	157	212
Link Distance (ft)	183	162	391	391
Upstream Blk Time (%)	5	0	0	0
Queuing Penalty (veh)	33	0	0	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	TR	LTR	LTR
Maximum Queue (ft)	394	121	156	30	163
Average Queue (ft)	182	53	80	3	73
95th Queue (ft)	335	98	139	19	137
Link Distance (ft)	391	150	150	273	1458
Upstream Blk Time (%)	0	0	0		
Queuing Penalty (veh)	2	0	1		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	L	TR	LTR	LTR
Maximum Queue (ft)	164	118	235	562	285	28
Average Queue (ft)	105	50	136	186	147	2
95th Queue (ft)	178	94	241	426	245	12
Link Distance (ft)	150	150		2242	1429	198
Upstream Blk Time (%)	2	0				
Queuing Penalty (veh)	7	0				
Storage Bay Dist (ft)			150			
Storage Blk Time (%)			13	6		
Queuing Penalty (veh)			67	15		

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	WB	WB	SB
Directions Served	T	T	TR	R
Maximum Queue (ft)	59	197	204	56
Average Queue (ft)	4	54	36	17
95th Queue (ft)	27	159	147	47
Link Distance (ft)	184	234	234	200
Upstream Blk Time (%)		1	1	
Queuing Penalty (veh)		2	3	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 1917

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	82	179	238	115	123	140	76	143	117	75	64	115
Average Queue (ft)	30	79	123	53	63	75	21	76	32	24	20	53
95th Queue (ft)	67	141	202	123	114	124	54	133	83	57	49	99
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)		0	53	7				0	0	0	0	1
Queuing Penalty (veh)		0	35	15				0	0	0	0	0

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	108
Average Queue (ft)	36
95th Queue (ft)	81
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	207	263	156	89	116	122	87
Average Queue (ft)	97	153	72	21	39	60	28
95th Queue (ft)	186	256	133	62	91	105	68
Link Distance (ft)	248	248		290	290	1014	1014
Upstream Blk Time (%)	0	1					
Queuing Penalty (veh)	0	3					
Storage Bay Dist (ft)			205				
Storage Blk Time (%)			0				
Queuing Penalty (veh)			0				

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	102	108	176	168	29	83
Average Queue (ft)	31	22	63	60	3	27
95th Queue (ft)	77	72	134	127	18	65
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	39	62	116	141	158	164	143	153	273	238	118	240
Average Queue (ft)	6	26	49	70	73	94	63	74	166	116	53	140
95th Queue (ft)	26	56	101	125	132	144	123	136	253	228	94	211
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)					0	0						
Queuing Penalty (veh)					0	0						

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	224
Average Queue (ft)	106
95th Queue (ft)	195
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	B20	B20	SB
Directions Served	L	T	T	T	TR	T	T	LR
Maximum Queue (ft)	89	106	116	193	190	10	4	191
Average Queue (ft)	38	39	49	69	65	0	0	80
95th Queue (ft)	77	87	99	154	139	6	4	150
Link Distance (ft)		463	463	155	155	167	167	667
Upstream Blk Time (%)				1	1			
Queuing Penalty (veh)				3	3			
Storage Bay Dist (ft)	80							
Storage Blk Time (%)	2	1						
Queuing Penalty (veh)	3	1						

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	SB
Directions Served	L	TR	T		L	TR	LTR
Maximum Queue (ft)	115	220	113	71	113	284	125
Average Queue (ft)	10	84	16	5	12	161	49
95th Queue (ft)	51	185	70	41	58	302	99
Link Distance (ft)		167	155	155		271	715
Upstream Blk Time (%)	0	1	0	0		1	
Queuing Penalty (veh)	0	6	0	0		11	
Storage Bay Dist (ft)	125				100		
Storage Blk Time (%)		4				13	
Queuing Penalty (veh)		0				2	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	45	63	182	78
Average Queue (ft)	11	4	32	35
95th Queue (ft)	37	28	124	67
Link Distance (ft)		271	298	821
Upstream Blk Time (%)			0	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)	100			
Storage Blk Time (%)		0		
Queuing Penalty (veh)		0		

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	46	105	114	70
Average Queue (ft)	9	9	18	22
95th Queue (ft)	35	51	70	49
Link Distance (ft)		298	238	1038
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	240			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	74	234	112	277	45	126
Average Queue (ft)	21	102	12	120	10	48
95th Queue (ft)	56	206	61	266	32	99
Link Distance (ft)		238		272	523	1057
Upstream Blk Time (%)		0	0	1		
Queuing Penalty (veh)		1	0	4		
Storage Bay Dist (ft)	160		175			
Storage Blk Time (%)		2		4		
Queuing Penalty (veh)		1		1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	57	38	138	37
Average Queue (ft)	3	7	12	12
95th Queue (ft)	26	29	72	36
Link Distance (ft)	272		291	1074
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		100		
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	54	230	64	250	69	73
Average Queue (ft)	8	56	8	98	20	22
95th Queue (ft)	35	148	39	231	50	55
Link Distance (ft)		291		239	973	1064
Upstream Blk Time (%)		0		1		
Queuing Penalty (veh)		0		7		
Storage Bay Dist (ft)	100		75			
Storage Blk Time (%)		3	0	8		
Queuing Penalty (veh)		0	0	1		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	L	T	TR	LTR	LTR
Maximum Queue (ft)	35	82	202	63	55
Average Queue (ft)	6	8	31	22	14
95th Queue (ft)	27	43	126	54	42
Link Distance (ft)		239	267	968	1076
Upstream Blk Time (%)			0		
Queuing Penalty (veh)			0		
Storage Bay Dist (ft)	90				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	WB	B50	B50	SB
Directions Served	L	T	TR	T		LR
Maximum Queue (ft)	85	256	347	255	22	78
Average Queue (ft)	11	92	184	29	1	26
95th Queue (ft)	52	222	375	154	15	63
Link Distance (ft)		267	270	277	277	1129
Upstream Blk Time (%)		0	5	1		
Queuing Penalty (veh)		1	46	2		
Storage Bay Dist (ft)	150					
Storage Blk Time (%)		3				
Queuing Penalty (veh)		0				

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	WB	WB	NB	NB
Directions Served	T	T	T	T	L	R
Maximum Queue (ft)	158	205	307	282	174	329
Average Queue (ft)	52	84	120	51	118	119
95th Queue (ft)	127	169	256	190	185	249
Link Distance (ft)	277	277	304	304		438
Upstream Blk Time (%)			1	0		
Queuing Penalty (veh)			2	0		
Storage Bay Dist (ft)					85	
Storage Blk Time (%)					25	3
Queuing Penalty (veh)					43	7

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	200	198	128	265	258	189	406	380	310
Average Queue (ft)	86	89	10	215	187	128	245	209	168
95th Queue (ft)	163	169	79	289	276	233	360	321	271
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)				23	10	1			
Queuing Penalty (veh)				65	27	3			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		2	0						
Queuing Penalty (veh)		9	0						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	L	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	188	242	236	190	238	140	9	55	247	271	283	165
Average Queue (ft)	99	108	99	94	122	108	0	2	103	160	154	77
95th Queue (ft)	167	185	192	161	218	165	5	21	204	251	256	170
Link Distance (ft)		234	234	162	162		183	183		1350	1350	
Upstream Blk Time (%)		0	1	1	5							
Queuing Penalty (veh)		1	2	2	15							
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	5	7			34	34			2	2	25	4
Queuing Penalty (veh)	6	14			97	49			8	3	29	13

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	257	237
Average Queue (ft)	138	116
95th Queue (ft)	226	207
Link Distance (ft)	1064	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		380
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	186	5	101	167
Average Queue (ft)	38	0	17	34
95th Queue (ft)	131	0	67	118
Link Distance (ft)	183	162	391	391
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	1			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	TR	LTR	LTR
Maximum Queue (ft)	235	116	163	28	135
Average Queue (ft)	102	42	83	2	47
95th Queue (ft)	203	88	156	14	97
Link Distance (ft)	391	150	150	273	1458
Upstream Blk Time (%)		0	1		
Queuing Penalty (veh)		0	2		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	LT	R	L	TR	LTR
Maximum Queue (ft)	166	72	164	228	363
Average Queue (ft)	94	29	52	106	182
95th Queue (ft)	176	62	112	192	301
Link Distance (ft)	150	150		2237	1429
Upstream Blk Time (%)	3				
Queuing Penalty (veh)	7				
Storage Bay Dist (ft)			150		
Storage Blk Time (%)			0	3	
Queuing Penalty (veh)			0	3	

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	22	9	123	111	67
Average Queue (ft)	1	0	20	15	27
95th Queue (ft)	14	5	76	67	55
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 562

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	105	197	200	115	163	185	161	179	158	99	106	138
Average Queue (ft)	41	103	111	53	84	100	73	103	68	33	48	70
95th Queue (ft)	85	165	178	122	146	165	136	162	135	75	94	122
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)		0	52	9			1	2	2	0	2	3
Queuing Penalty (veh)		0	38	20			3	2	3	1	3	2

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	154
Average Queue (ft)	67
95th Queue (ft)	131
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	252	253	114	110	148	173	147
Average Queue (ft)	125	133	48	36	53	89	69
95th Queue (ft)	228	239	95	89	117	149	130
Link Distance (ft)	248	248		290	290	1014	1014
Upstream Blk Time (%)	1	1					
Queuing Penalty (veh)	2	2					
Storage Bay Dist (ft)			205				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	208	207	136	153	30	142
Average Queue (ft)	87	81	44	56	3	56
95th Queue (ft)	183	179	108	124	17	110
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	72	84	280	274	90	109	145	168	257	217	397	176
Average Queue (ft)	21	44	150	159	37	62	71	84	157	106	165	98
95th Queue (ft)	53	78	246	250	79	99	131	148	227	199	320	162
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)			1									
Queuing Penalty (veh)			0									

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	158
Average Queue (ft)	54
95th Queue (ft)	125
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	B20	SB
Directions Served	L	T	T	T	TR	T	LR
Maximum Queue (ft)	170	424	430	171	193	4	618
Average Queue (ft)	113	241	250	74	86	0	335
95th Queue (ft)	212	459	472	144	162	4	641
Link Distance (ft)		463	463	154	154	167	667
Upstream Blk Time (%)		1	2	0	1		9
Queuing Penalty (veh)		4	10	1	2		0
Storage Bay Dist (ft)	80						
Storage Blk Time (%)	7	52					
Queuing Penalty (veh)	32	63					

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	SB
Directions Served	L	TR	T		L	TR	LTR
Maximum Queue (ft)	138	258	201	199	140	279	109
Average Queue (ft)	14	224	177	171	25	147	39
95th Queue (ft)	79	296	232	248	79	272	86
Link Distance (ft)		167	154	154		271	714
Upstream Blk Time (%)	0	28	32	24		0	
Queuing Penalty (veh)	0	327	190	139		2	
Storage Bay Dist (ft)	125				100		
Storage Blk Time (%)		28				13	
Queuing Penalty (veh)		5				3	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	54	240	135	58
Average Queue (ft)	9	43	15	21
95th Queue (ft)	37	166	73	50
Link Distance (ft)		271	298	821
Upstream Blk Time (%)		0		
Queuing Penalty (veh)		2		
Storage Bay Dist (ft)	100			
Storage Blk Time (%)		2		
Queuing Penalty (veh)		0		

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	WB	SB
Directions Served	L	T	TR	LR
Maximum Queue (ft)	57	300	118	71
Average Queue (ft)	16	99	15	19
95th Queue (ft)	46	273	66	51
Link Distance (ft)		298	238	1038
Upstream Blk Time (%)		1		
Queuing Penalty (veh)		6		
Storage Bay Dist (ft)	240			
Storage Blk Time (%)		3		
Queuing Penalty (veh)		1		

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	237	250	117	276	79	163
Average Queue (ft)	44	174	17	133	30	67
95th Queue (ft)	133	298	68	254	65	133
Link Distance (ft)		238		272	523	1057
Upstream Blk Time (%)	0	4		0		
Queuing Penalty (veh)	0	44		2		
Storage Bay Dist (ft)	160		175			
Storage Blk Time (%)		12		4		
Queuing Penalty (veh)		10		1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	WB	WB	NB
Directions Served	TR	L	T	LR
Maximum Queue (ft)	284	50	144	105
Average Queue (ft)	94	12	22	29
95th Queue (ft)	239	40	86	77
Link Distance (ft)	272		291	1074
Upstream Blk Time (%)	0			
Queuing Penalty (veh)	4			
Storage Bay Dist (ft)		100		
Storage Blk Time (%)			0	
Queuing Penalty (veh)			0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	TR	LTR	LTR
Maximum Queue (ft)	173	300	90	243	76	78
Average Queue (ft)	23	193	15	99	28	26
95th Queue (ft)	88	344	53	214	63	60
Link Distance (ft)		291		239	973	1064
Upstream Blk Time (%)		2		0		
Queuing Penalty (veh)		19		2		
Storage Bay Dist (ft)	100		75			
Storage Blk Time (%)		17	0	10		
Queuing Penalty (veh)		5	1	2		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	WB	NB	SB
Directions Served	L	T	TR	LTR	LTR
Maximum Queue (ft)	121	248	154	182	76
Average Queue (ft)	14	92	18	69	27
95th Queue (ft)	65	244	84	144	63
Link Distance (ft)		239	267	968	1076
Upstream Blk Time (%)		1			
Queuing Penalty (veh)		10			
Storage Bay Dist (ft)	90				
Storage Blk Time (%)		7			
Queuing Penalty (veh)		1			

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	WB	B21	B21	SB
Directions Served	L	T	TR	T		LR
Maximum Queue (ft)	180	278	337	129	5	88
Average Queue (ft)	25	206	161	9	0	34
95th Queue (ft)	96	347	325	59	5	69
Link Distance (ft)		267	264	266	266	1124
Upstream Blk Time (%)		5	3	0		
Queuing Penalty (veh)		59	23	0		
Storage Bay Dist (ft)	150					
Storage Blk Time (%)		15				
Queuing Penalty (veh)		5				

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	B21	WB	WB	NB	NB
Directions Served	T	T	T	T	T	L	R
Maximum Queue (ft)	260	327	27	236	166	168	230
Average Queue (ft)	98	158	2	89	18	89	85
95th Queue (ft)	234	306	19	193	88	150	171
Link Distance (ft)	266	266	264	304	304		437
Upstream Blk Time (%)	0	3		0			
Queuing Penalty (veh)	2	17		0			
Storage Bay Dist (ft)						85	
Storage Blk Time (%)						15	9
Queuing Penalty (veh)						18	13

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	299	347	235	270	264	184	376	353	295
Average Queue (ft)	138	204	130	236	187	110	262	232	192
95th Queue (ft)	276	338	294	298	297	229	356	324	274
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)	0	3		37	16	1			
Queuing Penalty (veh)	2	18		102	44	3			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		23	1						
Queuing Penalty (veh)		191	2						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	L	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	132	152	288	236	239	140	183	198	203	249	262	164
Average Queue (ft)	57	78	111	164	167	110	35	44	103	123	123	91
95th Queue (ft)	114	130	231	260	269	178	149	168	182	200	220	167
Link Distance (ft)		234	234	162	162		183	183		1350	1350	
Upstream Blk Time (%)			2	24	22		6	7				
Queuing Penalty (veh)			7	86	78		21	23				
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	1	2			44	19			1	0	15	17
Queuing Penalty (veh)	1	2			107	39			2	0	25	38

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	237	206
Average Queue (ft)	136	100
95th Queue (ft)	216	197
Link Distance (ft)	1064	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		380
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	253	114	299	330
Average Queue (ft)	144	14	87	116
95th Queue (ft)	278	78	235	271
Link Distance (ft)	183	162	391	391
Upstream Blk Time (%)	7	0	1	2
Queuing Penalty (veh)	46	2	5	7
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	TR	LTR	LTR
Maximum Queue (ft)	373	132	161	31	168
Average Queue (ft)	188	57	79	4	79
95th Queue (ft)	348	111	140	20	144
Link Distance (ft)	391	150	150	273	1458
Upstream Blk Time (%)	0	0	1		
Queuing Penalty (veh)	2	1	4		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	L	TR	LTR	LTR
Maximum Queue (ft)	165	111	239	455	335	24
Average Queue (ft)	112	49	125	168	142	2
95th Queue (ft)	179	89	221	362	264	12
Link Distance (ft)	150	150		2242	1429	198
Upstream Blk Time (%)	3	0				
Queuing Penalty (veh)	10	0				
Storage Bay Dist (ft)			150			
Storage Blk Time (%)			9	6		
Queuing Penalty (veh)			47	17		

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	5	47	231	231	59
Average Queue (ft)	0	2	59	43	19
95th Queue (ft)	0	19	175	164	51
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)			1	1	
Queuing Penalty (veh)			3	4	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 2043

Attachment E:
SimTraffic Intersection Delay Reports

1: Broadway Avenue & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6
Total Del/Veh (s)	21.6	21.4	21.8	21.6	22.0	23.4	23.5	20.7	21.5	22.5	22.0

2: Grand Avenue & Webster Street Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	15.3	16.2	16.1	15.3	13.3	16.3	14.0	13.0	14.5	16.4	15.1

3: Driveway/Valdez Street & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1
Total Del/Veh (s)	7.6	7.6	9.7	5.7	7.1	9.8	7.2	8.6	7.3	7.6	7.9

4: Harrison Street & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	23.1	21.5	25.1	25.3	23.9	22.0	23.1	22.3	23.7	23.1	23.3

5: Grand Avenue & Bay Place Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	9.1	8.0	8.2	8.3	8.6	7.4	8.5	9.4	8.4	8.1	8.4

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.7	6.5	5.3	6.9	6.6	6.7	7.3	6.7	7.3	5.6	6.7

7: Grand Avenue & Lennox Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.4	1.1	1.1	1.2	1.4	1.3	1.3	1.6	1.1	1.2	1.3

8: Grand Avenue & Lee Street Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.7	1.5	1.6	1.8	2.2	1.6	1.5	1.8	2.1	1.9	1.8

9: Grand Avenue & Perkins Street Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.1	7.4	8.1	7.2	8.1	6.6	6.1	9.0	7.2	7.0	7.3

10: Ellita Avenue & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.2	1.3	1.2	1.2	1.3	1.1	1.2	1.3	1.1	1.2	1.2

11: Staten Avenue & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.3	5.3	3.6	6.0	5.2	3.9	4.3	4.9	4.1	4.2	4.7

12: Bellevue Avenue & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.6	1.8	1.6	1.9	2.1	2.0	1.8	1.7	1.5	1.6	1.8

13: Grand Avenue & Euclid Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	6.8	6.3	6.3	6.8	7.0	6.8	6.6	6.2	5.8	6.0	6.5

14: El Embarcadero & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.6	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.6
Total Del/Veh (s)	15.5	16.3	17.3	18.7	19.2	18.0	18.0	14.7	17.2	18.6	17.4

15: MacArthur Boulevard & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	24.4	25.0	24.8	24.9	24.4	23.9	24.7	23.4	24.2	25.3	24.5

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3
Total Del/Veh (s)	52.8	49.5	40.3	33.4	38.2	42.2	39.0	47.5	32.1	53.4	42.9

17: Midblock Ped Crossing & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.3	1.8	2.9	3.0	2.4	1.8	2.4	2.2	2.5	1.8	2.3

18: Grand Avenue & Elwood Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	8.4	8.3	7.0	6.1	10.1	7.4	5.9	6.7	7.6	8.6	7.6

19: Mandana Boulevard & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3
Total Del/Veh (s)	14.3	14.7	15.6	15.1	14.7	16.6	14.8	15.2	16.4	15.7	15.3

100: Grand Avenue & OUSD Driveway Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.7	1.8	1.5	1.7	1.9	2.0	1.8	1.7	1.6	1.7	1.7

Total Network Performance By Run

Run Number	1	2	3	4	5	6	7
Denied Del/Veh (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total Del/Veh (s)	57.8	56.6	54.8	52.3	54.5	54.8	53.1

Total Network Performance By Run

Run Number	8	9	10	Avg
Denied Del/Veh (s)	0.5	0.5	0.5	0.5
Total Del/Veh (s)	55.5	51.0	58.5	55.0

1: Broadway Avenue & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7
Total Del/Veh (s)	26.2	27.7	26.7	26.3	26.3	25.0	24.8	25.0	25.4	26.3	26.0

2: Grand Avenue & Webster Street Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	16.9	18.2	16.0	17.2	17.7	18.2	16.7	19.1	15.9	17.9	17.4

3: Driveway/Valdez Street & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
Total Del/Veh (s)	6.4	6.6	8.0	6.5	7.4	7.3	6.6	7.9	7.8	8.3	7.3

4: Harrison Street & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	23.7	23.4	25.1	23.1	22.8	22.9	24.8	22.5	24.9	23.8	23.7

5: Grand Avenue & Bay Place Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1
Total Del/Veh (s)	13.4	14.2	13.9	13.9	13.8	13.8	14.9	14.4	14.3	13.4	14.0

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	8.2	9.6	7.2	7.6	8.9	7.5	7.4	9.2	9.9	8.6	8.4

7: Grand Avenue & Lennox Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.2	1.4	1.3	1.3	1.3	1.2	1.2	1.5	1.4	1.5	1.3

8: Grand Avenue & Lee Street Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	1.6	2.5	1.6	2.4	1.9	1.8	2.1	2.1	2.4	2.3	2.1

9: Grand Avenue & Perkins Street Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	7.9	9.6	8.2	9.6	7.6	9.3	8.7	9.2	10.4	11.1	9.2

10: Ellita Avenue & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.5	2.3	2.4	2.2	2.3	2.6	2.1	2.3	2.6	3.1	2.5

11: Staten Avenue & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.2	4.2	4.7	5.4	5.1	4.4	4.2	6.0	4.9	4.6	4.9

12: Bellevue Avenue & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.5	5.2	4.9	3.6	6.4	2.3	2.3	3.5	4.6	2.8	3.8

13: Grand Avenue & Euclid Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.6	19.9	16.6	12.6	17.2	5.5	5.4	10.8	14.1	9.0	11.7

14: El Embarcadero & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total Del/Veh (s)	28.8	54.5	44.1	51.2	50.2	34.9	28.1	37.8	47.7	35.2	41.4

15: MacArthur Boulevard & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	25.5	25.0	23.9	24.0	23.7	23.8	24.4	24.4	22.7	25.6	24.3

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total Del/Veh (s)	31.1	30.5	34.4	35.1	32.2	32.0	32.7	33.1	31.9	29.1	32.2

17: Midblock Ped Crossing & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	5.7	8.6	7.3	8.8	7.0	7.6	7.6	7.4	7.8	7.4	7.5

18: Grand Avenue & Elwood Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	10.1	11.8	12.0	11.9	10.5	11.5	11.4	11.0	9.8	10.5	11.1

19: Mandana Boulevard & Grand Avenue Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
Total Del/Veh (s)	17.7	19.3	15.9	17.7	18.0	27.8	19.0	18.2	18.2	17.7	19.0

100: Grand Avenue & OUSD Driveway Performance by run number

Run Number	1	2	3	4	5	6	7	8	9	10	Avg
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	2.4	1.9	1.5	1.6	2.1	1.5	1.6	1.9	1.4	1.6	1.8

Total Network Performance By Run

Run Number	1	2	3	4	5	6	7
Denied Del/Veh (s)	0.6	0.6	0.6	0.6	0.5	0.6	0.5
Total Del/Veh (s)	58.9	70.8	66.8	67.8	67.5	62.8	60.7

Total Network Performance By Run

Run Number	8	9	10	Avg
Denied Del/Veh (s)	0.6	0.5	0.5	0.6
Total Del/Veh (s)	63.3	68.8	63.0	65.1

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.3	0.2	1.4	0.0	0.0	0.0	3.5	0.2	3.5	2.4	0.1	0.1
Total Del/Veh (s)	21.9	23.6	9.4	25.8	25.8	19.0	33.9	21.9	8.6	42.7	21.8	12.9

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	21.8

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0
Total Del/Veh (s)	23.0	19.1	21.2	35.6	7.4	5.5	29.4	24.8	28.4	19.1

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	7.8	4.9	12.8	11.0	8.7	30.1	6.0	24.1	7.5	9.1

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.3	0.1	0.2
Total Del/Veh (s)	40.4	22.7	15.9	32.4	16.1	14.4	54.0	30.8	6.5	40.0	23.4	12.9

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	23.5

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Del/Veh (s)	22.5	6.0	5.7	4.9	29.6	17.6	8.4

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0
Total Del/Veh (s)	30.3	6.7	5.4	13.8	10.1	8.3	30.3	19.8	33.9	10.5

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	13.9	0.9	2.7	2.1	22.1	20.0	2.9

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	12.5	0.5	2.6	2.0	20.9	14.3	2.4

9: Perkins Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2
Total Del/Veh (s)	25.1	5.4	3.3	9.2	7.6	6.2	34.1	26.5	7.1	30.3	29.5	18.0

9: Perkins Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	8.7

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.1	0.8	4.2	2.1	25.8	4.8	1.9

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	18.8	2.9	1.0	7.0	4.6	3.5	24.9	40.5	7.2	27.2	23.3	11.9

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	4.8

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	13.3	0.8	4.1	2.9	34.6	9.0	6.0	22.3	21.5	3.5

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	22.8	7.7	20.0	16.0	22.9	22.6	15.8

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.5	0.8	0.6
Total Del/Veh (s)	8.3	13.3	36.3	12.1	15.0

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.1
Total Del/Veh (s)	29.6	2.9	45.9	43.8	21.8	34.3	30.4	34.2	27.5

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.2	1.8	0.4	0.5
Total Del/Veh (s)	33.8	31.5	14.7	11.7	64.5	31.5	17.5	74.7	23.3	22.4	62.5	55.8

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.6	0.3
Total Del/Veh (s)	35.3	28.9

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.3	2.9	2.6

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.0
Total Del/Veh (s)	13.9	7.8	4.5	4.4	4.9	3.9	21.6	20.1	9.3	7.0

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.7	0.4	0.4	0.4	0.3
Total Del/Veh (s)	8.0	9.7	2.7	24.8	13.6	25.2	20.7	15.7

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.9	3.2	2.6	15.6	2.5

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	56.1

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.4	0.2	1.4	0.0	0.0	0.0	3.1	0.2	3.0	2.4	0.1	0.2
Total Del/Veh (s)	23.4	25.4	8.8	28.9	29.5	23.8	44.6	24.4	9.4	49.8	26.1	21.5

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	25.8

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0
Total Del/Veh (s)	20.8	18.5	17.4	41.2	9.6	7.9	29.4	25.5	29.7	19.7

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.0	0.0	0.1	0.1	0.1	0.2	0.0
Total Del/Veh (s)	12.4	8.8	9.4		9.5	7.3	23.2	7.0	26.6	13.1	10.6

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.4	0.3	0.1	0.2
Total Del/Veh (s)	43.6	34.1	30.2	46.8	29.8	21.6	23.1	17.1	17.0	32.0	17.1	7.5

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	24.0

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	0.3	0.0
Total Del/Veh (s)	19.5	10.0	7.8	5.9	36.5	30.2	13.9

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0
Total Del/Veh (s)	16.5	8.3	7.2	22.9	9.1	5.9	31.1	38.0	32.5	9.5

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	6.6	1.4	1.1	0.7	22.0	9.2	1.5

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	7.0	1.3	2.6	2.4	23.4	7.4	2.0

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2
Total Del/Veh (s)	16.2	5.5	4.2	23.3	12.2	9.9	35.5	31.7	15.0	34.3	32.1	20.0

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	10.3

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	2.1	1.2	9.5	2.3	35.1	15.3	2.7

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	13.5	6.0	4.8	18.1	5.8	4.1	30.7	27.4	11.5	28.8	24.5	10.2

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	6.6

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	8.6	2.0	2.5	1.7	35.6	19.4	13.8	23.8	12.7	3.0

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	14.4	6.8	10.6	8.2	30.4	17.2	8.8

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.9	1.0	0.4
Total Del/Veh (s)	20.8	7.7	38.7	45.0	20.3

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.1	0.1
Total Del/Veh (s)	54.6	10.5	39.6	43.1	19.9	37.4	32.3	33.5	30.5

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.2	1.8	0.3	0.3
Total Del/Veh (s)	31.4	28.9	12.8	10.7	128.9	41.3	16.1	44.7	27.8	33.4	84.4	98.3

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	41.1	31.8

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	11.4	9.8	10.6

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.0
Total Del/Veh (s)	25.1	16.9	13.7	12.5	6.0	4.5	14.6	6.3	30.5	20.8	18.6	12.9

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.9	0.8	0.5	0.3	0.3	0.1	0.4
Total Del/Veh (s)	17.2	9.4	3.9	45.6	16.6	25.9	29.6	23.6	4.7	19.4

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.5	5.3	4.1	19.0	3.7

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	66.8

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.5	0.2	1.3	0.0	0.0	0.0	3.5	0.2	3.5	2.7	0.1	0.1
Total Del/Veh (s)	20.9	24.0	8.8	24.9	26.6	19.2	33.7	21.7	9.6	36.5	21.9	11.5

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	21.8

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0
Total Del/Veh (s)	24.6	21.6	22.4	34.3	7.3	5.1	26.5	25.0	31.7	19.8

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	8.3	5.1	11.5	9.2	6.4	17.9	5.3	26.5	8.2	8.2

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.3	0.1	0.2
Total Del/Veh (s)	42.3	25.4	16.9	33.7	16.7	13.5	50.9	31.7	6.4	34.5	22.5	13.0

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	24.0

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Del/Veh (s)	22.2	6.4	4.2	3.5	27.9	17.0	7.6

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0
Total Del/Veh (s)	17.0	6.4	3.8	11.5	4.5	2.5	28.7	37.4	32.1	6.8

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	6.2	1.1	0.7	0.9	22.5	8.8	1.3

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	5.5	1.2	1.4	1.3	19.6	7.2	1.7

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	16.2	8.7	5.8	9.1	4.1	2.8	26.5	19.3	6.4	28.2	27.7	13.4

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	7.2

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.7	1.2	5.4	1.1	13.9	5.6	1.4

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.1	0.1
Total Del/Veh (s)	9.1	3.2	2.1	7.6	3.5	2.2	21.0	16.2	7.3	23.7	16.8	7.3

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	3.9

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.0
Total Del/Veh (s)	7.5	1.4	1.7	1.4	20.1	12.9	7.2	19.0	7.4	1.9

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	14.4	6.9	6.6	5.8	23.2	8.5	7.0

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.5	0.8	0.6
Total Del/Veh (s)	7.9	6.1	35.7	11.1	11.7

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.1	0.1
Total Del/Veh (s)	29.6	2.9	45.0	44.2	17.8	34.5	29.7	31.3	26.5

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.2	1.8	0.4	0.5
Total Del/Veh (s)	32.8	34.3	16.0	11.8	58.6	33.3	17.3	56.5	21.7	21.7	51.6	45.5

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.6	0.3
Total Del/Veh (s)	31.8	27.2

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.3	2.6	2.4

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.0
Total Del/Veh (s)	13.7	8.3	7.0	4.2	5.0	3.8	23.0	20.5	9.3	7.2

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.7	0.4	0.4	0.4	0.3
Total Del/Veh (s)	18.9	9.6	2.9	25.6	12.9	26.1	19.8	15.8

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.0	2.5	1.8	11.9	2.1

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	50.2

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.4	0.2	1.4	0.0	0.0	0.0	3.1	0.2	3.1	2.6	0.1	0.2
Total Del/Veh (s)	23.9	25.7	9.1	29.6	29.7	24.8	45.2	24.2	9.8	54.4	25.6	20.5

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	25.9

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0
Total Del/Veh (s)	21.8	19.2	18.1	41.5	10.6	8.2	29.3	26.4	29.6	20.4

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.0	0.0	0.1	0.1	0.2	0.1	0.0
Total Del/Veh (s)	12.2	8.6	6.0		8.9	7.2	28.6	4.8	26.1	13.6	10.2

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.4	0.2	0.1	0.2
Total Del/Veh (s)	48.2	37.7	34.4	47.8	28.7	26.6	24.1	17.1	20.5	33.8	15.8	7.2

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	25.5

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	14.0	14.7	2.3
Total Del/Veh (s)	37.6	45.0	8.6	6.3	114.7	105.5	45.1

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Del/Veh (s)	16.7	14.6	12.4	70.1	7.0	5.1	33.0	30.5	32.5	13.6

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	6.1	3.2	0.5	0.6	53.1	11.2	2.7

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	6.2	5.5	1.5	1.6	69.4	16.0	4.7

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2
Total Del/Veh (s)	13.2	8.9	7.0	47.7	6.4	5.5	35.6	32.9	32.0	38.2	38.5	23.3

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	11.1

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	5.5	4.7	25.3	1.2	42.4	36.4	5.0

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	12.7	9.8	7.9	35.7	4.2	3.0	33.1	26.3	24.7	32.9	33.6	9.1

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	8.9

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.0
Total Del/Veh (s)	7.9	5.2	1.4	1.3	87.8	126.5	92.9	91.6	25.1	8.3

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	17.3	10.1	7.7	7.1	32.4	10.7	9.7

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.7	0.6	0.3
Total Del/Veh (s)	12.9	4.9	35.9	31.3	13.7

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.3	0.1	0.2	0.1
Total Del/Veh (s)	48.9	8.7	43.6	44.5	15.2	41.4	33.4	38.5	30.0

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.6	0.0	0.0	2.0	0.2	1.8	0.3	0.3
Total Del/Veh (s)	38.8	30.0	12.1	10.2	112.5	38.5	16.1	45.3	27.4	34.3	87.1	85.0

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	42.9	31.3

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	10.3	9.4	9.8

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.7	0.2	0.0
Total Del/Veh (s)	20.5	15.2	16.1	11.2	5.7	4.3	11.6	6.2	27.3	23.9	16.5	11.6

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	1.1	0.8	1.9	0.3	0.3	0.1	0.5
Total Del/Veh (s)	16.1	8.7	4.0	44.0	16.8	11.6	30.6	24.2	5.8	19.3

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.4	5.2	3.2	20.9	3.6

Total Network Performance

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	75.9

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.5	0.2	1.4	0.0	0.0	0.0	3.5	0.1	3.5	2.6	0.1	0.1
Total Del/Veh (s)	20.8	23.9	9.5	25.2	25.1	17.6	35.7	22.5	8.6	34.6	21.6	11.2

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	21.7

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0
Total Del/Veh (s)	24.0	22.0	22.7	32.3	7.0	5.4	26.7	24.2	29.6	19.8

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.0
Total Del/Veh (s)	9.5	4.8	13.5	9.7	6.1	22.6	3.7	26.8	6.0	8.3

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.3	0.1	0.1
Total Del/Veh (s)	41.3	23.4	17.8	33.6	16.3	13.6	55.6	32.0	6.7	36.2	22.6	14.1

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	23.9

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Del/Veh (s)	23.2	6.4	4.4	3.2	29.3	17.3	7.7

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.0
Total Del/Veh (s)	26.2	7.4	4.9	14.4	8.1	5.5	30.6	33.8	31.5	9.3

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	11.4	1.1	2.2	1.7	26.4	17.4	2.6

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	10.3	1.1	2.5	1.5	25.2	13.1	2.5

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.2	0.2	0.2
Total Del/Veh (s)	27.8	7.7	4.6	10.4	6.9	5.3	32.5	34.1	7.5	28.7	30.1	17.9

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	9.0

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.6	1.1	6.1	2.1	18.7	6.5	2.1

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.4	0.1
Total Del/Veh (s)	16.1	3.7	4.9	8.2	5.2	3.7	29.4	22.2	8.2	24.2	28.3	11.1

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	5.4

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	15.7	1.3	3.6	2.3	33.5	17.9	6.9	21.6	19.2	3.3

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	27.7	6.2	10.5	8.1	25.0	18.9	9.4

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.5	0.8	0.6
Total Del/Veh (s)	8.5	10.2	35.9	10.8	13.5

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.1
Total Del/Veh (s)	29.5	3.1	41.8	43.6	19.8	33.8	29.7	32.1	26.8

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.2	1.8	0.4	0.4
Total Del/Veh (s)	31.9	33.2	12.9	9.5	58.2	31.0	16.9	61.4	23.9	23.5	56.9	51.8

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.5	0.3
Total Del/Veh (s)	34.9	27.8

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.1	2.7	2.4

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.0
Total Del/Veh (s)	14.0	7.7	7.0	2.7	5.2	4.4	19.0	22.1	9.2	7.2

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.7	0.4	0.4	0.4	0.3
Total Del/Veh (s)	11.8	9.7	2.6	23.4	14.0	25.5	19.3	15.7

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.9	2.6	1.8	9.9	2.0

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	53.6

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.3	0.2	1.4	0.0	0.0	0.0	3.1	0.2	3.1	2.5	0.1	0.2
Total Del/Veh (s)	24.0	25.1	8.6	27.9	30.0	24.6	46.6	24.7	10.6	51.7	24.8	20.6

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	25.9

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0
Total Del/Veh (s)	21.4	19.1	19.1	40.2	10.7	8.8	29.0	25.8	28.7	20.3

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.0
Total Del/Veh (s)	12.8	8.8	7.0	14.7	9.0	7.2	23.7	6.7	24.9	12.7	10.1

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.4	0.2	0.1	0.2
Total Del/Veh (s)	49.3	36.8	35.3	45.2	27.3	21.1	23.4	17.2	20.7	32.9	17.2	7.7

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	25.3

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	14.0	13.2	2.3
Total Del/Veh (s)	39.1	44.0	8.2	6.0	120.3	109.6	45.5

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.3	0.0	0.0	0.0	0.1	0.2	0.1	0.0
Total Del/Veh (s)	19.3	14.8	12.7	68.1	9.6	9.4	29.8	30.0	36.1	14.5

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	7.2	3.4	1.3	1.1	47.0	12.3	3.0

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	8.8	5.7	2.4	2.0	65.8	18.1	5.0

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2
Total Del/Veh (s)	17.0	10.2	8.8	42.9	10.1	8.0	36.2	28.5	22.5	31.6	35.4	18.8

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	12.6

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	5.8	4.0	23.7	2.2	73.6	44.0	5.8

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	17.5	10.4	8.3	34.4	6.6	5.0	33.2	29.5	23.0	34.7	42.2	11.5

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	10.1

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.0
Total Del/Veh (s)	9.7	5.5	2.9	2.1	77.4	63.6	66.2	74.7	25.6	8.0

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	20.3	10.2	11.4	8.6	28.2	15.7	11.1

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.7	0.6	0.3
Total Del/Veh (s)	10.1	7.1	36.8	29.6	12.8

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.3	0.1	0.1	0.1
Total Del/Veh (s)	47.0	8.3	42.2	44.3	21.4	38.5	32.8	34.9	29.6

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	0.0	0.0	2.0	0.2	1.9	0.3	0.3
Total Del/Veh (s)	28.9	30.2	10.5	8.5	131.6	45.1	18.3	46.9	28.1	35.3	79.0	65.3

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	42.0	32.4

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	10.6	16.3	13.6

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.2	0.0
Total Del/Veh (s)	20.8	15.1	13.8	25.7	6.8	5.2	19.5	6.4	29.0	31.0	19.7	12.5

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	1.0	0.8	0.6	0.3	0.3	0.1	0.4
Total Del/Veh (s)	15.5	8.8	3.8	39.4	16.3	32.0	30.7	24.7	13.7	18.3

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.3	6.2	7.4	21.9	4.1

Total Network Performance

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	78.4

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.6	0.6	1.5	0.0	0.0	0.0	3.5	0.1	3.5	2.7	0.1	0.1
Total Del/Veh (s)	32.2	52.4	32.8	33.4	21.3	14.9	26.6	16.9	33.0	64.2	16.7	9.2

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	31.0

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.0
Total Del/Veh (s)	40.2	37.9	36.1	45.6	8.0	6.8	35.4	32.4	40.8	29.6

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	10.2	6.5	11.5	8.7	5.2	9.8	4.8	30.2	9.4	8.6

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.3	0.1	0.2
Total Del/Veh (s)	41.4	23.7	14.4	32.2	15.5	13.0	56.1	31.8	7.0	32.2	21.8	12.1

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	23.3

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Del/Veh (s)	21.4	5.4	5.4	4.7	29.5	17.8	8.1

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.0
Total Del/Veh (s)	24.9	6.2	3.9	11.5	9.4	6.7	30.1	31.1	32.4	9.8

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	10.4	0.8	2.2	1.4	29.3	18.5	2.6

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	11.0	0.6	2.4	2.0	17.4	12.9	2.3

9: Perkins Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.1	0.2
Total Del/Veh (s)	21.1	5.4	3.3	8.3	6.5	5.2	37.7	32.0	7.6	30.0	30.5	18.1

9: Perkins Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	8.2

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.0	0.7	4.4	1.9	30.3	6.5	1.7

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	16.2	2.8	1.0	8.2	4.8	3.7	31.5	15.4	7.4	27.3	48.4	12.0

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	4.8

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	14.6	0.8	4.1	2.7	27.9	22.0	5.3	20.5	17.1	3.3

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	22.1	7.7	19.3	15.6	20.8	15.6	15.2

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.6	0.8	0.6
Total Del/Veh (s)	7.9	12.4	37.6	11.1	14.4

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.1	0.1
Total Del/Veh (s)	31.4	2.9	43.3	42.7	22.2	37.5	30.9	31.2	28.0

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.2	1.7	0.4	0.3
Total Del/Veh (s)	47.7	45.8	23.2	18.6	40.3	31.6	16.3	39.1	19.3	18.8	52.5	58.5

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.6	0.3
Total Del/Veh (s)	29.1	27.3

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.7	3.6	2.8

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.0
Total Del/Veh (s)	13.9	7.3	3.1	8.0	6.2	4.1	25.4	23.5	11.4	7.6

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.7	0.4	0.4	0.4	0.3
Total Del/Veh (s)	14.8	13.1	3.1	27.2	16.8	24.4	19.6	17.4

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.2	3.0	2.5	9.5	2.4

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	58.6

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.7	0.7	1.5	0.0	0.0	0.0	3.1	0.2	3.1	2.4	0.1	0.2
Total Del/Veh (s)	29.4	48.8	31.9	23.6	25.4	21.6	42.7	20.9	35.9	158.4	24.1	13.6

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.8
Total Del/Veh (s)	36.0

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.0
Total Del/Veh (s)	27.4	27.8	26.0	47.6	11.4	9.9	37.9	36.6	38.3	27.3

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.0	0.0	0.1	0.1	0.2	0.2	0.0
Total Del/Veh (s)	13.6	8.2	4.8		8.3	6.7	21.1	6.4	33.5	16.3	10.4

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.3	0.2	0.1	0.2
Total Del/Veh (s)	46.6	31.8	28.6	42.1	23.3	21.6	24.9	18.9	20.0	41.8	19.3	8.4

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	24.1

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	0.3	0.1
Total Del/Veh (s)	18.3	9.2	8.1	6.9	34.2	28.3	13.3

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.0
Total Del/Veh (s)	17.6	9.1	7.2	24.1	11.1	8.8	28.7	37.3	28.8	10.6

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	6.0	1.5	1.4	0.9	19.7	9.7	1.6

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	8.6	1.5	2.7	2.0	25.0	8.0	2.2

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Total Del/Veh (s)	16.8	5.3	3.8	24.5	12.3	9.6	30.9	22.4	9.5	32.4	31.2	20.4

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	10.0

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	2.2	2.0	9.4	2.5	36.7	12.5	2.8

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1
Total Del/Veh (s)	13.5	5.2	4.5	16.6	5.8	4.3	31.3	22.7	10.6	30.6	26.6	9.4

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	6.2

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	9.1	2.0	2.7	1.9	23.7	22.1	18.0	24.0	9.9	3.1

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	13.1	6.9	11.3	8.5	28.5	14.5	9.0

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.7	0.6	0.3
Total Del/Veh (s)	15.7	7.5	38.6	29.9	16.3

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.1	0.1
Total Del/Veh (s)	43.5	8.8	54.0	53.5	23.4	44.0	36.9	41.0	32.5

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.2	1.8	0.3	0.3
Total Del/Veh (s)	44.1	36.6	18.0	14.4	106.7	30.3	13.6	45.6	26.9	32.8	80.5	87.9

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	41.7	30.8

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	7.8	16.9	12.7

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.2	0.0
Total Del/Veh (s)	26.5	11.1	7.2	15.5	9.0	7.2	27.7	10.3	29.4	33.5	21.8	12.2

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	1.0	0.8	1.4	0.3	0.3	0.1	0.4
Total Del/Veh (s)	15.5	9.7	3.7	47.9	18.6	20.0	36.7	30.7	9.4	21.5

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.7	9.3	4.3	55.4	6.3

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	70.7

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.7	0.5	1.6	0.0	0.0	0.0	3.3	0.1	3.4	2.5	0.1	0.2
Total Del/Veh (s)	35.1	58.6	39.1	33.5	18.3	12.0	25.0	16.6	35.4	124.2	18.8	9.9

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	34.8

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.3	0.4	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.1
Total Del/Veh (s)	40.2	37.8	36.2	47.8	7.1	5.1	36.8	32.2	36.1	29.6

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	9.8	6.0	12.0	9.2	8.0	30.3	3.8	29.4	11.0	8.8

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.3	0.1	0.2
Total Del/Veh (s)	39.1	23.7	15.9	33.3	17.3	13.7	49.6	30.8	6.3	37.1	22.2	13.2

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	23.6

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Del/Veh (s)	21.0	6.4	4.0	3.3	29.2	20.7	7.7

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.1	0.2	0.0
Total Del/Veh (s)	13.5	6.4	4.8	13.2	5.2	3.6	29.0	31.3	30.5	7.3

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	9.7	1.1	1.0	1.1	24.6	9.5	1.5

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	6.7	1.0	2.1	1.7	23.6	8.8	2.1

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.2
Total Del/Veh (s)	17.6	6.5	5.6	10.7	7.0	5.2	25.9	33.1	7.7	26.0	26.4	12.4

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	8.1

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.4	0.8	4.5	1.1	11.1	5.6	1.3

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	13.0	4.9	7.4	6.6	3.6	2.6	22.0	24.7	7.5	20.6	16.4	7.6

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	4.6

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.0
Total Del/Veh (s)	8.4	1.5	1.6	1.4	14.1	17.9	8.1	20.4	8.3	1.9

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	9.6	5.1	6.5	5.8	27.1	8.7	6.4

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.5	0.8	0.6
Total Del/Veh (s)	7.2	7.9	34.6	11.0	11.9

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.1
Total Del/Veh (s)	30.2	2.8	40.8	43.2	17.4	34.0	29.6	29.2	26.2

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.9	0.2	1.7	0.5	0.5
Total Del/Veh (s)	41.6	39.7	26.4	22.5	33.8	30.0	15.7	53.6	22.4	21.4	61.9	57.7

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.5	0.3
Total Del/Veh (s)	33.1	29.3

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	3.5	2.6

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.0	0.0	0.1	0.1	0.2	0.0
Total Del/Veh (s)	13.4	7.3	3.8		5.8	4.3	25.8	21.9	10.0	7.4

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.7	0.4	0.4	0.4	0.3
Total Del/Veh (s)	20.9	12.0	3.3	25.5	14.3	25.4	20.9	16.7

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.2	3.0	2.3	11.7	2.4

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	55.7

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.7	0.7	1.6	0.0	0.0	0.0	3.0	0.2	3.0	2.5	0.1	0.2
Total Del/Veh (s)	32.9	52.0	35.8	25.4	25.4	20.8	48.4	22.1	35.6	134.2	23.9	14.1

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.8
Total Del/Veh (s)	36.7

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0
Total Del/Veh (s)	28.2	27.3	26.7	46.6	10.1	8.6	39.5	36.6	39.7	27.0

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.0	0.0	0.1	0.1	0.2	0.2	0.0
Total Del/Veh (s)	13.2	8.8	4.9		8.5	7.6	37.3	6.7	31.3	15.8	10.6

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.4	0.2	0.1	0.2
Total Del/Veh (s)	51.2	53.3	47.3	45.3	27.8	23.8	24.5	17.1	27.5	33.9	16.7	8.0

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	30.1

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	11.3	14.6	1.9
Total Del/Veh (s)	44.1	56.3	10.0	7.6	141.8	134.5	55.4

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.0
Total Del/Veh (s)	17.3	15.6	12.2	66.3	7.2	6.2	34.1	31.7	32.0	14.3

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	7.0	3.0	0.6	0.7	42.3	8.3	2.5

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	6.8	5.1	1.5	1.6	55.8	10.5	4.2

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.2
Total Del/Veh (s)	13.7	9.3	7.3	38.8	6.6	5.3	36.9	29.0	25.4	37.9	39.4	23.3

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	11.3

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	5.3	3.8	24.4	1.3	40.3	30.3	4.8

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	13.4	10.1	6.6	36.7	4.6	4.4	36.0	39.1	20.2	33.6	28.2	9.6

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	9.2

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	7.3	5.1	1.4	1.4	60.2	63.0	71.3	84.1	27.0	7.2

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	16.3	9.9	7.5	6.5	30.6	14.0	9.5

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.7	0.6	0.3
Total Del/Veh (s)	11.9	6.2	37.1	28.3	13.5

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.3	0.1	0.2	0.1
Total Del/Veh (s)	41.3	7.7	49.8	51.3	16.5	40.5	34.3	38.8	30.0

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.2	1.9	0.3	0.3
Total Del/Veh (s)	41.1	36.9	16.8	13.8	109.9	28.3	13.2	44.8	27.4	33.4	68.3	64.6

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	43.0	30.1

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.5	18.3	13.7

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.0
Total Del/Veh (s)	26.1	11.8	10.4	16.0	9.5	7.3	27.9	8.2	30.0	26.0	23.1	12.8

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	1.0	0.8	0.7	0.3	0.3	0.1	0.4
Total Del/Veh (s)	20.8	9.4	3.6	54.4	19.7	20.7	39.0	32.7	9.3	22.9

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.5	4.7	1.7	19.8	3.4

Total Network Performance

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	83.9

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.6	0.6	1.6	0.0	0.0	0.0	3.5	0.1	3.5	2.6	0.1	0.1
Total Del/Veh (s)	36.8	57.7	38.0	32.3	19.1	14.9	28.7	16.6	49.1	160.6	21.4	10.4

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	36.8

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.2	0.2	0.0	0.0	0.0	0.2	0.1	0.1	0.1
Total Del/Veh (s)	39.3	38.8	36.7	46.0	7.6	5.4	31.2	31.3	36.8	29.4

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.0
Total Del/Veh (s)	10.1	5.6	9.9	8.7	6.4	35.1	4.6	31.4	8.2	8.3

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.2	0.1	0.2
Total Del/Veh (s)	42.4	23.3	16.9	33.5	16.0	15.8	53.4	31.5	6.5	37.7	22.4	12.7

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	23.6

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Del/Veh (s)	23.7	6.0	5.0	4.0	29.3	18.8	8.2

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0
Total Del/Veh (s)	22.4	7.0	4.9	12.5	8.2	5.6	27.6	30.7	33.5	9.3

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	11.0	1.1	2.2	2.1	26.2	18.9	2.6

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	11.0	0.9	2.6	1.6	26.8	14.0	2.6

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.2
Total Del/Veh (s)	24.5	6.8	4.3	10.8	6.6	4.8	28.6	27.2	7.1	31.1	29.1	18.0

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	8.6

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.5	1.0	5.0	2.1	27.3	6.1	2.1

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	16.1	3.8	1.6	9.7	5.0	4.6	28.6	36.2	7.3	23.6	21.5	13.9

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	5.4

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	13.5	1.2	3.4	2.2	35.1	18.5	9.8	28.6	15.5	3.2

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	15.7	6.0	10.2	8.0	30.6	16.2	9.1

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.6	0.8	0.6
Total Del/Veh (s)	7.6	10.7	36.8	11.2	13.7

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.1	0.1
Total Del/Veh (s)	30.1	2.9	40.4	41.5	21.9	35.3	29.5	30.7	27.1

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.2	1.8	0.4	0.5
Total Del/Veh (s)	44.0	41.4	23.8	20.6	33.5	30.4	16.2	50.5	21.8	21.1	63.0	56.8

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.6	0.3
Total Del/Veh (s)	34.0	29.0

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	1.5	3.7	2.8

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.0	0.0	0.1	0.1	0.2	0.0
Total Del/Veh (s)	17.1	7.5	4.7		5.8	4.1	17.9	23.4	11.5	7.6

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.7	0.4	0.4	0.4	0.3
Total Del/Veh (s)	20.8	12.9	3.0	27.4	16.3	25.3	20.7	17.6

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.1	3.8	2.9	12.9	2.9

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	59.0

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.7	0.7	1.6	0.0	0.0	0.0	3.2	0.2	3.1	2.5	0.1	0.2
Total Del/Veh (s)	31.8	51.2	34.5	21.4	18.8	14.7	45.6	22.0	43.8	289.0	27.5	17.5

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.8
Total Del/Veh (s)	42.8

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0
Total Del/Veh (s)	31.2	30.1	26.7	49.7	7.3	4.9	40.9	37.5	38.0	27.9

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.0	0.0	0.1	0.1	0.2	0.2	0.0
Total Del/Veh (s)	8.7	5.0	3.7		9.2	7.9	39.5	4.6	32.6	16.5	8.8

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.4	0.3	0.1	0.1
Total Del/Veh (s)	45.9	35.9	32.4	46.0	28.5	25.1	23.5	17.8	19.5	31.1	17.0	7.8

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	25.1

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	4.8	4.6	0.8
Total Del/Veh (s)	34.0	36.2	7.4	5.7	98.6	86.0	37.2

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0
Total Del/Veh (s)	19.5	15.0	11.8	66.0	10.6	7.9	30.3	22.0	31.0	14.8

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	6.5	3.1	1.2	1.1	43.0	10.3	2.8

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	8.1	4.8	2.2	1.6	70.1	16.3	4.4

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2
Total Del/Veh (s)	17.8	9.1	7.4	44.3	9.0	7.2	34.8	31.8	29.6	32.2	32.8	16.8

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	11.6

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	5.3	4.6	26.0	2.0	50.9	31.6	5.1

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	15.5	10.2	7.8	34.7	5.8	4.6	33.5	41.4	23.3	30.1	33.3	9.2

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	9.7

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	8.2	5.8	2.7	1.8	72.7	149.0	87.0	102.8	40.6	9.5

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	20.9	10.5	10.9	8.1	28.9	15.0	11.1

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	3.7	0.6	0.3
Total Del/Veh (s)	10.6	7.4	37.0	26.6	12.9

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.1	0.1
Total Del/Veh (s)	41.5	8.0	52.8	52.7	24.4	39.5	34.4	37.9	31.1

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.2	1.9	0.3	0.3
Total Del/Veh (s)	44.5	36.9	16.4	13.8	119.6	30.4	14.1	43.9	27.2	33.4	76.3	85.6

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	43.1	30.9

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	8.0	17.1	12.9

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.2	0.0
Total Del/Veh (s)	30.9	10.5	9.2	16.9	9.6	7.4	24.5	7.3	28.9	32.2	22.6	12.3

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	1.0	0.8	0.4	0.3	0.3	0.1	0.4
Total Del/Veh (s)	18.0	9.5	3.7	52.1	20.5	23.4	39.6	32.3	8.9	23.2

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.5	7.8	6.3	31.6	5.2

Total Network Performance

Denied Del/Veh (s)	0.7
Total Del/Veh (s)	82.2

Attachment F:
Transit Delay Summaries

Line 12 Eastbound - AM								
#	Intersection	Transit Line Movement	Delay (s)					
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1	Alt 4 (3-Lane Diet): VERSION 1	Alt 2 WB Diet: VERSION 2	Alt 4 (3-Lane Diet): VERSION 2	Volume
1	Broadway Ave & Grand Ave	NBR	8.2	33.0	49.1	8.6	8.6	
2	Webster St & Grand Ave	EBT	17.3	37.9	38.8	19.1	22.0	
	Bus Stop		1.0					127
3	Valdez St & Grand Ave	EBT	3.8	6.5	5.6	4.9	4.8	
	Bus Stop		1.0					113
4	Harrison St & Grand Ave	EBT	24.2	23.7	23.3	22.7	23.4	
5	Bay Place & Grand Ave	EBT	6.6	5.4	6.0	6.0	6.4	
	Bus Stop		2.0					227
6	Park View Terrace/Bellevue Ave & Grand Ave	EBT	5.4	6.2	7.0	6.7	7.4	
7	Lenox Ave & Grand Ave	EBT	0.8	0.8	1.1	0.9	1.1	
8	Lee St & Grand Ave	EBT	0.6	0.6	0.9	0.5	1.1	
	Bus Stop		2.0					201
9	Perkins St & Grand Ave	EBT	4.6	5.4	6.8	5.4	7.7	
10	Ellita Ave & Grand Ave	EBT	0.9	1.0	1.5	1.1	1.6	
	Bus Stop		2.0					216
11	Staten Ave & Grand Ave	EBT	3.7	2.8	3.8	2.9	3.7	
12	Bellevue Ave & Grand Ave	EBT	1.0	0.8	1.2	0.8	1.3	
13	Euclid Ave & Grand Ave	EBT	4.9	7.7	6.0	7.7	6.2	
	Bus Stop		2.0					245
14	El Embarcadero & Grand Ave	EBT	15.5	7.9	7.6	8.3	8.5	
	Bus Stop		2.0					260
15	MacArthur Blvd & Grand Ave	EBT	25.8	31.4	30.1	29.6	29.5	
	Bus Stop		1.0					180
16	Santa Clara Ave/Lake Park Ave & Grand Ave	EBT	22.1	23.2	23.8	14.7	12.9	
17	Signalized Mid-Block Ped Crossing & Grand Ave	EBT	1.6	1.7	1.5	2.3	2.1	
18	Elwood Ave & Grand Ave	EBT	6.5	7.3	7.5	7.8	7.7	
	Bus Stop		1.0					127
19	Mandana Blvd & Grand Ave	EBT	9.9	13.1	12.9	9.7	9.7	
Total Delay (s)			**177.4**	**216.4**	**234.5**	**159.7**	**165.7**	

Line 12 Westbound - AM								
#	Intersection	Transit Line Movement	Delay (s)					
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1	Alt 4 (3-Lane Diet): VERSION 1	Alt 2 WB Diet: VERSION 2	Alt 4 (3-Lane Diet): VERSION 2	Volume
19	Mandana Blvd & Grand Ave	WBT	12.9	16.8	16.3	13.6	14.0	
18	Elwood Ave & Grand Ave	WBT	6.1	6.2	5.8	4.9	5.2	
	Bus Stop		2.0					299
17	Signalized Mid-Block Ped Crossing & Grand Ave	WBT	2.8	3.6	3.7	2.9	2.7	
	Bus Stop		2.0					299
16	Santa Clara Ave/Lake Park Ave & Grand Ave	WBT	25.8	31.6	30.4	31.5	31.0	
	Bus Stop		2.0					296
15	MacArthur Blvd & Grand Ave	WBT	14.5	22.2	21.9	21.8	19.8	
14	El Embarcadero & Grand Ave	WBT	10.0	12.4	10.7	13.3	10.2	
	Bus Stop		4.0					441
13	Euclid Ave & Grand Ave	WBT	7.4	19.3	10.2	20.0	10.5	
12	Bellevue Ave & Grand Ave	WBT	1.8	4.1	3.4	4.1	3.6	
	Bus Stop		3.0					393
11	Staten Ave & Grand Ave	WBT	4.4	4.8	5.0	4.6	5.2	
10	Ellita Ave & Grand Ave	WBT	1.2	1.9	2.1	2.1	2.1	
	Bus Stop		3.0					379
9	Perkins St & Grand Ave	WBT	6.6	6.5	6.6	7.6	6.9	
8	Lee St & Grand Ave	WBT	1.9	2.4	2.6	2.6	2.5	
7	Lenox Ave & Grand Ave	WBT	0.9	2.2	2.2	2.7	2.2	
	Bus Stop		3.0					399
6	Park View Terrace/Bellevue Ave & Grand Ave	WBT	6.1	9.4	8.2	10.1	8.1	
5	Bay Place & Grand Ave	WBT	4.8	5.4	5.0	5.7	4.4	
	Bus Stop		4.0					416
4	Harrison St & Grand Ave	WBT	16.2	15.5	16.0	16.1	16.3	
3	Valdez St & Grand Ave	WBT	9.6	8.7	8.7	11.0	9.7	
	Bus Stop		2.0					204
2	Webster St & Grand Ave	WBT	5.8	8.0	7.6	7.4	7.0	
1	Broadway Ave & Grand Ave	WBL	26.0	33.4	32.3	25.8	25.2	
Total Delay (s)			**189.8**	**214.4**	**198.7**	**207.8**	**186.6**	

Line 12 Eastbound - PM								
#	Intersection	Transit Line Movement	Delay (s)					
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1	Alt 4 (3-Lane Diet): VERSION 1	Alt 2 WB Diet: VERSION 2	Alt 4 (3-Lane Diet): VERSION 2	Volume
1	Broadway Ave & Grand Ave	NBR	10.0	35.9	43.8	9.4	10.6	
2	Webster St & Grand Ave	EBT	18.3	27.8	30.1	18.5	19.1	
	Bus Stop		3.0					303
3	Valdez St & Grand Ave	EBT	4.4	8.2	5.0	8.8	8.8	
	Bus Stop		2.0					280
4	Harrison St & Grand Ave	EBT	33.0	31.8	35.9	34.1	36.8	
5	Bay Place & Grand Ave	EBT	9.8	9.2	36.2	10.0	44.0	
	Bus Stop		5.0					586
6	Park View Terrace/Bellevue Ave & Grand Ave	EBT	8.0	9.1	15.0	8.3	14.8	
7	Lenox Ave & Grand Ave	EBT	1.5	1.5	3.1	1.4	3.4	
8	Lee St & Grand Ave	EBT	1.9	1.5	4.8	1.3	5.7	
	Bus Stop		5.0					513
9	Perkins St & Grand Ave	EBT	5.6	5.3	9.1	5.5	10.2	
10	Ellita Ave & Grand Ave	EBT	2.3	2.2	5.3	2.1	5.8	
	Bus Stop		5.0					530
11	Staten Ave & Grand Ave	EBT	4.1	5.2	10.2	6.0	10.4	
12	Bellevue Ave & Grand Ave	EBT	3.3	2.0	5.8	2.0	5.5	
13	Euclid Ave & Grand Ave	EBT	14.5	6.9	10.5	6.8	10.2	
	Bus Stop		5.0					573
14	El Embarcadero & Grand Ave	EBT	56.9	15.7	10.6	20.8	10.1	
	Bus Stop		4.0					444
15	MacArthur Blvd & Grand Ave	EBT	20.7	43.5	41.5	54.6	47.0	
	Bus Stop		2.0					285
16	Santa Clara Ave/Lake Park Ave & Grand Ave	EBT	23.8	18.0	16.4	12.8	10.5	
17	Signalized Mid-Block Ped Crossing & Grand Ave	EBT	6.8	7.8	8.0	11.4	10.6	
18	Elwood Ave & Grand Ave	EBT	12.3	11.1	10.5	16.9	15.1	
	Bus Stop		2.0					249
19	Mandana Blvd & Grand Ave	EBT	8.5	9.7	9.5	9.4	8.8	
Total Delay (s)			**278.7**	**252.4**	**311.3**	**240.1**	**287.4**	

Line 12 Westbound - PM								
#	Intersection	Transit Line Movement	Delay (s)					
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1	Alt 4 (3-Lane Diet): VERSION 1	Alt 2 WB Diet: VERSION 2	Alt 4 (3-Lane Diet): VERSION 2	Volume
19	Mandana Blvd & Grand Ave	WBT	17.0	18.6	20.5	16.6	16.3	
18	Elwood Ave & Grand Ave	WBT	6.4	9.0	9.6	6.0	6.8	
	Bus Stop		3.0					351
17	Signalized Mid-Block Ped Crossing & Grand Ave	WBT	8.2	16.9	17.1	9.8	16.3	
	Bus Stop		3.0					351
16	Santa Clara Ave/Lake Park Ave & Grand Ave	WBT	31.2	30.3	30.4	41.3	45.1	
	Bus Stop		2.0					272
15	MacArthur Blvd & Grand Ave	WBT	19.1	23.4	24.4	19.9	21.4	
14	El Embarcadero & Grand Ave	WBT	6.4	7.5	7.4	7.7	7.1	
	Bus Stop		3.0					341
13	Euclid Ave & Grand Ave	WBT	6.5	11.3	10.9	10.6	11.4	
12	Bellevue Ave & Grand Ave	WBT	1.4	2.7	2.7	2.5	2.9	
	Bus Stop		2.0					279
11	Staten Ave & Grand Ave	WBT	4.2	5.8	5.8	5.8	6.6	
10	Ellita Ave & Grand Ave	WBT	1.4	2.5	2.0	2.3	2.2	
	Bus Stop		2.0					270
9	Perkins St & Grand Ave	WBT	9.7	12.3	9.0	12.2	10.1	
8	Lee St & Grand Ave	WBT	1.8	2.7	2.2	2.6	2.4	
7	Lenox Ave & Grand Ave	WBT	0.6	1.4	1.2	1.1	1.3	
	Bus Stop		2.0					266
6	Park View Terrace/Bellevue Ave & Grand Ave	WBT	7.9	11.1	10.6	9.1	9.6	
5	Bay Place & Grand Ave	WBT	8.8	8.1	7.4	7.8	8.2	
	Bus Stop		2.0					275
4	Harrison St & Grand Ave	WBT	28.5	23.3	28.5	29.8	27.3	
3	Valdez St & Grand Ave	WBT	8.7	8.3	9.2	9.5	9.0	
	Bus Stop		1.0					181
2	Webster St & Grand Ave	WBT	7.4	11.4	7.3	9.6	10.7	
1	Broadway Ave & Grand Ave	WBL	29.2	23.6	21.4	28.9	27.9	
Total Delay (s)			**224.4**	**230.2**	**227.6**	**233.1**	**242.6**	

Line NL Eastbound - AM								
#	Intersection	Transit Line Movement	Delay (s)					
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1	Alt 4 (3-Lane Diet): VERSION 1	Alt 2 WB Diet: VERSION 2	Alt 4 (3-Lane Diet): VERSION 2	Volume
1	Broadway Ave & Grand Ave	NBR	8.2	33.0	49.1	8.6	8.6	
2	Webster St & Grand Ave	EBT	17.3	37.9	38.8	19.1	22.0	
	Bus Stop							127
3	Valdez St & Grand Ave	EBT	3.8	6.5	5.6	4.9	4.8	
	Bus Stop		1.0					113
4	Harrison St & Grand Ave	EBT	24.2	23.7	23.3	22.7	23.4	
5	Bay Place & Grand Ave	EBT	6.6	5.4	6.0	6.0	6.4	
	Bus Stop							227
6	Park View Terrace/Bellevue Ave & Grand Ave	EBT	5.4	6.2	7.0	6.7	7.4	
7	Lenox Ave & Grand Ave	EBT	0.8	0.8	1.1	0.9	1.1	
8	Lee St & Grand Ave	EBT	0.6	0.6	0.9	0.5	1.1	
	Bus Stop		2.0					201
9	Perkins St & Grand Ave	EBT	4.6	5.4	6.8	5.4	7.7	
10	Ellita Ave & Grand Ave	EBT	0.9	1.0	1.5	1.1	1.6	
	Bus Stop							216
11	Staten Ave & Grand Ave	EBT	3.7	2.8	3.8	2.9	3.7	
12	Bellevue Ave & Grand Ave	EBT	1.0	0.8	1.2	0.8	1.3	
13	Euclid Ave & Grand Ave	EBT	4.9	7.7	6.0	7.7	6.2	
	Bus Stop							245
14	El Embarcadero & Grand Ave	EBT	15.5	7.9	7.6	8.3	8.5	
	Bus Stop							260
15	MacArthur Blvd & Grand Ave	EBR	2.3	2.9	2.9	2.9	3.1	
	Bus Stop							
16	Santa Clara Ave/Lake Park Ave & Grand Ave							
17	Signalized Mid-Block Ped Crossing & Grand Ave							
18	Elwood Ave & Grand Ave							
	Bus Stop							
19	Mandana Blvd & Grand Ave							
Total Delay (s)			**102.8**	**142.6**	**161.6**	**98.5**	**106.9**	

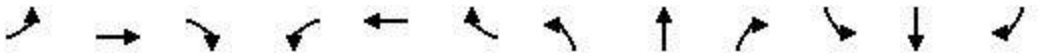
Line NL Westbound - AM								
#	Intersection	Transit Line Movement	Delay (s)					
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1	Alt 4 (3-Lane Diet): VERSION 1	Alt 2 WB Diet: VERSION 2	Alt 4 (3-Lane Diet): VERSION 2	Volume
19	Mandana Blvd & Grand Ave							
18	Elwood Ave & Grand Ave							
	Bus Stop							
17	Signalized Mid-Block Ped Crossing & Grand Ave							
	Bus Stop							
16	Santa Clara Ave/Lake Park Ave & Grand Ave	NBL	209.8	39.1	50.5	74.7	61.4	
	Bus Stop							296
15	MacArthur Blvd & Grand Ave	WBT	14.5	22.2	21.9	21.8	19.8	
14	El Embarcadero & Grand Ave	WBT	10.0	12.4	10.7	13.3	10.2	
	Bus Stop							441
13	Euclid Ave & Grand Ave	WBT	7.4	19.3	10.2	20.0	10.5	
12	Bellevue Ave & Grand Ave	WBT	1.8	4.1	3.4	4.1	3.6	
	Bus Stop							393
11	Staten Ave & Grand Ave	WBT	4.4	4.8	5.0	4.6	5.2	
10	Ellita Ave & Grand Ave	WBT	1.2	1.9	2.1	2.1	2.1	
	Bus Stop		3.0					379
9	Perkins St & Grand Ave	WBT	6.6	6.5	6.6	7.6	6.9	
8	Lee St & Grand Ave	WBT	1.9	2.4	2.6	2.6	2.5	
7	Lenox Ave & Grand Ave	WBT	0.9	2.2	2.2	2.7	2.2	
	Bus Stop							399
6	Park View Terrace/Bellevue Ave & Grand Ave	WBT	6.1	9.4	8.2	10.1	8.1	
5	Bay Place & Grand Ave	WBT	4.8	5.4	5.0	5.7	4.4	
	Bus Stop		4.0					416
4	Harrison St & Grand Ave	WBT	16.2	15.5	16.0	16.1	16.3	
3	Valdez St & Grand Ave	WBT	9.6	8.7	8.7	11.0	9.7	
	Bus Stop							204
2	Webster St & Grand Ave	WBT	5.8	8.0	7.6	7.4	7.0	
1	Broadway Ave & Grand Ave	WBL	26.0	33.4	32.3	25.8	25.2	
Total Delay (s)			**334.0**	**195.3**	**193.0**	**229.6**	**195.1**	

Line NL Eastbound - PM								
#	Intersection	Transit Line Movement	Delay (s)					
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1	Alt 4 (3-Lane Diet): VERSION 1	Alt 2 WB Diet: VERSION 2	Alt 4 (3-Lane Diet): VERSION 2	Volume
1	Broadway Ave & Grand Ave	NBR	10.0	35.9	43.8	9.4	10.6	
2	Webster St & Grand Ave	EBT	18.3	27.8	30.1	18.5	19.1	
	Bus Stop							303
3	Valdez St & Grand Ave	EBT	4.4	8.2	5.0	8.8	8.8	
	Bus Stop		2.0					280
4	Harrison St & Grand Ave	EBT	33.0	31.8	35.9	34.1	36.8	
5	Bay Place & Grand Ave	EBT	9.8	9.2	36.2	10.0	44.0	
	Bus Stop							586
6	Park View Terrace/Bellevue Ave & Grand Ave	EBT	8.0	9.1	15.0	8.3	14.8	
7	Lenox Ave & Grand Ave	EBT	1.5	1.5	3.1	1.4	3.4	
8	Lee St & Grand Ave	EBT	1.9	1.5	4.8	1.3	5.7	
	Bus Stop		5.0					513
9	Perkins St & Grand Ave	EBT	5.6	5.3	9.1	5.5	10.2	
10	Ellita Ave & Grand Ave	EBT	2.3	2.2	5.3	2.1	5.8	
	Bus Stop							530
11	Staten Ave & Grand Ave	EBT	4.1	5.2	10.2	6.0	10.4	
12	Bellevue Ave & Grand Ave	EBT	3.3	2.0	5.8	2.0	5.5	
13	Euclid Ave & Grand Ave	EBT	14.5	6.9	10.5	6.8	10.2	
	Bus Stop							573
14	El Embarcadero & Grand Ave	EBT	56.9	15.7	10.6	20.8	10.1	
	Bus Stop							444
15	MacArthur Blvd & Grand Ave	EBR	4.1	8.8	8.0	10.5	8.3	
	Bus Stop							
16	Santa Clara Ave/Lake Park Ave & Grand Ave							
17	Signalized Mid-Block Ped Crossing & Grand Ave							
18	Elwood Ave & Grand Ave							
	Bus Stop							
19	Mandana Blvd & Grand Ave							
Total Delay (s)			**184.7**	**171.1**	**233.4**	**145.5**	**203.7**	

Line NL Westbound - PM								
#	Intersection	Transit Line Movement	Delay (s)					
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 1	Alt 4 (3-Lane Diet): VERSION 1	Alt 2 WB Diet: VERSION 2	Alt 4 (3-Lane Diet): VERSION 2	Volume
19	Mandana Blvd & Grand Ave							
18	Elwood Ave & Grand Ave							
	Bus Stop							
17	Signalized Mid-Block Ped Crossing & Grand Ave							
	Bus Stop							
16	Santa Clara Ave/Lake Park Ave & Grand Ave	NBL	49.3	45.6	43.9	44.7	46.9	
	Bus Stop							272
15	MacArthur Blvd & Grand Ave	WBT	19.1	23.4	24.4	19.9	21.4	
14	El Embarcadero & Grand Ave	WBT	6.4	7.5	7.4	7.7	7.1	
	Bus Stop							341
13	Euclid Ave & Grand Ave	WBT	6.5	11.3	10.9	10.6	11.4	
12	Bellevue Ave & Grand Ave	WBT	1.4	2.7	2.7	2.5	2.9	
	Bus Stop							279
11	Staten Ave & Grand Ave	WBT	4.2	5.8	5.8	5.8	6.6	
10	Ellita Ave & Grand Ave	WBT	1.4	2.5	2.0	2.3	2.2	
	Bus Stop		2.0					270
9	Perkins St & Grand Ave	WBT	9.7	12.3	9.0	12.2	10.1	
8	Lee St & Grand Ave	WBT	1.8	2.7	2.2	2.6	2.4	
7	Lenox Ave & Grand Ave	WBT	0.6	1.4	1.2	1.1	1.3	
	Bus Stop							266
6	Park View Terrace/Bellevue Ave & Grand Ave	WBT	7.9	11.1	10.6	9.1	9.6	
5	Bay Place & Grand Ave	WBT	8.8	8.1	7.4	7.8	8.2	
	Bus Stop		2.0					275
4	Harrison St & Grand Ave	WBT	28.5	23.3	28.5	29.8	27.3	
3	Valdez St & Grand Ave	WBT	8.7	8.3	9.2	9.5	9.0	
	Bus Stop							181
2	Webster St & Grand Ave	WBT	7.4	11.4	7.3	9.6	10.7	
1	Broadway Ave & Grand Ave	WBL	29.2	23.6	21.4	28.9	27.9	
Total Delay (s)			**194.9**	**201.0**	**193.9**	**204.1**	**205.0**	

Attachment G:

Two-Way El Embarcadero Scenario Attachments (Alternatives 2B and 2C (WB Diet) VERSION 2)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	71
Future Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	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		0.91	1.00		0.90	0.92		0.85	0.93		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	78	464	73	53	200	44	41	280	102	41	228	79
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	459	916	370	126	468	101	358	1195	451	359	839	273
Arrive On Green	0.26	0.26	0.26	0.20	0.20	0.20	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1767	3526	1424	638	2367	512	975	3526	1332	928	2476	806
Grp Volume(v), veh/h	78	464	73	151	0	146	41	280	102	41	158	149
Grp Sat Flow(s),veh/h/ln	1767	1763	1424	1824	0	1693	975	1763	1332	928	1763	1519
Q Serve(g_s), s	2.5	8.3	3.0	5.4	0.0	5.6	2.4	4.2	4.0	2.4	4.8	5.3
Cycle Q Clear(g_c), s	2.5	8.3	3.0	5.4	0.0	5.6	7.7	4.2	4.0	6.7	4.8	5.3
Prop In Lane	1.00		1.00	0.35		0.30	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	459	916	370	361	0	335	358	1195	451	359	597	515
V/C Ratio(X)	0.17	0.51	0.20	0.42	0.00	0.43	0.11	0.23	0.23	0.11	0.26	0.29
Avail Cap(c_a), veh/h	910	1816	733	544	0	505	358	1195	451	359	597	515
HCM Platoon Ratio	1.00	1.00	1.00	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	23.3	21.3	25.9	0.0	26.0	20.7	17.5	17.5	19.9	17.7	17.9
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.3	0.6	0.5	1.2	0.6	1.1	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	1.0	3.4	1.0	2.3	0.0	2.2	0.6	1.7	1.3	0.6	2.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	23.4	21.4	26.2	0.0	26.3	21.3	18.0	18.6	20.5	18.8	19.3
LnGrp LOS	C	C	C	C		C	C	B	B	C	B	B
Approach Vol, veh/h		615			297			423			348	
Approach Delay, s/veh		22.9			26.2			18.5			19.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.6		30.0		24.2		30.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		25.0		38.0		25.0				
Max Q Clear Time (g_c+I1), s		7.6		9.7		10.3		8.7				
Green Ext Time (p_c), s		1.0		1.5		2.5		1.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			21.6									
HCM 7th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
Future Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
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)	0.91		0.85	1.00		0.90				1.00		0.80
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	66	253	289	116	268	69				29	131	30
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	122	381	340	454	1659	414				143	623	137
Arrive On Green	0.28	0.28	0.28	0.51	1.00	1.00				0.26	0.26	0.26
Sat Flow, veh/h	251	1359	1213	1767	2729	681				545	2371	520
Grp Volume(v), veh/h	319	0	289	116	170	167				97	0	93
Grp Sat Flow(s),veh/h/ln	1610	0	1213	1767	1763	1647				1828	0	1608
Q Serve(g_s), s	9.5	0.0	19.1	3.1	0.0	0.0				3.5	0.0	3.8
Cycle Q Clear(g_c), s	14.6	0.0	19.1	3.1	0.0	0.0				3.5	0.0	3.8
Prop In Lane	0.21		1.00	1.00		0.41				0.30		0.32
Lane Grp Cap(c), veh/h	503	0	340	454	1072	1001				480	0	422
V/C Ratio(X)	0.63	0.00	0.85	0.26	0.16	0.17				0.20	0.00	0.22
Avail Cap(c_a), veh/h	733	0	521	454	1072	1001				538	0	473
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.91	0.00	0.91	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	27.0	0.0	28.9	16.1	0.0	0.0				24.4	0.0	24.5
Incr Delay (d2), s/veh	5.5	0.0	20.8	0.1	0.3	0.4				0.1	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
%ile BackOfQ(50%),veh/ln	6.3	0.0	7.3	1.2	0.1	0.1				1.5	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.5	0.0	49.7	16.2	0.3	0.4				24.5	0.0	24.6
LnGrp LOS	C		D	B	A	A				C		C
Approach Vol, veh/h		608			453						190	
Approach Delay, s/veh		40.7			4.4						24.5	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.8	29.8		27.3		57.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	8.0	* 37		25.0		49.0
Max Q Clear Time (g_c+I1), s	5.1	21.1		5.8		2.0
Green Ext Time (p_c), s	0.0	2.7		0.6		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	25.1
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)	10	244	0	7	383	24	2	0	3	22	0	22
Future Volume (veh/h)	10	244	0	7	383	24	2	0	3	22	0	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)	0.98		1.00	0.96		0.92	0.96		0.94	0.94		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	11	271	0	8	426	27	2	0	3	24	0	24
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	93	2094	0	57	2056	128	180	23	215	221	19	177
Arrive On Green	0.21	0.21	0.00	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	75	3392	0	21	3248	203	485	91	863	632	78	710
Grp Volume(v), veh/h	150	132	0	244	0	217	5	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	1778	1604	0	1840	0	1632	1439	0	0	1420	0	0
Q Serve(g_s), s	0.0	5.7	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	5.7	0.0	4.7	0.0	4.8	0.2	0.0	0.0	1.9	0.0	0.0
Prop In Lane	0.07		0.00	0.03		0.12	0.40		0.60	0.50		0.50
Lane Grp Cap(c), veh/h	1171	1016	0	1209	0	1033	418	0	0	417	0	0
V/C Ratio(X)	0.13	0.13	0.00	0.20	0.00	0.21	0.01	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	1171	1016	0	1209	0	1033	564	0	0	562	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.00	0.98	0.00	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.5	14.6	0.0	6.6	0.0	6.6	24.0	0.0	0.0	24.7	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.1	0.0	1.8	0.0	1.6	0.1	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	14.8	0.0	7.0	0.0	7.1	24.0	0.0	0.0	24.8	0.0	0.0
LnGrp LOS	B	B		A		A	C			C		
Approach Vol, veh/h		282			461			5			48	
Approach Delay, s/veh		14.7			7.0			24.0			24.8	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.2	58.8	26.2	58.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	45.0	30.0	45.0
Max Q Clear Time (g_c+I1), s	3.9	6.8	2.2	7.7
Green Ext Time (p_c), s	0.2	3.2	0.0	1.9

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)	43	163	63	278	295	38	57	405	241	13	511	62
Future Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	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		0.89	1.00		0.91	0.98		0.93	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	48	181	70	309	328	42	63	450	268	14	568	69
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	717	260	417	1202	152	137	848	508	59	1048	125
Arrive On Green	0.04	0.29	0.29	0.12	0.39	0.39	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	3428	2445	888	3428	3111	393	218	2433	1458	27	3007	359
Grp Volume(v), veh/h	48	127	124	309	184	186	210	303	268	348	0	303
Grp Sat Flow(s),veh/h/ln	1714	1763	1570	1714	1763	1742	1047	1604	1458	1813	0	1580
Q Serve(g_s), s	1.0	4.2	4.6	6.6	5.4	5.6	3.9	11.6	11.2	0.0	0.0	11.8
Cycle Q Clear(g_c), s	1.0	4.2	4.6	6.6	5.4	5.6	15.7	11.6	11.2	11.4	0.0	11.8
Prop In Lane	1.00		0.57	1.00		0.23	0.30		1.00	0.04		0.23
Lane Grp Cap(c), veh/h	144	517	460	417	681	673	427	559	508	681	0	551
V/C Ratio(X)	0.33	0.25	0.27	0.74	0.27	0.28	0.49	0.54	0.53	0.51	0.00	0.55
Avail Cap(c_a), veh/h	225	648	577	720	903	892	554	716	651	852	0	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	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	35.5	20.5	20.7	32.3	16.0	16.1	20.2	19.9	19.8	19.9	0.0	20.0
Incr Delay (d2), s/veh	1.4	0.2	0.3	2.6	0.2	0.2	0.9	0.8	0.8	0.6	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.7	1.7	2.9	2.2	2.2	3.2	4.2	3.8	4.8	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	20.7	21.0	34.9	16.2	16.3	21.1	20.7	20.6	20.5	0.0	20.9
LnGrp LOS	D	C	C	C	B	B	C	C	C	C		C
Approach Vol, veh/h		299			679			781			651	
Approach Delay, s/veh		23.4			24.7			20.8			20.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	32.6	8.2	35.4	32.6	15.3	28.3
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	34.0	5.0	39.0	34.0	16.0	* 28
Max Q Clear Time (g_c+I1), s	17.7	3.0	7.6	13.8	8.6	6.6
Green Ext Time (p_c), s	4.1	0.0	2.5	4.1	0.7	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	61	356	548	283	97	63
Future Volume (veh/h)	61	356	548	283	97	63
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			0.92	1.00	0.93
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	68	396	609	314	108	70
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	362	2488	1540	794	180	117
Arrive On Green	0.71	0.71	0.23	0.23	0.18	0.18
Sat Flow, veh/h	600	3618	2274	1124	984	638
Grp Volume(v), veh/h	68	396	492	431	179	0
Grp Sat Flow(s),veh/h/ln	600	1763	1763	1543	1632	0
Q Serve(g_s), s	6.1	3.4	21.2	21.2	9.1	0.0
Cycle Q Clear(g_c), s	27.3	3.4	21.2	21.2	9.1	0.0
Prop In Lane	1.00			0.73	0.60	0.39
Lane Grp Cap(c), veh/h	362	2488	1244	1089	299	0
V/C Ratio(X)	0.19	0.16	0.40	0.40	0.60	0.00
Avail Cap(c_a), veh/h	362	2488	1244	1089	562	0
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.70	0.70	1.00	0.00
Uniform Delay (d), s/veh	14.3	4.4	18.3	18.3	33.7	0.0
Incr Delay (d2), s/veh	1.1	0.1	0.7	0.8	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	1.1	10.1	8.9	3.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.4	4.5	19.0	19.1	35.6	0.0
LnGrp LOS	B	A	B	B	D	
Approach Vol, veh/h		464	923		179	
Approach Delay, s/veh		6.1	19.0		35.6	
Approach LOS		A	B		D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	21.5	68.5	68.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	31.0	49.0	49.0
Max Q Clear Time (g_c+I1), s	11.1	23.2	29.3
Green Ext Time (p_c), s	0.5	7.4	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	17.1
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
Future Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
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)	0.98		0.91	0.97		0.88				1.00		0.91
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	14	470	19	19	870	16				33	1	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	527	2524	102	718	1329	24				91	3	146
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00				0.15	0.15	0.15
Sat Flow, veh/h	609	3438	139	869	1811	33				588	18	944
Grp Volume(v), veh/h	14	240	249	19	0	886				87	0	0
Grp Sat Flow(s),veh/h/ln	609	1763	1814	869	0	1844				1550	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				4.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				4.5	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.02				0.38		0.61
Lane Grp Cap(c), veh/h	527	1294	1331	718	0	1354				240	0	0
V/C Ratio(X)	0.03	0.19	0.19	0.03	0.00	0.65				0.36	0.00	0.00
Avail Cap(c_a), veh/h	527	1294	1331	718	0	1354				413	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				34.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.1	0.0	2.5				0.9	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
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.0	0.9				1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.3	0.3	0.1	0.0	2.5				35.0	0.0	0.0
LnGrp LOS	A	A	A	A		A				C		
Approach Vol, veh/h		503			905						87	
Approach Delay, s/veh		0.3			2.4						35.0	
Approach LOS		A			A						C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	18.9	71.1	71.1
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	56.0	56.0
Max Q Clear Time (g_c+I1), s	6.5	2.0	2.0
Green Ext Time (p_c), s	0.4	9.9	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	3.6
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	438	767	17	6	47
Future Vol, veh/h	15	438	767	17	6	47
Conflicting Peds, #/hr	0	0	0	112	14	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	17	487	852	19	7	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	983	0	-	0	1264	974
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	291	-
Critical Hdwy	4.145	-	-	-	6.645	6.245
Critical Hdwy Stg 1	-	-	-	-	5.445	-
Critical Hdwy Stg 2	-	-	-	-	5.845	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	695	-	-	-	173	303
Stage 1	-	-	-	-	363	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	621	-	-	-	134	271
Mov Cap-2 Maneuver	-	-	-	-	134	-
Stage 1	-	-	-	-	316	-
Stage 2	-	-	-	-	653	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.36	0	24.53
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	621	-	-	-	243
HCM Lane V/C Ratio	0.027	-	-	-	0.243
HCM Control Delay (s/veh)	11	-	-	-	24.5
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

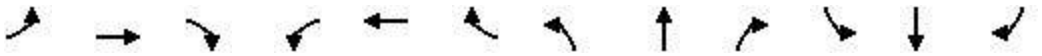
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	428	756	19	11	28
Future Vol, veh/h	16	428	756	19	11	28
Conflicting Peds, #/hr	0	0	0	79	19	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	476	840	21	12	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	940	0	-	0	1222	930
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	292	-
Critical Hdwy	4.145	-	-	-	6.645	6.245
Critical Hdwy Stg 1	-	-	-	-	5.445	-
Critical Hdwy Stg 2	-	-	-	-	5.845	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	722	-	-	-	183	321
Stage 1	-	-	-	-	381	-
Stage 2	-	-	-	-	730	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	668	-	-	-	153	297
Mov Cap-2 Maneuver	-	-	-	-	153	-
Stage 1	-	-	-	-	343	-
Stage 2	-	-	-	-	675	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.38	0	23.79
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	668	-	-	-	235
HCM Lane V/C Ratio	0.027	-	-	-	0.185
HCM Control Delay (s/veh)	10.5	-	-	-	23.8
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	52
Future Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	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)	0.99		0.93	0.98		0.91	0.95		0.96	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	41	438	9	23	794	47	9	3	6	43	8	58
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	552	2604	53	755	1272	75	158	58	78	123	38	119
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	639	3527	72	915	1723	102	654	386	520	444	250	789
Grp Volume(v), veh/h	41	219	228	23	0	841	18	0	0	109	0	0
Grp Sat Flow(s),veh/h/ln	639	1763	1836	915	0	1825	1561	0	0	1482	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.06	0.50		0.33	0.39		0.53
Lane Grp Cap(c), veh/h	552	1302	1356	755	0	1348	295	0	0	279	0	0
V/C Ratio(X)	0.07	0.17	0.17	0.03	0.00	0.62	0.06	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	552	1302	1356	755	0	1348	441	0	0	427	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	0.0	0.0	0.0	0.0	0.0	0.0	32.8	0.0	0.0	34.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.3	0.3	0.1	0.0	2.2	0.1	0.0	0.0	0.9	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	0.0	0.1	0.1	0.0	0.0	0.8	0.3	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.3	0.3	0.3	0.1	0.0	2.2	32.9	0.0	0.0	35.8	0.0	0.0
LnGrp LOS	A	A	A	A		A	C			D		
Approach Vol, veh/h		488			864			18			109	
Approach Delay, s/veh		0.3			2.1			32.9			35.8	
Approach LOS		A			A			C			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.5		71.5		18.5		71.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.8		57.2		22.8		57.2				
Max Q Clear Time (g_c+I1), s		7.8		2.0		2.8		2.0				
Green Ext Time (p_c), s		0.5		8.5		0.0		3.4				
Intersection Summary												
HCM 7th Control Delay, s/veh			4.4									
HCM 7th LOS			A									

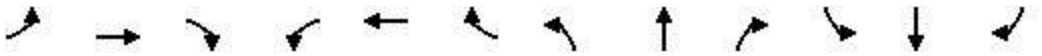
Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	431	7	13	773	5	9
Future Vol, veh/h	431	7	13	773	5	9
Conflicting Peds, #/hr	0	69	0	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	479	8	14	859	6	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	556	0	1446	312
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	894	-
Critical Hdwy	-	-	4.145	-	6.645	6.945
Critical Hdwy Stg 1	-	-	-	-	5.845	-
Critical Hdwy Stg 2	-	-	-	-	5.445	-
Follow-up Hdwy	-	-	2.2285	-	3.5285	3.3285
Pot Cap-1 Maneuver	-	-	1007	-	132	682
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	396	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	941	-	121	637
Mov Cap-2 Maneuver	-	-	-	-	121	-
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	388	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.15	20.19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	253	-	-	941	-
HCM Lane V/C Ratio	0.062	-	-	0.015	-
HCM Control Delay (s/veh)	20.2	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	16
Future Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	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)	0.99		0.93	0.98		0.93	0.94		0.98	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	10	478	1	19	842	31	13	1	17	14	1	18
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	581	2900	6	793	1424	52	92	23	71	93	22	69
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	624	3609	8	887	1772	65	412	269	827	417	259	812
Grp Volume(v), veh/h	10	233	246	19	0	873	31	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	624	1763	1853	887	0	1838	1508	0	0	1489	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.04	0.42		0.55	0.42		0.55
Lane Grp Cap(c), veh/h	581	1416	1489	793	0	1477	186	0	0	184	0	0
V/C Ratio(X)	0.02	0.16	0.16	0.02	0.00	0.59	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	581	1416	1489	793	0	1477	414	0	0	411	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.0	0.0	38.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.2	0.1	0.0	1.7	0.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.0	0.7	0.7	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.3	0.2	0.1	0.0	1.7	38.8	0.0	0.0	38.9	0.0	0.0
LnGrp LOS	A	A	A	A		A	D			D		
Approach Vol, veh/h		489			892			31			33	
Approach Delay, s/veh		0.2			1.7			38.8			38.9	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.7		77.3		12.7		77.3				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		58.0		22.0		58.0				
Max Q Clear Time (g_c+I1), s		3.7		2.0		3.6		2.0				
Green Ext Time (p_c), s		0.1		9.0		0.1		3.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			2.9									
HCM 7th LOS			A									

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	8	450	0	0	783	38	6	1	24	5	0	14
Future Vol, veh/h	8	450	0	0	783	38	6	1	24	5	0	14
Conflicting Peds, #/hr	0	0	81	0	0	48	0	0	1	0	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	500	0	0	870	42	7	1	27	6	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	960	0	-	-	-	0	1404	1478	251	1208	1457	955
Stage 1	-	-	-	-	-	-	518	518	-	939	939	-
Stage 2	-	-	-	-	-	-	886	960	-	269	518	-
Critical Hdwy	4.145	-	-	-	-	-	7.345	6.545	6.945	7.345	6.545	6.245
Critical Hdwy Stg 1	-	-	-	-	-	-	6.545	5.545	-	6.145	5.545	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.145	5.545	-	6.545	5.545	-
Follow-up Hdwy	2.2285	-	-	-	-	-	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285
Pot Cap-1 Maneuver	709	-	0	0	-	-	107	124	747	148	128	311
Stage 1	-	-	0	0	-	-	508	530	-	314	340	-
Stage 2	-	-	0	0	-	-	336	332	-	711	530	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	677	-	-	-	-	-	99	117	746	133	121	292
Mov Cap-2 Maneuver	-	-	-	-	-	-	99	117	-	133	121	-
Stage 1	-	-	-	-	-	-	501	523	-	300	324	-
Stage 2	-	-	-	-	-	-	314	317	-	675	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	18.29	22.91
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	305	677	-	-	-	222
HCM Lane V/C Ratio	0.113	0.013	-	-	-	0.095
HCM Control Delay (s/veh)	18.3	10.4	-	-	-	22.9
HCM Lane LOS	C	B	-	-	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	-	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	467	813	68	23	8
Future Volume (veh/h)	12	467	813	68	23	8
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			0.96	1.00	0.97
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	13	519	903	76	26	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	377	2862	1249	105	108	38
Arrive On Green	0.05	1.00	0.74	0.74	0.09	0.09
Sat Flow, veh/h	1767	3618	1682	142	1229	425
Grp Volume(v), veh/h	13	519	0	979	36	0
Grp Sat Flow(s),veh/h/ln	1767	1763	0	1824	1702	0
Q Serve(g_s), s	0.1	0.0	0.0	26.8	1.8	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	26.8	1.8	0.0
Prop In Lane	1.00			0.08	0.72	0.25
Lane Grp Cap(c), veh/h	377	2862	0	1354	150	0
V/C Ratio(X)	0.03	0.18	0.00	0.72	0.24	0.00
Avail Cap(c_a), veh/h	490	2862	0	1354	511	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	0.0	6.4	38.2	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	3.4	0.8	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	0.1	0.1	0.0	8.8	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.6	0.1	0.0	9.8	39.0	0.0
LnGrp LOS	A	A		A	D	
Approach Vol, veh/h		532	979		36	
Approach Delay, s/veh		0.3	9.8		39.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		6.2	71.3		12.4	77.6
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	42.0		27.0	54.0
Max Q Clear Time (g_c+I1), s		2.1	28.8		3.8	2.0
Green Ext Time (p_c), s		0.0	6.4		0.1	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.2
HCM 7th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	349	141	99	653	228	170
Future Volume (veh/h)	349	141	99	653	228	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)		0.94	0.99		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	388	157	110	726	253	189
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1753	696	303	1934	300	267
Arrive On Green	0.73	0.73	0.97	0.97	0.17	0.17
Sat Flow, veh/h	2507	959	358	2747	1767	1572
Grp Volume(v), veh/h	281	264	397	439	253	189
Grp Sat Flow(s),veh/h/ln	1763	1611	1417	1604	1767	1572
Q Serve(g_s), s	5.5	5.7	0.3	1.6	14.7	12.0
Cycle Q Clear(g_c), s	5.5	5.7	6.0	1.6	14.7	12.0
Prop In Lane		0.60	0.28		1.00	1.00
Lane Grp Cap(c), veh/h	1280	1170	1072	1165	300	267
V/C Ratio(X)	0.22	0.23	0.37	0.38	0.84	0.71
Avail Cap(c_a), veh/h	1280	1170	1072	1165	550	490
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.95	0.95	1.00	1.00
Uniform Delay (d), s/veh	4.7	4.8	0.5	0.5	42.6	41.5
Incr Delay (d2), s/veh	0.4	0.4	0.9	0.9	6.3	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.8	0.5	0.6	7.0	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.1	5.2	1.4	1.4	49.0	44.9
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	545			836	442	
Approach Delay, s/veh	5.2			1.4	47.2	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	83.0			83.0	23.0
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	62.0			62.0	33.0
Max Q Clear Time (g_c+I1), s	7.7			8.0	16.7
Green Ext Time (p_c), s	3.9			7.1	1.3

Intersection Summary		
HCM 7th Control Delay, s/veh	13.6	
HCM 7th LOS	B	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	312	207	35	207	592	0	0	0	0	328	678	160
Future Volume (veh/h)	0	312	207	35	207	592	0	0	0	0	328	678	160
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		0.94
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	0	1856	1856		1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	347	0		230	658	0				364	753	178
Peak Hour Factor	0.90	0.90	0.90		0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3		3	3	0				3	3	3
Cap, veh/h	0	534			709	2115	0				436	902	213
Arrive On Green	0.00	0.05	0.00		0.80	1.00	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3618	1572		1767	3618	0				1448	2995	707
Grp Volume(v), veh/h	0	347	0		230	658	0				448	424	422
Grp Sat Flow(s),veh/h/ln	0	1763	1572		1767	1763	0				1783	1689	1678
Q Serve(g_s), s	0.0	10.2	0.0		3.7	0.0	0.0				24.9	24.9	24.9
Cycle Q Clear(g_c), s	0.0	10.2	0.0		3.7	0.0	0.0				24.9	24.9	24.9
Prop In Lane	0.00		1.00		1.00		0.00				0.81		0.42
Lane Grp Cap(c), veh/h	0	534			709	2115	0				537	508	505
V/C Ratio(X)	0.00	0.65			0.32	0.31	0.00				0.83	0.83	0.84
Avail Cap(c_a), veh/h	0	732			709	2115	0				681	645	641
HCM Platoon Ratio	1.00	0.33	0.33		2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.97	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	47.6	0.0		6.6	0.0	0.0				34.6	34.6	34.6
Incr Delay (d2), s/veh	0.0	5.8	0.0		0.1	0.4	0.0				5.8	6.1	6.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	0.0		1.2	0.1	0.0				11.5	10.9	10.9
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	53.4	0.0		6.7	0.4	0.0				40.4	40.7	40.8
LnGrp LOS		D			A	A					D	D	D
Approach Vol, veh/h		347				888						1295	
Approach Delay, s/veh		53.4				2.0						40.6	
Approach LOS		D				A						D	

Timer - Assigned Phs	1	2		4		6							
Phs Duration (G+Y+Rc), s	17.5	21.1		37.4		68.6							
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0							
Max Green Setting (Gmax), s	28.6	22.0		40.5		55.0							
Max Q Clear Time (g_c+I1), s	15.7	12.2		26.9		2.0							
Green Ext Time (p_c), s	0.3	1.1		5.0		3.6							

Intersection Summary	
HCM 7th Control Delay, s/veh	28.8
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Future Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.98	1.00		0.97	0.97		0.92	1.00		0.91
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	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		254	308	92	19	324	321	144	749	127	0	0	493
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, %		3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h		324	854	255	97	1563	736	311	985	403	0	518	795
Arrive On Green		0.16	1.00	1.00	0.48	0.48	0.48	0.28	0.28	0.28	0.00	0.00	0.28
Sat Flow, veh/h		3428	1363	407	124	3225	1518	871	3526	1443	0	1856	2847
Grp Volume(v), veh/h		254	0	400	180	163	321	144	749	127	0	0	493
Grp Sat Flow(s),veh/h/ln		1714	0	1771	1744	1604	1518	871	1763	1443	0	1856	1423
Q Serve(g_s), s		7.5	0.0	0.0	0.0	6.2	14.6	15.1	20.6	7.4	0.0	0.0	16.0
Cycle Q Clear(g_c), s		7.5	0.0	0.0	5.9	6.2	14.6	15.1	20.6	7.4	0.0	0.0	16.0
Prop In Lane		1.00		0.23	0.11		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h		324	0	1109	883	778	736	311	985	403	0	518	795
V/C Ratio(X)		0.78	0.00	0.36	0.20	0.21	0.44	0.46	0.76	0.32	0.00	0.00	0.62
Avail Cap(c_a), veh/h		517	0	1109	883	778	736	421	1430	585	0	753	1155
HCM Platoon Ratio		1.67	1.67	1.67	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	0.00	0.00	1.00
Uniform Delay (d), s/veh		43.6	0.0	0.0	15.6	15.7	17.8	33.0	35.0	30.2	0.0	0.0	33.3
Incr Delay (d2), s/veh		4.2	0.0	0.9	0.5	0.6	1.9	1.1	1.5	0.4	0.0	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		3.2	0.0	0.3	2.6	2.4	5.5	3.3	9.0	2.6	0.0	0.0	5.6
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		47.8	0.0	0.9	16.1	16.3	19.7	34.1	36.4	30.6	0.0	0.0	34.1
LnGrp LOS		D		A	B	B	B	C	D	C			C
Approach Vol, veh/h			654			664			1020			493	
Approach Delay, s/veh			19.1			17.9			35.4			34.1	
Approach LOS			B			B			D			C	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	71.4		34.6	15.0	56.4		34.6
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	53.0		43.0	16.0	32.0		43.0
Max Q Clear Time (g_c+I1), s	2.0		18.0	9.5	16.6		22.6
Green Ext Time (p_c), s	3.1		2.4	0.5	3.0		7.0

Intersection Summary	
HCM 7th Control Delay, s/veh	27.3
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	0	63
Future Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	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)	0.99		0.98	1.00		0.96	0.98		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	24	477	2	1	592	100	2	0	0	59	0	70
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	77	1302	5	45	2189	368	253	0	0	138	16	105
Arrive On Green	0.75	0.75	0.75	1.00	1.00	1.00	0.13	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	40	1746	7	0	2934	493	1262	0	0	558	127	812
Grp Volume(v), veh/h	503	0	0	374	0	319	2	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	1794	0	0	1855	0	1573	1262	0	0	1497	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	7.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	6.5	0.0	0.0
Prop In Lane	0.05		0.00	0.00		0.31	1.00		0.00	0.46		0.54
Lane Grp Cap(c), veh/h	1385	0	0	1429	0	1173	253	0	0	259	0	0
V/C Ratio(X)	0.36	0.00	0.00	0.26	0.00	0.27	0.01	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1385	0	0	1429	0	1173	425	0	0	454	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.00	0.92	0.00	0.92	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.5	0.0	0.0	0.0	0.0	0.0	30.4	0.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.6	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	2.3	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.3	0.0	0.0	0.4	0.0	0.5	30.4	0.0	0.0	33.6	0.0	0.0
LnGrp LOS	A			A		A	C			C		
Approach Vol, veh/h		503			693			2			129	
Approach Delay, s/veh		4.3			0.5			30.4			33.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.3	64.7	15.3	64.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	8.5	2.0	2.1	9.6
Green Ext Time (p_c), s	0.4	3.3	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	5.2
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	0
Future Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	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)	0.99		0.95	0.99		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	3	391	141	123	373	0	320	0	169	0	0	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	966	780	536	968	0	429	0	187	0	690	0
Arrive On Green	1.00	1.00	1.00	0.52	0.52	0.00	0.37	0.00	0.37	0.00	0.00	0.00
Sat Flow, veh/h	2	1851	1495	855	1856	0	952	0	503	0	1856	0
Grp Volume(v), veh/h	394	0	141	123	373	0	489	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1854	0	1495	855	1856	0	1455	0	0	0	1856	0
Q Serve(g_s), s	0.0	0.0	0.0	6.4	9.6	0.0	25.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	6.4	9.6	0.0	25.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	0.65		0.35	0.00		0.00
Lane Grp Cap(c), veh/h	1012	0	780	536	968	0	616	0	0	0	690	0
V/C Ratio(X)	0.39	0.00	0.18	0.23	0.39	0.00	0.79	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1012	0	780	536	968	0	747	0	0	0	847	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	0.94	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	10.7	11.5	0.0	23.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	1.0	1.2	0.0	4.9	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	0.3	0.0	0.1	1.3	4.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	1.1	0.0	0.5	11.7	12.6	0.0	28.6	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	A		A	B	B		C					
Approach Vol, veh/h		535			496			489			0	
Approach Delay, s/veh		0.9			12.4			28.6			0.0	
Approach LOS		A			B			C				

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	45.7	34.3	45.7	34.3
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	35.0	* 37	35.0	36.5
Max Q Clear Time (g_c+I1), s	11.6	27.4	2.0	0.0
Green Ext Time (p_c), s	3.3	2.3	3.4	0.0

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.

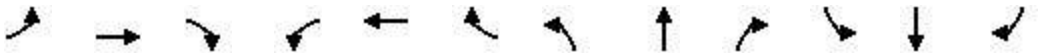
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	675	794	87	0	40
Future Vol, veh/h	0	675	794	87	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	750	882	97	0	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	489
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	522
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	522
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.54
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	522
HCM Lane V/C Ratio	-	-	-	0.085
HCM Control Delay (s/veh)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Future Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.85	0.93		0.80	0.95		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	106	505	76	62	229	64	116	420	159	81	281	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	476	950	379	140	508	138	302	1159	414	277	781	287
Arrive On Green	0.27	0.27	0.27	0.22	0.22	0.22	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1795	3582	1431	625	2261	617	928	3582	1280	800	2412	886
Grp Volume(v), veh/h	106	505	76	184	0	171	116	420	159	81	205	185
Grp Sat Flow(s),veh/h/ln	1795	1791	1431	1854	0	1650	928	1791	1280	800	1791	1507
Q Serve(g_s), s	3.7	9.7	3.3	6.9	0.0	7.2	8.9	7.2	7.7	6.9	7.0	7.6
Cycle Q Clear(g_c), s	3.7	9.7	3.3	6.9	0.0	7.2	16.5	7.2	7.7	14.2	7.0	7.6
Prop In Lane	1.00		1.00	0.34		0.37	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	476	950	379	416	0	370	302	1159	414	277	580	488
V/C Ratio(X)	0.22	0.53	0.20	0.44	0.00	0.46	0.38	0.36	0.38	0.29	0.35	0.38
Avail Cap(c_a), veh/h	827	1650	659	508	0	452	302	1159	414	277	580	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	25.2	22.9	26.8	0.0	27.0	27.3	20.8	21.0	26.2	20.7	21.0
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.3	3.7	0.9	2.7	2.7	1.7	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.1	1.1	3.0	0.0	2.8	2.2	3.1	2.6	1.5	3.1	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.1	25.4	23.0	27.1	0.0	27.3	31.0	21.7	23.7	28.9	22.4	23.2
LnGrp LOS	C	C	C	C		C	C	C	C	C	C	C
Approach Vol, veh/h		687			355			695			471	
Approach Delay, s/veh		24.8			27.2			23.7			23.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	23.0	31.0	26.3	31.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	26.0	37.0	26.0
Max Q Clear Time (g_c+I1), s	9.2	18.5	11.7	16.2
Green Ext Time (p_c), s	1.2	1.8	2.8	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)	52	538	118	72	246	43	0	0	0	67	150	92
Future Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
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)	0.92		0.89	1.00		0.92				1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	55	566	124	76	259	45				71	158	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	95	697	150	496	1872	318				190	412	240
Arrive On Green	0.27	0.27	0.27	0.55	1.00	1.00				0.25	0.25	0.25
Sat Flow, veh/h	172	2551	548	1795	3019	513				760	1644	956
Grp Volume(v), veh/h	397	0	348	76	151	153				173	0	153
Grp Sat Flow(s),veh/h/ln	1733	0	1539	1795	1791	1742				1847	0	1513
Q Serve(g_s), s	12.1	0.0	18.1	1.8	0.0	0.0				6.6	0.0	7.2
Cycle Q Clear(g_c), s	18.2	0.0	18.1	1.8	0.0	0.0				6.6	0.0	7.2
Prop In Lane	0.14		0.36	1.00		0.29				0.41		0.63
Lane Grp Cap(c), veh/h	522	0	420	496	1111	1080				463	0	379
V/C Ratio(X)	0.76	0.00	0.83	0.15	0.14	0.14				0.37	0.00	0.40
Avail Cap(c_a), veh/h	784	0	661	496	1111	1080				543	0	445
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.88	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	29.0	14.1	0.0	0.0				26.3	0.0	26.6
Incr Delay (d2), s/veh	8.9	0.0	15.2	0.1	0.3	0.3				0.2	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	8.2	0.7	0.1	0.1				2.8	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.8	0.0	44.2	14.2	0.3	0.3				26.5	0.0	26.8
LnGrp LOS	D		D	B	A	A				C		C
Approach Vol, veh/h		745			380						326	
Approach Delay, s/veh		40.8			3.1						26.7	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.5	29.2		26.3		58.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	3.5	* 37		25.0		49.0
Max Q Clear Time (g_c+I1), s	3.8	20.2		9.2		2.0
Green Ext Time (p_c), s	0.0	3.1		1.2		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	27.7
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)	28	574	3	1	313	42	2	0	2	73	0	46
Future Volume (veh/h)	28	574	3	1	313	42	2	0	2	73	0	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)	0.98		0.92	0.99		0.93	0.96		0.94	0.96		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	29	604	3	1	329	44	2	0	2	77	0	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	110	2148	11	43	1954	257	231	20	187	273	16	137
Arrive On Green	0.21	0.21	0.21	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	101	3389	17	1	3082	405	673	79	752	824	63	553
Grp Volume(v), veh/h	327	0	309	200	0	174	4	0	0	125	0	0
Grp Sat Flow(s),veh/h/ln	1795	0	1711	1884	0	1604	1504	0	0	1440	0	0
Q Serve(g_s), s	0.0	0.0	12.9	0.0	0.0	3.8	0.0	0.0	0.0	4.6	0.0	0.0
Cycle Q Clear(g_c), s	12.4	0.0	12.9	3.7	0.0	3.8	0.2	0.0	0.0	5.9	0.0	0.0
Prop In Lane	0.09		0.01	0.01		0.25	0.50		0.50	0.62		0.38
Lane Grp Cap(c), veh/h	1184	0	1085	1237	0	1017	437	0	0	426	0	0
V/C Ratio(X)	0.28	0.00	0.28	0.16	0.00	0.17	0.01	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	1184	0	1085	1237	0	1017	634	0	0	625	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.00	0.86	0.97	0.00	0.97	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.2	0.0	17.4	6.4	0.0	6.4	24.1	0.0	0.0	26.1	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.6	0.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	6.0	1.4	0.0	1.3	0.1	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.7	0.0	18.0	6.6	0.0	6.7	24.1	0.0	0.0	26.5	0.0	0.0
LnGrp LOS	B		B	A		A	C			C		
Approach Vol, veh/h		636			374			4			125	
Approach Delay, s/veh		17.8			6.7			24.1			26.5	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.1	58.9	26.1	58.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	33.0	42.0	33.0	42.0
Max Q Clear Time (g_c+I1), s	7.9	5.8	2.2	14.9
Green Ext Time (p_c), s	0.7	2.5	0.0	4.5

Intersection Summary	
HCM 7th Control Delay, s/veh	15.1
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Future Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	0.98		0.91	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	94	516	74	139	288	24	25	687	564	14	360	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	209	871	124	213	901	74	72	1556	667	64	1296	215
Arrive On Green	0.06	0.28	0.28	0.06	0.27	0.27	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	3483	3085	439	3483	3312	273	59	3398	1457	43	2830	470
Grp Volume(v), veh/h	94	298	292	139	154	158	377	335	564	227	0	208
Grp Sat Flow(s),veh/h/ln	1742	1791	1733	1742	1791	1794	1827	1630	1457	1745	0	1598
Q Serve(g_s), s	2.2	12.3	12.4	3.3	5.9	6.0	0.0	12.0	29.3	0.0	0.0	6.9
Cycle Q Clear(g_c), s	2.2	12.3	12.4	3.3	5.9	6.0	11.6	12.0	29.3	6.4	0.0	6.9
Prop In Lane	1.00		0.25	1.00		0.15	0.07		1.00	0.06		0.29
Lane Grp Cap(c), veh/h	209	506	489	213	487	488	882	746	667	844	0	732
V/C Ratio(X)	0.45	0.59	0.60	0.65	0.32	0.32	0.43	0.45	0.85	0.27	0.00	0.28
Avail Cap(c_a), veh/h	244	586	567	326	628	629	1250	1085	970	1171	0	1064
HCM Platoon Ratio	1.00	1.00	1.00	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	38.9	26.4	26.5	39.3	24.8	24.9	15.7	15.8	20.5	14.3	0.0	14.5
Incr Delay (d2), s/veh	1.5	1.2	1.3	3.4	0.4	0.4	0.3	0.4	4.7	0.2	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	1.0	5.3	5.2	1.5	2.5	2.6	4.8	4.3	10.3	2.6	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.4	27.6	27.8	42.6	25.2	25.3	16.1	16.2	25.3	14.5	0.0	14.7
LnGrp LOS	D	C	C	D	C	C	B	B	C	B		B
Approach Vol, veh/h		684			451			1276			435	
Approach Delay, s/veh		29.5			30.6			20.2			14.6	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	45.2	11.1	29.3		45.2	10.2	30.2
Change Period (Y+Rc), s	6.0	6.0	* 6		6.0	5.0	6.0
Max Green Setting (Gmax), s	57.0	6.0	* 30		57.0	8.0	28.0
Max Q Clear Time (g_c+I1), s	31.3	4.2	8.0		8.9	5.3	14.4
Green Ext Time (p_c), s	7.9	0.0	1.9		3.1	0.1	3.2

Intersection Summary	
HCM 7th Control Delay, s/veh	23.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	917	372	177	254	57
Future Volume (veh/h)	122	917	372	177	254	57
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)	0.99			0.96	1.00	0.90
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	128	965	392	186	267	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	647	2449	1599	746	303	68
Arrive On Green	0.68	0.68	1.00	1.00	0.22	0.22
Sat Flow, veh/h	835	3676	2432	1091	1399	314
Grp Volume(v), veh/h	128	965	299	279	328	0
Grp Sat Flow(s),veh/h/ln	835	1791	1791	1638	1719	0
Q Serve(g_s), s	5.4	11.1	0.0	0.0	17.6	0.0
Cycle Q Clear(g_c), s	5.4	11.1	0.0	0.0	17.6	0.0
Prop In Lane	1.00			0.67	0.81	0.18
Lane Grp Cap(c), veh/h	647	2449	1224	1120	372	0
V/C Ratio(X)	0.20	0.39	0.24	0.25	0.88	0.00
Avail Cap(c_a), veh/h	647	2449	1224	1120	678	0
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.91	0.91	1.00	0.00
Uniform Delay (d), s/veh	5.6	6.5	0.0	0.0	36.1	0.0
Incr Delay (d2), s/veh	0.5	0.3	0.4	0.5	6.9	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	3.9	0.1	0.2	8.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.1	6.8	0.4	0.5	43.0	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		1093	578		328	
Approach Delay, s/veh		6.7	0.5		43.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		70.0		25.0	70.0
Change Period (Y+Rc), s		5.0		4.5	5.0
Max Green Setting (Gmax), s		48.0		37.5	48.0
Max Q Clear Time (g_c+I1), s		2.0		19.6	13.1
Green Ext Time (p_c), s		4.4		1.0	10.1

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)	18	1124	29	23	518	13	0	0	0	21	5	31
Future Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
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)	0.97		0.89	0.99		0.90				1.00		0.89
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	19	1183	31	24	545	14				22	5	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	687	2619	69	414	1344	35				91	21	137
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00				0.16	0.16	0.16
Sat Flow, veh/h	829	3553	93	459	1824	47				577	131	866
Grp Volume(v), veh/h	19	596	618	24	0	559				60	0	0
Grp Sat Flow(s),veh/h/ln	829	1791	1855	459	0	1870				1574	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				3.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				3.2	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.03				0.37		0.55
Lane Grp Cap(c), veh/h	687	1320	1368	414	0	1379				248	0	0
V/C Ratio(X)	0.03	0.45	0.45	0.06	0.00	0.41				0.24	0.00	0.00
Avail Cap(c_a), veh/h	687	1320	1368	414	0	1379				431	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				35.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.0	0.9	0.3	0.0	0.9				0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.0	0.0	0.3				1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	1.0	0.9	0.3	0.0	0.9				35.5	0.0	0.0
LnGrp LOS	A	A	A	A		A				D		
Approach Vol, veh/h		1233			583						60	
Approach Delay, s/veh		0.9			0.9						35.5	
Approach LOS		A			A						D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	20.0	75.0	75.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	26.0	59.0	59.0
Max Q Clear Time (g_c+I1), s	5.2	2.0	2.0
Green Ext Time (p_c), s	0.3	5.1	12.6

Intersection Summary	
HCM 7th Control Delay, s/veh	2.0
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	1127	536	12	6	18
Future Vol, veh/h	18	1127	536	12	6	18
Conflicting Peds, #/hr	0	0	0	95	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	1186	564	13	6	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	672	0	-	0	1310	666
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	644	-
Critical Hdwy	4.115	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	922	-	-	-	164	461
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	488	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	839	-	-	-	132	419
Mov Cap-2 Maneuver	-	-	-	-	132	-
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	444	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.15	0	19.59
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	839	-	-	-	272
HCM Lane V/C Ratio	0.023	-	-	-	0.093
HCM Control Delay (s/veh)	9.4	-	-	-	19.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	1101	527	35	8	21
Future Vol, veh/h	32	1101	527	35	8	21
Conflicting Peds, #/hr	0	0	0	96	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	34	1159	555	37	8	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	688	0	-	0	1340	669
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	671	-
Critical Hdwy	4.115	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	910	-	-	-	157	459
Stage 1	-	-	-	-	510	-
Stage 2	-	-	-	-	473	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	827	-	-	-	124	417
Mov Cap-2 Maneuver	-	-	-	-	124	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	430	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.27	0	21.21
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	827	-	-	-	252
HCM Lane V/C Ratio	0.041	-	-	-	0.121
HCM Control Delay (s/veh)	9.5	-	-	-	21.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	63
Future Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	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		0.89	0.99		0.89	0.89		0.93	0.95		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	88	1063	16	19	496	73	29	11	9	67	15	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	430	2483	37	434	1086	160	212	79	52	168	48	130
Arrive On Green	1.00	1.00	1.00	0.23	0.23	0.23	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	849	3604	54	519	1576	232	735	382	252	550	233	630
Grp Volume(v), veh/h	88	528	551	19	0	569	49	0	0	148	0	0
Grp Sat Flow(s),veh/h/ln	849	1791	1868	519	0	1808	1369	0	0	1413	0	0
Q Serve(g_s), s	4.6	0.0	0.0	2.7	0.0	25.8	0.0	0.0	0.0	6.2	0.0	0.0
Cycle Q Clear(g_c), s	30.3	0.0	0.0	2.7	0.0	25.8	2.4	0.0	0.0	8.6	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.13	0.59		0.18	0.45		0.45
Lane Grp Cap(c), veh/h	430	1234	1287	434	0	1246	342	0	0	346	0	0
V/C Ratio(X)	0.20	0.43	0.43	0.04	0.00	0.46	0.14	0.00	0.00	0.43	0.00	0.00
Avail Cap(c_a), veh/h	430	1234	1287	434	0	1246	462	0	0	469	0	0
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	6.0	0.0	0.0	12.5	0.0	21.4	30.8	0.0	0.0	33.3	0.0	0.0
Incr Delay (d2), s/veh	1.1	1.1	1.0	0.2	0.0	1.2	0.2	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	0.8	0.4	0.4	0.3	0.0	12.8	0.9	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.0	1.1	1.0	12.7	0.0	22.6	31.0	0.0	0.0	34.1	0.0	0.0
LnGrp LOS	A	A	A	B		C	C			C		
Approach Vol, veh/h		1167			588			49			148	
Approach Delay, s/veh		1.5			22.3			31.0			34.1	
Approach LOS		A			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.6		70.4		24.6		70.4				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		28.0		57.0		28.0		57.0				
Max Q Clear Time (g_c+I1), s		10.6		27.8		4.4		32.3				
Green Ext Time (p_c), s		0.8		4.5		0.2		8.6				

Intersection Summary												
HCM 7th Control Delay, s/veh			11.0									
HCM 7th LOS			B									

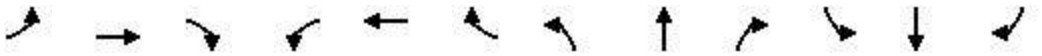
Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1074	9	15	541	17	15
Future Vol, veh/h	1074	9	15	541	17	15
Conflicting Peds, #/hr	0	91	0	0	41	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1131	9	16	569	18	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1231	0	1868	661
Stage 1	-	-	-	-	1226	-
Stage 2	-	-	-	-	642	-
Critical Hdwy	-	-	4.115	-	6.615	6.915
Critical Hdwy Stg 1	-	-	-	-	5.815	-
Critical Hdwy Stg 2	-	-	-	-	5.415	-
Follow-up Hdwy	-	-	2.2095	-	3.5095	3.3095
Pot Cap-1 Maneuver	-	-	568	-	72	408
Stage 1	-	-	-	-	243	-
Stage 2	-	-	-	-	525	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	519	-	61	372
Mov Cap-2 Maneuver	-	-	-	-	61	-
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	490	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	57.77
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	101	-	-	519	-
HCM Lane V/C Ratio	0.335	-	-	0.03	-
HCM Control Delay (s/veh)	57.8	-	-	12.2	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	1.3	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	23
Future Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	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)	0.99		0.90	1.00		0.91	0.91		0.97	0.97		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	31	1102	14	18	547	39	14	4	23	15	3	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	630	2799	36	376	1336	95	93	39	104	95	33	102
Arrive On Green	0.52	0.52	0.52	0.77	0.77	0.77	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	828	3616	46	509	1726	123	347	325	858	362	270	842
Grp Volume(v), veh/h	31	546	570	18	0	586	41	0	0	42	0	0
Grp Sat Flow(s),veh/h/ln	828	1791	1871	509	0	1849	1529	0	0	1473	0	0
Q Serve(g_s), s	2.0	17.5	17.5	1.4	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.0	17.5	17.5	18.9	0.0	10.0	2.1	0.0	0.0	2.3	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.07	0.34		0.56	0.36		0.57
Lane Grp Cap(c), veh/h	630	1386	1448	376	0	1431	235	0	0	229	0	0
V/C Ratio(X)	0.05	0.39	0.39	0.05	0.00	0.41	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	630	1386	1448	376	0	1431	428	0	0	417	0	0
HCM Platoon Ratio	0.67	0.67	0.67	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	10.9	9.4	9.4	8.3	0.0	3.6	37.6	0.0	0.0	37.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.8	0.2	0.0	0.9	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	7.7	8.0	0.2	0.0	3.0	0.9	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.0	10.2	10.2	8.5	0.0	4.4	38.0	0.0	0.0	38.1	0.0	0.0
LnGrp LOS	B	B	B	A		A	D			D		
Approach Vol, veh/h		1147			604			41			42	
Approach Delay, s/veh		10.2			4.5			38.0			38.1	
Approach LOS		B			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.5		78.5		16.5		78.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		24.0		61.0		24.0		61.0				
Max Q Clear Time (g_c+I1), s		4.3		20.9		4.1		19.5				
Green Ext Time (p_c), s		0.2		4.9		0.1		9.9				

Intersection Summary	
HCM 7th Control Delay, s/veh	9.6
HCM 7th LOS	A

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	21	1062	0	0	550	37	4	2	65	10	0	20
Future Vol, veh/h	21	1062	0	0	550	37	4	2	65	10	0	20
Conflicting Peds, #/hr	0	0	81	0	0	89	0	0	0	0	0	14
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	22	1118	0	0	579	39	4	2	68	11	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	-	-	-	0	1755	1869	559	1292	1850	701
Stage 1	-	-	-	-	-	-	1162	1162	-	687	687	-
Stage 2	-	-	-	-	-	-	593	707	-	604	1162	-
Critical Hdwy	4.115	-	-	-	-	-	7.315	6.515	6.915	7.315	6.515	6.215
Critical Hdwy Stg 1	-	-	-	-	-	-	6.515	5.515	-	6.115	5.515	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.115	5.515	-	6.515	5.515	-
Follow-up Hdwy	2.2095	-	-	-	-	-	3.5095	4.0095	3.3095	3.5095	4.0095	3.3095
Pot Cap-1 Maneuver	895	-	0	0	-	-	61	73	475	131	75	440
Stage 1	-	-	0	0	-	-	209	270	-	438	448	-
Stage 2	-	-	0	0	-	-	493	439	-	455	270	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	819	-	-	-	-	-	55	65	475	96	66	397
Mov Cap-2 Maneuver	-	-	-	-	-	-	55	65	-	96	66	-
Stage 1	-	-	-	-	-	-	204	263	-	401	410	-
Stage 2	-	-	-	-	-	-	461	402	-	376	263	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	21.27	27.02
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	295	819	-	-	-	195
HCM Lane V/C Ratio	0.253	0.027	-	-	-	0.162
HCM Control Delay (s/veh)	21.3	9.5	-	-	-	27
HCM Lane LOS	C	A	-	-	-	D
HCM 95th %tile Q(veh)	1	0.1	-	-	-	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	1107	566	116	38	21
Future Volume (veh/h)	30	1107	566	116	38	21
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			0.95	1.00	0.96
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	32	1165	596	122	40	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	526	2808	1042	213	130	72
Arrive On Green	0.05	0.78	0.69	0.69	0.12	0.12
Sat Flow, veh/h	1795	3676	1503	308	1075	591
Grp Volume(v), veh/h	32	1165	0	718	63	0
Grp Sat Flow(s),veh/h/ln	1795	1791	0	1810	1693	0
Q Serve(g_s), s	0.4	9.9	0.0	19.1	3.2	0.0
Cycle Q Clear(g_c), s	0.4	9.9	0.0	19.1	3.2	0.0
Prop In Lane	1.00			0.17	0.63	0.35
Lane Grp Cap(c), veh/h	526	2808	0	1256	205	0
V/C Ratio(X)	0.06	0.41	0.00	0.57	0.31	0.00
Avail Cap(c_a), veh/h	591	2808	0	1256	483	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.2	3.3	0.0	7.4	38.1	0.0
Incr Delay (d2), s/veh	0.0	0.5	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
%ile BackOfQ(50%),veh/ln	0.1	2.6	0.0	6.8	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.2	3.7	0.0	9.3	38.9	0.0
LnGrp LOS	A	A		A	D	
Approach Vol, veh/h		1197	718		63	
Approach Delay, s/veh		3.8	9.3		38.9	
Approach LOS		A	A		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		8.6	70.4		16.0	79.0
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	46.9		27.1	58.9
Max Q Clear Time (g_c+I1), s		2.4	21.1		5.2	11.9
Green Ext Time (p_c), s		0.0	5.7		0.1	11.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	765	380	194	527	157	122
Future Volume (veh/h)	765	380	194	527	157	122
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)		0.93	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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	805	400	204	555	165	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1764	870	375	1272	208	185
Arrive On Green	0.78	0.78	1.00	1.00	0.12	0.12
Sat Flow, veh/h	2354	1115	394	1716	1795	1598
Grp Volume(v), veh/h	637	568	204	555	165	128
Grp Sat Flow(s),veh/h/ln	1791	1584	394	1630	1795	1598
Q Serve(g_s), s	12.8	13.0	16.5	0.0	9.5	8.2
Cycle Q Clear(g_c), s	12.8	13.0	29.6	0.0	9.5	8.2
Prop In Lane		0.70	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1398	1236	375	1272	208	185
V/C Ratio(X)	0.46	0.46	0.54	0.44	0.79	0.69
Avail Cap(c_a), veh/h	1398	1236	375	1272	440	392
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	4.0	4.0	2.3	0.0	45.6	45.1
Incr Delay (d2), s/veh	1.1	1.2	5.4	1.1	6.7	4.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	3.6	1.0	0.4	4.6	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.0	5.2	7.7	1.1	52.4	49.6
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	1205			759	293	
Approach Delay, s/veh	5.1			2.9	51.2	
Approach LOS	A			A	D	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	88.7			88.7	17.3
Change Period (Y+Rc), s	6.0			6.0	5.0
Max Green Setting (Gmax), s	69.0			69.0	26.0
Max Q Clear Time (g_c+I1), s	15.0			31.6	11.5
Green Ext Time (p_c), s	12.2			9.3	0.8

Intersection Summary		
HCM 7th Control Delay, s/veh	10.3	
HCM 7th LOS	B	

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	428	459	10	262	544	0	0	0	0	320	740	177
Future Volume (veh/h)	0	428	459	10	262	544	0	0	0	0	320	740	177
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		0.95
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	0	1885	1885		1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	451	0		276	573	0				337	779	186
Peak Hour Factor	0.95	0.95	0.95		0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1		1	1	0				1	1	1
Cap, veh/h	0	1373			313	2166	0				401	928	221
Arrive On Green	0.00	0.51	0.00		0.06	0.20	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3676	1598		1795	3676	0				1355	3133	748
Grp Volume(v), veh/h	0	451	0		276	573	0				452	426	424
Grp Sat Flow(s),veh/h/ln	0	1791	1598		1795	1791	0				1817	1716	1704
Q Serve(g_s), s	0.0	7.9	0.0		16.2	14.3	0.0				24.7	24.7	24.7
Cycle Q Clear(g_c), s	0.0	7.9	0.0		16.2	14.3	0.0				24.7	24.7	24.7
Prop In Lane	0.00		1.00		1.00		0.00				0.75		0.44
Lane Grp Cap(c), veh/h	0	1373			313	2166	0				538	508	504
V/C Ratio(X)	0.00	0.33			0.88	0.26	0.00				0.84	0.84	0.84
Avail Cap(c_a), veh/h	0	1373			491	2166	0				660	623	619
HCM Platoon Ratio	1.00	1.33	1.33		0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.85	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	18.0	0.0		48.9	22.5	0.0				34.9	34.9	35.0
Incr Delay (d2), s/veh	0.0	0.5	0.0		7.3	0.3	0.0				6.7	7.1	7.2
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	0.0	3.2	0.0		8.5	7.0	0.0				11.7	11.1	11.1
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	18.5	0.0		56.1	22.8	0.0				41.7	42.0	42.1
LnGrp LOS		B			E	C					D	D	D
Approach Vol, veh/h		451				849						1302	
Approach Delay, s/veh		18.5				33.6						41.9	
Approach LOS		B				C						D	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	23.5	45.6	36.9	69.1
Change Period (Y+Rc), s	5.0	5.0	5.5	5.0
Max Green Setting (Gmax), s	29.6	23.0	38.5	57.0
Max Q Clear Time (g_c+I1), s	18.2	9.9	26.7	16.3
Green Ext Time (p_c), s	0.3	1.8	4.7	3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	35.2
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Future Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.90	1.00		0.93	1.00		0.88	0.97		0.97
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No			No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		192	400	200	46	437	255	166	476	173	79	119	162
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		500	675	338	97	746	601	180	1115	436	145	201	484
Arrive On Green		0.05	0.20	0.20	0.40	0.40	0.40	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h		3483	1136	568	116	1849	1488	1106	3582	1401	315	646	1555
Grp Volume(v), veh/h		192	0	600	95	388	255	166	476	173	198	0	162
Grp Sat Flow(s),veh/h/ln		1742	0	1705	336	1630	1488	1106	1791	1401	961	0	1555
Q Serve(g_s), s		5.7	0.0	33.9	4.9	19.7	13.1	10.8	11.2	10.3	11.0	0.0	8.5
Cycle Q Clear(g_c), s		5.7	0.0	33.9	38.8	19.7	13.1	33.0	11.2	10.3	22.2	0.0	8.5
Prop In Lane		1.00		0.33	0.48		1.00	1.00		1.00	0.40		1.00
Lane Grp Cap(c), veh/h		500	0	1013	186	658	601	180	1115	436	347	0	484
V/C Ratio(X)		0.38	0.00	0.59	0.51	0.59	0.42	0.92	0.43	0.40	0.57	0.00	0.33
Avail Cap(c_a), veh/h		500	0	1013	221	707	646	180	1115	436	347	0	484
HCM Platoon Ratio		0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	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		45.9	0.0	30.9	32.6	24.7	22.7	49.4	29.0	28.7	33.7	0.0	28.1
Incr Delay (d2), s/veh		0.5	0.0	2.5	9.8	3.8	2.2	45.0	0.3	0.6	2.2	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		2.6	0.0	16.2	2.9	8.3	5.0	6.7	4.9	3.5	4.8	0.0	3.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		46.4	0.0	33.5	42.4	28.6	24.9	94.4	29.2	29.3	35.9	0.0	28.5
LnGrp LOS		D		C	D	C	C	F	C	C	D		C
Approach Vol, veh/h			792			738			815			360	
Approach Delay, s/veh			36.6			29.1			42.5			32.6	
Approach LOS			D			C			D			C	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	68.0		38.0	20.2	47.8		38.0					
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0					
Max Green Setting (Gmax), s	63.0		33.0	12.0	46.0		33.0					
Max Q Clear Time (g_c+I1), s	35.9		24.2	7.7	40.8		35.0					
Green Ext Time (p_c), s	5.0		1.4	0.2	2.0		0.0					

Intersection Summary	
HCM 7th Control Delay, s/veh	35.8
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	61
Future Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	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)	0.98		0.97	1.00		0.91	1.00		1.00	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	41	606	4	2	674	92	0	2	3	116	2	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	91	1149	7	46	2069	281	0	135	203	243	19	102
Arrive On Green	0.68	0.68	0.68	1.00	1.00	1.00	0.00	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	63	1699	11	1	3058	416	0	681	1021	852	94	513
Grp Volume(v), veh/h	651	0	0	416	0	352	0	0	5	182	0	0
Grp Sat Flow(s),veh/h/ln	1773	0	0	1884	0	1592	0	0	1701	1460	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	7.9	0.0	0.0
Cycle Q Clear(g_c), s	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	9.0	0.0	0.0
Prop In Lane	0.06		0.01	0.00		0.26	0.00		0.60	0.64		0.35
Lane Grp Cap(c), veh/h	1248	0	0	1320	0	1077	0	0	338	363	0	0
V/C Ratio(X)	0.52	0.00	0.00	0.32	0.00	0.33	0.00	0.00	0.01	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1248	0	0	1320	0	1077	0	0	447	456	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.00	0.88	0.00	0.88	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.8	29.2	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.6	0.0	0.7	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.1	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.8	0.0	0.0	0.6	0.0	0.7	0.0	0.0	25.8	29.6	0.0	0.0
LnGrp LOS	A			A		A			C	C		
Approach Vol, veh/h		651			768			5			182	
Approach Delay, s/veh		7.8			0.6			25.8			29.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	20.9	59.1	20.9	59.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	11.0	2.0	2.2	15.7
Green Ext Time (p_c), s	0.5	3.8	0.0	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	0	2
Future Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	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)	0.96		0.93	0.98		0.89	1.00		0.91	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	11	453	262	276	557	1	208	0	141	0	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	55	1147	918	541	1163	2	304	4	160	0	0	439
Arrive On Green	1.00	1.00	1.00	0.62	0.62	0.62	0.28	0.00	0.28	0.00	0.00	0.28
Sat Flow, veh/h	14	1854	1485	729	1881	3	844	14	582	0	0	1594
Grp Volume(v), veh/h	464	0	262	276	0	558	349	0	0	0	0	2
Grp Sat Flow(s),veh/h/ln	1868	0	1485	729	0	1884	1440	0	0	0	0	1594
Q Serve(g_s), s	0.0	0.0	0.0	18.6	0.0	12.8	18.2	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	18.6	0.0	12.8	18.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	0.02		1.00	1.00		0.00	0.60		0.40	0.00		1.00
Lane Grp Cap(c), veh/h	1201	0	918	541	0	1165	468	0	0	0	0	439
V/C Ratio(X)	0.39	0.00	0.29	0.51	0.00	0.48	0.75	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1201	0	918	541	0	1165	504	0	0	0	0	468
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.00	0.81	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.4	0.0	8.3	27.7	0.0	0.0	0.0	0.0	21.0
Incr Delay (d2), s/veh	0.8	0.0	0.6	3.4	0.0	1.4	5.6	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	0.3	0.0	0.2	3.1	0.0	5.1	6.9	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.8	0.0	0.6	12.8	0.0	9.7	33.3	0.0	0.0	0.0	0.0	21.0
LnGrp LOS	A		A	B		A	C					C
Approach Vol, veh/h		726			834			349			2	
Approach Delay, s/veh		0.7			10.7			33.3			21.0	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.5	26.5	53.5	26.5
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	48.0	* 24	48.0	23.5
Max Q Clear Time (g_c+I1), s	20.6	20.5	2.0	2.1
Green Ext Time (p_c), s	7.0	0.7	4.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

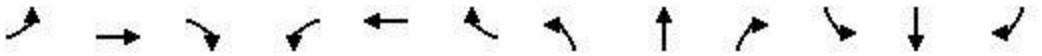
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	758	794	6	0	22
Future Vol, veh/h	0	758	794	6	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	798	836	6	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	421
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.31
Pot Cap-1 Maneuver	0	-	-	-	0	584
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	584
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.42
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	584
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s/veh)	-	-	-	11.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	71
Future Volume (veh/h)	70	418	66	48	180	40	37	252	92	37	205	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		0.91	1.00		0.90	0.92		0.85	0.93		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	78	464	73	53	200	44	41	280	102	41	228	79
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	459	916	370	126	468	101	358	1195	451	359	839	273
Arrive On Green	0.26	0.26	0.26	0.20	0.20	0.20	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1767	3526	1424	638	2367	512	975	3526	1332	928	2476	806
Grp Volume(v), veh/h	78	464	73	151	0	146	41	280	102	41	158	149
Grp Sat Flow(s),veh/h/ln	1767	1763	1424	1824	0	1693	975	1763	1332	928	1763	1519
Q Serve(g_s), s	2.5	8.3	3.0	5.4	0.0	5.6	2.4	4.2	4.0	2.4	4.8	5.3
Cycle Q Clear(g_c), s	2.5	8.3	3.0	5.4	0.0	5.6	7.7	4.2	4.0	6.7	4.8	5.3
Prop In Lane	1.00		1.00	0.35		0.30	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	459	916	370	361	0	335	358	1195	451	359	597	515
V/C Ratio(X)	0.17	0.51	0.20	0.42	0.00	0.43	0.11	0.23	0.23	0.11	0.26	0.29
Avail Cap(c_a), veh/h	910	1816	733	544	0	505	358	1195	451	359	597	515
HCM Platoon Ratio	1.00	1.00	1.00	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	23.3	21.3	25.9	0.0	26.0	20.7	17.5	17.5	19.9	17.7	17.9
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.3	0.6	0.5	1.2	0.6	1.1	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	1.0	3.4	1.0	2.3	0.0	2.2	0.6	1.7	1.3	0.6	2.1	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	23.4	21.4	26.2	0.0	26.3	21.3	18.0	18.6	20.5	18.8	19.3
LnGrp LOS	C	C	C	C		C	C	B	B	C	B	B
Approach Vol, veh/h		615			297			423			348	
Approach Delay, s/veh		22.9			26.2			18.5			19.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.6		30.0		24.2		30.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		25.0		38.0		25.0				
Max Q Clear Time (g_c+I1), s		7.6		9.7		10.3		8.7				
Green Ext Time (p_c), s		1.0		1.5		2.5		1.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			21.6									
HCM 7th LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
Future Volume (veh/h)	59	228	260	104	241	62	0	0	0	26	118	27
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)	0.91		0.85	1.00		0.90				1.00		0.80
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	66	253	289	116	268	69				29	131	30
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	122	381	340	454	1659	414				143	623	137
Arrive On Green	0.28	0.28	0.28	0.51	1.00	1.00				0.26	0.26	0.26
Sat Flow, veh/h	251	1359	1213	1767	2729	681				545	2371	520
Grp Volume(v), veh/h	319	0	289	116	170	167				97	0	93
Grp Sat Flow(s),veh/h/ln	1610	0	1213	1767	1763	1647				1828	0	1608
Q Serve(g_s), s	9.5	0.0	19.1	3.1	0.0	0.0				3.5	0.0	3.8
Cycle Q Clear(g_c), s	14.6	0.0	19.1	3.1	0.0	0.0				3.5	0.0	3.8
Prop In Lane	0.21		1.00	1.00		0.41				0.30		0.32
Lane Grp Cap(c), veh/h	503	0	340	454	1072	1001				480	0	422
V/C Ratio(X)	0.63	0.00	0.85	0.26	0.16	0.17				0.20	0.00	0.22
Avail Cap(c_a), veh/h	733	0	521	454	1072	1001				538	0	473
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.91	0.00	0.91	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	27.0	0.0	28.9	16.1	0.0	0.0				24.4	0.0	24.5
Incr Delay (d2), s/veh	5.5	0.0	20.8	0.1	0.3	0.4				0.1	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
%ile BackOfQ(50%),veh/ln	6.3	0.0	7.3	1.2	0.1	0.1				1.5	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.5	0.0	49.7	16.2	0.3	0.4				24.5	0.0	24.6
LnGrp LOS	C		D	B	A	A				C		C
Approach Vol, veh/h		608			453						190	
Approach Delay, s/veh		40.7			4.4						24.5	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	27.8	29.8		27.3		57.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	8.0	* 37		25.0		49.0
Max Q Clear Time (g_c+I1), s	5.1	21.1		5.8		2.0
Green Ext Time (p_c), s	0.0	2.7		0.6		1.4

Intersection Summary	
HCM 7th Control Delay, s/veh	25.1
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)	10	244	0	7	383	24	2	0	3	22	0	22
Future Volume (veh/h)	10	244	0	7	383	24	2	0	3	22	0	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)	0.98		1.00	0.96		0.92	0.96		0.94	0.94		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	11	271	0	8	426	27	2	0	3	24	0	24
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	93	2094	0	57	2056	128	180	23	215	221	19	177
Arrive On Green	0.21	0.21	0.00	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	75	3392	0	21	3248	203	485	91	863	632	78	710
Grp Volume(v), veh/h	150	132	0	244	0	217	5	0	0	48	0	0
Grp Sat Flow(s),veh/h/ln	1778	1604	0	1840	0	1632	1439	0	0	1420	0	0
Q Serve(g_s), s	0.0	5.7	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	5.7	0.0	4.7	0.0	4.8	0.2	0.0	0.0	1.9	0.0	0.0
Prop In Lane	0.07		0.00	0.03		0.12	0.40		0.60	0.50		0.50
Lane Grp Cap(c), veh/h	1171	1016	0	1209	0	1033	418	0	0	417	0	0
V/C Ratio(X)	0.13	0.13	0.00	0.20	0.00	0.21	0.01	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	1171	1016	0	1209	0	1033	564	0	0	562	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.77	0.77	0.00	0.98	0.00	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.5	14.6	0.0	6.6	0.0	6.6	24.0	0.0	0.0	24.7	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.1	0.0	1.8	0.0	1.6	0.1	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	14.8	0.0	7.0	0.0	7.1	24.0	0.0	0.0	24.8	0.0	0.0
LnGrp LOS	B	B		A		A	C			C		
Approach Vol, veh/h		282			461			5			48	
Approach Delay, s/veh		14.7			7.0			24.0			24.8	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.2	58.8	26.2	58.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	30.0	45.0	30.0	45.0
Max Q Clear Time (g_c+I1), s	3.9	6.8	2.2	7.7
Green Ext Time (p_c), s	0.2	3.2	0.0	1.9

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)	43	163	63	278	295	38	57	405	241	13	511	62
Future Volume (veh/h)	43	163	63	278	295	38	57	405	241	13	511	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		0.89	1.00		0.91	0.98		0.93	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	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	48	181	70	309	328	42	63	450	268	14	568	69
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	144	717	260	417	1202	152	137	848	508	59	1048	125
Arrive On Green	0.04	0.29	0.29	0.12	0.39	0.39	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	3428	2445	888	3428	3111	393	218	2433	1458	27	3007	359
Grp Volume(v), veh/h	48	127	124	309	184	186	210	303	268	348	0	303
Grp Sat Flow(s),veh/h/ln	1714	1763	1570	1714	1763	1742	1047	1604	1458	1813	0	1580
Q Serve(g_s), s	1.0	4.2	4.6	6.6	5.4	5.6	3.9	11.6	11.2	0.0	0.0	11.8
Cycle Q Clear(g_c), s	1.0	4.2	4.6	6.6	5.4	5.6	15.7	11.6	11.2	11.4	0.0	11.8
Prop In Lane	1.00		0.57	1.00		0.23	0.30		1.00	0.04		0.23
Lane Grp Cap(c), veh/h	144	517	460	417	681	673	427	559	508	681	0	551
V/C Ratio(X)	0.33	0.25	0.27	0.74	0.27	0.28	0.49	0.54	0.53	0.51	0.00	0.55
Avail Cap(c_a), veh/h	225	648	577	720	903	892	554	716	651	852	0	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	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	35.5	20.5	20.7	32.3	16.0	16.1	20.2	19.9	19.8	19.9	0.0	20.0
Incr Delay (d2), s/veh	1.4	0.2	0.3	2.6	0.2	0.2	0.9	0.8	0.8	0.6	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.7	1.7	2.9	2.2	2.2	3.2	4.2	3.8	4.8	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	20.7	21.0	34.9	16.2	16.3	21.1	20.7	20.6	20.5	0.0	20.9
LnGrp LOS	D	C	C	C	B	B	C	C	C	C		C
Approach Vol, veh/h		299			679			781			651	
Approach Delay, s/veh		23.4			24.7			20.8			20.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	32.6	8.2	35.4	32.6	15.3	28.3
Change Period (Y+Rc), s	6.0	5.0	6.0	6.0	6.0	* 6
Max Green Setting (Gmax), s	34.0	5.0	39.0	34.0	16.0	* 28
Max Q Clear Time (g_c+I1), s	17.7	3.0	7.6	13.8	8.6	6.6
Green Ext Time (p_c), s	4.1	0.0	2.5	4.1	0.7	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	22.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	61	356	548	283	97	63
Future Volume (veh/h)	61	356	548	283	97	63
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			0.92	1.00	0.93
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	68	396	609	314	108	70
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	362	2488	1540	794	180	117
Arrive On Green	0.71	0.71	0.23	0.23	0.18	0.18
Sat Flow, veh/h	600	3618	2274	1124	984	638
Grp Volume(v), veh/h	68	396	492	431	179	0
Grp Sat Flow(s),veh/h/ln	600	1763	1763	1543	1632	0
Q Serve(g_s), s	6.1	3.4	21.2	21.2	9.1	0.0
Cycle Q Clear(g_c), s	27.3	3.4	21.2	21.2	9.1	0.0
Prop In Lane	1.00			0.73	0.60	0.39
Lane Grp Cap(c), veh/h	362	2488	1244	1089	299	0
V/C Ratio(X)	0.19	0.16	0.40	0.40	0.60	0.00
Avail Cap(c_a), veh/h	362	2488	1244	1089	562	0
HCM Platoon Ratio	1.00	1.00	0.33	0.33	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.70	0.70	1.00	0.00
Uniform Delay (d), s/veh	14.3	4.4	18.3	18.3	33.7	0.0
Incr Delay (d2), s/veh	1.1	0.1	0.7	0.8	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	1.1	10.1	8.9	3.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.4	4.5	19.0	19.1	35.6	0.0
LnGrp LOS	B	A	B	B	D	
Approach Vol, veh/h		464	923		179	
Approach Delay, s/veh		6.1	19.0		35.6	
Approach LOS		A	B		D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	21.5	68.5	68.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	31.0	49.0	49.0
Max Q Clear Time (g_c+I1), s	11.1	23.2	29.3
Green Ext Time (p_c), s	0.5	7.4	3.3

Intersection Summary	
HCM 7th Control Delay, s/veh	17.1
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
Future Volume (veh/h)	13	423	17	17	783	14	0	0	0	30	1	48
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)	0.98		0.91	0.97		0.88				1.00		0.91
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	1856	1856	1856	1856	1856	1856				1856	1856	1856
Adj Flow Rate, veh/h	14	470	19	19	870	16				33	1	53
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3				3	3	3
Cap, veh/h	527	2524	102	718	1329	24				91	3	146
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00				0.15	0.15	0.15
Sat Flow, veh/h	609	3438	139	869	1811	33				588	18	944
Grp Volume(v), veh/h	14	240	249	19	0	886				87	0	0
Grp Sat Flow(s),veh/h/ln	609	1763	1814	869	0	1844				1550	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				4.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				4.5	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.02				0.38		0.61
Lane Grp Cap(c), veh/h	527	1294	1331	718	0	1354				240	0	0
V/C Ratio(X)	0.03	0.19	0.19	0.03	0.00	0.65				0.36	0.00	0.00
Avail Cap(c_a), veh/h	527	1294	1331	718	0	1354				413	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				34.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.3	0.1	0.0	2.5				0.9	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
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.0	0.9				1.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.3	0.3	0.1	0.0	2.5				35.0	0.0	0.0
LnGrp LOS	A	A	A	A		A				C		
Approach Vol, veh/h		503			905						87	
Approach Delay, s/veh		0.3			2.4						35.0	
Approach LOS		A			A						C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	18.9	71.1	71.1
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	56.0	56.0
Max Q Clear Time (g_c+I1), s	6.5	2.0	2.0
Green Ext Time (p_c), s	0.4	9.9	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	3.6
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	438	767	17	6	47
Future Vol, veh/h	15	438	767	17	6	47
Conflicting Peds, #/hr	0	0	0	112	14	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	17	487	852	19	7	52

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	983	0	-	0	1264	974
Stage 1	-	-	-	-	974	-
Stage 2	-	-	-	-	291	-
Critical Hdwy	4.145	-	-	-	6.645	6.245
Critical Hdwy Stg 1	-	-	-	-	5.445	-
Critical Hdwy Stg 2	-	-	-	-	5.845	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	695	-	-	-	173	303
Stage 1	-	-	-	-	363	-
Stage 2	-	-	-	-	731	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	621	-	-	-	134	271
Mov Cap-2 Maneuver	-	-	-	-	134	-
Stage 1	-	-	-	-	316	-
Stage 2	-	-	-	-	653	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.36	0	24.53
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	621	-	-	-	243
HCM Lane V/C Ratio	0.027	-	-	-	0.243
HCM Control Delay (s/veh)	11	-	-	-	24.5
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9

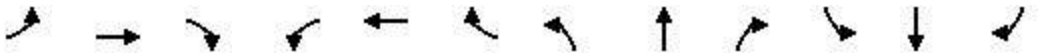
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	428	756	19	11	28
Future Vol, veh/h	16	428	756	19	11	28
Conflicting Peds, #/hr	0	0	0	79	19	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	18	476	840	21	12	31

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	940	0	-	0	1222	930
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	292	-
Critical Hdwy	4.145	-	-	-	6.645	6.245
Critical Hdwy Stg 1	-	-	-	-	5.445	-
Critical Hdwy Stg 2	-	-	-	-	5.845	-
Follow-up Hdwy	2.2285	-	-	-	3.5285	3.3285
Pot Cap-1 Maneuver	722	-	-	-	183	321
Stage 1	-	-	-	-	381	-
Stage 2	-	-	-	-	730	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	668	-	-	-	153	297
Mov Cap-2 Maneuver	-	-	-	-	153	-
Stage 1	-	-	-	-	343	-
Stage 2	-	-	-	-	675	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.38	0	23.79
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	668	-	-	-	235
HCM Lane V/C Ratio	0.027	-	-	-	0.185
HCM Control Delay (s/veh)	10.5	-	-	-	23.8
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.7



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	52
Future Volume (veh/h)	37	394	8	21	715	42	8	3	5	39	7	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)	0.99		0.93	0.98		0.91	0.95		0.96	0.96		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	41	438	9	23	794	47	9	3	6	43	8	58
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	552	2604	53	755	1272	75	158	58	78	123	38	119
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	639	3527	72	915	1723	102	654	386	520	444	250	789
Grp Volume(v), veh/h	41	219	228	23	0	841	18	0	0	109	0	0
Grp Sat Flow(s),veh/h/ln	639	1763	1836	915	0	1825	1561	0	0	1482	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.06	0.50		0.33	0.39		0.53
Lane Grp Cap(c), veh/h	552	1302	1356	755	0	1348	295	0	0	279	0	0
V/C Ratio(X)	0.07	0.17	0.17	0.03	0.00	0.62	0.06	0.00	0.00	0.39	0.00	0.00
Avail Cap(c_a), veh/h	552	1302	1356	755	0	1348	441	0	0	427	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	0.0	0.0	0.0	0.0	0.0	0.0	32.8	0.0	0.0	34.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.3	0.3	0.1	0.0	2.2	0.1	0.0	0.0	0.9	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	0.0	0.1	0.1	0.0	0.0	0.8	0.3	0.0	0.0	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.3	0.3	0.3	0.1	0.0	2.2	32.9	0.0	0.0	35.8	0.0	0.0
LnGrp LOS	A	A	A	A		A	C			D		
Approach Vol, veh/h		488			864			18			109	
Approach Delay, s/veh		0.3			2.1			32.9			35.8	
Approach LOS		A			A			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		18.5		71.5		18.5		71.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.8		57.2		22.8		57.2				
Max Q Clear Time (g_c+I1), s		7.8		2.0		2.8		2.0				
Green Ext Time (p_c), s		0.5		8.5		0.0		3.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			4.4									
HCM 7th LOS			A									

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	431	7	13	773	5	9
Future Vol, veh/h	431	7	13	773	5	9
Conflicting Peds, #/hr	0	69	0	0	6	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	479	8	14	859	6	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	556	0	1446	312
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	894	-
Critical Hdwy	-	-	4.145	-	6.645	6.945
Critical Hdwy Stg 1	-	-	-	-	5.845	-
Critical Hdwy Stg 2	-	-	-	-	5.445	-
Follow-up Hdwy	-	-	2.2285	-	3.5285	3.3285
Pot Cap-1 Maneuver	-	-	1007	-	132	682
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	396	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	941	-	121	637
Mov Cap-2 Maneuver	-	-	-	-	121	-
Stage 1	-	-	-	-	504	-
Stage 2	-	-	-	-	388	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.15	20.19
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	253	-	-	941	-
HCM Lane V/C Ratio	0.062	-	-	0.015	-
HCM Control Delay (s/veh)	20.2	-	-	8.9	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	16
Future Volume (veh/h)	9	430	1	17	758	28	12	1	15	13	1	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)	0.99		0.93	0.98		0.93	0.94		0.98	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	10	478	1	19	842	31	13	1	17	14	1	18
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	581	2900	6	793	1424	52	92	23	71	93	22	69
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	624	3609	8	887	1772	65	412	269	827	417	259	812
Grp Volume(v), veh/h	10	233	246	19	0	873	31	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	624	1763	1853	887	0	1838	1508	0	0	1489	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	1.7	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.04	0.42		0.55	0.42		0.55
Lane Grp Cap(c), veh/h	581	1416	1489	793	0	1477	186	0	0	184	0	0
V/C Ratio(X)	0.02	0.16	0.16	0.02	0.00	0.59	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	581	1416	1489	793	0	1477	414	0	0	411	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	0.0	0.0	0.0	0.0	0.0	0.0	38.4	0.0	0.0	38.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.2	0.1	0.0	1.7	0.4	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.1	0.0	0.0	0.7	0.7	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	0.3	0.2	0.1	0.0	1.7	38.8	0.0	0.0	38.9	0.0	0.0
LnGrp LOS	A	A	A	A		A	D			D		
Approach Vol, veh/h		489			892			31			33	
Approach Delay, s/veh		0.2			1.7			38.8			38.9	
Approach LOS		A			A			D			D	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		12.7		77.3		12.7		77.3				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		58.0		22.0		58.0				
Max Q Clear Time (g_c+I1), s		3.7		2.0		3.6		2.0				
Green Ext Time (p_c), s		0.1		9.0		0.1		3.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			2.9									
HCM 7th LOS			A									

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	8	450	0	0	783	38	6	1	24	5	0	14
Future Vol, veh/h	8	450	0	0	783	38	6	1	24	5	0	14
Conflicting Peds, #/hr	0	0	81	0	0	48	0	0	1	0	0	16
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	500	0	0	870	42	7	1	27	6	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	960	0	-	-	-	0	1404	1478	251	1208	1457	955
Stage 1	-	-	-	-	-	-	518	518	-	939	939	-
Stage 2	-	-	-	-	-	-	886	960	-	269	518	-
Critical Hdwy	4.145	-	-	-	-	-	7.345	6.545	6.945	7.345	6.545	6.245
Critical Hdwy Stg 1	-	-	-	-	-	-	6.545	5.545	-	6.145	5.545	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.145	5.545	-	6.545	5.545	-
Follow-up Hdwy	2.2285	-	-	-	-	-	3.5285	4.0285	3.3285	3.5285	4.0285	3.3285
Pot Cap-1 Maneuver	709	-	0	0	-	-	107	124	747	148	128	311
Stage 1	-	-	0	0	-	-	508	530	-	314	340	-
Stage 2	-	-	0	0	-	-	336	332	-	711	530	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	677	-	-	-	-	-	99	117	746	133	121	292
Mov Cap-2 Maneuver	-	-	-	-	-	-	99	117	-	133	121	-
Stage 1	-	-	-	-	-	-	501	523	-	300	324	-
Stage 2	-	-	-	-	-	-	314	317	-	675	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	18.29	22.91
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	305	677	-	-	-	222
HCM Lane V/C Ratio	0.113	0.013	-	-	-	0.095
HCM Control Delay (s/veh)	18.3	10.4	-	-	-	22.9
HCM Lane LOS	C	B	-	-	-	C
HCM 95th %tile Q(veh)	0.4	0	-	-	-	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	467	813	68	23	8
Future Volume (veh/h)	12	467	813	68	23	8
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			0.96	1.00	0.97
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	13	519	903	76	26	9
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	377	2862	1249	105	108	38
Arrive On Green	0.05	1.00	0.74	0.74	0.09	0.09
Sat Flow, veh/h	1767	3618	1682	142	1229	425
Grp Volume(v), veh/h	13	519	0	979	36	0
Grp Sat Flow(s),veh/h/ln	1767	1763	0	1824	1702	0
Q Serve(g_s), s	0.1	0.0	0.0	26.8	1.8	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.0	26.8	1.8	0.0
Prop In Lane	1.00			0.08	0.72	0.25
Lane Grp Cap(c), veh/h	377	2862	0	1354	150	0
V/C Ratio(X)	0.03	0.18	0.00	0.72	0.24	0.00
Avail Cap(c_a), veh/h	490	2862	0	1354	511	0
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.6	0.0	0.0	6.4	38.2	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.0	3.4	0.8	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	0.1	0.1	0.0	8.8	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.6	0.1	0.0	9.8	39.0	0.0
LnGrp LOS	A	A		A	D	
Approach Vol, veh/h		532	979		36	
Approach Delay, s/veh		0.3	9.8		39.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		6.2	71.3		12.4	77.6
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	42.0		27.0	54.0
Max Q Clear Time (g_c+I1), s		2.1	28.8		3.8	2.0
Green Ext Time (p_c), s		0.0	6.4		0.1	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	7.2
HCM 7th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	349	141	99	653	228	170
Future Volume (veh/h)	349	141	99	653	228	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)		0.85	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	388	157	110	726	253	189
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	505	199	804	1350	298	265
Arrive On Green	0.22	0.22	0.91	1.00	0.17	0.17
Sat Flow, veh/h	2430	919	1767	1856	1767	1572
Grp Volume(v), veh/h	290	255	110	726	253	189
Grp Sat Flow(s),veh/h/ln	1763	1493	1767	1856	1767	1572
Q Serve(g_s), s	16.3	17.1	0.7	0.0	14.7	12.0
Cycle Q Clear(g_c), s	16.3	17.1	0.7	0.0	14.7	12.0
Prop In Lane		0.62	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	381	323	804	1350	298	265
V/C Ratio(X)	0.76	0.79	0.14	0.54	0.85	0.71
Avail Cap(c_a), veh/h	782	662	804	1350	467	415
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.95	0.95	1.00	1.00
Uniform Delay (d), s/veh	39.0	39.3	2.6	0.0	42.8	41.6
Incr Delay (d2), s/veh	13.3	17.7	0.1	1.5	8.5	3.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	7.8	0.3	0.5	7.1	4.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	52.3	57.0	2.7	1.5	51.2	45.2
LnGrp LOS	D	E	A	A	D	D
Approach Vol, veh/h	545			836	442	
Approach Delay, s/veh	54.5			1.6	48.7	
Approach LOS	D			A	D	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.2	28.9			83.1	22.9
Change Period (Y+Rc), s	6.0	* 6			6.0	5.0
Max Green Setting (Gmax), s	15.5	* 47			67.0	28.0
Max Q Clear Time (g_c+I1), s	12.3	19.1			2.0	16.7
Green Ext Time (p_c), s	0.2	3.8			6.4	1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	28.8
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	312	207	35	207	592	0	0	0	0	328	678	160
Future Volume (veh/h)	0	312	207	35	207	592	0	0	0	0	328	678	160
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		0.94
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	0	1856	1856		1856	1856	0				1856	1856	1856
Adj Flow Rate, veh/h	0	347	0		230	658	0				364	753	178
Peak Hour Factor	0.90	0.90	0.90		0.90	0.90	0.90				0.90	0.90	0.90
Percent Heavy Veh, %	0	3	3		3	3	0				3	3	3
Cap, veh/h	0	520			716	2115	0				436	902	213
Arrive On Green	0.00	0.30	0.00		0.81	1.00	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3618	1572		1767	3618	0				1448	2995	707
Grp Volume(v), veh/h	0	347	0		230	658	0				448	424	422
Grp Sat Flow(s),veh/h/ln	0	1763	1572		1767	1763	0				1783	1689	1678
Q Serve(g_s), s	0.0	9.2	0.0		3.5	0.0	0.0				24.9	24.9	24.9
Cycle Q Clear(g_c), s	0.0	9.2	0.0		3.5	0.0	0.0				24.9	24.9	24.9
Prop In Lane	0.00		1.00		1.00		0.00				0.81		0.42
Lane Grp Cap(c), veh/h	0	520			716	2115	0				537	508	505
V/C Ratio(X)	0.00	0.67			0.32	0.31	0.00				0.83	0.83	0.84
Avail Cap(c_a), veh/h	0	732			716	2115	0				681	645	641
HCM Platoon Ratio	1.00	2.00	2.00		2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.95	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	35.1	0.0		6.3	0.0	0.0				34.6	34.6	34.6
Incr Delay (d2), s/veh	0.0	6.3	0.0		0.1	0.4	0.0				5.8	6.1	6.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.0	0.0		1.2	0.1	0.0				11.5	10.9	10.9
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	41.4	0.0		6.4	0.4	0.0				40.4	40.7	40.8
LnGrp LOS		D			A	A					D	D	D
Approach Vol, veh/h		347				888						1295	
Approach Delay, s/veh		41.4				1.9						40.6	
Approach LOS		D				A						D	

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	17.9	20.6		37.4		68.6			
Change Period (Y+Rc), s	5.0	5.0		5.5		5.0			
Max Green Setting (Gmax), s	28.6	22.0		40.5		55.0			
Max Q Clear Time (g_c+I1), s	5.5	11.2		26.9		2.0			
Green Ext Time (p_c), s	0.3	1.2		5.0		3.6			

Intersection Summary	
HCM 7th Control Delay, s/veh	27.2
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Future Volume (veh/h)	86	229	277	83	17	292	289	130	674	114	62	6	373
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.98	1.00		0.97	0.97		0.92	1.00		0.91
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	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		254	308	92	19	324	321	144	749	127	0	0	493
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, %		3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h		324	854	255	97	1563	736	311	985	403	0	518	795
Arrive On Green		0.16	1.00	1.00	0.48	0.48	0.48	0.28	0.28	0.28	0.00	0.00	0.28
Sat Flow, veh/h		3428	1363	407	124	3225	1518	871	3526	1443	0	1856	2847
Grp Volume(v), veh/h		254	0	400	180	163	321	144	749	127	0	0	493
Grp Sat Flow(s),veh/h/ln		1714	0	1771	1744	1604	1518	871	1763	1443	0	1856	1423
Q Serve(g_s), s		7.5	0.0	0.0	0.0	6.2	14.6	15.1	20.6	7.4	0.0	0.0	16.0
Cycle Q Clear(g_c), s		7.5	0.0	0.0	5.9	6.2	14.6	15.1	20.6	7.4	0.0	0.0	16.0
Prop In Lane		1.00		0.23	0.11		1.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h		324	0	1109	883	778	736	311	985	403	0	518	795
V/C Ratio(X)		0.78	0.00	0.36	0.20	0.21	0.44	0.46	0.76	0.32	0.00	0.00	0.62
Avail Cap(c_a), veh/h		517	0	1109	883	778	736	421	1430	585	0	753	1155
HCM Platoon Ratio		1.67	1.67	1.67	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	0.00	0.00	1.00
Uniform Delay (d), s/veh		43.6	0.0	0.0	15.6	15.7	17.8	33.0	35.0	30.2	0.0	0.0	33.3
Incr Delay (d2), s/veh		4.2	0.0	0.9	0.5	0.6	1.9	1.1	1.5	0.4	0.0	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		3.2	0.0	0.3	2.6	2.4	5.5	3.3	9.0	2.6	0.0	0.0	5.6
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		47.8	0.0	0.9	16.1	16.3	19.7	34.1	36.4	30.6	0.0	0.0	34.1
LnGrp LOS		D		A	B	B	B	C	D	C			C
Approach Vol, veh/h			654			664			1020			493	
Approach Delay, s/veh			19.1			17.9			35.4			34.1	
Approach LOS			B			B			D			C	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	71.4		34.6	15.0	56.4		34.6
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	53.0		43.0	16.0	32.0		43.0
Max Q Clear Time (g_c+I1), s	2.0		18.0	9.5	16.6		22.6
Green Ext Time (p_c), s	3.1		2.4	0.5	3.0		7.0

Intersection Summary	
HCM 7th Control Delay, s/veh	27.3
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	0	63
Future Volume (veh/h)	22	429	2	1	533	90	2	0	0	53	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)	0.99		0.98	1.00		0.96	0.98		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	24	477	2	1	592	100	2	0	0	59	0	70
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	77	1302	5	45	2189	368	253	0	0	138	16	105
Arrive On Green	0.75	0.75	0.75	1.00	1.00	1.00	0.13	0.00	0.00	0.13	0.00	0.13
Sat Flow, veh/h	40	1746	7	0	2934	493	1262	0	0	558	127	812
Grp Volume(v), veh/h	503	0	0	374	0	319	2	0	0	129	0	0
Grp Sat Flow(s),veh/h/ln	1794	0	0	1855	0	1573	1262	0	0	1497	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0
Cycle Q Clear(g_c), s	7.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	6.5	0.0	0.0
Prop In Lane	0.05		0.00	0.00		0.31	1.00		0.00	0.46		0.54
Lane Grp Cap(c), veh/h	1385	0	0	1429	0	1173	253	0	0	259	0	0
V/C Ratio(X)	0.36	0.00	0.00	0.26	0.00	0.27	0.01	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1385	0	0	1429	0	1173	425	0	0	454	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.00	0.00	0.92	0.00	0.92	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.5	0.0	0.0	0.0	0.0	0.0	30.4	0.0	0.0	33.1	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.4	0.0	0.5	0.0	0.0	0.0	0.6	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	2.3	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.3	0.0	0.0	0.4	0.0	0.5	30.4	0.0	0.0	33.6	0.0	0.0
LnGrp LOS	A			A		A	C			C		
Approach Vol, veh/h		503			693			2			129	
Approach Delay, s/veh		4.3			0.5			30.4			33.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	15.3	64.7	15.3	64.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	8.5	2.0	2.1	9.6
Green Ext Time (p_c), s	0.4	3.3	0.0	2.6

Intersection Summary	
HCM 7th Control Delay, s/veh	5.2
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	0
Future Volume (veh/h)	3	352	127	111	336	0	288	0	152	0	0	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)	0.99		0.95	0.99		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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	3	391	141	123	373	0	320	0	169	0	0	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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	966	780	536	968	0	429	0	187	0	690	0
Arrive On Green	1.00	1.00	1.00	0.52	0.52	0.00	0.37	0.00	0.37	0.00	0.00	0.00
Sat Flow, veh/h	2	1851	1495	855	1856	0	952	0	503	0	1856	0
Grp Volume(v), veh/h	394	0	141	123	373	0	489	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1854	0	1495	855	1856	0	1455	0	0	0	1856	0
Q Serve(g_s), s	0.0	0.0	0.0	6.4	9.6	0.0	25.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	6.4	9.6	0.0	25.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.01		1.00	1.00		0.00	0.65		0.35	0.00		0.00
Lane Grp Cap(c), veh/h	1012	0	780	536	968	0	616	0	0	0	690	0
V/C Ratio(X)	0.39	0.00	0.18	0.23	0.39	0.00	0.79	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1012	0	780	536	968	0	747	0	0	0	847	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	0.94	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	10.7	11.5	0.0	23.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	1.0	1.2	0.0	4.9	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	0.3	0.0	0.1	1.3	4.0	0.0	9.2	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	1.1	0.0	0.5	11.7	12.6	0.0	28.6	0.0	0.0	0.0	0.0	0.0
LnGrp LOS	A		A	B	B		C					
Approach Vol, veh/h		535			496			489			0	
Approach Delay, s/veh		0.9			12.4			28.6			0.0	
Approach LOS		A			B			C				

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	45.7	34.3	45.7	34.3
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	35.0	* 37	35.0	36.5
Max Q Clear Time (g_c+I1), s	11.6	27.4	2.0	0.0
Green Ext Time (p_c), s	3.3	2.3	3.4	0.0

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.

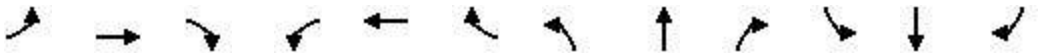
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	675	794	87	0	40
Future Vol, veh/h	0	675	794	87	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	750	882	97	0	44

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	489
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	0	-	-	-	0	522
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	522
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	12.54
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	522
HCM Lane V/C Ratio	-	-	-	0.085
HCM Control Delay (s/veh)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Future Volume (veh/h)	101	480	72	59	218	61	110	399	151	77	267	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.85	0.93		0.80	0.95		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	106	505	76	62	229	64	116	420	159	81	281	109
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	476	950	379	140	508	138	302	1159	414	277	781	287
Arrive On Green	0.27	0.27	0.27	0.22	0.22	0.22	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1795	3582	1431	625	2261	617	928	3582	1280	800	2412	886
Grp Volume(v), veh/h	106	505	76	184	0	171	116	420	159	81	205	185
Grp Sat Flow(s),veh/h/ln	1795	1791	1431	1854	0	1650	928	1791	1280	800	1791	1507
Q Serve(g_s), s	3.7	9.7	3.3	6.9	0.0	7.2	8.9	7.2	7.7	6.9	7.0	7.6
Cycle Q Clear(g_c), s	3.7	9.7	3.3	6.9	0.0	7.2	16.5	7.2	7.7	14.2	7.0	7.6
Prop In Lane	1.00		1.00	0.34		0.37	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	476	950	379	416	0	370	302	1159	414	277	580	488
V/C Ratio(X)	0.22	0.53	0.20	0.44	0.00	0.46	0.38	0.36	0.38	0.29	0.35	0.38
Avail Cap(c_a), veh/h	827	1650	659	508	0	452	302	1159	414	277	580	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	25.2	22.9	26.8	0.0	27.0	27.3	20.8	21.0	26.2	20.7	21.0
Incr Delay (d2), s/veh	0.1	0.2	0.1	0.3	0.0	0.3	3.7	0.9	2.7	2.7	1.7	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.1	1.1	3.0	0.0	2.8	2.2	3.1	2.6	1.5	3.1	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.1	25.4	23.0	27.1	0.0	27.3	31.0	21.7	23.7	28.9	22.4	23.2
LnGrp LOS	C	C	C	C		C	C	C	C	C	C	C
Approach Vol, veh/h		687			355			695			471	
Approach Delay, s/veh		24.8			27.2			23.7			23.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		23.0		31.0		26.3		31.0				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		22.0		26.0		37.0		26.0				
Max Q Clear Time (g_c+I1), s		9.2		18.5		11.7		16.2				
Green Ext Time (p_c), s		1.2		1.8		2.8		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)	52	538	118	72	246	43	0	0	0	67	150	92
Future Volume (veh/h)	52	538	118	72	246	43	0	0	0	67	150	92
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)	0.92		0.89	1.00		0.92				1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	55	566	124	76	259	45				71	158	97
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	95	697	150	496	1872	318				190	412	240
Arrive On Green	0.27	0.27	0.27	0.55	1.00	1.00				0.25	0.25	0.25
Sat Flow, veh/h	172	2551	548	1795	3019	513				760	1644	956
Grp Volume(v), veh/h	397	0	348	76	151	153				173	0	153
Grp Sat Flow(s),veh/h/ln	1733	0	1539	1795	1791	1742				1847	0	1513
Q Serve(g_s), s	12.1	0.0	18.1	1.8	0.0	0.0				6.6	0.0	7.2
Cycle Q Clear(g_c), s	18.2	0.0	18.1	1.8	0.0	0.0				6.6	0.0	7.2
Prop In Lane	0.14		0.36	1.00		0.29				0.41		0.63
Lane Grp Cap(c), veh/h	522	0	420	496	1111	1080				463	0	379
V/C Ratio(X)	0.76	0.00	0.83	0.15	0.14	0.14				0.37	0.00	0.40
Avail Cap(c_a), veh/h	784	0	661	496	1111	1080				543	0	445
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.88	0.00	0.88	0.99	0.99	0.99				1.00	0.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	29.0	14.1	0.0	0.0				26.3	0.0	26.6
Incr Delay (d2), s/veh	8.9	0.0	15.2	0.1	0.3	0.3				0.2	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	8.2	0.7	0.1	0.1				2.8	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	37.8	0.0	44.2	14.2	0.3	0.3				26.5	0.0	26.8
LnGrp LOS	D		D	B	A	A				C		C
Approach Vol, veh/h		745			380						326	
Approach Delay, s/veh		40.8			3.1						26.7	
Approach LOS		D			A						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	9.5	29.2		26.3		58.7
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0
Max Green Setting (Gmax), s	8.0	* 37		25.0		49.0
Max Q Clear Time (g_c+I1), s	3.8	20.2		9.2		2.0
Green Ext Time (p_c), s	0.0	3.1		1.2		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	27.7
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)	28	574	3	1	313	42	2	0	2	73	0	46
Future Volume (veh/h)	28	574	3	1	313	42	2	0	2	73	0	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)	0.98		0.92	0.99		0.93	0.96		0.94	0.96		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	29	604	3	1	329	44	2	0	2	77	0	48
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	110	2148	11	43	1954	257	231	20	187	273	16	137
Arrive On Green	0.21	0.21	0.21	0.63	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	101	3389	17	1	3082	405	673	79	752	824	63	553
Grp Volume(v), veh/h	327	0	309	200	0	174	4	0	0	125	0	0
Grp Sat Flow(s),veh/h/ln	1795	0	1711	1884	0	1604	1504	0	0	1440	0	0
Q Serve(g_s), s	0.0	0.0	12.9	0.0	0.0	3.8	0.0	0.0	0.0	4.6	0.0	0.0
Cycle Q Clear(g_c), s	12.4	0.0	12.9	3.7	0.0	3.8	0.2	0.0	0.0	5.9	0.0	0.0
Prop In Lane	0.09		0.01	0.01		0.25	0.50		0.50	0.62		0.38
Lane Grp Cap(c), veh/h	1184	0	1085	1237	0	1017	437	0	0	426	0	0
V/C Ratio(X)	0.28	0.00	0.28	0.16	0.00	0.17	0.01	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	1184	0	1085	1237	0	1017	634	0	0	625	0	0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.00	0.86	0.97	0.00	0.97	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.2	0.0	17.4	6.4	0.0	6.4	24.1	0.0	0.0	26.1	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.6	0.3	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	6.0	1.4	0.0	1.3	0.1	0.0	0.0	2.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.7	0.0	18.0	6.6	0.0	6.7	24.1	0.0	0.0	26.5	0.0	0.0
LnGrp LOS	B		B	A		A	C			C		
Approach Vol, veh/h		636			374			4			125	
Approach Delay, s/veh		17.8			6.7			24.1			26.5	
Approach LOS		B			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	26.1	58.9	26.1	58.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	33.0	42.0	33.0	42.0
Max Q Clear Time (g_c+I1), s	7.9	5.8	2.2	14.9
Green Ext Time (p_c), s	0.7	2.5	0.0	4.5

Intersection Summary	
HCM 7th Control Delay, s/veh	15.1
HCM 7th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Future Volume (veh/h)	89	490	70	132	274	23	24	653	536	13	342	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	0.98		0.91	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	94	516	74	139	288	24	25	687	564	14	360	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	209	871	124	213	901	74	72	1556	667	64	1296	215
Arrive On Green	0.06	0.28	0.28	0.06	0.27	0.27	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	3483	3085	439	3483	3312	273	59	3398	1457	43	2830	470
Grp Volume(v), veh/h	94	298	292	139	154	158	377	335	564	227	0	208
Grp Sat Flow(s),veh/h/ln	1742	1791	1733	1742	1791	1794	1827	1630	1457	1745	0	1598
Q Serve(g_s), s	2.2	12.3	12.4	3.3	5.9	6.0	0.0	12.0	29.3	0.0	0.0	6.9
Cycle Q Clear(g_c), s	2.2	12.3	12.4	3.3	5.9	6.0	11.6	12.0	29.3	6.4	0.0	6.9
Prop In Lane	1.00		0.25	1.00		0.15	0.07		1.00	0.06		0.29
Lane Grp Cap(c), veh/h	209	506	489	213	487	488	882	746	667	844	0	732
V/C Ratio(X)	0.45	0.59	0.60	0.65	0.32	0.32	0.43	0.45	0.85	0.27	0.00	0.28
Avail Cap(c_a), veh/h	244	586	567	326	628	629	1250	1085	970	1171	0	1064
HCM Platoon Ratio	1.00	1.00	1.00	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	38.9	26.4	26.5	39.3	24.8	24.9	15.7	15.8	20.5	14.3	0.0	14.5
Incr Delay (d2), s/veh	1.5	1.2	1.3	3.4	0.4	0.4	0.3	0.4	4.7	0.2	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	1.0	5.3	5.2	1.5	2.5	2.6	4.8	4.3	10.3	2.6	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.4	27.6	27.8	42.6	25.2	25.3	16.1	16.2	25.3	14.5	0.0	14.7
LnGrp LOS	D	C	C	D	C	C	B	B	C	B		B
Approach Vol, veh/h		684			451			1276			435	
Approach Delay, s/veh		29.5			30.6			20.2			14.6	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	45.2	11.1	29.3		45.2	10.2	30.2
Change Period (Y+Rc), s	6.0	6.0	* 6		6.0	5.0	6.0
Max Green Setting (Gmax), s	57.0	6.0	* 30		57.0	8.0	28.0
Max Q Clear Time (g_c+I1), s	31.3	4.2	8.0		8.9	5.3	14.4
Green Ext Time (p_c), s	7.9	0.0	1.9		3.1	0.1	3.2

Intersection Summary	
HCM 7th Control Delay, s/veh	23.2
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	122	917	372	177	254	57
Future Volume (veh/h)	122	917	372	177	254	57
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)	0.99			0.96	1.00	0.90
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	128	965	392	186	267	60
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	647	2449	1599	746	303	68
Arrive On Green	0.68	0.68	1.00	1.00	0.22	0.22
Sat Flow, veh/h	835	3676	2432	1091	1399	314
Grp Volume(v), veh/h	128	965	299	279	328	0
Grp Sat Flow(s),veh/h/ln	835	1791	1791	1638	1719	0
Q Serve(g_s), s	5.4	11.1	0.0	0.0	17.6	0.0
Cycle Q Clear(g_c), s	5.4	11.1	0.0	0.0	17.6	0.0
Prop In Lane	1.00			0.67	0.81	0.18
Lane Grp Cap(c), veh/h	647	2449	1224	1120	372	0
V/C Ratio(X)	0.20	0.39	0.24	0.25	0.88	0.00
Avail Cap(c_a), veh/h	647	2449	1224	1120	678	0
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	0.67	0.67	0.91	0.91	1.00	0.00
Uniform Delay (d), s/veh	5.6	6.5	0.0	0.0	36.1	0.0
Incr Delay (d2), s/veh	0.5	0.3	0.4	0.5	6.9	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	3.9	0.1	0.2	8.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.1	6.8	0.4	0.5	43.0	0.0
LnGrp LOS	A	A	A	A	D	
Approach Vol, veh/h		1093	578		328	
Approach Delay, s/veh		6.7	0.5		43.0	
Approach LOS		A	A		D	

Timer - Assigned Phs		4		6	8
Phs Duration (G+Y+Rc), s		70.0		25.0	70.0
Change Period (Y+Rc), s		5.0		4.5	5.0
Max Green Setting (Gmax), s		48.0		37.5	48.0
Max Q Clear Time (g_c+I1), s		2.0		19.6	13.1
Green Ext Time (p_c), s		4.4		1.0	10.1

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)	18	1124	29	23	518	13	0	0	0	21	5	31
Future Volume (veh/h)	18	1124	29	23	518	13	0	0	0	21	5	31
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)	0.97		0.89	0.99		0.90				1.00		0.89
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	1885	1885	1885	1885	1885	1885				1885	1885	1885
Adj Flow Rate, veh/h	19	1183	31	24	545	14				22	5	33
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1				1	1	1
Cap, veh/h	687	2619	69	414	1344	35				91	21	137
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00				0.16	0.16	0.16
Sat Flow, veh/h	829	3553	93	459	1824	47				577	131	866
Grp Volume(v), veh/h	19	596	618	24	0	559				60	0	0
Grp Sat Flow(s),veh/h/ln	829	1791	1855	459	0	1870				1574	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				3.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				3.2	0.0	0.0
Prop In Lane	1.00		0.05	1.00		0.03				0.37		0.55
Lane Grp Cap(c), veh/h	687	1320	1368	414	0	1379				248	0	0
V/C Ratio(X)	0.03	0.45	0.45	0.06	0.00	0.41				0.24	0.00	0.00
Avail Cap(c_a), veh/h	687	1320	1368	414	0	1379				431	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00				1.00	1.00	1.00
Upstream Filter(I)	0.86	0.86	0.86	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				35.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.0	0.9	0.3	0.0	0.9				0.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.4	0.0	0.0	0.3				1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.1	1.0	0.9	0.3	0.0	0.9				35.5	0.0	0.0
LnGrp LOS	A	A	A	A		A				D		
Approach Vol, veh/h		1233			583						60	
Approach Delay, s/veh		0.9			0.9						35.5	
Approach LOS		A			A						D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	20.0	75.0	75.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	26.0	59.0	59.0
Max Q Clear Time (g_c+I1), s	5.2	2.0	2.0
Green Ext Time (p_c), s	0.3	5.1	12.6

Intersection Summary	
HCM 7th Control Delay, s/veh	2.0
HCM 7th LOS	A

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	1127	536	12	6	18
Future Vol, veh/h	18	1127	536	12	6	18
Conflicting Peds, #/hr	0	0	0	95	13	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	100	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	19	1186	564	13	6	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	672	0	-	0	1310	666
Stage 1	-	-	-	-	666	-
Stage 2	-	-	-	-	644	-
Critical Hdwy	4.115	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	922	-	-	-	164	461
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	488	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	839	-	-	-	132	419
Mov Cap-2 Maneuver	-	-	-	-	132	-
Stage 1	-	-	-	-	456	-
Stage 2	-	-	-	-	444	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.15	0	19.59
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	839	-	-	-	272
HCM Lane V/C Ratio	0.023	-	-	-	0.093
HCM Control Delay (s/veh)	9.4	-	-	-	19.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	32	1101	527	35	8	21
Future Vol, veh/h	32	1101	527	35	8	21
Conflicting Peds, #/hr	0	0	0	96	24	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	240	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	34	1159	555	37	8	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	688	0	-	0	1340	669
Stage 1	-	-	-	-	669	-
Stage 2	-	-	-	-	671	-
Critical Hdwy	4.115	-	-	-	6.615	6.215
Critical Hdwy Stg 1	-	-	-	-	5.415	-
Critical Hdwy Stg 2	-	-	-	-	5.815	-
Follow-up Hdwy	2.2095	-	-	-	3.5095	3.3095
Pot Cap-1 Maneuver	910	-	-	-	157	459
Stage 1	-	-	-	-	510	-
Stage 2	-	-	-	-	473	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	827	-	-	-	124	417
Mov Cap-2 Maneuver	-	-	-	-	124	-
Stage 1	-	-	-	-	445	-
Stage 2	-	-	-	-	430	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.27	0	21.21
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	827	-	-	-	252
HCM Lane V/C Ratio	0.041	-	-	-	0.121
HCM Control Delay (s/veh)	9.5	-	-	-	21.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	63
Future Volume (veh/h)	84	1010	15	18	471	69	28	10	9	64	14	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		0.89	0.99		0.89	0.89		0.93	0.95		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	88	1063	16	19	496	73	29	11	9	67	15	66
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	430	2483	37	434	1086	160	212	79	52	168	48	130
Arrive On Green	1.00	1.00	1.00	0.23	0.23	0.23	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	849	3604	54	519	1576	232	735	382	252	550	233	630
Grp Volume(v), veh/h	88	528	551	19	0	569	49	0	0	148	0	0
Grp Sat Flow(s),veh/h/ln	849	1791	1868	519	0	1808	1369	0	0	1413	0	0
Q Serve(g_s), s	4.6	0.0	0.0	2.7	0.0	25.8	0.0	0.0	0.0	6.2	0.0	0.0
Cycle Q Clear(g_c), s	30.3	0.0	0.0	2.7	0.0	25.8	2.4	0.0	0.0	8.6	0.0	0.0
Prop In Lane	1.00		0.03	1.00		0.13	0.59		0.18	0.45		0.45
Lane Grp Cap(c), veh/h	430	1234	1287	434	0	1246	342	0	0	346	0	0
V/C Ratio(X)	0.20	0.43	0.43	0.04	0.00	0.46	0.14	0.00	0.00	0.43	0.00	0.00
Avail Cap(c_a), veh/h	430	1234	1287	434	0	1246	462	0	0	469	0	0
HCM Platoon Ratio	2.00	2.00	2.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	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	6.0	0.0	0.0	12.5	0.0	21.4	30.8	0.0	0.0	33.3	0.0	0.0
Incr Delay (d2), s/veh	1.1	1.1	1.0	0.2	0.0	1.2	0.2	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	0.8	0.4	0.4	0.3	0.0	12.8	0.9	0.0	0.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.0	1.1	1.0	12.7	0.0	22.6	31.0	0.0	0.0	34.1	0.0	0.0
LnGrp LOS	A	A	A	B		C	C			C		
Approach Vol, veh/h		1167			588			49			148	
Approach Delay, s/veh		1.5			22.3			31.0			34.1	
Approach LOS		A			C			C			C	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		24.6		70.4		24.6		70.4				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		28.0		57.0		28.0		57.0				
Max Q Clear Time (g_c+I1), s		10.6		27.8		4.4		32.3				
Green Ext Time (p_c), s		0.8		4.5		0.2		8.6				

Intersection Summary												
HCM 7th Control Delay, s/veh			11.0									
HCM 7th LOS			B									

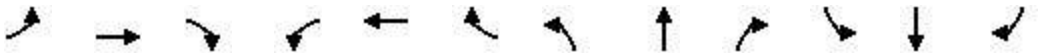
Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1074	9	15	541	17	15
Future Vol, veh/h	1074	9	15	541	17	15
Conflicting Peds, #/hr	0	91	0	0	41	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	1131	9	16	569	18	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1231	0	1868	661
Stage 1	-	-	-	-	1226	-
Stage 2	-	-	-	-	642	-
Critical Hdwy	-	-	4.115	-	6.615	6.915
Critical Hdwy Stg 1	-	-	-	-	5.815	-
Critical Hdwy Stg 2	-	-	-	-	5.415	-
Follow-up Hdwy	-	-	2.2095	-	3.5095	3.3095
Pot Cap-1 Maneuver	-	-	568	-	72	408
Stage 1	-	-	-	-	243	-
Stage 2	-	-	-	-	525	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	519	-	61	372
Mov Cap-2 Maneuver	-	-	-	-	61	-
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	490	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.33	57.77
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	101	-	-	519	-
HCM Lane V/C Ratio	0.335	-	-	0.03	-
HCM Control Delay (s/veh)	57.8	-	-	12.2	-
HCM Lane LOS	F	-	-	B	-
HCM 95th %tile Q(veh)	1.3	-	-	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	23
Future Volume (veh/h)	29	1047	13	17	520	37	13	4	22	14	3	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)	0.99		0.90	1.00		0.91	0.91		0.97	0.97		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	31	1102	14	18	547	39	14	4	23	15	3	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	630	2799	36	376	1336	95	93	39	104	95	33	102
Arrive On Green	0.52	0.52	0.52	0.77	0.77	0.77	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	828	3616	46	509	1726	123	347	325	858	362	270	842
Grp Volume(v), veh/h	31	546	570	18	0	586	41	0	0	42	0	0
Grp Sat Flow(s),veh/h/ln	828	1791	1871	509	0	1849	1529	0	0	1473	0	0
Q Serve(g_s), s	2.0	17.5	17.5	1.4	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.0	17.5	17.5	18.9	0.0	10.0	2.1	0.0	0.0	2.3	0.0	0.0
Prop In Lane	1.00		0.02	1.00		0.07	0.34		0.56	0.36		0.57
Lane Grp Cap(c), veh/h	630	1386	1448	376	0	1431	235	0	0	229	0	0
V/C Ratio(X)	0.05	0.39	0.39	0.05	0.00	0.41	0.17	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	630	1386	1448	376	0	1431	428	0	0	417	0	0
HCM Platoon Ratio	0.67	0.67	0.67	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	10.9	9.4	9.4	8.3	0.0	3.6	37.6	0.0	0.0	37.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.8	0.8	0.2	0.0	0.9	0.3	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	7.7	8.0	0.2	0.0	3.0	0.9	0.0	0.0	0.9	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.0	10.2	10.2	8.5	0.0	4.4	38.0	0.0	0.0	38.1	0.0	0.0
LnGrp LOS	B	B	B	A		A	D			D		
Approach Vol, veh/h		1147			604			41			42	
Approach Delay, s/veh		10.2			4.5			38.0			38.1	
Approach LOS		B			A			D			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		16.5		78.5		16.5		78.5				
Change Period (Y+Rc), s		5.0		5.0		5.0		5.0				
Max Green Setting (Gmax), s		24.0		61.0		24.0		61.0				
Max Q Clear Time (g_c+I1), s		4.3		20.9		4.1		19.5				
Green Ext Time (p_c), s		0.2		4.9		0.1		9.9				

Intersection Summary	
HCM 7th Control Delay, s/veh	9.6
HCM 7th LOS	A

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	21	1062	0	0	550	37	4	2	65	10	0	20
Future Vol, veh/h	21	1062	0	0	550	37	4	2	65	10	0	20
Conflicting Peds, #/hr	0	0	81	0	0	89	0	0	0	0	0	14
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	90	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	22	1118	0	0	579	39	4	2	68	11	0	21

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	707	0	-	-	-	0	1755	1869	559	1292	1850	701
Stage 1	-	-	-	-	-	-	1162	1162	-	687	687	-
Stage 2	-	-	-	-	-	-	593	707	-	604	1162	-
Critical Hdwy	4.115	-	-	-	-	-	7.315	6.515	6.915	7.315	6.515	6.215
Critical Hdwy Stg 1	-	-	-	-	-	-	6.515	5.515	-	6.115	5.515	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.115	5.515	-	6.515	5.515	-
Follow-up Hdwy	2.2095	-	-	-	-	-	3.5095	4.0095	3.3095	3.5095	4.0095	3.3095
Pot Cap-1 Maneuver	895	-	0	0	-	-	61	73	475	131	75	440
Stage 1	-	-	0	0	-	-	209	270	-	438	448	-
Stage 2	-	-	0	0	-	-	493	439	-	455	270	-
Platoon blocked, %		-			-	-						
Mov Cap-1 Maneuver	819	-	-	-	-	-	55	65	475	96	66	397
Mov Cap-2 Maneuver	-	-	-	-	-	-	55	65	-	96	66	-
Stage 1	-	-	-	-	-	-	204	263	-	401	410	-
Stage 2	-	-	-	-	-	-	461	402	-	376	263	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.18	0	21.27	27.02
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	295	819	-	-	-	195
HCM Lane V/C Ratio	0.253	0.027	-	-	-	0.162
HCM Control Delay (s/veh)	21.3	9.5	-	-	-	27
HCM Lane LOS	C	A	-	-	-	D
HCM 95th %tile Q(veh)	1	0.1	-	-	-	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	1107	566	116	38	21
Future Volume (veh/h)	30	1107	566	116	38	21
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			0.95	1.00	0.96
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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	32	1165	596	122	40	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	526	2808	1042	213	130	72
Arrive On Green	0.05	0.78	0.69	0.69	0.12	0.12
Sat Flow, veh/h	1795	3676	1503	308	1075	591
Grp Volume(v), veh/h	32	1165	0	718	63	0
Grp Sat Flow(s),veh/h/ln	1795	1791	0	1810	1693	0
Q Serve(g_s), s	0.4	9.9	0.0	19.1	3.2	0.0
Cycle Q Clear(g_c), s	0.4	9.9	0.0	19.1	3.2	0.0
Prop In Lane	1.00			0.17	0.63	0.35
Lane Grp Cap(c), veh/h	526	2808	0	1256	205	0
V/C Ratio(X)	0.06	0.41	0.00	0.57	0.31	0.00
Avail Cap(c_a), veh/h	591	2808	0	1256	483	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.2	3.3	0.0	7.4	38.1	0.0
Incr Delay (d2), s/veh	0.0	0.5	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
%ile BackOfQ(50%),veh/ln	0.1	2.6	0.0	6.8	1.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.2	3.7	0.0	9.3	38.9	0.0
LnGrp LOS	A	A		A	D	
Approach Vol, veh/h		1197	718		63	
Approach Delay, s/veh		3.8	9.3		38.9	
Approach LOS		A	A		D	

Timer - Assigned Phs		3	4		6	8
Phs Duration (G+Y+Rc), s		8.6	70.4		16.0	79.0
Change Period (Y+Rc), s		4.0	4.5		4.5	4.5
Max Green Setting (Gmax), s		8.0	46.9		27.1	58.9
Max Q Clear Time (g_c+I1), s		2.4	21.1		5.2	11.9
Green Ext Time (p_c), s		0.0	5.7		0.1	11.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	765	380	194	527	157	122
Future Volume (veh/h)	765	380	194	527	157	122
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)		0.88	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	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	805	400	204	555	165	128
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	916	451	559	1472	207	184
Arrive On Green	0.41	0.41	0.62	1.00	0.12	0.12
Sat Flow, veh/h	2312	1092	1795	1885	1795	1598
Grp Volume(v), veh/h	649	556	204	555	165	128
Grp Sat Flow(s),veh/h/ln	1791	1520	1795	1885	1795	1598
Q Serve(g_s), s	35.3	36.0	5.9	0.0	9.5	8.2
Cycle Q Clear(g_c), s	35.3	36.0	5.9	0.0	9.5	8.2
Prop In Lane		0.72	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	739	627	559	1472	207	184
V/C Ratio(X)	0.88	0.89	0.36	0.38	0.80	0.69
Avail Cap(c_a), veh/h	811	688	559	1472	407	362
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.97	0.97	1.00	1.00
Uniform Delay (d), s/veh	28.6	28.8	14.9	0.0	45.7	45.1
Incr Delay (d2), s/veh	13.9	16.9	0.4	0.7	6.9	4.7
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	15.6	2.1	0.3	4.6	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	42.6	45.7	15.2	0.7	52.5	49.7
LnGrp LOS	D	D	B	A	D	D
Approach Vol, veh/h	1205			759	293	
Approach Delay, s/veh	44.0			4.6	51.3	
Approach LOS	D			A	D	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	39.0	49.8			88.8	17.2
Change Period (Y+Rc), s	6.0	* 6			6.0	5.0
Max Green Setting (Gmax), s	18.5	* 48			71.0	24.0
Max Q Clear Time (g_c+I1), s	17.9	38.0			2.0	11.5
Green Ext Time (p_c), s	0.4	5.8			4.3	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	31.7
HCM 7th LOS	C

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	0	428	459	10	262	544	0	0	0	0	320	740	177
Future Volume (veh/h)	0	428	459	10	262	544	0	0	0	0	320	740	177
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		0.95
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	0	1885	1885		1885	1885	0				1885	1885	1885
Adj Flow Rate, veh/h	0	451	0		276	573	0				337	779	186
Peak Hour Factor	0.95	0.95	0.95		0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	1	1		1	1	0				1	1	1
Cap, veh/h	0	1373			313	2166	0				401	928	221
Arrive On Green	0.00	0.13	0.00		0.06	0.20	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3676	1598		1795	3676	0				1355	3133	748
Grp Volume(v), veh/h	0	451	0		276	573	0				452	426	424
Grp Sat Flow(s),veh/h/ln	0	1791	1598		1795	1791	0				1817	1716	1704
Q Serve(g_s), s	0.0	12.2	0.0		16.2	14.3	0.0				24.7	24.7	24.7
Cycle Q Clear(g_c), s	0.0	12.2	0.0		16.2	14.3	0.0				24.7	24.7	24.7
Prop In Lane	0.00		1.00		1.00		0.00				0.75		0.44
Lane Grp Cap(c), veh/h	0	1373			313	2166	0				538	508	504
V/C Ratio(X)	0.00	0.33			0.88	0.26	0.00				0.84	0.84	0.84
Avail Cap(c_a), veh/h	0	1373			491	2166	0				660	623	619
HCM Platoon Ratio	1.00	0.33	0.33		0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.68	0.00		1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	33.9	0.0		48.9	22.5	0.0				34.9	34.9	35.0
Incr Delay (d2), s/veh	0.0	0.4	0.0		7.3	0.3	0.0				6.7	7.1	7.2
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	0.0	5.9	0.0		8.5	7.0	0.0				11.7	11.1	11.1
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	0.0	34.3	0.0		56.1	22.8	0.0				41.7	42.0	42.1
LnGrp LOS		C			E	C					D	D	D
Approach Vol, veh/h		451				849						1302	
Approach Delay, s/veh		34.3				33.6						41.9	
Approach LOS		C				C						D	

Timer - Assigned Phs	1	2	4	6
Phs Duration (G+Y+Rc), s	23.5	45.6	36.9	69.1
Change Period (Y+Rc), s	5.0	5.0	5.5	5.0
Max Green Setting (Gmax), s	29.6	23.0	38.5	57.0
Max Q Clear Time (g_c+I1), s	18.2	14.2	26.7	16.3
Green Ext Time (p_c), s	0.3	1.5	4.7	3.0

Intersection Summary	
HCM 7th Control Delay, s/veh	37.9
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations													
Traffic Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Future Volume (veh/h)	6	182	380	190	44	415	242	158	452	164	75	11	221
Initial Q (Qb), veh		0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)		1.00		0.90	1.00		0.93	1.00		0.88	0.97		0.97
Parking Bus, Adj		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No			No			No			No	
Adj Sat Flow, veh/h/ln		1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h		192	400	200	46	437	255	166	476	173	79	119	162
Peak Hour Factor		0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %		1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h		500	675	338	97	746	601	180	1115	436	145	201	484
Arrive On Green		0.05	0.20	0.20	0.40	0.40	0.40	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h		3483	1136	568	116	1849	1488	1106	3582	1401	315	646	1555
Grp Volume(v), veh/h		192	0	600	95	388	255	166	476	173	198	0	162
Grp Sat Flow(s),veh/h/ln		1742	0	1705	336	1630	1488	1106	1791	1401	961	0	1555
Q Serve(g_s), s		5.7	0.0	33.9	4.9	19.7	13.1	10.8	11.2	10.3	11.0	0.0	8.5
Cycle Q Clear(g_c), s		5.7	0.0	33.9	38.8	19.7	13.1	33.0	11.2	10.3	22.2	0.0	8.5
Prop In Lane		1.00		0.33	0.48		1.00	1.00		1.00	0.40		1.00
Lane Grp Cap(c), veh/h		500	0	1013	186	658	601	180	1115	436	347	0	484
V/C Ratio(X)		0.38	0.00	0.59	0.51	0.59	0.42	0.92	0.43	0.40	0.57	0.00	0.33
Avail Cap(c_a), veh/h		500	0	1013	221	707	646	180	1115	436	347	0	484
HCM Platoon Ratio		0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)		1.00	0.00	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		45.9	0.0	30.9	32.6	24.7	22.7	49.4	29.0	28.7	33.7	0.0	28.1
Incr Delay (d2), s/veh		0.5	0.0	2.5	9.8	3.8	2.2	45.0	0.3	0.6	2.2	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		2.6	0.0	16.2	2.9	8.3	5.0	6.7	4.9	3.5	4.8	0.0	3.2
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh		46.4	0.0	33.5	42.4	28.6	24.9	94.4	29.2	29.3	35.9	0.0	28.5
LnGrp LOS		D		C	D	C	C	F	C	C	D		C
Approach Vol, veh/h			792			738			815			360	
Approach Delay, s/veh			36.6			29.1			42.5			32.6	
Approach LOS			D			C			D			C	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	68.0		38.0	20.2	47.8		38.0					
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0		5.0					
Max Green Setting (Gmax), s	63.0		33.0	12.0	46.0		33.0					
Max Q Clear Time (g_c+I1), s	35.9		24.2	7.7	40.8		35.0					
Green Ext Time (p_c), s	5.0		1.4	0.2	2.0		0.0					

Intersection Summary	
HCM 7th Control Delay, s/veh	35.8
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.
User approved ignoring U-Turning movement.

HCM 7th Edition methodology does not support exclusive ped or hold phases.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	61
Future Volume (veh/h)	39	576	4	2	640	87	0	2	3	110	2	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)	0.98		0.97	1.00		0.91	1.00		1.00	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	41	606	4	2	674	92	0	2	3	116	2	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	91	1149	7	46	2069	281	0	135	203	243	19	102
Arrive On Green	0.68	0.68	0.68	1.00	1.00	1.00	0.00	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	63	1699	11	1	3058	416	0	681	1021	852	94	513
Grp Volume(v), veh/h	651	0	0	416	0	352	0	0	5	182	0	0
Grp Sat Flow(s),veh/h/ln	1773	0	0	1884	0	1592	0	0	1701	1460	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	7.9	0.0	0.0
Cycle Q Clear(g_c), s	13.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	9.0	0.0	0.0
Prop In Lane	0.06		0.01	0.00		0.26	0.00		0.60	0.64		0.35
Lane Grp Cap(c), veh/h	1248	0	0	1320	0	1077	0	0	338	363	0	0
V/C Ratio(X)	0.52	0.00	0.00	0.32	0.00	0.33	0.00	0.00	0.01	0.50	0.00	0.00
Avail Cap(c_a), veh/h	1248	0	0	1320	0	1077	0	0	447	456	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.00	0.00	0.88	0.00	0.88	0.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.8	29.2	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.6	0.0	0.7	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.1	3.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	7.8	0.0	0.0	0.6	0.0	0.7	0.0	0.0	25.8	29.6	0.0	0.0
LnGrp LOS	A			A		A			C	C		
Approach Vol, veh/h		651			768			5			182	
Approach Delay, s/veh		7.8			0.6			25.8			29.6	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	20.9	59.1	20.9	59.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	21.0	49.0	21.0	49.0
Max Q Clear Time (g_c+I1), s	11.0	2.0	2.2	15.7
Green Ext Time (p_c), s	0.5	3.8	0.0	3.7

Intersection Summary	
HCM 7th Control Delay, s/veh	6.9
HCM 7th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	0	2
Future Volume (veh/h)	10	430	249	262	529	1	198	0	134	0	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)	0.96		0.93	0.98		0.89	1.00		0.91	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885	1885
Adj Flow Rate, veh/h	11	453	262	276	557	1	208	0	141	0	0	2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	55	1147	918	541	1163	2	304	4	160	0	0	439
Arrive On Green	1.00	1.00	1.00	0.62	0.62	0.62	0.28	0.00	0.28	0.00	0.00	0.28
Sat Flow, veh/h	14	1854	1485	729	1881	3	844	14	582	0	0	1594
Grp Volume(v), veh/h	464	0	262	276	0	558	349	0	0	0	0	2
Grp Sat Flow(s),veh/h/ln	1868	0	1485	729	0	1884	1440	0	0	0	0	1594
Q Serve(g_s), s	0.0	0.0	0.0	18.6	0.0	12.8	18.2	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	18.6	0.0	12.8	18.5	0.0	0.0	0.0	0.0	0.1
Prop In Lane	0.02		1.00	1.00		0.00	0.60		0.40	0.00		1.00
Lane Grp Cap(c), veh/h	1201	0	918	541	0	1165	468	0	0	0	0	439
V/C Ratio(X)	0.39	0.00	0.29	0.51	0.00	0.48	0.75	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1201	0	918	541	0	1165	504	0	0	0	0	468
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.00	0.81	1.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	9.4	0.0	8.3	27.7	0.0	0.0	0.0	0.0	21.0
Incr Delay (d2), s/veh	0.8	0.0	0.6	3.4	0.0	1.4	5.6	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	0.3	0.0	0.2	3.1	0.0	5.1	6.9	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.8	0.0	0.6	12.8	0.0	9.7	33.3	0.0	0.0	0.0	0.0	21.0
LnGrp LOS	A		A	B		A	C					C
Approach Vol, veh/h		726			834			349			2	
Approach Delay, s/veh		0.7			10.7			33.3			21.0	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.5	26.5	53.5	26.5
Change Period (Y+Rc), s	4.0	* 4.5	4.0	4.5
Max Green Setting (Gmax), s	48.0	* 24	48.0	23.5
Max Q Clear Time (g_c+I1), s	20.6	20.5	2.0	2.1
Green Ext Time (p_c), s	7.0	0.7	4.8	0.0

Intersection Summary	
HCM 7th Control Delay, s/veh	11.0
HCM 7th LOS	B

Notes

* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	758	794	6	0	22
Future Vol, veh/h	0	758	794	6	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	798	836	6	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	421
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.31
Pot Cap-1 Maneuver	0	-	-	-	0	584
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	584
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	11.42
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	584
HCM Lane V/C Ratio	-	-	-	0.04
HCM Control Delay (s/veh)	-	-	-	11.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

#	Intersection	Movement	95th Percentile Queues (ft)					
			Alt 2 (WB Diet with 1-Way El Embarcadero) VERSION 2		Alt 2B (WB Diet with 2-Way El Embarcadero and Permissive WBL) VERSION 2		Alt 2C (WB Diet with 2-Way El Embarcadero and Protected WBL Trap Lane) VERSION 2	
			Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM
1	Broadway & Grand Ave	NBL	*140*	54	*140*	53	*140*	50
		NBT	*150*	129	*150*	132	*150*	120
		NBR	*100*	52	*100*	52	*100*	52
		SBL	*100*	64	*100*	53	*100*	53
		SBT	*200*	94	*200*	94	*200*	97
		SBTR	*200*	91	*200*	89	*200*	85
		EBL	*200*	66	*200*	75	*200*	75
		EBT	*260*	191	*260*	204	*260*	203
		EBR	*25*	**123**	*25*	**114**	*25*	**124**
		WBLT	*290*	121	*290*	122	*290*	128
		WBTR	*290*	127	*290*	129	*290*	139
2	Webster St & Grand Ave	SBLT	*135*	116	*135*	109	*135*	116
		SBTR	*135*	77	*135*	66	*135*	74
		EBLT	*290*	178	*290*	183	*290*	186
		EBTR	*290*	242	*290*	251	*290*	243
		WBL	*205*	131	*205*	132	*205*	133
		WBT	*255*	68	*255*	82	*255*	79
		WBTR	*255*	101	*255*	103	*255*	110
3	Valdez St & Grand Ave	NBLTR	*90*	23	*90*	19	*90*	19
		SBLTR	*130*	66	*130*	59	*130*	62
		EBLT	*255*	78	*255*	85	*255*	82
		EBTR	*255*	67	*255*	67	*255*	65
		WBLT	*470*	143	*470*	131	*470*	127
		WBTR	*470*	150	*470*	130	*470*	136
4	Harrison St & Grand Ave	NBLT	*495*	256	*495*	240	*495*	247
		NBT	*495*	227	*495*	216	*495*	222
		NBR	*495*	97	*495*	88	*495*	99
		SBLT	*600*	218	*600*	212	*600*	215
		SBTR	*600*	190	*600*	190	*600*	190
		EBL	*275*	57	*275*	57	*275*	60
		EBT	*470*	98	*470*	104	*470*	104
		EBTR	*470*	116	*470*	120	*470*	120
		WBL	*225*	142	*225*	144	*225*	145
		WBT	*430*	121	*430*	120	*430*	128
		WBTR	*430*	139	*430*	134	*430*	147
5	Bay Place & Grand Ave	SBLR	*135*	**140**	*135*	**152**	*135*	**150**
		EBL	*80*	79	*80*	**83**	*80*	77
		EBT	*430*	99	*430*	99	*430*	96
		WBT	*350*	174	*350*	160	*350*	165
		WBTR	*350*	164	*350*	167	*350*	174

#	Intersection	Movement	95th Percentile Queues (ft)					
			Alt 2 (WB Diet with 1-Way El Embarcadero) VERSION 2		Alt 2B (WB Diet with 2-Way El Embarcadero and Permissive WBL) VERSION 2		Alt 2C (WB Diet with 2-Way El Embarcadero and Protected WBL Trap Lane) VERSION 2	
			Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM
6	Park View Terrace/Bellevue Ave & Grand Ave	SBLTR	*775*	107	*775*	97	*775*	99
		EBL	*125*	24	*125*	22	*125*	25
		EBT	*350*	84	*350*	70	*350*	79
		EBTR	*350*	90	*350*	80	*350*	87
		WBL	*100*	58	*100*	75	*100*	74
		WBTR	*250*	**319**	*250*	**316**	*250*	**328**
7	Lennox Ave & Grand Ave	SBLR	*675*	68	*675*	73	*675*	77
		EBL	*100*	36	*100*	34	*100*	37
		EBT	*225*	26	*225*	15	*225*	19
		WBTR	*300*	159	*300*	150	*300*	141
8	Lee St & Grand Ave	SBLR	*630*	49	*630*	52	*630*	55
		EBL	*240*	35	*240*	33	*240*	30
		EBT	*300*	21	*300*	27	*300*	26
		WBTR	*240*	89	*240*	71	*240*	70
9	Perkins St & Grand Ave	NBLTR	*480*	33	*480*	31	*480*	30
		SBLTR	*260*	99	*260*	102	*260*	100
		EBL	*160*	53	*160*	48	*160*	53
		EBT	*240*	79	*240*	86	*240*	80
		EBTR	*240*	98	*240*	107	*240*	103
		WBL	*175*	28	*175*	41	*175*	26
		WBTR	*250*	**289**	*250*	**271**	*250*	**275**
10	Ellita Ave & Grand Ave	NBLR	*350*	39	*350*	41	*350*	37
		EBT	*250*	14	*250*	11	*250*	7
		EBTR	*250*	15	*250*	12	*250*	16
		WBL	*100*	23	*100*	21	*100*	31
		WBT	*265*	82	*265*	68	*265*	79
11	Staten Ave & Grand Ave	NBLTR	*320*	50	*320*	51	*320*	49
		SBLTR	*260*	54	*260*	53	*260*	53
		EBL	*100*	30	*100*	29	*100*	28
		EBT	*265*	77	*265*	74	*265*	77
		EBTR	*265*	84	*265*	92	*265*	93
		WBL	*75*	52	*75*	51	*75*	39
		WBTR	*240*	232	*240*	**244**	*240*	**243**
12	Bellevue Ave & Grand Ave	NBLTR	*515*	54	*515*	52	*515*	56
		SBLTR	*590*	45	*590*	48	*590*	44
		EBL	*90*	25	*90*	23	*90*	22
		EBT	*240*	22	*240*	25	*240*	25
		WBTR	*230*	122	*230*	116	*230*	138

#	Intersection	Movement	95th Percentile Queues (ft)					
			Alt 2 (WB Diet with 1-Way El Embarcadero) VERSION 2		Alt 2B (WB Diet with 2-Way El Embarcadero and Permissive WBL) VERSION 2		Alt 2C (WB Diet with 2-Way El Embarcadero and Protected WBL Trap Lane) VERSION 2	
			Available Storage (ft)	AM	Available Storage (ft)	AM	Available Storage (ft)	AM
13	Euclid Ave & Grand Ave	SBLR	*130*	56	*130*	55	*130*	53
		EBL	*150*	37	*150*	36	*150*	34
		EBT	*230*	135	*230*	129	*230*	141
		WBTR	*585*	406	*585*	408	*585*	411
14	El Embarcadero & Grand Ave	NBL	*85*	**186**	*85*	**176**	*85*	**184**
		NBR	*275*	239	*275*	227	*275*	244
		EBT	*585*	182	*585*	116	*585*	187
		EBTR	-	-	*585*	204	*585*	242
		WBL	-	-	-	-	*330*	298
		WBLT	-	-	*330*	174	-	-
		WBT	*330*	271	*330*	182	*330*	322
15	MacArthur Blvd & Grand Ave	SBLT	*395*	369	*395*	372	*395*	366
		SBT	*395*	333	*395*	339	*395*	324
		SBTR	*395*	282	*395*	289	*395*	272
		EBT	*330*	165	*330*	151	*330*	182
		EBR	*145*	68	*145*	28	*145*	119
		WBUL	*180*	**286**	*180*	**243**	*180*	**256**
		WBT	*445*	285	*445*	219	*445*	226
16	Santa Clara Ave /Lake Park Ave & Grand Ave	NBL	*215*	**228**	*215*	195	*215*	**222**
		NBT	*400*	294	*400*	252	*400*	287
		NBR	*75*	**171**	*75*	**164**	*75*	**164**
		SBLTR	*1,500*	234	*1,500*	207	*1,500*	226
		EBUL	*115*	**159**	*115*	**169**	*115*	**170**
		EBL	*115*	**176**	*115*	**188**	*115*	**185**
		EBTR	*420*	215	*420*	295	*420*	310
		WBLT	*410*	163	*410*	157	*410*	161
		WBT	*410*	224	*410*	213	*410*	223
		WBR	*80*	**166**	*50*	**165**	*50*	**167**
		EBT	*370*	140	*370*	152	*370*	144
17	Mid-Block Ped Crossing & Grand Ave	WBT	*355*	125	*355*	116	*355*	127
		NBLTR	*60*	13	*60*	12	*60*	16
18	Elwood Ave & Grand Ave	SBLTR	*160*	91	*160*	90	*160*	83
		EBLTR	*400*	212	*400*	237	*400*	218
		WBLT	*155*	86	*155*	87	*155*	89
		WBTR	*155*	140	*155*	149	*155*	147
		NBLTR	*235*	**292**	*235*	**311**	*235*	**323**
19	Mandana Blvd & Grand Ave	SBLTR	*50*	0	*50*	0	*50*	0
		EBLT	*145*	**169**	*145*	**179**	*145*	**186**
		EBR	*145*	67	*145*	65	*145*	65
		WBL	*150*	112	*150*	111	*150*	117
		WBTR	*415*	207	*415*	192	*415*	201
		WBTR	*415*	194	*415*	207	*415*	196

Notes:
Bold = Exceeds storage; **Red** = Queue exceeds 1,100 ft; **Orange** = Queue exceeds 500 ft.

#	Intersection	Movement	95th Percentile Queues (ft)					
			Alt 2 (WB Diet with 1-Way El Embarcadero) VERSION 2		Alt 2B (WB Diet with 2-Way El Embarcadero and Permissive WBL) VERSION 2		Alt 2C (WB Diet with 2-Way El Embarcadero and Protected WBL Trap Lane) VERSION 2	
			Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM
1	Broadway & Grand Ave	NBL	*140*	125	*140*	126	*140*	124
		NBT	*150*	**164**	*150*	**172**	*150*	**160**
		NBR	*100*	72	*100*	68	*100*	75
		SBL	*100*	98	*100*	94	*100*	91
		SBT	*200*	124	*200*	123	*200*	126
		SBTR	*200*	132	*200*	131	*200*	140
		EBL	*200*	98	*200*	90	*200*	83
		EBT	*260*	179	*260*	186	*260*	185
		EBR	*25*	**113**	*25*	**115**	*25*	**113**
		WBLT	*290*	146	*290*	143	*290*	137
		WBTR	*290*	159	*290*	157	*290*	155
2	Webster St & Grand Ave	SBLT	*135*	**147**	*135*	**146**	*135*	**145**
		SBTR	*135*	128	*135*	128	*135*	124
		EBLT	*290*	220	*290*	235	*290*	234
		EBTR	*290*	234	*290*	244	*290*	240
		WBL	*205*	103	*205*	102	*205*	101
		WBT	*255*	85	*255*	89	*255*	89
		WBTR	*255*	117	*255*	116	*255*	110
3	Valdez St & Grand Ave	NBLTR	*90*	19	*90*	15	*90*	17
		SBLTR	*130*	117	*130*	115	*130*	118
		EBLT	*255*	188	*255*	181	*255*	185
		EBTR	*255*	187	*255*	180	*255*	179
		WBLT	*470*	118	*470*	127	*470*	116
		WBTR	*470*	132	*470*	136	*470*	141
4	Harrison St & Grand Ave	NBLT	*495*	230	*495*	227	*495*	236
		NBT	*495*	198	*495*	194	*495*	214
		NBR	*495*	284	*495*	286	*495*	276
		SBLT	*600*	158	*600*	152	*600*	151
		SBTR	*600*	110	*600*	112	*600*	115
		EBL	*275*	76	*275*	79	*275*	77
		EBT	*470*	239	*470*	255	*470*	237
		EBTR	*470*	253	*470*	267	*470*	245
		WBL	*225*	102	*225*	105	*225*	100
		WBT	*430*	140	*430*	131	*430*	134
		WBTR	*430*	152	*430*	146	*430*	153
5	Bay Place & Grand Ave	SBLR	*135*	**281**	*135*	**296**	*135*	**288**
		EBL	*80*	**139**	*80*	**132**	*80*	**143**
		EBT	*430*	238	*430*	233	*430*	239
		WBT	*350*	126	*350*	130	*350*	130
		WBTR	*350*	150	*350*	156	*350*	157

#	Intersection	Movement	95th Percentile Queues (ft)					
			Alt 2 (WB Diet with 1-Way El Embarcadero) VERSION 2		Alt 2B (WB Diet with 2-Way El Embarcadero and Permissive WBL) VERSION 2		Alt 2C (WB Diet with 2-Way El Embarcadero and Protected WBL Trap Lane) VERSION 2	
			Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM
6	Park View Terrace/Bellevue Ave & Grand Ave	SBLTR	*775*	78	*775*	84	*775*	77
		EBL	*125*	41	*125*	36	*125*	43
		EBT	*350*	230	*350*	240	*350*	233
		EBTR	*350*	241	*350*	255	*350*	237
		WBL	*100*	70	*100*	84	*100*	62
		WBTR	*250*	**254**	*250*	**263**	*250*	**264**
7	Lennox Ave & Grand Ave	SBLR	*675*	44	*675*	44	*675*	44
		EBL	*100*	34	*100*	36	*100*	31
		EBT	*225*	58	*225*	51	*225*	56
		WBTR	*300*	53	*300*	62	*300*	65
8	Lee St & Grand Ave	SBLR	*630*	41	*630*	42	*630*	43
		EBL	*240*	42	*240*	48	*240*	44
		EBT	*300*	68	*300*	70	*300*	71
		WBTR	*240*	69	*240*	72	*240*	84
9	Perkins St & Grand Ave	NBLTR	*480*	64	*480*	60	*480*	59
		SBLTR	*260*	129	*260*	130	*260*	126
		EBL	*160*	71	*160*	78	*160*	71
		EBT	*240*	168	*240*	177	*240*	164
		EBTR	*240*	188	*240*	196	*240*	190
		WBL	*175*	47	*175*	62	*175*	54
		WBTR	*250*	**282**	*250*	**277**	*250*	**270**
10	Ellita Ave & Grand Ave	NBLR	*350*	60	*350*	53	*350*	62
		EBT	*250*	72	*250*	84	*250*	75
		EBTR	*250*	81	*250*	103	*250*	93
		WBL	*100*	28	*100*	29	*100*	33
		WBT	*265*	86	*265*	100	*265*	97
11	Staten Ave & Grand Ave	NBLTR	*320*	59	*320*	60	*320*	61
		SBLTR	*260*	57	*260*	60	*260*	55
		EBL	*100*	58	*100*	54	*100*	53
		EBT	*265*	191	*265*	199	*265*	202
		EBTR	*265*	214	*265*	231	*265*	233
		WBL	*75*	47	*75*	61	*75*	37
		WBTR	*240*	193	*240*	211	*240*	185
12	Bellevue Ave & Grand Ave	NBLTR	*515*	72	*515*	76	*515*	90
		SBLTR	*590*	53	*590*	51	*590*	52
		EBL	*90*	36	*90*	36	*90*	35
		EBT	*240*	78	*240*	67	*240*	92
		WBTR	*230*	57	*230*	58	*230*	72

#	Intersection	Movement	95th Percentile Queues (ft)					
			Alt 2 (WB Diet with 1-Way El Embarcadero) VERSION 2		Alt 2B (WB Diet with 2-Way El Embarcadero and Permissive WBL) VERSION 2		Alt 2C (WB Diet with 2-Way El Embarcadero and Protected WBL Trap Lane) VERSION 2	
			Available Storage (ft)	PM	Available Storage (ft)	PM	Available Storage (ft)	PM
13	Euclid Ave & Grand Ave	SBLR	*130*	80	*130*	79	*130*	80
		EBL	*150*	63	*150*	57	*150*	73
		EBT	*230*	**233**	*230*	**246**	*230*	**240**
		WBTR	*585*	323	*585*	325	*585*	338
14	El Embarcadero & Grand Ave	NBL	*85*	**167**	*85*	**148**	*85*	**139**
		NBR	*275*	231	*275*	153	*275*	139
		EBT	*585*	387	*585*	307	*585*	359
		EBTR	-	-	*585*	388	*585*	378
		WBL	-	-	-	-	*330*	300
		WBLT	-	-	*330*	**374**	-	-
		WBT	*330*	199	*330*	**360**	*330*	330
15	MacArthur Blvd & Grand Ave	SBLT	*395*	357	*395*	367	*395*	347
		SBT	*395*	324	*395*	363	*395*	303
		SBTR	*395*	273	*395*	366	*395*	270
		EBT	*330*	**382**	*330*	263	*330*	255
		EBR	*145*	**318**	*145*	**196**	*145*	**218**
		WBUL	*180*	**295**	*180*	**299**	*180*	**269**
		WBT	*445*	305	*445*	282	*445*	229
16	Santa Clara Ave /Lake Park Ave & Grand Ave	NBL	*215*	176	*215*	**274**	*215*	179
		NBT	*400*	266	*400*	**661**	*400*	207
		NBR	*75*	**165**	*75*	**171**	*75*	**164**
		SBLTR	*1,500*	238	*1,500*	384	*1,500*	203
		EBUL	*115*	107	*115*	112	*115*	104
		EBL	*115*	**127**	*115*	**132**	*115*	**125**
		EBTR	*420*	270	*420*	330	*420*	311
		WBLT	*410*	261	*410*	263	*410*	246
		WBT	*410*	265	*410*	272	*410*	255
		WBR	*80*	**176**	*50*	**180**	*50*	**174**
17	Mid-Block Ped Crossing & Grand Ave	EBT	*370*	272	*370*	273	*370*	277
		WBT	*355*	219	*355*	332	*355*	200
18	Elwood Ave & Grand Ave	NBLTR	*60*	18	*60*	19	*60*	20
		SBLTR	*160*	**163**	*160*	**305**	*160*	142
		EBLTR	*400*	361	*400*	359	*400*	340
		WBLT	*155*	103	*155*	117	*155*	100
		WBTR	*155*	142	*155*	**156**	*155*	130
19	Mandana Blvd & Grand Ave	NBLTR	*235*	**246**	*235*	**649**	*235*	233
		SBLTR	*50*	13	*50*	13	*50*	12
		EBLT	*145*	**183**	*145*	**180**	*145*	**180**
		EBR	*145*	93	*145*	90	*145*	95
		WBL	*150*	**244**	*150*	**245**	*150*	**232**
		WBTR	*415*	**447**	*415*	**1,088**	*415*	410

Notes:
Bold = Exceeds storage; **Red** = Queue exceeds 1,100 ft; **Orange** = Queue exceeds 500 ft.

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	97	189	248	115	142	146	72	154	120	71	65	113
Average Queue (ft)	31	78	117	48	65	76	22	76	33	23	23	50
95th Queue (ft)	75	145	204	114	122	129	53	132	86	52	53	94
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)		0	53	7				0	0	0		1
Queuing Penalty (veh)		0	35	15				0	0	0		0

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	121
Average Queue (ft)	38
95th Queue (ft)	89
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	226	264	162	115	120	124	93
Average Queue (ft)	96	144	71	28	46	61	26
95th Queue (ft)	183	251	132	82	103	109	66
Link Distance (ft)	248	248		290	290	1014	1014
Upstream Blk Time (%)	0	1					
Queuing Penalty (veh)	0	4					
Storage Bay Dist (ft)			205				
Storage Blk Time (%)			0	0			
Queuing Penalty (veh)			0	0			

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	105	92	156	154	33	77
Average Queue (ft)	33	22	61	61	3	25
95th Queue (ft)	85	67	131	130	19	59
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	39	64	126	141	147	169	158	158	252	232	108	240
Average Queue (ft)	5	28	49	64	68	92	62	75	159	106	50	138
95th Queue (ft)	24	57	104	120	126	144	120	134	240	216	88	212
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	214
Average Queue (ft)	103
95th Queue (ft)	190
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	106	114	122	199	208	194
Average Queue (ft)	39	34	48	70	78	82
95th Queue (ft)	83	88	99	160	167	152
Link Distance (ft)		463	463	374	374	667
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	80					
Storage Blk Time (%)	2	1				
Queuing Penalty (veh)	3	0				

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	TR	L	TR	LTR
Maximum Queue (ft)	28	90	96	130	284	124
Average Queue (ft)	6	27	36	15	186	47
95th Queue (ft)	22	70	80	75	316	97
Link Distance (ft)		374	374		271	717
Upstream Blk Time (%)					2	
Queuing Penalty (veh)					18	
Storage Bay Dist (ft)	125			100		
Storage Blk Time (%)		0			17	
Queuing Penalty (veh)		0			3	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	39	23	32	227	89
Average Queue (ft)	10	1	2	42	36
95th Queue (ft)	34	11	15	150	73
Link Distance (ft)		271	271	298	821
Upstream Blk Time (%)				0	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)	100				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	38	35	52	126	72
Average Queue (ft)	9	2	4	16	24
95th Queue (ft)	33	15	27	71	52
Link Distance (ft)		298	298	235	1038
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	240				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Perkins Street & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	60	119	128	62	284	40	137
Average Queue (ft)	21	33	50	9	122	10	49
95th Queue (ft)	48	86	107	41	271	31	102
Link Distance (ft)		235	235		272	510	1057
Upstream Blk Time (%)					1		
Queuing Penalty (veh)					5		
Storage Bay Dist (ft)	160			175			
Storage Blk Time (%)					4		
Queuing Penalty (veh)					1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	L	T	LR
Maximum Queue (ft)	28	25	30	123	44
Average Queue (ft)	1	1	4	14	15
95th Queue (ft)	11	12	21	68	41
Link Distance (ft)	272	272		292	1062
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	37	114	132	98	250	58	70
Average Queue (ft)	7	24	31	10	95	21	22
95th Queue (ft)	29	74	92	51	244	51	53
Link Distance (ft)		292	292		239	961	1064
Upstream Blk Time (%)					1		
Queuing Penalty (veh)					9		
Storage Bay Dist (ft)	100			75			
Storage Blk Time (%)		0			7		
Queuing Penalty (veh)		0			1		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	34	49	56	181	59	53
Average Queue (ft)	5	4	3	31	23	18
95th Queue (ft)	23	25	25	116	52	48
Link Distance (ft)		239	239	267	955	1076
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	90					
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	EB	WB	B20	B20	SB
Directions Served	L	T	T	TR	T		LR
Maximum Queue (ft)	46	138	148	359	272	285	68
Average Queue (ft)	11	46	65	277	111	84	20
95th Queue (ft)	36	103	129	408	247	236	55
Link Distance (ft)		267	267	267	260	260	1127
Upstream Blk Time (%)				16	1	2	
Queuing Penalty (veh)				145	4	9	
Storage Bay Dist (ft)	150						
Storage Blk Time (%)		0					
Queuing Penalty (veh)		0					

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	NB	NB
Directions Served	T	TR	T	T	LT	T	L	R
Maximum Queue (ft)	160	240	6	11	210	218	172	290
Average Queue (ft)	44	100	0	0	89	85	112	108
95th Queue (ft)	116	204	6	8	174	182	176	227
Link Distance (ft)	260	260	267	267	304	304		439
Upstream Blk Time (%)		0			0	0		0
Queuing Penalty (veh)		0			0	0		0
Storage Bay Dist (ft)							85	
Storage Blk Time (%)							24	2
Queuing Penalty (veh)							41	6

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	169	188	56	248	240	202	416	380	317
Average Queue (ft)	73	78	3	157	131	110	250	217	174
95th Queue (ft)	141	151	28	243	219	186	372	339	289
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)				6	2	1			
Queuing Penalty (veh)				17	5	2			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		2							
Queuing Penalty (veh)		4							

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	L	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	194	228	314	182	232	140	3	64	221	265	286	165
Average Queue (ft)	106	114	178	92	117	106	0	4	103	155	153	75
95th Queue (ft)	169	188	295	157	213	165	3	35	195	237	252	164
Link Distance (ft)		234	234	162	162		183	183		1350	1350	
Upstream Blk Time (%)		0	4	1	4			0				
Queuing Penalty (veh)		1	14	3	13			0				
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	9	10			38	31			2	2	22	6
Queuing Penalty (veh)	10	20			110	45			7	2	25	19

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	238	217
Average Queue (ft)	129	112
95th Queue (ft)	207	193
Link Distance (ft)	1064	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		380
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	208	7	87	166
Average Queue (ft)	43	0	16	34
95th Queue (ft)	152	7	61	116
Link Distance (ft)	183	162	391	391
Upstream Blk Time (%)	1			
Queuing Penalty (veh)	3			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	TR	LTR	LTR
Maximum Queue (ft)	312	108	161	28	112
Average Queue (ft)	114	40	80	2	45
95th Queue (ft)	237	87	149	12	90
Link Distance (ft)	391	150	150	273	1458
Upstream Blk Time (%)		0	1		
Queuing Penalty (veh)		0	2		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	LT	R	L	TR	LTR
Maximum Queue (ft)	165	82	157	221	370
Average Queue (ft)	98	30	52	101	186
95th Queue (ft)	179	65	111	192	311
Link Distance (ft)	150	150		2258	1429
Upstream Blk Time (%)	3	0			
Queuing Penalty (veh)	8	0			
Storage Bay Dist (ft)			150		
Storage Blk Time (%)			0	3	
Queuing Penalty (veh)			1	3	

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	WB	WB	SB
Directions Served	T	T	TR	R
Maximum Queue (ft)	61	63	92	62
Average Queue (ft)	3	4	8	26
95th Queue (ft)	26	32	46	52
Link Distance (ft)	184	234	234	200
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 616

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	106	190	222	115	171	181	160	201	170	88	111	146
Average Queue (ft)	41	105	111	50	81	95	68	107	69	33	46	70
95th Queue (ft)	90	166	186	115	143	157	126	172	137	68	94	123
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)					0	0						
Queuing Penalty (veh)					0	0						
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)		0	51	8			1	2	2	0	3	3
Queuing Penalty (veh)		0	37	19			1	3	3	0	4	3

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	165
Average Queue (ft)	67
95th Queue (ft)	131
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	249	255	124	113	137	175	154
Average Queue (ft)	128	135	51	34	52	88	68
95th Queue (ft)	235	244	102	89	116	146	128
Link Distance (ft)	248	248		290	290	1014	1014
Upstream Blk Time (%)	0	1					
Queuing Penalty (veh)	1	2					
Storage Bay Dist (ft)			205				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	207	222	153	170	30	133
Average Queue (ft)	90	78	51	58	2	60
95th Queue (ft)	181	180	127	136	15	115
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	75	86	279	289	103	120	160	170	243	216	339	165
Average Queue (ft)	20	46	152	162	37	65	74	85	153	102	162	92
95th Queue (ft)	54	79	255	267	85	105	131	146	227	194	286	152
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)			0				0					
Queuing Penalty (veh)			0				0					

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	143
Average Queue (ft)	49
95th Queue (ft)	112
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	164	284	266	158	194	344
Average Queue (ft)	62	116	127	58	72	183
95th Queue (ft)	132	230	233	130	156	296
Link Distance (ft)		463	463	374	374	667
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	80					
Storage Blk Time (%)	3	12				
Queuing Penalty (veh)	16	15				

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	TR	L	TR	LTR
Maximum Queue (ft)	77	295	311	173	279	107
Average Queue (ft)	9	111	123	23	140	40
95th Queue (ft)	36	240	255	84	263	84
Link Distance (ft)		374	374		271	717
Upstream Blk Time (%)			0		1	
Queuing Penalty (veh)			0		3	
Storage Bay Dist (ft)	125			100		
Storage Blk Time (%)		6			13	
Queuing Penalty (veh)		1			3	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	42	106	96	115	49
Average Queue (ft)	11	8	8	13	17
95th Queue (ft)	36	51	47	62	44
Link Distance (ft)		271	271	298	821
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	66	103	108	139	52
Average Queue (ft)	16	13	17	16	18
95th Queue (ft)	48	60	70	72	42
Link Distance (ft)		298	298	235	1038
Upstream Blk Time (%)				0	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)	240				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	110	234	242	105	282	77	162
Average Queue (ft)	31	72	87	14	150	26	70
95th Queue (ft)	78	177	196	62	277	60	130
Link Distance (ft)		235	235		272	510	1057
Upstream Blk Time (%)		0	0	0	1		
Queuing Penalty (veh)		1	2	0	4		
Storage Bay Dist (ft)	160			175			
Storage Blk Time (%)	0	1			6		
Queuing Penalty (veh)	0	1			1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	L	T	LR
Maximum Queue (ft)	134	151	38	155	62
Average Queue (ft)	24	32	7	28	24
95th Queue (ft)	84	103	29	100	53
Link Distance (ft)	272	272		292	1062
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		
Storage Blk Time (%)				1	
Queuing Penalty (veh)				0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	82	258	267	101	239	79	74
Average Queue (ft)	17	85	109	15	90	26	27
95th Queue (ft)	54	199	231	61	211	60	60
Link Distance (ft)		292	292		239	961	1064
Upstream Blk Time (%)		0	0		0		
Queuing Penalty (veh)		0	0		2		
Storage Bay Dist (ft)	100			75			
Storage Blk Time (%)		4		0	8		
Queuing Penalty (veh)		1		1	1		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	53	96	124	119	92	56
Average Queue (ft)	10	7	14	11	39	22
95th Queue (ft)	36	40	67	58	76	51
Link Distance (ft)		239	239	267	955	1076
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	90					
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	EB	WB	B20	B20	SB
Directions Served	L	T	T	TR	T		LR
Maximum Queue (ft)	74	261	286	344	147	106	91
Average Queue (ft)	22	75	107	151	21	11	37
95th Queue (ft)	57	204	246	325	86	55	79
Link Distance (ft)		267	267	268	247	247	1128
Upstream Blk Time (%)		0	1	3			
Queuing Penalty (veh)		2	5	19			
Storage Bay Dist (ft)	150						
Storage Blk Time (%)	0	2					
Queuing Penalty (veh)	0	1					

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	NB	NB
Directions Served	T	TR	T	T	LT	T	L	R
Maximum Queue (ft)	301	331	231	277	322	352	165	209
Average Queue (ft)	146	244	32	77	257	175	88	72
95th Queue (ft)	307	388	146	236	374	360	148	153
Link Distance (ft)	247	247	268	268	304	304		436
Upstream Blk Time (%)	2	21	0	1	31	4		
Queuing Penalty (veh)	13	122	2	5	110	16		
Storage Bay Dist (ft)							85	
Storage Blk Time (%)							15	2
Queuing Penalty (veh)							18	3

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	267	303	234	266	258	225	409	422	416
Average Queue (ft)	96	150	53	207	171	131	256	236	211
95th Queue (ft)	214	263	196	299	282	231	367	363	366
Link Distance (ft)	304	304		184	184	184	1849	1849	1849
Upstream Blk Time (%)	0	1		37	26	3			
Queuing Penalty (veh)	1	4		102	70	9			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		13	0						
Queuing Penalty (veh)		62	0						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	L	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	130	152	316	238	237	140	193	202	264	542	552	165
Average Queue (ft)	58	81	198	168	175	106	44	50	138	212	205	94
95th Queue (ft)	112	132	330	263	272	180	170	180	274	661	644	171
Link Distance (ft)		234	234	162	162		183	183		1350	1350	
Upstream Blk Time (%)			7	29	28		11	12		2	2	
Queuing Penalty (veh)			25	103	97		40	43		0	0	
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	4	4			50	17			17	0	18	15
Queuing Penalty (veh)	3	3			122	34			37	0	29	35

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	386	308
Average Queue (ft)	175	136
95th Queue (ft)	384	302
Link Distance (ft)	1064	
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		380
Storage Blk Time (%)	3	2
Queuing Penalty (veh)	3	4

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	260	115	286	323
Average Queue (ft)	150	12	111	138
95th Queue (ft)	273	68	305	332
Link Distance (ft)	183	162	391	391
Upstream Blk Time (%)	8	0	6	8
Queuing Penalty (veh)	48	1	20	30
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	TR	LTR	LTR
Maximum Queue (ft)	387	135	164	32	273
Average Queue (ft)	202	58	85	4	106
95th Queue (ft)	359	117	156	19	305
Link Distance (ft)	391	150	150	273	1458
Upstream Blk Time (%)	1	2	7		
Queuing Penalty (veh)	3	9	27		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	L	TR	LTR	LTR
Maximum Queue (ft)	165	116	239	965	570	33
Average Queue (ft)	105	47	136	301	210	2
95th Queue (ft)	180	90	245	1088	649	13
Link Distance (ft)	150	150		2246	1429	198
Upstream Blk Time (%)	3	0		4	2	
Queuing Penalty (veh)	11	0		0	0	
Storage Bay Dist (ft)			150			
Storage Blk Time (%)			11	14		
Queuing Penalty (veh)			56	36		

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	8	140	227	234	107
Average Queue (ft)	0	12	63	63	34
95th Queue (ft)	6	69	224	227	110
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)		0	11	13	3
Queuing Penalty (veh)		0	43	50	0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 1606

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	103	177	238	115	151	170	63	146	119	72	63	118
Average Queue (ft)	30	75	119	53	68	81	21	68	28	22	22	52
95th Queue (ft)	75	141	203	124	128	139	50	120	76	52	53	97
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)		0	52	8				0	0	0	0	1
Queuing Penalty (veh)		0	34	16				0	0	0	0	0

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	108
Average Queue (ft)	39
95th Queue (ft)	85
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	227	250	160	110	143	140	105
Average Queue (ft)	93	133	70	28	48	62	30
95th Queue (ft)	186	243	133	79	110	116	74
Link Distance (ft)	248	248		290	290	1014	1014
Upstream Blk Time (%)	0	1					
Queuing Penalty (veh)	0	2					
Storage Bay Dist (ft)			205				
Storage Blk Time (%)			0				
Queuing Penalty (veh)			0				

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	103	80	155	164	30	76
Average Queue (ft)	32	22	57	59	3	26
95th Queue (ft)	82	65	127	136	19	62
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	42	69	123	141	147	177	151	190	274	255	126	237
Average Queue (ft)	7	31	50	65	72	94	66	81	160	106	53	140
95th Queue (ft)	28	60	104	120	131	145	128	147	247	222	99	215
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)						0						
Queuing Penalty (veh)						0						

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	215
Average Queue (ft)	100
95th Queue (ft)	190
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	94	107	109	194	215	180
Average Queue (ft)	38	39	50	73	79	83
95th Queue (ft)	77	85	96	165	174	150
Link Distance (ft)		463	463	374	374	667
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	80					
Storage Blk Time (%)	2	1				
Queuing Penalty (veh)	3	1				

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	TR	L	TR	LTR
Maximum Queue (ft)	39	109	118	158	287	125
Average Queue (ft)	7	31	38	15	188	51
95th Queue (ft)	25	79	87	74	328	99
Link Distance (ft)		374	374		271	717
Upstream Blk Time (%)					3	
Queuing Penalty (veh)					23	
Storage Bay Dist (ft)	125			100		
Storage Blk Time (%)		0			18	
Queuing Penalty (veh)		0			3	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	47	32	34	218	94
Average Queue (ft)	11	2	2	42	37
95th Queue (ft)	37	19	19	141	77
Link Distance (ft)		271	271	298	821
Upstream Blk Time (%)				0	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	34	41	55	111	75
Average Queue (ft)	8	3	4	17	24
95th Queue (ft)	30	22	26	70	55
Link Distance (ft)		298	298	235	1038
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	240				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Perkins Street & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	68	111	123	30	283	43	130
Average Queue (ft)	20	31	47	7	122	9	49
95th Queue (ft)	53	80	103	26	275	30	100
Link Distance (ft)		235	235		272	510	1057
Upstream Blk Time (%)					1		
Queuing Penalty (veh)					7		
Storage Bay Dist (ft)	160			175			
Storage Blk Time (%)		0			4		
Queuing Penalty (veh)		0			1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	L	T	LR
Maximum Queue (ft)	12	41	47	134	45
Average Queue (ft)	1	2	5	16	11
95th Queue (ft)	7	16	31	79	37
Link Distance (ft)	272	272		292	1062
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		
Storage Blk Time (%)				1	
Queuing Penalty (veh)				0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	37	107	128	60	250	54	63
Average Queue (ft)	7	25	35	9	92	20	22
95th Queue (ft)	28	77	93	39	243	49	53
Link Distance (ft)		292	292		239	961	1064
Upstream Blk Time (%)					1		
Queuing Penalty (veh)					9		
Storage Bay Dist (ft)	100			75			
Storage Blk Time (%)		0			7		
Queuing Penalty (veh)		0			1		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	31	28	51	193	63	44
Average Queue (ft)	5	2	4	37	24	17
95th Queue (ft)	22	15	25	138	56	44
Link Distance (ft)		239	239	267	955	1076
Upstream Blk Time (%)				0		
Queuing Penalty (veh)				0		
Storage Bay Dist (ft)	90					
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	EB	WB	B20	SB
Directions Served	L	T	T	TR	T	LR
Maximum Queue (ft)	40	133	168	364	331	64
Average Queue (ft)	10	50	73	287	88	19
95th Queue (ft)	34	106	141	411	282	53
Link Distance (ft)		267	267	267	260	1127
Upstream Blk Time (%)				17	3	
Queuing Penalty (veh)				155	27	
Storage Bay Dist (ft)	150					
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	B20	WB	WB	NB	NB
Directions Served	T	TR	T	L	T	L	R
Maximum Queue (ft)	241	274	2	311	320	174	326
Average Queue (ft)	89	133	0	156	191	120	115
95th Queue (ft)	187	242	2	298	322	184	244
Link Distance (ft)	260	260	267	305	305		433
Upstream Blk Time (%)	0	1		2	3		0
Queuing Penalty (veh)	0	2		6	10		0
Storage Bay Dist (ft)						85	
Storage Blk Time (%)						28	4
Queuing Penalty (veh)						48	10

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	216	231	197	263	243	222	426	379	326
Average Queue (ft)	81	90	31	162	134	117	246	210	167
95th Queue (ft)	171	182	119	256	226	201	366	324	272
Link Distance (ft)	305	305		184	184	184	1849	1849	1849
Upstream Blk Time (%)	0	0		8	2	1			
Queuing Penalty (veh)	0	0		21	6	4			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		5	0						
Queuing Penalty (veh)		10	0						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	L	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	191	222	318	190	233	140	15	89	250	342	342	165
Average Queue (ft)	101	108	177	92	120	108	1	7	107	158	153	72
95th Queue (ft)	170	185	310	161	223	167	9	48	222	287	278	164
Link Distance (ft)		234	234	162	162		183	183		1350	1350	
Upstream Blk Time (%)		0	5	1	5							
Queuing Penalty (veh)		1	15	4	16							
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	9	9			36	32			5	1	23	3
Queuing Penalty (veh)	10	18			104	47			18	2	26	10

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	255	248
Average Queue (ft)	132	122
95th Queue (ft)	226	214
Link Distance (ft)	1064	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		380
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	218	21	127	200
Average Queue (ft)	39	1	20	37
95th Queue (ft)	144	12	75	127
Link Distance (ft)	183	162	391	391
Upstream Blk Time (%)	1			
Queuing Penalty (veh)	3			
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	TR	LTR	LTR
Maximum Queue (ft)	296	112	159	29	106
Average Queue (ft)	105	41	77	3	43
95th Queue (ft)	218	89	147	16	83
Link Distance (ft)	391	150	150	273	1458
Upstream Blk Time (%)	0	0	1		
Queuing Penalty (veh)	0	0	2		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	LT	R	L	TR	LTR
Maximum Queue (ft)	165	80	167	257	407
Average Queue (ft)	101	30	53	103	189
95th Queue (ft)	186	65	117	201	323
Link Distance (ft)	150	150		2258	1429
Upstream Blk Time (%)	4				
Queuing Penalty (veh)	9				
Storage Bay Dist (ft)			150		
Storage Blk Time (%)			0	3	
Queuing Penalty (veh)			1	3	

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	WB	WB	SB
Directions Served	T	T	TR	R
Maximum Queue (ft)	103	96	113	68
Average Queue (ft)	7	7	9	25
95th Queue (ft)	49	49	58	54
Link Distance (ft)	184	234	234	200
Upstream Blk Time (%)	0	0	0	
Queuing Penalty (veh)	0	0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 689

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	LT	TR	L	T	T	R	L	T
Maximum Queue (ft)	107	189	234	115	161	174	140	184	150	104	108	141
Average Queue (ft)	40	101	109	48	78	97	68	101	68	35	47	71
95th Queue (ft)	83	161	185	113	137	155	124	160	135	75	91	126
Link Distance (ft)		1864	1864		248	248		842	842			1221
Upstream Blk Time (%)						0						
Queuing Penalty (veh)						0						
Storage Bay Dist (ft)	200			25			140			100	100	
Storage Blk Time (%)		0	51	9			1	1	2	0	2	4
Queuing Penalty (veh)		0	37	21			2	2	3	0	3	3

Intersection: 1: Broadway Avenue & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	172
Average Queue (ft)	68
95th Queue (ft)	140
Link Distance (ft)	1221
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Grand Avenue & Webster Street

Movement	EB	EB	WB	WB	WB	SB	SB
Directions Served	LT	TR	L	T	TR	LT	TR
Maximum Queue (ft)	252	261	119	120	145	188	154
Average Queue (ft)	132	136	51	34	52	84	63
95th Queue (ft)	234	240	101	89	110	145	124
Link Distance (ft)	248	248		290	290	1014	1014
Upstream Blk Time (%)	0	1					
Queuing Penalty (veh)	1	2					
Storage Bay Dist (ft)			205				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: Driveway/Valdez Street & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	TR	LT	TR	LTR	LTR
Maximum Queue (ft)	205	209	138	166	27	152
Average Queue (ft)	90	82	48	64	3	61
95th Queue (ft)	185	179	116	141	17	118
Link Distance (ft)	290	290	494	494	674	1093
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 4: Harrison Street & Grand Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	L	T	TR	L	L	T	TR	LT	T	R	LT
Maximum Queue (ft)	64	88	270	274	91	105	154	176	260	247	341	173
Average Queue (ft)	18	43	151	159	35	63	74	89	157	108	152	92
95th Queue (ft)	50	77	237	245	79	100	134	153	236	214	276	151
Link Distance (ft)			494	494			463	463	731	731	731	915
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	275	275			225	225						
Storage Blk Time (%)			0									
Queuing Penalty (veh)			0									

Intersection: 4: Harrison Street & Grand Avenue

Movement	SB
Directions Served	TR
Maximum Queue (ft)	151
Average Queue (ft)	49
95th Queue (ft)	115
Link Distance (ft)	915
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Grand Avenue & Bay Place

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	T	T	TR	LR
Maximum Queue (ft)	170	278	278	167	207	338
Average Queue (ft)	68	117	128	56	69	173
95th Queue (ft)	143	238	239	130	157	288
Link Distance (ft)		463	463	374	374	667
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	80					
Storage Blk Time (%)	4	11				
Queuing Penalty (veh)	19	14				

Intersection: 6: Bellevue Avenue/Park View Terrace & Grand Avenue

Movement	EB	EB	EB	WB	WB	SB
Directions Served	L	T	TR	L	TR	LTR
Maximum Queue (ft)	71	318	312	103	280	96
Average Queue (ft)	9	105	112	18	138	36
95th Queue (ft)	43	233	237	62	264	77
Link Distance (ft)		374	374		271	717
Upstream Blk Time (%)		0	0		1	
Queuing Penalty (veh)		0	0		3	
Storage Bay Dist (ft)	125			100		
Storage Blk Time (%)		4			12	
Queuing Penalty (veh)		1			3	

Intersection: 7: Grand Avenue & Lennox Avenue

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	38	105	100	107	46
Average Queue (ft)	8	9	11	14	17
95th Queue (ft)	31	52	56	65	44
Link Distance (ft)		271	271	298	821
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Intersection: 8: Grand Avenue & Lee Street

Movement	EB	EB	EB	WB	SB
Directions Served	L	T	T	TR	LR
Maximum Queue (ft)	55	103	116	135	48
Average Queue (ft)	15	15	18	21	18
95th Queue (ft)	44	64	71	84	43
Link Distance (ft)		298	298	235	1038
Upstream Blk Time (%)				0	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)	240				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Grand Avenue & Perkins Street

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	109	206	230	84	286	73	157
Average Queue (ft)	32	71	89	12	151	26	67
95th Queue (ft)	71	164	190	54	270	59	126
Link Distance (ft)		235	235		272	510	1057
Upstream Blk Time (%)		0	0		1		
Queuing Penalty (veh)		0	1		3		
Storage Bay Dist (ft)	160			175			
Storage Blk Time (%)	0	1			5		
Queuing Penalty (veh)	0	1			1		

Intersection: 10: Ellita Avenue & Grand Avenue

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	L	T	LR
Maximum Queue (ft)	128	145	46	166	74
Average Queue (ft)	20	28	8	26	28
95th Queue (ft)	75	93	33	97	62
Link Distance (ft)	272	272		292	1062
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			100		
Storage Blk Time (%)				1	
Queuing Penalty (veh)				0	

Intersection: 11: Staten Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	TR	L	TR	LTR	LTR
Maximum Queue (ft)	67	253	269	55	233	75	64
Average Queue (ft)	19	87	110	12	78	25	25
95th Queue (ft)	53	202	233	37	185	61	55
Link Distance (ft)		292	292		239	961	1064
Upstream Blk Time (%)		0	0		0		
Queuing Penalty (veh)		0	1		2		
Storage Bay Dist (ft)	100			75			
Storage Blk Time (%)	0	4			8		
Queuing Penalty (veh)	0	1			1		

Intersection: 12: Bellevue Avenue & Grand Avenue

Movement	EB	EB	EB	WB	NB	SB
Directions Served	L	T	T	TR	LTR	LTR
Maximum Queue (ft)	42	106	131	131	107	62
Average Queue (ft)	10	11	18	12	41	22
95th Queue (ft)	35	72	92	72	90	52
Link Distance (ft)		239	239	267	955	1076
Upstream Blk Time (%)		0	1			
Queuing Penalty (veh)		2	3			
Storage Bay Dist (ft)	90					
Storage Blk Time (%)		1				
Queuing Penalty (veh)		0				

Intersection: 13: Grand Avenue & Euclid Avenue

Movement	EB	EB	EB	WB	B20	SB
Directions Served	L	T	T	TR	T	LR
Maximum Queue (ft)	120	257	268	350	182	106
Average Queue (ft)	23	83	111	172	11	38
95th Queue (ft)	73	211	240	338	76	80
Link Distance (ft)		267	267	268	246	1128
Upstream Blk Time (%)		1	1	3	0	
Queuing Penalty (veh)		5	8	23	0	
Storage Bay Dist (ft)	150					
Storage Blk Time (%)		3				
Queuing Penalty (veh)		1				

Intersection: 14: El Embarcadero & Grand Avenue

Movement	EB	EB	B20	B20	WB	WB	NB	NB
Directions Served	T	TR	T	T	L	T	L	R
Maximum Queue (ft)	323	327	272	303	308	324	160	195
Average Queue (ft)	233	283	67	105	174	189	84	67
95th Queue (ft)	359	378	240	291	300	330	139	139
Link Distance (ft)	246	246	268	268	305	305		430
Upstream Blk Time (%)	16	42	2	4	1	3		
Queuing Penalty (veh)	92	241	9	23	5	9		
Storage Bay Dist (ft)							85	
Storage Blk Time (%)							14	2
Queuing Penalty (veh)							17	2

Intersection: 15: MacArthur Boulevard & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	UL	T	T	LT	T	TR
Maximum Queue (ft)	290	314	235	263	248	195	391	342	309
Average Queue (ft)	98	143	105	183	132	119	246	216	183
95th Queue (ft)	225	255	218	269	229	198	347	303	270
Link Distance (ft)	305	305		184	184	184	1849	1849	1849
Upstream Blk Time (%)	0	0		14	4	1			
Queuing Penalty (veh)	1	2		38	10	4			
Storage Bay Dist (ft)			145						
Storage Blk Time (%)		7	1						
Queuing Penalty (veh)		32	1						

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	EB	EB	EB	WB	WB	WB	B56	B56	NB	NB	NB	NB
Directions Served	UL	L	TR	LT	T	R	T	T	L	T	T	R
Maximum Queue (ft)	124	151	319	238	235	140	145	155	200	218	240	165
Average Queue (ft)	53	77	180	149	154	109	19	24	104	120	123	91
95th Queue (ft)	104	125	311	246	255	174	98	111	179	188	207	164
Link Distance (ft)		234	234	162	162		183	183		1350	1350	
Upstream Blk Time (%)			4	16	13		1	1				
Queuing Penalty (veh)			16	56	45		3	4				
Storage Bay Dist (ft)	115					50			215			75
Storage Blk Time (%)	0	2			39	20			0	0	18	16
Queuing Penalty (veh)	0	2			95	41			1	0	29	37

Intersection: 16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue

Movement	SB	SB
Directions Served	LTR	R
Maximum Queue (ft)	224	199
Average Queue (ft)	125	91
95th Queue (ft)	203	182
Link Distance (ft)	1064	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		380
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Midblock Ped Crossing & Grand Avenue

Movement	EB	B56	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	262	131	186	248
Average Queue (ft)	149	14	64	97
95th Queue (ft)	277	78	140	200
Link Distance (ft)	183	162	391	391
Upstream Blk Time (%)	8	0		
Queuing Penalty (veh)	51	2		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 18: Grand Avenue & Elwood Avenue

Movement	EB	WB	WB	NB	SB
Directions Served	LTR	LT	TR	LTR	LTR
Maximum Queue (ft)	377	131	154	33	166
Average Queue (ft)	183	53	76	3	75
95th Queue (ft)	340	100	130	20	142
Link Distance (ft)	391	150	150	273	1458
Upstream Blk Time (%)	1	0	0		
Queuing Penalty (veh)	6	0	1		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: Mandana Boulevard & Grand Avenue

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	L	TR	LTR	LTR
Maximum Queue (ft)	167	117	239	552	275	22
Average Queue (ft)	105	51	131	177	136	2
95th Queue (ft)	180	95	232	410	233	12
Link Distance (ft)	150	150		2246	1429	198
Upstream Blk Time (%)	3	0				
Queuing Penalty (veh)	9	0				
Storage Bay Dist (ft)			150			
Storage Blk Time (%)			10	6		
Queuing Penalty (veh)			56	16		

Intersection: 100: Grand Avenue & OUSD Driveway

Movement	EB	EB	WB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	11	97	100	61	59
Average Queue (ft)	0	8	8	4	18
95th Queue (ft)	8	55	52	39	46
Link Distance (ft)	184	184	234	234	200
Upstream Blk Time (%)		0			
Queuing Penalty (veh)		0			
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 1128

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.3	0.2	1.3	0.0	0.0	0.0	3.5	0.2	3.3	2.6	0.1	0.1
Total Del/Veh (s)	21.4	24.1	9.7	26.4	25.9	17.8	31.4	21.8	8.8	36.4	22.5	12.5

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	21.8

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0
Total Del/Veh (s)	23.4	19.2	21.3	36.1	8.4	5.7	29.2	23.6	26.2	19.3

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	10.6	5.0	11.5	9.6	7.2	21.2	8.4	26.2	7.1	8.5

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.3	0.1	0.2
Total Del/Veh (s)	41.6	24.1	16.9	32.7	16.8	12.9	49.6	30.1	6.0	29.7	22.6	12.9

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	23.3

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Del/Veh (s)	22.7	6.1	5.4	4.7	30.7	17.5	8.4

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0
Total Del/Veh (s)	25.5	6.3	4.4	14.2	9.7	9.2	29.8	19.4	33.3	10.0

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	11.3	0.8	2.5	1.2	31.4	21.5	2.9

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	9.0	0.5	2.4	1.6	20.0	13.7	2.3

9: Perkins Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	24.3	5.5	6.1	9.2	6.8	5.2	26.8	32.1	5.0	29.4	30.3	18.6

9: Perkins Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	8.3

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.0	1.1	4.1	1.8	24.3	4.5	1.7

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	15.8	2.9	2.7	7.5	4.9	3.9	33.4	17.4	6.8	28.2	24.7	12.1

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	5.0

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	15.6	0.9	4.2	2.9	22.7	21.4	6.5	23.5	17.7	3.4

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.1	0.1	0.1
Total Del/Veh (s)	21.3	7.1	20.6	17.1	22.2	18.0	15.9

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	3.6	0.8	0.6
Total Del/Veh (s)	9.2	8.2	15.6	8.8	33.5	9.8	12.8

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.1
Total Del/Veh (s)	27.8	2.1	40.2	41.8	15.6	34.7	28.7	29.3	25.4

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.2	1.7	0.4	0.3
Total Del/Veh (s)	37.8	39.1	25.3	21.4	34.3	32.4	16.0	59.9	21.9	22.4	51.0	60.6

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.6	0.3
Total Del/Veh (s)	31.2	28.8

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.4	2.8	2.6

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.0
Total Del/Veh (s)	15.0	8.4	2.9	6.5	5.3	4.1	17.8	20.6	9.0	7.4

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.7	0.4	0.4	0.4	0.3
Total Del/Veh (s)	11.4	10.0	2.8	24.1	13.3	25.1	20.9	15.7

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.0	1.8	1.5	5.7	1.5

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	54.3

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.4	0.2	1.2	0.0	0.0	0.0	3.1	0.2	3.0	2.4	0.1	0.2
Total Del/Veh (s)	21.9	25.0	8.5	30.3	29.5	23.5	44.8	24.9	9.6	53.3	26.2	21.1

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	25.7

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0
Total Del/Veh (s)	21.2	18.3	18.0	41.7	10.5	7.4	29.8	25.7	28.2	19.9

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.0
Total Del/Veh (s)	12.1	8.7	5.3	14.5	10.2	7.5	16.7	3.8	25.3	13.6	10.6

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.4	0.3	0.1	0.2
Total Del/Veh (s)	45.5	35.3	31.3	47.8	30.9	21.5	23.0	16.8	17.6	33.7	15.9	6.5

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	24.4

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	0.3	0.1
Total Del/Veh (s)	18.0	10.0	7.9	6.1	36.5	29.9	14.1

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Del/Veh (s)	15.4	9.0	8.6	24.1	10.0	7.2	32.7	32.6	33.4	10.4

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	7.4	1.4	1.2	0.8	22.2	9.9	1.5

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	8.1	1.4	2.6	2.0	23.2	8.9	2.1

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Total Del/Veh (s)	16.8	5.6	3.9	25.6	12.2	9.9	33.1	29.7	13.6	32.6	37.7	20.7

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	10.3

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	2.5	2.3	10.1	2.5	40.8	15.7	3.0

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1
Total Del/Veh (s)	11.7	6.3	4.7	19.0	6.0	4.5	29.4	31.0	11.9	28.6	39.3	10.0

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	7.0

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0.1	0.1	0.0
Total Del/Veh (s)	9.4	2.2	2.7	1.8	24.7	19.8	14.8	24.2	11.7	3.1

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	14.3	6.4	11.2	8.6	31.6	17.3	8.7

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.4	0.0	3.7	0.6	0.4
Total Del/Veh (s)	16.7	21.6	177.5	11.6	36.7	13.2	31.1

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.1
Total Del/Veh (s)	32.2	4.6	58.3	67.1	40.9	36.1	32.6	69.5	35.1

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	7.5	6.8	9.3	0.3	0.4
Total Del/Veh (s)	114.9	46.1	17.7	15.2	133.7	57.1	21.1	152.3	30.9	35.2	114.8	118.9

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.3	2.4
Total Del/Veh (s)	72.2	48.4

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	11.3	29.7	20.8

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.2	0.0
Total Del/Veh (s)	20.4	16.0	13.7	9.6	9.9	9.2	17.9	7.4	51.9	29.7	50.7	17.3

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	8.8	11.4	20.1	2.8	4.1	0.1	5.2
Total Del/Veh (s)	18.5	8.9	3.7	59.5	41.7	70.7	65.0	55.2	17.5	34.7

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	6.9	0.1
Total Del/Veh (s)	1.6	18.5	7.3	158.5	11.9

Total Network Performance

Denied Del/Veh (s)	2.1
Total Del/Veh (s)	81.1

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.5	0.2	1.3	0.0	0.0	0.0	3.5	0.1	3.4	2.6	0.1	0.1
Total Del/Veh (s)	20.8	23.2	10.1	26.2	27.1	19.2	34.1	21.8	8.1	38.0	22.4	12.1

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.6
Total Del/Veh (s)	21.8

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.0
Total Del/Veh (s)	20.6	18.3	19.5	37.7	8.2	6.6	28.2	24.2	26.0	18.7

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	10.8	5.2	11.0	9.1	7.1	24.0	3.0	24.6	7.6	8.1

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.3	0.1	0.2
Total Del/Veh (s)	44.4	24.2	16.8	34.2	16.5	14.8	50.0	31.0	6.5	34.7	22.4	12.8

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	23.6

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Del/Veh (s)	23.1	6.3	5.9	4.9	28.2	16.7	8.6

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0
Total Del/Veh (s)	21.8	6.4	3.8	13.0	10.0	7.6	31.2	31.5	32.2	10.3

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	12.8	0.8	2.4	2.1	26.4	22.5	2.8

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	10.7	0.5	2.5	1.7	25.6	16.2	2.4

9: Perkins Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1
Total Del/Veh (s)	24.2	5.1	4.0	8.3	6.8	4.8	28.1	28.4	6.9	29.4	33.3	18.0

9: Perkins Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	8.1

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.0	1.0	4.4	2.0	30.2	6.4	1.8

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.1	0.1	0.3	0.1
Total Del/Veh (s)	13.7	3.0	0.2	8.4	4.8	3.7	24.9	35.0	6.0	28.8	29.4	13.6

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	4.9

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	15.3	0.8	4.2	3.0	32.7	15.1	7.8	18.5	16.5	3.5

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	22.0	7.6	20.7	17.2	20.1	18.1	16.1

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	3.6	0.8	0.6
Total Del/Veh (s)	20.3	18.4	43.8	20.4	38.4	12.1	23.3

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.1
Total Del/Veh (s)	31.6	3.2	42.7	40.4	17.2	34.3	29.2	31.3	26.3

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	1.8	0.2	1.7	0.4	0.4
Total Del/Veh (s)	40.0	38.9	24.3	20.6	36.8	30.5	16.7	70.1	22.1	20.9	60.0	61.2

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.5	0.3
Total Del/Veh (s)	31.5	29.2

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	2.3	2.9	2.7

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.0
Total Del/Veh (s)	12.5	8.4	7.6	9.2	5.0	3.7	20.7	21.1	9.3	7.2

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.7	0.4	0.3	0.4	0.3
Total Del/Veh (s)	21.7	10.4	2.9	24.4	13.4	26.1	20.4	16.1

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.1	2.0	1.7	6.8	1.7

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	57.2

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.4	0.2	1.3	0.0	0.0	0.0	3.1	0.2	3.1	2.4	0.1	0.2
Total Del/Veh (s)	23.1	25.5	8.8	28.6	29.9	24.6	48.4	24.2	9.9	47.5	25.6	21.1

1: Broadway Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.7
Total Del/Veh (s)	25.8

2: Grand Avenue & Webster Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0
Total Del/Veh (s)	22.6	19.6	19.5	40.5	10.0	6.9	29.1	25.2	27.1	20.2

3: Driveway/Valdez Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0		0.0	0.0	0.1	0.1	0.2	0.2	0.0
Total Del/Veh (s)	13.6	8.8	5.9		9.7	7.7	14.8	6.7	25.5	13.5	10.5

4: Harrison Street & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.4	0.3	0.1	0.1
Total Del/Veh (s)	45.3	34.4	31.1	46.2	30.3	22.8	24.7	17.0	16.7	35.6	16.6	6.5

4: Harrison Street & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.1
Total Del/Veh (s)	24.1

5: Grand Avenue & Bay Place Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	0.3	0.1
Total Del/Veh (s)	19.5	10.1	7.9	6.0	35.2	28.4	13.9

6: Bellevue Avenue/Park View Terrace & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Total Del/Veh (s)	15.9	8.5	6.5	20.6	9.2	7.2	31.5	29.9	33.6	9.6

7: Grand Avenue & Lennox Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	6.4	1.4	1.2	1.1	16.0	8.5	1.5

8: Grand Avenue & Lee Street Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	8.1	1.4	2.8	2.2	24.4	8.7	2.2

9: Grand Avenue & Perkins Street Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.2	0.2	0.2
Total Del/Veh (s)	17.3	5.7	4.8	18.8	11.9	9.6	33.1	30.2	16.3	31.1	32.6	19.0

9: Grand Avenue & Perkins Street Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	10.2

10: Ellita Avenue & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	2.2	2.6	9.8	2.4	44.2	14.5	3.0

11: Staten Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	13.7	6.4	5.9	17.5	5.4	3.7	32.9	34.2	11.9	28.9	25.4	10.0

11: Staten Avenue & Grand Avenue Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	6.9

12: Bellevue Avenue & Grand Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	8.2	2.7	2.8	2.0	25.3	48.1	20.4	28.0	11.9	3.8

13: Grand Avenue & Euclid Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	15.0	7.7	11.9	9.6	32.7	16.6	9.9

14: El Embarcadero & Grand Avenue Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.4	0.0	0.0	3.7	0.6	0.4
Total Del/Veh (s)	32.0	38.8	50.7	22.2	38.1	11.2	31.6

15: MacArthur Boulevard & Grand Avenue Performance by movement

Movement	EBT	EBR	WBU	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.2	0.1
Total Del/Veh (s)	23.5	6.0	48.6	45.9	18.8	35.8	29.9	33.1	25.6

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.9	0.2	1.8	0.3	0.3
Total Del/Veh (s)	32.6	37.8	15.7	12.9	109.4	35.9	15.2	46.2	27.8	33.8	70.8	75.4

16: Lake Park Avenue/Santa Clara Avenue & Grand Avenue Performance by movement

Movement	SBR	All
Denied Del/Veh (s)	0.3	0.3
Total Del/Veh (s)	36.7	31.0

17: Midblock Ped Crossing & Grand Avenue Performance by movement

Movement	EBT	WBT	All
Denied Del/Veh (s)	0.0	0.0	0.0
Total Del/Veh (s)	11.2	8.4	9.7

18: Grand Avenue & Elwood Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.2	0.0
Total Del/Veh (s)	21.6	15.9	10.2	11.4	5.6	4.3	21.9	9.7	27.6	40.9	17.8	12.0

19: Mandana Boulevard & Grand Avenue Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	1.0	0.8	0.3	0.3	0.3	0.1	0.4
Total Del/Veh (s)	17.0	8.6	3.8	40.8	16.2	13.9	28.6	21.2	5.3	18.0

100: Grand Avenue & OUSD Driveway Performance by movement

Movement	EBT	WBT	WBR	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.4	1.7	1.5	9.9	1.7

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	66.4

Line 12 Eastbound - AM							
#	Intersection	Transit Line Movement	Delay (s)				
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2	Alt 2B (WB Diet): VERSION 2	Alt 2C (WB Diet): VERSION 2	Volume
1	Broadway Ave & Grand Ave	NBR	8.2	8.6	8.8	8.1	
2	Webster St & Grand Ave	EBT	17.3	19.1	19.2	18.3	
	Bus Stop		1.0				127
3	Valdez St & Grand Ave	EBT	3.8	4.9	5.0	5.2	
	Bus Stop		1.0				113
4	Harrison St & Grand Ave	EBT	24.2	22.7	24.1	24.2	
5	Bay Place & Grand Ave	EBT	6.6	6.0	6.1	6.3	
	Bus Stop		2.0				227
6	Park View Terrace/Bellevue Ave & Grand Ave	EBT	5.4	6.7	6.3	6.4	
7	Lenox Ave & Grand Ave	EBT	0.8	0.9	0.8	0.8	
8	Lee St & Grand Ave	EBT	0.6	0.5	0.5	0.5	
	Bus Stop		2.0				201
9	Perkins St & Grand Ave	EBT	4.6	5.4	5.5	5.1	
10	Ellita Ave & Grand Ave	EBT	0.9	1.1	1.0	1.0	
	Bus Stop		2.0				216
11	Staten Ave & Grand Ave	EBT	3.7	2.9	2.9	3.0	
12	Bellevue Ave & Grand Ave	EBT	1.0	0.8	0.9	0.8	
13	Euclid Ave & Grand Ave	EBT	4.9	7.7	7.1	7.6	
	Bus Stop		2.0				245
14	El Embarcadero & Grand Ave	EBT	15.5	8.3	9.2	20.3	
	Bus Stop		2.0				260
15	MacArthur Blvd & Grand Ave	EBT	25.8	29.6	27.8	31.6	
	Bus Stop		1.0				180
16	Santa Clara Ave/Lake Park Ave & Grand Ave	EBT	22.1	14.7	25.3	24.3	
17	Signalized Mid-Block Ped Crossing & Grand Ave	EBT	1.6	2.3	2.4	2.3	
18	Elwood Ave & Grand Ave	EBT	6.5	7.8	8.4	8.4	
	Bus Stop		1.0				127
19	Mandana Blvd & Grand Ave	EBT	9.9	9.7	10.0	10.4	
Total Delay (s)			**177.4**	**159.7**	**171.3**	**184.6**	

Line 12 Westbound - AM							
#	Intersection	Transit Line Movement	Delay (s)				
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2	Alt 2B (WB Diet): VERSION 2	Alt 2C (WB Diet): VERSION 2	Volume
19	Mandana Blvd & Grand Ave	WBT	12.9	13.6	13.3	13.4	
18	Elwood Ave & Grand Ave	WBT	6.1	4.9	5.3	5.0	
	Bus Stop		2.0				299
17	Signalized Mid-Block Ped Crossing & Grand Ave	WBT	2.8	2.9	2.8	2.9	
	Bus Stop		2.0				299
16	Santa Clara Ave/Lake Park Ave & Grand Ave	WBT	25.8	31.5	32.4	30.5	
	Bus Stop		2.0				296
15	MacArthur Blvd & Grand Ave	WBT	14.5	21.8	15.6	17.2	
14	El Embarcadero & Grand Ave	WBT	10.0	13.3	8.8	20.4	
	Bus Stop		4.0				441
13	Euclid Ave & Grand Ave	WBT	7.4	20.0	20.6	20.7	
12	Bellevue Ave & Grand Ave	WBT	1.8	4.1	4.2	4.2	
	Bus Stop		3.0				393
11	Staten Ave & Grand Ave	WBT	4.4	4.6	4.9	4.8	
10	Ellita Ave & Grand Ave	WBT	1.2	2.1	1.8	2.0	
	Bus Stop		3.0				379
9	Perkins St & Grand Ave	WBT	6.6	7.6	6.8	6.8	
8	Lee St & Grand Ave	WBT	1.9	2.6	2.4	2.5	
7	Lenox Ave & Grand Ave	WBT	0.9	2.7	2.5	2.4	
	Bus Stop		3.0				399
6	Park View Terrace/Bellevue Ave & Grand Ave	WBT	6.1	10.1	9.7	10.0	
5	Bay Place & Grand Ave	WBT	4.8	5.7	5.4	5.9	
	Bus Stop		4.0				416
4	Harrison St & Grand Ave	WBT	16.2	16.1	16.8	16.5	
3	Valdez St & Grand Ave	WBT	9.6	11.0	9.6	9.1	
	Bus Stop		2.0				204
2	Webster St & Grand Ave	WBT	5.8	7.4	8.4	8.2	
1	Broadway Ave & Grand Ave	WBL	26.0	25.8	26.4	26.2	
Total Delay (s)			**189.8**	**207.8**	**197.7**	**208.7**	

Line 12 Eastbound - PM							
#	Intersection	Transit Line Movement	Delay (s)				
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2	Alt 2B (WB Diet): VERSION 2	Alt 2C (WB Diet): VERSION 2	Volume
1	Broadway Ave & Grand Ave	NBR	10.0	9.4	9.6	9.9	
2	Webster St & Grand Ave	EBT	18.3	18.5	18.3	19.6	
	Bus Stop		3.0				303
3	Valdez St & Grand Ave	EBT	4.4	8.8	8.7	8.8	
	Bus Stop		2.0				280
4	Harrison St & Grand Ave	EBT	33.0	34.1	35.3	34.4	
5	Bay Place & Grand Ave	EBT	9.8	10.0	10.0	10.1	
	Bus Stop		5.0				586
6	Park View Terrace/Bellevue Ave & Grand Ave	EBT	8.0	8.3	9.0	8.5	
7	Lenox Ave & Grand Ave	EBT	1.5	1.4	1.4	1.4	
8	Lee St & Grand Ave	EBT	1.9	1.3	1.4	1.4	
	Bus Stop		5.0				513
9	Perkins St & Grand Ave	EBT	5.6	5.5	5.6	5.7	
10	Ellita Ave & Grand Ave	EBT	2.3	2.1	2.5	2.2	
	Bus Stop		5.0				530
11	Staten Ave & Grand Ave	EBT	4.1	6.0	6.3	6.4	
12	Bellevue Ave & Grand Ave	EBT	3.3	2.0	2.2	2.7	
13	Euclid Ave & Grand Ave	EBT	14.5	6.8	6.4	7.7	
	Bus Stop		5.0				573
14	El Embarcadero & Grand Ave	EBT	56.9	20.8	16.7	32.0	
	Bus Stop		4.0				444
15	MacArthur Blvd & Grand Ave	EBT	20.7	54.6	32.2	23.5	
	Bus Stop		2.0				285
16	Santa Clara Ave/Lake Park Ave & Grand Ave	EBT	23.8	12.8	17.7	15.7	
17	Signalized Mid-Block Ped Crossing & Grand Ave	EBT	6.8	11.4	11.3	11.2	
18	Elwood Ave & Grand Ave	EBT	12.3	16.9	16.0	15.9	
	Bus Stop		2.0				249
19	Mandana Blvd & Grand Ave	EBT	8.5	9.4	8.9	8.6	
Total Delay (s)			**278.7**	**240.1**	**219.5**	**225.7**	

Line 12 Westbound - PM							
#	Intersection	Transit Line Movement	Delay (s)				
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2	Alt 2B (WB Diet): VERSION 2	Alt 2C (WB Diet): VERSION 2	Volume
19	Mandana Blvd & Grand Ave	WBT	17.0	16.6	41.7	16.2	
18	Elwood Ave & Grand Ave	WBT	6.4	6.0	9.9	5.6	
	Bus Stop		3.0				351
17	Signalized Mid-Block Ped Crossing & Grand Ave	WBT	8.2	9.8	29.7	8.4	
	Bus Stop		3.0				351
16	Santa Clara Ave/Lake Park Ave & Grand Ave	WBT	31.2	41.3	57.1	35.9	
	Bus Stop		2.0				272
15	MacArthur Blvd & Grand Ave	WBT	19.1	19.9	40.9	18.8	
14	El Embarcadero & Grand Ave	WBT	6.4	7.7	11.6	22.2	
	Bus Stop		3.0				341
13	Euclid Ave & Grand Ave	WBT	6.5	10.6	11.2	11.9	
12	Bellevue Ave & Grand Ave	WBT	1.4	2.5	2.7	2.8	
	Bus Stop		2.0				279
11	Staten Ave & Grand Ave	WBT	4.2	5.8	6.0	5.4	
10	Ellita Ave & Grand Ave	WBT	1.4	2.3	2.5	2.4	
	Bus Stop		2.0				270
9	Perkins St & Grand Ave	WBT	9.7	12.2	12.2	11.9	
8	Lee St & Grand Ave	WBT	1.8	2.6	2.6	2.8	
7	Lenox Ave & Grand Ave	WBT	0.6	1.1	1.2	1.2	
	Bus Stop		2.0				266
6	Park View Terrace/Bellevue Ave & Grand Ave	WBT	7.9	9.1	10.0	9.2	
5	Bay Place & Grand Ave	WBT	8.8	7.8	7.9	7.9	
	Bus Stop		2.0				275
4	Harrison St & Grand Ave	WBT	28.5	29.8	30.9	30.3	
3	Valdez St & Grand Ave	WBT	8.7	9.5	10.2	9.7	
	Bus Stop		1.0				181
2	Webster St & Grand Ave	WBT	7.4	9.6	10.5	10.0	
1	Broadway Ave & Grand Ave	WBL	29.2	28.9	30.3	28.6	
Total Delay (s)			**224.4**	**233.1**	**329.1**	**241.2**	

Line NL Eastbound - AM							
#	Intersection	Transit Line Movement	Delay (s)				
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2	Alt 2B (WB Diet): VERSION 2	Alt 2C (WB Diet): VERSION 2	Volume
1	Broadway Ave & Grand Ave	NBR	8.2	8.6	8.8	8.1	
2	Webster St & Grand Ave	EBT	17.3	19.1	19.2	18.3	
	Bus Stop						127
3	Valdez St & Grand Ave	EBT	3.8	4.9	5.0	5.2	
	Bus Stop		1.0				113
4	Harrison St & Grand Ave	EBT	24.2	22.7	24.1	24.2	
5	Bay Place & Grand Ave	EBT	6.6	6.0	6.1	6.3	
	Bus Stop						227
6	Park View Terrace/Bellevue Ave & Grand Ave	EBT	5.4	6.7	6.3	6.4	
7	Lenox Ave & Grand Ave	EBT	0.8	0.9	0.8	0.8	
8	Lee St & Grand Ave	EBT	0.6	0.5	0.5	0.5	
	Bus Stop		2.0				201
9	Perkins St & Grand Ave	EBT	4.6	5.4	5.5	5.1	
10	Ellita Ave & Grand Ave	EBT	0.9	1.1	1.0	1.0	
	Bus Stop						216
11	Staten Ave & Grand Ave	EBT	3.7	2.9	2.9	3.0	
12	Bellevue Ave & Grand Ave	EBT	1.0	0.8	0.9	0.8	
13	Euclid Ave & Grand Ave	EBT	4.9	7.7	7.1	7.6	
	Bus Stop						245
14	El Embarcadero & Grand Ave	EBT	15.5	8.3	9.2	20.3	
	Bus Stop						260
15	MacArthur Blvd & Grand Ave	EBR	2.3	2.9	2.1	3.2	
	Bus Stop						
16	Santa Clara Ave/Lake Park Ave & Grand Ave						
17	Signalized Mid-Block Ped Crossing & Grand Ave						
18	Elwood Ave & Grand Ave						
	Bus Stop						
19	Mandana Blvd & Grand Ave						
Total Delay (s)			**102.8**	**98.5**	**99.5**	**110.8**	

Line NL Westbound - AM							
#	Intersection	Transit Line Movement	Delay (s)				
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2	Alt 2B (WB Diet): VERSION 2	Alt 2C (WB Diet): VERSION 2	Volume
19	Mandana Blvd & Grand Ave						
18	Elwood Ave & Grand Ave						
	Bus Stop						
17	Signalized Mid-Block Ped Crossing & Grand Ave						
	Bus Stop						
16	Santa Clara Ave/Lake Park Ave & Grand Ave	NBL	209.8	74.7	59.9	70.1	
	Bus Stop						296
15	MacArthur Blvd & Grand Ave	WBT	14.5	21.8	15.6	17.2	
14	El Embarcadero & Grand Ave	WBT	10.0	13.3	8.8	20.4	
	Bus Stop						441
13	Euclid Ave & Grand Ave	WBT	7.4	20.0	20.6	20.7	
12	Bellevue Ave & Grand Ave	WBT	1.8	4.1	4.2	4.2	
	Bus Stop						393
11	Staten Ave & Grand Ave	WBT	4.4	4.6	4.9	4.8	
10	Ellita Ave & Grand Ave	WBT	1.2	2.1	1.8	2.0	
	Bus Stop		3.0				379
9	Perkins St & Grand Ave	WBT	6.6	7.6	6.8	6.8	
8	Lee St & Grand Ave	WBT	1.9	2.6	2.4	2.5	
7	Lenox Ave & Grand Ave	WBT	0.9	2.7	2.5	2.4	
	Bus Stop						399
6	Park View Terrace/Bellevue Ave & Grand Ave	WBT	6.1	10.1	9.7	10.0	
5	Bay Place & Grand Ave	WBT	4.8	5.7	5.4	5.9	
	Bus Stop		4.0				416
4	Harrison St & Grand Ave	WBT	16.2	16.1	16.8	16.5	
3	Valdez St & Grand Ave	WBT	9.6	11.0	9.6	9.1	
	Bus Stop						204
2	Webster St & Grand Ave	WBT	5.8	7.4	8.4	8.2	
1	Broadway Ave & Grand Ave	WBL	26.0	25.8	26.4	26.2	
Total Delay (s)			**334.0**	**229.6**	**203.8**	**227.0**	

Line NL Eastbound - PM							
#	Intersection	Transit Line Movement	Delay (s)				
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2	Alt 2B (WB Diet): VERSION 2	Alt 2C (WB Diet): VERSION 2	Volume
1	Broadway Ave & Grand Ave	NBR	10.0	9.4	9.6	9.9	
2	Webster St & Grand Ave	EBT	18.3	18.5	18.3	19.6	
	Bus Stop						303
3	Valdez St & Grand Ave	EBT	4.4	8.8	8.7	8.8	
	Bus Stop		2.0				280
4	Harrison St & Grand Ave	EBT	33.0	34.1	35.3	34.4	
5	Bay Place & Grand Ave	EBT	9.8	10.0	10.0	10.1	
	Bus Stop						586
6	Park View Terrace/Bellevue Ave & Grand Ave	EBT	8.0	8.3	9.0	8.5	
7	Lenox Ave & Grand Ave	EBT	1.5	1.4	1.4	1.4	
8	Lee St & Grand Ave	EBT	1.9	1.3	1.4	1.4	
	Bus Stop		5.0				513
9	Perkins St & Grand Ave	EBT	5.6	5.5	5.6	5.7	
10	Ellita Ave & Grand Ave	EBT	2.3	2.1	2.5	2.2	
	Bus Stop						530
11	Staten Ave & Grand Ave	EBT	4.1	6.0	6.3	6.4	
12	Bellevue Ave & Grand Ave	EBT	3.3	2.0	2.2	2.7	
13	Euclid Ave & Grand Ave	EBT	14.5	6.8	6.4	7.7	
	Bus Stop						573
14	El Embarcadero & Grand Ave	EBT	56.9	20.8	16.7	32.0	
	Bus Stop						444
15	MacArthur Blvd & Grand Ave	EBR	4.1	10.5	4.6	6.0	
	Bus Stop						
16	Santa Clara Ave/Lake Park Ave & Grand Ave						
17	Signalized Mid-Block Ped Crossing & Grand Ave						
18	Elwood Ave & Grand Ave						
	Bus Stop						
19	Mandana Blvd & Grand Ave						
Total Delay (s)			**184.7**	**145.5**	**138.0**	**156.8**	

Line NL Westbound - PM							
#	Intersection	Transit Line Movement	Delay (s)				
			Alt 1 Existing No Build	Alt 2 (WB Diet): VERSION 2	Alt 2B (WB Diet): VERSION 2	Alt 2C (WB Diet): VERSION 2	Volume
19	Mandana Blvd & Grand Ave						
18	Elwood Ave & Grand Ave						
	Bus Stop						
17	Signalized Mid-Block Ped Crossing & Grand Ave						
	Bus Stop						
16	Santa Clara Ave/Lake Park Ave & Grand Ave	NBL	49.3	44.7	152.3	46.2	
	Bus Stop						272
15	MacArthur Blvd & Grand Ave	WBT	19.1	19.9	40.9	18.8	
14	El Embarcadero & Grand Ave	WBT	6.4	7.7	11.6	22.2	
	Bus Stop						341
13	Euclid Ave & Grand Ave	WBT	6.5	10.6	11.2	11.9	
12	Bellevue Ave & Grand Ave	WBT	1.4	2.5	2.7	2.8	
	Bus Stop						279
11	Staten Ave & Grand Ave	WBT	4.2	5.8	6.0	5.4	
10	Ellita Ave & Grand Ave	WBT	1.4	2.3	2.5	2.4	
	Bus Stop		2.0				270
9	Perkins St & Grand Ave	WBT	9.7	12.2	12.2	11.9	
8	Lee St & Grand Ave	WBT	1.8	2.6	2.6	2.8	
7	Lenox Ave & Grand Ave	WBT	0.6	1.1	1.2	1.2	
	Bus Stop						266
6	Park View Terrace/Bellevue Ave & Grand Ave	WBT	7.9	9.1	10.0	9.2	
5	Bay Place & Grand Ave	WBT	8.8	7.8	7.9	7.9	
	Bus Stop		2.0				275
4	Harrison St & Grand Ave	WBT	28.5	29.8	30.9	30.3	
3	Valdez St & Grand Ave	WBT	8.7	9.5	10.2	9.7	
	Bus Stop						181
2	Webster St & Grand Ave	WBT	7.4	9.6	10.5	10.0	
1	Broadway Ave & Grand Ave	WBL	29.2	28.9	30.3	28.6	
Total Delay (s)			**194.9**	**204.1**	**343.0**	**221.3**	