FEHR PEERS

Draft Memorandum

Date: May 28, 2024

To: Terri Avila, ESA and Tina Wallis, Law Offices of Tina Wallis

From: Purva Kapshikar and Ian Barnes, PE, Fehr & Peers

Subject: Intersection Level of Service Assessment for Barlow Hotel Project

WC24-4072

Introduction and Background

Fehr & Peers completed a non-CEQA intersection operations assessment of the Barlow Hotel project. The proposed project includes an 83-room hotel with supporting uses at the Barlow site in downtown Sebastopol. The proposed project includes a "park-once" strategy that promotes hotel guests walking and bicycling to other destinations within the Barlow site as well as downtown Sebastopol as a whole. The remainder of this memorandum outlines the assumptions, methods and outcomes of the analyses described.

Informational (Non-CEQA) Intersection Operations Analysis

Per Senate Bill 743, automobile delay as measured by congestion-based metrics such as Level of Service (LOS) no longer constitutes a significant impact under CEQA. However, many agencies like Sebastopol continue to require intersection operations analyses to assess a project's effects on the circulation system versus General Plan goals and policies related to the operations of the circulation system. Therefore, intersection operations analysis was performed at five intersections in downtown Sebastopol located near the Barlow Hotel. These intersections are presented in **Table 1** and shown visually in **Figure 1** (all figures provided at the end of this memorandum).

Table 1: Study Intersections

	Intersection	Intersection Control[1]
1	Sebastopol Avenue (SR 12)/Morris Street	Signal
2	Sebastopol Avenue (SR 12)/Petaluma Avenue	Signal
3	Bodega Avenue-Sebastopol Avenue (SR 12)/Main Street (SR 116)	Signal
4	North Main Street (SR 116)/McKinley Street	Signal
5	Petaluma Avenue/McKinley Street	SSSC

Notes:
1. SSSC = Side-Street Stop-Controlled.
Source: Fehr & Peers, April 2024.

Analysis Methods, Parameters and Substantial Effect Criteria

Intersection operations analysis was performed for Existing (Year 2024), Existing plus Project, Cumulative (Year 2040), and Cumulative plus Project Conditions. Year 2040 forecasts were developed in part using model link volume data from Base Year (without Project) and Cumulative Year (without Project) model runs from the SCTA Travel Demand Model (SCTA model).

The analysis was performed for the weekday AM and PM peak hours, consistent with the typical practice for analyses in the City of Sebastopol, which use intersection LOS as a basis for measuring the operating conditions of intersections. The *Highway Capacity Manual, 6th Edition* was used as the methodology for the analysis.

Signalized Intersections

A substantial operation effect would occur if:

- For intersections operating acceptably before the addition of project-generated traffic (LOS D or better): The addition of project-generated traffic results in operations degrading from LOS A, B, C, or D to LOS E or F.
- For intersections operating unacceptably before the addition of project-generated traffic (LOS E or LOS F): The addition of project-generated traffic results in an increase in average delay of 5.0 seconds or more.

Stop-Controlled Intersections

A substantial operation effect would occur if:

- For intersections operating acceptably before the addition of project-generated traffic (LOS D or better): The addition of project-generated traffic results in operations degrading from LOS A, B, C, or D to LOS E or F, and the Peak Hour Signal Warrant is met.

- For side-street stop-controlled intersections operating unacceptably before the addition of project -generated traffic (LOS E or LOS F): The addition of project-generated traffic results in an increase in delay on the worst movement or approach of 5.0 seconds or more, and the Peak Hour Signal Warrant is met.

Project Trip-Making Characteristics

The Barlow development and downtown Sebastopol are comprised of a diverse selection of land uses where guests and visitors can park their vehicle once and walk or bike between their remaining destinations. This "park-once" strategy for the Barlow guides our analysis assumptions. We assume 25 percent of project-generated trips will remain within the Barlow and downtown Sebastopol areas and contribute to trip-making characteristics that demonstrate reduced vehicle trips and increased walk and bike trips throughout the downtown area (compared to a typical suburban hotel).

Trip Generation

The trip generation for the Barlow Hotel is presented in **Table 2**. The 25 percent of project-generated trips that remain within the Barlow area are represented as non-vehicle trips in this table.

Table 2: Trip Generation

Land Use	ITE Code	Rooms	Daily	Weekday					
				AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Hotel	310	83	664	27	23	50	29	22	51
Walk, Bike, and Transit Reduction				6	5	11	7	5	12
Net New Project Trips				**21**	**18**	**39**	**22**	**17**	**39**

Notes:
1. Trip generation was calculated using the 11th Edition of the *ITE Trip Generation Manual*. The peak hour rates are associated with the peak hour of the generating land use.
Source: Fehr & Peers, April 2024.

As summarized above, the proposed project is anticipated to generate 39 weekday morning peak hour trips and 39 weekday evening peak hour trips.

Trip Distribution and Assignment

Project trip distribution refers to the directions of approach and departure that vehicles take to access and leave the site. Estimates of regional project trip distribution were developed based on data collected from StreetLight Data's database of "Big Data" location-based services information. The trip distributions of comparable hotels were used to establish a trip distribution for the proposed Barlow Hotel, which can be seen in **Figure 2**. The project's trip generation, in

combination with the expected trip distribution patterns, was used to assign the peak hour vehicle trips to the local roadway network and study intersections. The project's trip assignment is shown in **Figure 3**.

Near-Term Conditions Analysis

This section presents the results of the near-term operations analysis, comprised of Existing Conditions and Existing plus Project Conditions.

Intersection Operations Analysis

Intersection operations for Existing Conditions were analyzed using existing signal timing data, lane configurations, and traffic volume data from counts taken on a Friday in April 2024; based on available congestion information, Friday afternoons are the peak of weekday congestion in the downtown Sebastopol area. Existing Conditions volumes are presented in **Figure 4**.

Intersection operations for Existing plus Project Conditions were analyzed by adding project-generated traffic volume to the Existing Conditions volumes. Existing plus Project Conditions traffic volumes are included in **Figure 5**; signal timing and lane configurations were held constant. The results of the near-term intersection operations analysis are presented in **Table 3**. Intersection analysis model outputs for Existing and Existing plus Project Conditions are provided in **Attachment A**.

Table 3: Existing Conditions Intersection Operations Analysis

	Intersection	Peak Hour	Existing Conditions		Existing plus Project Conditions	
			Delay	LOS	Delay	LOS
1	Sebastopol Avenue (SR 12)/Morris Street	AM PM	33.2 31.9	C C	33.9 32.5	C C
2	Sebastopol Avenue (SR 12)/Petaluma Avenue	AM PM	32.0 27.1	C C	35.8 29.9	D C
3	Bodega Avenue-Sebastopol Avenue (SR 12)/Main Street (SR 116)	AM PM	22.3 23.8	C C	22.7 24.2	C C
4	North Main Street (SR 116)/McKinley Street	AM PM	14.1 23.6	B C	14.2 23.8	B C
5	Petaluma Avenue/McKinley Street	AM PM	3.1 (16.2) 4.1 (18.0)	A (C) A (C)	3.1 (16.2) 4.1 (18.0)	A (C) A (C)

Notes:
1. The City's LOS standard is LOS D.
2. Delay for signalized intersections presented as whole-intersection average delay. Delay for Side-Street Stop-Controlled intersections presented as whole-intersection average delay (delay on worst movement or single-lane approach).
3. LOS per *Highway Capacity Manual, 6th Edition.*
Source: Fehr & Peers, April 2024.

As shown in the above table, all study intersections are expected to operate acceptably under Existing with Project Conditions. Therefore, no improvements are required to maintain the City's LOS D operational standard.

Queueing Analysis

Table 4 presents weekday morning and evening 95th percentile queues for movements where vehicle queues may occasionally exceed the vehicle storage length in the Existing and Existing with Project Conditions. These queues are indicative of maximum design queues occurring during periods of peak traffic. Queue worksheets are provided in **Attachment B**.

Table 4: Existing Conditions Queuing Analysis

	Intersection	Lane Group	Storage Length (feet)	95th Percentile Queue (feet)			
				Existing Conditions		Existing plus Project Conditions	
				AM Peak	PM Peak	AM Peak	PM Peak
1	Sebastopol Avenue (SR 12)/Morris Street	EBL WBL WBR SBR	175 350 325 200	75 25 75 0	125 25 50 50	75 25 75 0	125 25 50 50
2	Sebastopol Avenue (SR 12)/Petaluma Avenue	EBL WBT	75 375	75 300	**100** 250	75 300	**100** 250
3	Bodega Avenue-Sebastopol Avenue (SR 12)/Main Street (SR 116)	EBR WBL	100 325	25 **375**	25 **350**	25 **375**	25 **375**
4	North Main Street (SR 116)/McKinley Street	WBL WBR	100 100	25 0	75 0	25 0	75 0
5	Petaluma Avenue/McKinley Street	No Striped Turn Pockets Subject to Stop Control					

Notes:
1. Storage lengths and 95th percentile queues have been rounded up to the nearest 25 feet.
2. **Bolded** values indicate queue lengths that exceed the storage length of the lane group.
Source: Fehr & Peers, April 2024.

Estimated 95th percentile queue lengths at Sebastopol Avenue (SR 12)/Petaluma Avenue, Bodega Avenue-Sebastopol Avenue (SR 12)/Main Street (SR 116), and North Main Street (SR 116)/McKinley Street suggest that motorists may experience periodic queue spillback and delays from the identified individual movements. These queues exceed storage lengths in Existing Conditions; in many cases, these turn pockets are unable to be lengthened due to existing right-of-way constraints.

Cumulative (Year 2040) Conditions Analysis

This section presents the results of the Cumulative (Year 2040) operations analysis, comprised of Cumulative (without Project) Conditions and Cumulative plus Project Conditions. The analysis

assumes that the transportation network and signal timing parameters are held to Existing Conditions to provide a conservative baseline and to assess if development proposed by the project should contribute to other transportation system improvements.

Intersection Operations Analysis

Intersection operations under Cumulative Conditions were analyzed by growing Existing Conditions volumes using growth factors derived from SCTA model outputs. Traffic volume information for Cumulative Conditions is included in **Figure 6**. Cumulative with Project Conditions traffic volumes are included in **Figure 7**. The results of the Cumulative intersection operations analysis are presented in **Table 5**. Intersection analysis model outputs for Cumulative and Cumulative plus Project Conditions are provided in **Attachment A**.

Table 5: Cumulative Conditions Intersection Operations Analysis

	Intersection	Peak Hour	Cumulative Conditions		Cumulative plus Project Conditions	
			Delay	LOS	Delay	LOS
1	Sebastopol Avenue (SR 12)/Morris Street	AM PM	51.0 39.9	D D	52.5 40.7	D D
2	Sebastopol Avenue (SR 12)/Petaluma Avenue	AM PM	35.8 28.5	D C	42.5 33.0	D C
3	Bodega Avenue-Sebastopol Avenue (SR 12)/Main Street (SR 116)	AM PM	29.5 32.7	C C	30.0 33.4	C C
4	North Main Street (SR 116)/McKinley Street	AM PM	17.6 39.2	B D	17.7 39.7	B D
5	Petaluma Avenue/McKinley Street	AM PM	3.6 (18.2) 4.7 (16.9)	A (C) A (C)	3.6 (18.2) 4.7 (16.9)	A (C) A (C)

Notes:
1. The City's LOS standard is LOS D.
2. Delay for signalized intersections presented as whole-intersection average delay. Delay for Side-Street Stop-Controlled intersections presented as whole-intersection average delay (delay on worst movement or single-lane approach).
3. LOS per *Highway Capacity Manual, 6th Edition.*
Source: Fehr & Peers, April 2024.

As shown in the above table, all study intersections are expected to operate acceptably under the Cumulative and Cumulative with Project Conditions. Therefore, no improvements are required to maintain the City's LOS D operational standard.

Queueing Analysis

Table 6 presents weekday morning and evening 95th percentile queues for movements where vehicle queues may occasionally exceed the vehicle storage length in the Cumulative and

Cumulative with Project Conditions. These queues are indicative of maximum design queues occurring during periods of peak traffic. Queue worksheets are provided in **Attachment D**.

Table 6: Cumulative Conditions Queuing Analysis

	Intersection	Lane Group	Storage Length (feet)	95th Percentile Queue (feet)			
				Cumulative Conditions		Cumulative plus Project Conditions	
				AM Peak	PM Peak	AM Peak	PM Peak
1	Sebastopol Avenue (SR 12)/Morris Street	EBL WBL WBR SBR	175 350 325 200	100 50 100 0	125 50 75 75	100 50 100 0	125 50 75 75
2	Sebastopol Avenue (SR 12)/Petaluma Avenue	EBL WBT	75 375	**100** 375	**150** 300	**100** 375	**150** 300
3	Bodega Avenue-Sebastopol Avenue (SR 12)/Main Street (SR 116)	EBR WBL	100 325	25 **400**	25 **425**	25 **425**	25 **425**
4	North Main Street (SR 116)/McKinley Street	WBL WBR	100 100	50 0	75 0	50 0	75 0
5	Petaluma Avenue/McKinley Street	No Striped Turn Pockets Subject to Stop Control					

Notes:
1. Storage lengths and 95th percentile queues have been rounded up to the nearest 25 feet.
2. **Bolded** values indicate queue lengths that exceed the storage length of the lane group.
Source: Fehr & Peers, April 2024.

Estimated 95th percentile queue lengths at Sebastopol Avenue (SR 12)/Petaluma Street, Bodega Avenue-Sebastopol Avenue (SR 12)/Main Street (SR 116), and North Main Street (SR 116)/McKinley Street suggest that motorists may experience periodic queue spillback and delays from the identified individual movements. These queues exceed storage lengths in Cumulative (without Project) Conditions; in many cases, these turn pockets are unable to be lengthened due to existing right-of-way constraints.

Conclusions

The operational analysis results suggest that no improvement measures are needed as all study intersections are expected to operate acceptably under all scenarios studied in this analysis. While some additional 95th percentile queueing is expected on some turn pockets in the downtown area, these turn pockets are generally already at their maximum length given existing right-of-way constraints.

This concludes the transportation assessment of the Barlow Hotel project transportation assessment. Please call Ian Barnes or Purva Kapshikar at (925) 930-7100 with any questions.

Figures

Attachments

ATTACHMENT A: TRAFFIC COUNT WORKSHEETS

Prepared by National Data & Surveying Services

Morris St & Sebastopol Ave

Peak Hour Turning Movement Count

ID: 24-080086-001
City: Sebastopol

Day: Friday
Date: 4/12/2024

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 (Morris St)

AM	27	0	91	0	256	AM
NOON	0	0	0	0	0	NOON
PM	59	1	131	0	205	PM
	0.5	0.5	1	0		

EASTBOUND (Sebastopol Ave)

AM	NOON	PM	
835	0	732	
0	0	0	0
43	0	70	1
790	0	737	1
3	0	6	0

WESTBOUND (Sebastopol Ave)

	PM	NOON	AM
1	132	0	212
1	664	0	800
1	6	0	6
0	0	0	0
	875	0	884

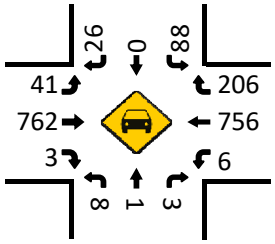
NORTHBOUND (Morris St)

PM	13	0	9	3	7	PM
NOON	0	0	0	0	0	NOON
AM	9	0	8	1	3	AM
		0	0	1	0	

CONTROL: Signalized

TEV	1984	0	1825
	AM	NOON	PM
PHF	0.90		0.96

Cars (AM)



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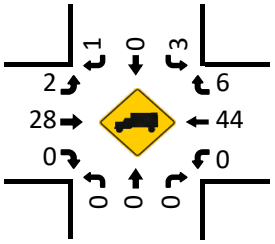

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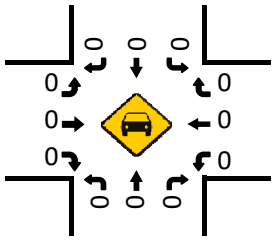

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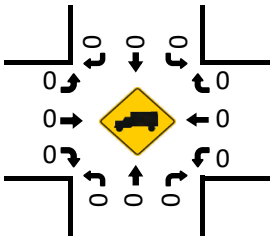
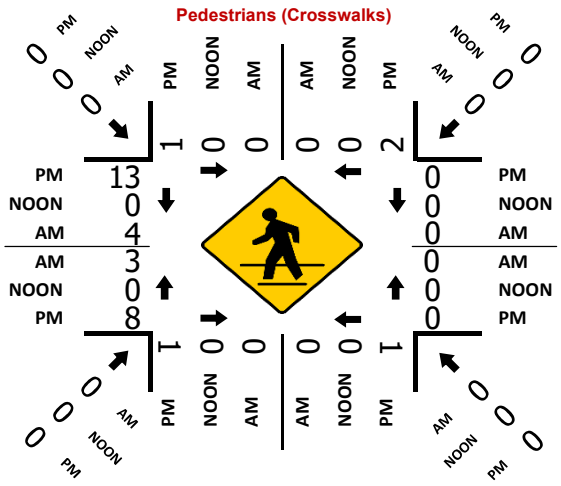


Pedestrians (Crosswalks)



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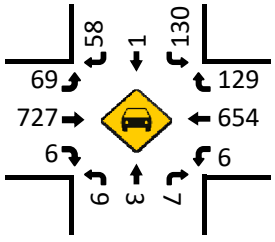

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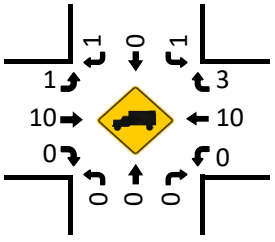


Prepared by National Data & Surveying Services

Petaluma Ave & Depot St/Sebastopol Ave

Peak Hour Turning Movement Count

ID: 24-080086-002
City: Sebastopol

Day: Friday
Date: 4/12/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	2281	0	2290
PHF	0.92		0.98

SOUTHBOUND (Petaluma Ave)

	L	T	R	U	Total	
AM	0	0	0	0	657	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	741	PM

EASTBOUND (Depot St/Sebastopol Ave)

	L	T	R	U	Total	
AM	1	0	0	0	1	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM
AM	57	0	87	0	144	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM
AM	508	0	495	0	1003	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM
AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM
AM	740	0	681	0	1421	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

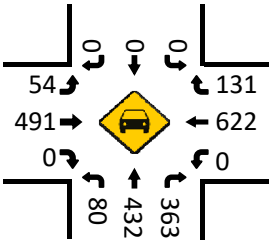
WESTBOUND (Depot St/Sebastopol Ave)

	L	T	R	U	Total	
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM
PM	162	0	146	0	308	PM
NOON	0	0	0	0	0	NOON
AM	563	0	652	0	1215	AM
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	1	0	0	0	1	AM
PM	868	0	884	0	1752	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM

NORTHBOUND (Petaluma Ave)

	L	T	R	U	Total	
PM	0	0	118	492	372	PM
NOON	0	0	0	0	0	NOON
AM	0	0	87	454	376	AM

Cars (AM)



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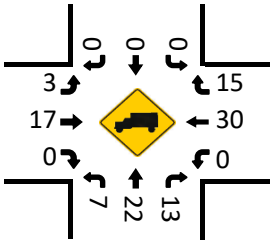
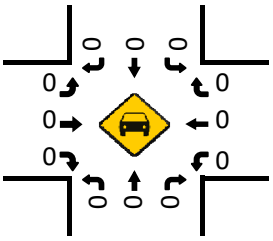


Cars (NOON)



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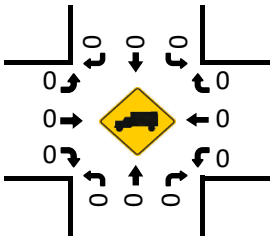
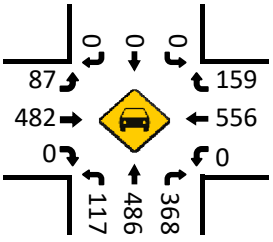
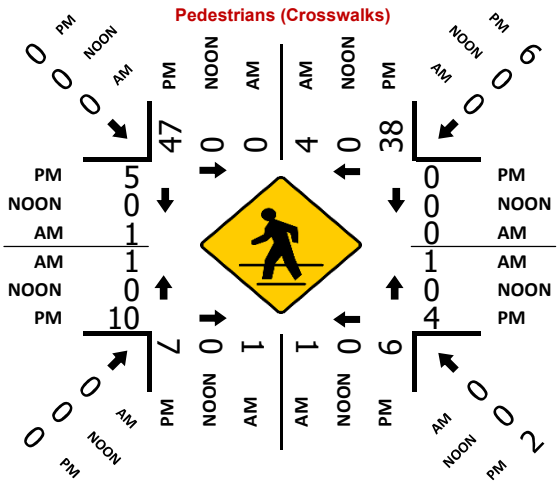


Cars (PM)



Pedestrians (Crosswalks)



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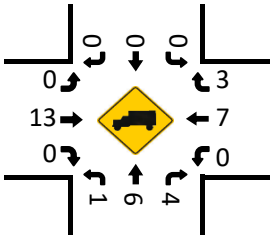


Prepared by National Data & Surveying Services

N Main St & Bodega Ave

Peak Hour Turning Movement Count

ID: 24-080086-003
City: Sebastopol

Day: Friday
Date: 4/12/2024

PEAK HOURS	COUNT PERIODS
08:00 AM - 09:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

SOUTHBOUND (N Main St)

AM	38	507	214	0	0	AM
NOON	0	0	0	0	0	NOON
PM	75	599	273	0	0	PM
	0.5	1.5	1	0		

EASTBOUND (Bodega Ave)

AM	NOON	PM	
467	0	479	
0	0	0	0
0	0	0	0
357	0	327	1
57	0	61	1
AM	NOON	PM	

WESTBOUND (Bodega Ave)

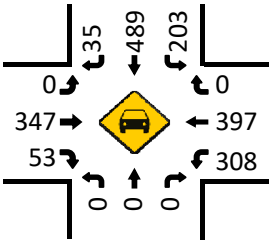
PM	NOON	AM	
0	0	0	0
404	0	429	1
296	0	313	1
0	0	0	0
600	0	571	
PM	NOON	AM	

NORTHBOUND (N Main St)

PM	956	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	877	0	0	0	0	AM
		0	0	0	0	

CONTROL			
Signalized			
TEV	1915 AM	0 NOON	2035 PM
PHF	0.94		0.95

Cars (AM)



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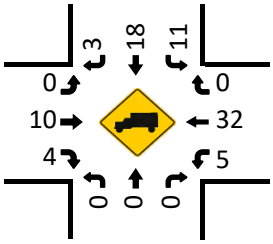
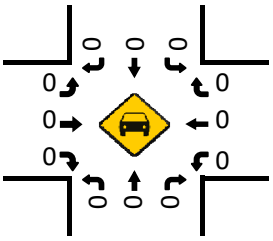


Cars (NOON)



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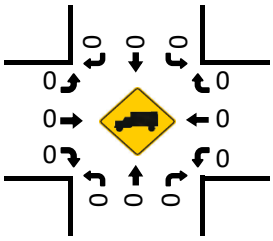
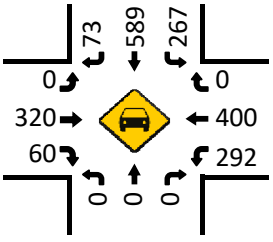
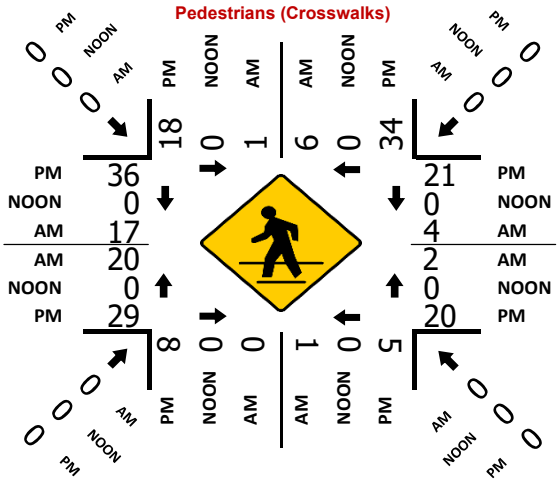


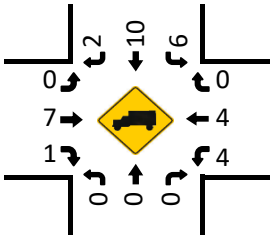
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



Prepared by National Data & Surveying Services

N Main St & McKinley St

Peak Hour Turning Movement Count

ID: 24-080086-004
City: Sebastopol

Day: Friday
Date: 4/12/2024

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 (N Main St)

AM	0	693	0	0	591	AM
NOON	0	0	0	0	0	NOON
PM	0	768	0	0	686	PM
	0	2	0	0		

EASTBOUND (McKinley St)

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

WESTBOUND (McKinley St)

PM	NOON	AM	
686	0	591	1
0	0	0	0
175	0	70	1
0	0	0	0
0	0	0	
PM	NOON	AM	

NORTHBOUND (N Main St)

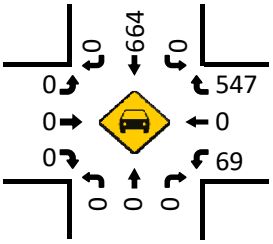
PM	943	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	763	0	0	0	0	AM
		0	0	0	0	

CONTROL

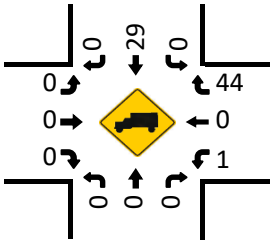
Signalized

TEV	1354 AM	0 NOON	1629 PM
PHF	0.98		0.96

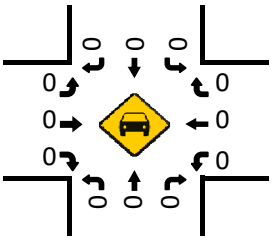
Cars (AM)



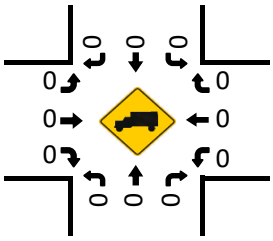
HT (AM)



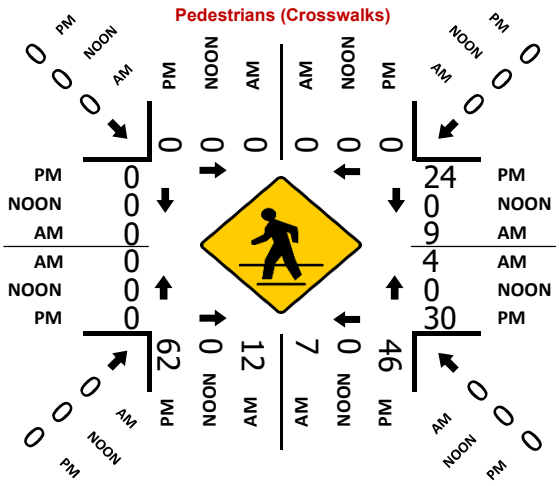
Cars (NOON)



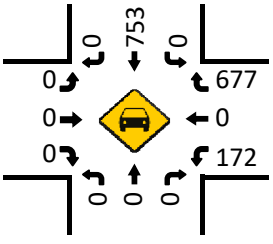
HT (NOON)



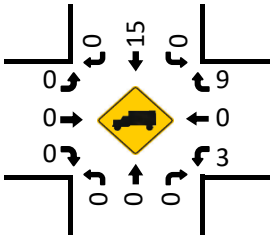
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Laguna Park Way/Petaluma Ave & McKinley St

Peak Hour Turning Movement Count

ID: 24-080086-005
City: Sebastopol

Day: Friday
Date: 4/12/2024

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

SOUTHBOUND – Laguna Park Way/Petaluma Ave

	Right	Thru	Left	U-Turn	Departing (NB)
AM	74	0	0	0	86
NOON	0	0	0	0	0
PM	82	0	0	0	53
Lanes	1	0	0	0	

EASTBOUND – McKinley St

	AM	NOON	PM	Lanes
Departing (WB)	666	0	821	
U-Turn	0	0	0	0
Left	0	0	0	0
Thru	0	0	0	0
Right	0	0	0	0

WESTBOUND – McKinley St

	PM	NOON	AM	Lanes
Right	4	0	0	0
Thru	79	0	46	1
Left	0	0	0	0
U-Turn	0	0	0	0
Departing (EB)	60	0	27	

NORTHBOUND – Laguna Park Way/Petaluma Ave

	Departing (SB)	U-Turn	Left	Thru	Right
Lanes		0	1.3	0.3	0.3
PM	0	0	660	49	60
NOON	0	0	0	0	0
AM	0	0	546	86	27

CONTROL

2-Way Stop(SB/WB)

	AM	NOON	PM
TEV	779	0	934
PHF	0.81		0.98

Cars (AM)

Approach	Right	Thru	Left
SB	71	0	0
EB	0	0	0
WB	0	42	0
NB	26	84	508

HT (AM)

Approach	Right	Thru	Left
SB	3	0	0
EB	0	0	0
WB	0	4	0
NB	1	2	38

Cars (NOON)

Approach	Right	Thru	Left
SB	0	0	0
EB	0	0	0
WB	0	0	0
NB	0	0	0

HT (NOON)

Approach	Right	Thru	Left
SB	0	0	0
EB	0	0	0
WB	0	0	0
NB	0	0	0

Cars (PM)

Approach	Right	Thru	Left
SB	79	0	0
EB	0	0	0
WB	4	78	0
NB	60	47	653

HT (PM)

Approach	Right	Thru	Left
SB	3	0	0
EB	0	0	0
WB	0	1	0
NB	0	2	7

Pedestrians (Crosswalks)

Crosswalk	Direction	AM	NOON	PM
North leg	Eastbound	4	0	16
North leg	Westbound	4	0	21
South leg	Eastbound	6	0	19
South leg	Westbound	6	0	7
West leg	Southbound	0	0	0
West leg	Northbound	0	0	0
East leg	Southbound	1	0	8
East leg	Northbound	3	0	11
NW diagonal		0	0	0
NE diagonal		0	0	0
SW diagonal		0	0	0
SE diagonal		0	0	0

ATTACHMENT B: INTERSECTION LOS WORKSHEETS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	870	3	6	860	212	8	1	3	91	0	27
Future Volume (veh/h)	43	870	3	6	860	212	8	1	3	91	0	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	48	967	3	7	956	236	9	1	3	101	0	30
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	157	1083	3	32	955	809	37	4	12	218	0	185
Arrive On Green	0.09	0.59	0.59	0.02	0.52	0.52	0.03	0.03	0.03	0.12	0.00	0.12
Sat Flow, veh/h	1753	1834	6	1753	1841	1560	1168	130	389	1753	0	1481
Grp Volume(v), veh/h	48	0	970	7	956	236	13	0	0	101	0	30
Grp Sat Flow(s),veh/h/ln	1753	0	1840	1753	1841	1560	1688	0	0	1753	0	1481
Q Serve(g_s), s	2.1	0.0	37.2	0.3	42.2	7.0	0.6	0.0	0.0	4.4	0.0	1.5
Cycle Q Clear(g_c), s	2.1	0.0	37.2	0.3	42.2	7.0	0.6	0.0	0.0	4.4	0.0	1.5
Prop In Lane	1.00		0.00	1.00		1.00	0.69		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	157	0	1086	32	955	809	53	0	0	218	0	185
V/C Ratio(X)	0.31	0.00	0.89	0.22	1.00	0.29	0.25	0.00	0.00	0.46	0.00	0.16
Avail Cap(c_a), veh/h	345	0	1243	258	955	809	207	0	0	538	0	455
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	34.7	0.0	14.5	39.4	19.6	11.1	38.5	0.0	0.0	33.1	0.0	31.8
Incr Delay (d2), s/veh	0.4	0.0	8.2	1.3	29.4	0.3	0.9	0.0	0.0	0.6	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	15.1	0.1	23.2	2.2	0.3	0.0	0.0	1.9	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.1	0.0	22.7	40.7	49.0	11.4	39.4	0.0	0.0	33.7	0.0	32.0
LnGrp LOS	D		C	D	F	B	D			C		C
Approach Vol, veh/h		1018			1199			13			131	
Approach Delay, s/veh		23.3			41.5			39.4			33.3	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	53.2		14.8	12.0	47.3		7.2				
Change Period (Y+Rc), s	4.7	5.1		4.7	4.7	5.1		4.7				
Max Green Setting (Gmax), s	12.0	55.0		25.0	16.0	32.0		10.0				
Max Q Clear Time (g_c+I1), s	2.3	39.2		6.4	4.1	44.2		2.6				
Green Ext Time (p_c), s	0.0	8.9		0.2	0.0	0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		33.2	
HCM 6th LOS		C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	538	0	0	712	147	87	462	426	0	0	0
Future Volume (veh/h)	66	538	0	0	712	147	87	462	426	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1826	1826	0	0	1826	1826	1826	1826	1826			
Adj Flow Rate, veh/h	72	585	0	0	774	160	95	502	463			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	5	5	0	0	5	5	5	5	5			
Cap, veh/h	333	1034	0	0	894	185	168	936	472			
Arrive On Green	0.19	0.57	0.00	0.00	0.31	0.31	0.31	0.31	0.31			
Sat Flow, veh/h	1739	1826	0	0	2951	591	537	2996	1510			
Grp Volume(v), veh/h	72	585	0	0	469	465	318	279	463			
Grp Sat Flow(s),veh/h/ln	1739	1826	0	0	1735	1717	1799	1735	1510			
Q Serve(g_s), s	2.8	16.4	0.0	0.0	20.4	20.4	11.8	10.5	24.3			
Cycle Q Clear(g_c), s	2.8	16.4	0.0	0.0	20.4	20.4	11.8	10.5	24.3			
Prop In Lane	1.00		0.00	0.00		0.34	0.30		1.00			
Lane Grp Cap(c), veh/h	333	1034	0	0	542	536	562	542	472			
V/C Ratio(X)	0.22	0.57	0.00	0.00	0.87	0.87	0.57	0.51	0.98			
Avail Cap(c_a), veh/h	333	1034	0	0	598	592	562	542	472			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.39	0.39	1.00	1.00	1.00			
Uniform Delay (d), s/veh	27.3	11.1	0.0	0.0	25.9	25.9	23.0	22.5	27.3			
Incr Delay (d2), s/veh	0.1	2.2	0.0	0.0	7.5	7.5	1.5	1.0	36.5			
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	1.1	6.3	0.0	0.0	9.0	8.9	5.0	4.3	13.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.4	13.3	0.0	0.0	33.4	33.5	24.4	23.5	63.8			
LnGrp LOS	C	B			C	C	C	C	E			
Approach Vol, veh/h		657			934			1060				
Approach Delay, s/veh		14.9			33.4			41.4				
Approach LOS		B			C			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.3			20.3	30.0		29.7				
Change Period (Y+Rc), s		5.0			5.0	* 5		4.7				
Max Green Setting (Gmax), s		45.3			13.0	* 28		25.0				
Max Q Clear Time (g_c+I1), s		18.4			4.8	22.4		26.3				
Green Ext Time (p_c), s		4.0			0.0	2.6		0.0				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	32.0
HCM 6th LOS	C

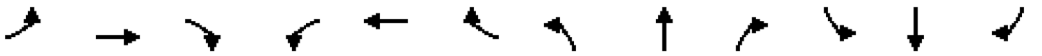
Notes

* HCM 6th computational engine requires 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)	0	359	57	343	459	0	0	0	0	245	510	38
Future Volume (veh/h)	0	359	57	343	459	0	0	0	0	245	510	38
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		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	1841	1841	1841	1841	0				1841	1841	1841
Adj Flow Rate, veh/h	0	382	61	365	488	0				261	543	40
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	4	4	4	4	0				4	4	4
Cap, veh/h	0	456	386	417	1031	0				510	955	70
Arrive On Green	0.00	0.25	0.25	0.24	0.56	0.00				0.29	0.29	0.29
Sat Flow, veh/h	0	1841	1557	1753	1841	0				1753	3285	241
Grp Volume(v), veh/h	0	382	61	365	488	0				261	288	295
Grp Sat Flow(s),veh/h/ln	0	1841	1557	1753	1841	0				1753	1749	1778
Q Serve(g_s), s	0.0	12.4	1.9	12.6	10.0	0.0				7.8	8.8	8.9
Cycle Q Clear(g_c), s	0.0	12.4	1.9	12.6	10.0	0.0				7.8	8.8	8.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.14
Lane Grp Cap(c), veh/h	0	456	386	417	1031	0				510	509	517
V/C Ratio(X)	0.00	0.84	0.16	0.88	0.47	0.00				0.51	0.57	0.57
Avail Cap(c_a), veh/h	0	681	576	417	1060	0				668	666	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	22.5	18.6	23.1	8.3	0.0				18.6	19.0	19.0
Incr Delay (d2), s/veh	0.0	3.7	0.1	18.5	0.7	0.0				1.1	1.4	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	0.6	6.9	3.3	0.0				3.1	3.6	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	26.2	18.6	41.6	9.0	0.0				19.8	20.4	20.4
LnGrp LOS		C	B	D	A					B	C	C
Approach Vol, veh/h		443			853						844	
Approach Delay, s/veh		25.2			23.0						20.2	
Approach LOS		C			C						C	

Timer - Assigned Phs		2	3	4				8				
Phs Duration (G+Y+Rc), s		23.0	19.7	20.3				40.0				
Change Period (Y+Rc), s		4.7	4.7	4.7				4.7				
Max Green Setting (Gmax), s		24.0	15.0	23.3				36.3				
Max Q Clear Time (g_c+I1), s		10.9	14.6	14.4				12.0				
Green Ext Time (p_c), s		5.2	0.1	1.1				5.9				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			22.3									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	70	0	591	0	0	0	0	723	0
Future Volume (veh/h)	0	0	0	70	0	591	0	0	0	0	723	0
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		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	
Adj Sat Flow, veh/h/ln				1826	1870	1826				0	1826	0
Adj Flow Rate, veh/h				71	0	603				0	738	0
Peak Hour Factor				0.98	0.92	0.98				0.98	0.98	0.92
Percent Heavy Veh, %				5	2	5				0	5	0
Cap, veh/h				811	0	730				0	1138	0
Arrive On Green				0.47	0.00	0.47				0.00	0.33	0.00
Sat Flow, veh/h				1739	0	1566				0	3652	0
Grp Volume(v), veh/h				71	0	603				0	738	0
Grp Sat Flow(s),veh/h/ln				1739	0	1566				0	1735	0
Q Serve(g_s), s				1.0	0.0	15.0				0.0	8.1	0.0
Cycle Q Clear(g_c), s				1.0	0.0	15.0				0.0	8.1	0.0
Prop In Lane				1.00		1.00				0.00		0.00
Lane Grp Cap(c), veh/h				811	0	730				0	1138	0
V/C Ratio(X)				0.09	0.00	0.83				0.00	0.65	0.00
Avail Cap(c_a), veh/h				1010	0	909				0	1535	0
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				6.6	0.0	10.4				0.0	12.8	0.0
Incr Delay (d2), s/veh				0.0	0.0	5.2				0.0	0.9	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				0.3	0.0	4.9				0.0	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				6.7	0.0	15.5				0.0	13.7	0.0
LnGrp LOS				A		B					B	
Approach Vol, veh/h					674						738	
Approach Delay, s/veh					14.6						13.7	
Approach LOS					B						B	

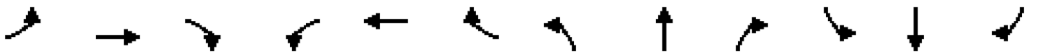
Timer - Assigned Phs	2							8				
Phs Duration (G+Y+Rc), s	19.4							25.4				
Change Period (Y+Rc), s	4.7							4.5				
Max Green Setting (Gmax), s	19.8							26.0				
Max Q Clear Time (g_c+I1), s	10.1							17.0				
Green Ext Time (p_c), s	4.6							3.3				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	14.1
HCM 6th LOS	B

SimTraffic Post-Processor **Barlow Hotel**
Average Results from 10 Runs **Existing AM**
Volume and Delay by Movement **AM**

Intersection 5 **Petaluma Ave** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	546	494	90.4%	0.9	0.1	A
	Through	86	81	94.5%	1.4	0.5	A
	Right Turn	27	28	105.2%	0.7	0.4	A
	Subtotal	659	604	91.6%	1.0	0.1	A
SB	Left Turn						
	Through						
	Right Turn	74	74	100.3%	10.2	2.1	B
	Subtotal	74	74	100.3%	10.2	2.1	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	46	50	109.1%	16.2	3.0	C
	Right Turn						
	Subtotal	46	50	109.1%	16.2	3.0	C
Total		779	728	93.4%	3.1	0.4	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	786	6	5	742	123	11	1	7	143	1	60
Future Volume (veh/h)	75	786	6	5	742	123	11	1	7	143	1	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.93	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	836	6	5	789	131	12	1	7	152	1	64
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	991	7	23	801	662	45	4	26	269	3	216
Arrive On Green	0.12	0.53	0.53	0.01	0.43	0.43	0.05	0.05	0.05	0.15	0.15	0.15
Sat Flow, veh/h	1781	1854	13	1781	1870	1547	999	83	583	1781	22	1432
Grp Volume(v), veh/h	80	0	842	5	789	131	20	0	0	152	0	65
Grp Sat Flow(s),veh/h/ln	1781	0	1868	1781	1870	1547	1666	0	0	1781	0	1455
Q Serve(g_s), s	3.1	0.0	28.6	0.2	31.2	4.0	0.9	0.0	0.0	5.9	0.0	3.0
Cycle Q Clear(g_c), s	3.1	0.0	28.6	0.2	31.2	4.0	0.9	0.0	0.0	5.9	0.0	3.0
Prop In Lane	1.00		0.01	1.00		1.00	0.60		0.35	1.00		0.98
Lane Grp Cap(c), veh/h	212	0	998	23	801	662	76	0	0	269	0	219
V/C Ratio(X)	0.38	0.00	0.84	0.21	0.98	0.20	0.26	0.00	0.00	0.57	0.00	0.30
Avail Cap(c_a), veh/h	380	0	1371	285	801	662	222	0	0	594	0	486
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	30.4	0.0	14.8	36.6	21.2	13.4	34.5	0.0	0.0	29.5	0.0	28.3
Incr Delay (d2), s/veh	0.4	0.0	4.3	1.7	28.0	0.2	0.7	0.0	0.0	0.7	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	11.3	0.1	18.2	1.3	0.4	0.0	0.0	2.5	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.8	0.0	19.1	38.2	49.2	13.6	35.2	0.0	0.0	30.2	0.0	28.5
LnGrp LOS	C		B	D	D	B	D			C		C
Approach Vol, veh/h		922			925			20			217	
Approach Delay, s/veh		20.1			44.1			35.2			29.7	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	45.1		16.0	13.6	37.2		8.1				
Change Period (Y+Rc), s	4.7	5.1		4.7	4.7	5.1		4.7				
Max Green Setting (Gmax), s	12.0	55.0		25.0	16.0	32.0		10.0				
Max Q Clear Time (g_c+I1), s	2.2	30.6		7.9	5.1	33.2		2.9				
Green Ext Time (p_c), s	0.0	9.4		0.4	0.1	0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		31.9	
HCM 6th LOS		C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	495	0	0	664	165	118	499	372	0	0	0
Future Volume (veh/h)	109	495	0	0	664	165	118	499	372	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.90	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	1885	1885	0	0	1885	1885	1885	1885	1885			
Adj Flow Rate, veh/h	111	505	0	0	678	168	120	509	380			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1			
Cap, veh/h	403	1104	0	0	830	205	195	874	445			
Arrive On Green	0.22	0.59	0.00	0.00	0.30	0.30	0.29	0.29	0.29			
Sat Flow, veh/h	1795	1885	0	0	2873	688	664	2979	1518			
Grp Volume(v), veh/h	111	505	0	0	437	409	335	294	380			
Grp Sat Flow(s),veh/h/ln	1795	1885	0	0	1791	1675	1852	1791	1518			
Q Serve(g_s), s	4.1	12.1	0.0	0.0	18.1	18.1	12.5	11.1	18.9			
Cycle Q Clear(g_c), s	4.1	12.1	0.0	0.0	18.1	18.1	12.5	11.1	18.9			
Prop In Lane	1.00		0.00	0.00		0.41	0.36		1.00			
Lane Grp Cap(c), veh/h	403	1104	0	0	535	500	543	525	445			
V/C Ratio(X)	0.28	0.46	0.00	0.00	0.82	0.82	0.62	0.56	0.85			
Avail Cap(c_a), veh/h	403	1104	0	0	618	578	579	560	474			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.41	0.41	1.00	1.00	1.00			
Uniform Delay (d), s/veh	25.7	9.4	0.0	0.0	26.0	26.0	24.4	23.9	26.6			
Incr Delay (d2), s/veh	0.1	1.4	0.0	0.0	5.7	6.2	2.0	1.3	13.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.7	4.6	0.0	0.0	8.1	7.6	5.5	4.7	8.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.8	10.8	0.0	0.0	31.8	32.2	26.4	25.2	40.4			
LnGrp LOS	C	B			C	C	C	C	D			
Approach Vol, veh/h		616			846			1009				
Approach Delay, s/veh		13.5			32.0			31.3				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		51.8			22.9	28.9		28.2				
Change Period (Y+Rc), s		5.0			5.0	* 5		4.7				
Max Green Setting (Gmax), s		45.3			13.0	* 28		25.0				
Max Q Clear Time (g_c+I1), s		14.1			6.1	20.1		20.9				
Green Ext Time (p_c), s		3.4			0.1	3.1		2.3				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	27.1
HCM 6th LOS	C

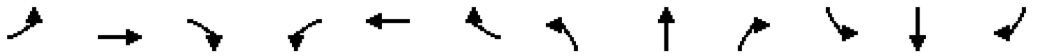
Notes

* HCM 6th computational engine requires 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)	0	329	61	346	454	0	0	0	0	275	599	75
Future Volume (veh/h)	0	329	61	346	454	0	0	0	0	275	599	75
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00				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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	346	64	364	478	0				289	631	79
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	458	369	401	1011	0				568	998	125
Arrive On Green	0.00	0.24	0.24	0.23	0.54	0.00				0.32	0.32	0.32
Sat Flow, veh/h	0	1870	1510	1781	1870	0				1781	3133	391
Grp Volume(v), veh/h	0	346	64	364	478	0				289	357	353
Grp Sat Flow(s),veh/h/ln	0	1870	1510	1781	1870	0				1781	1777	1748
Q Serve(g_s), s	0.0	11.4	2.2	13.3	10.5	0.0				8.8	11.4	11.5
Cycle Q Clear(g_c), s	0.0	11.4	2.2	13.3	10.5	0.0				8.8	11.4	11.5
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.22
Lane Grp Cap(c), veh/h	0	458	369	401	1011	0				568	566	557
V/C Ratio(X)	0.00	0.76	0.17	0.91	0.47	0.00				0.51	0.63	0.63
Avail Cap(c_a), veh/h	0	654	528	401	1019	0				641	640	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	23.3	19.9	25.2	9.5	0.0				18.5	19.4	19.4
Incr Delay (d2), s/veh	0.0	1.6	0.1	24.0	0.7	0.0				1.0	2.1	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.8	0.7	7.8	3.7	0.0				3.6	4.8	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	24.9	19.9	49.1	10.2	0.0				19.5	21.4	21.5
LnGrp LOS		C	B	D	B					B	C	C
Approach Vol, veh/h		410			842						999	
Approach Delay, s/veh		24.2			27.0						20.9	
Approach LOS		C			C						C	

Timer - Assigned Phs	2	3	4				8					
Phs Duration (G+Y+Rc), s	25.9	19.7	21.0				40.7					
Change Period (Y+Rc), s	4.7	4.7	4.7				4.7					
Max Green Setting (Gmax), s	24.0	15.0	23.3				36.3					
Max Q Clear Time (g_c+I1), s	13.5	15.3	13.4				12.5					
Green Ext Time (p_c), s	5.4	0.0	1.0				5.7					

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		23.8
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	178	0	686	0	0	0	0	771	0
Future Volume (veh/h)	0	0	0	178	0	686	0	0	0	0	771	0
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.94				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	
Adj Sat Flow, veh/h/ln				1870	1870	1870				0	1870	0
Adj Flow Rate, veh/h				185	0	715				0	803	0
Peak Hour Factor				0.96	0.92	0.96				0.96	0.96	0.92
Percent Heavy Veh, %				2	2	2				0	2	0
Cap, veh/h				906	0	755				0	1142	0
Arrive On Green				0.51	0.00	0.51				0.00	0.32	0.00
Sat Flow, veh/h				1781	0	1484				0	3741	0
Grp Volume(v), veh/h				185	0	715				0	803	0
Grp Sat Flow(s),veh/h/ln				1781	0	1484				0	1777	0
Q Serve(g_s), s				3.1	0.0	25.2				0.0	10.9	0.0
Cycle Q Clear(g_c), s				3.1	0.0	25.2				0.0	10.9	0.0
Prop In Lane				1.00		1.00				0.00		0.00
Lane Grp Cap(c), veh/h				906	0	755				0	1142	0
V/C Ratio(X)				0.20	0.00	0.95				0.00	0.70	0.00
Avail Cap(c_a), veh/h				913	0	761				0	1436	0
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				7.4	0.0	12.9				0.0	16.4	0.0
Incr Delay (d2), s/veh				0.2	0.0	21.2				0.0	1.4	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	11.2				0.0	4.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				7.7	0.0	34.1				0.0	17.9	0.0
LnGrp LOS				A		C					B	
Approach Vol, veh/h					900						803	
Approach Delay, s/veh					28.7						17.9	
Approach LOS					C						B	

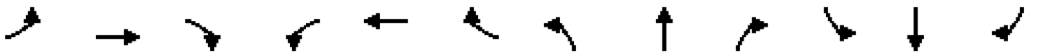
Timer - Assigned Phs	2							8				
Phs Duration (G+Y+Rc), s	22.4							32.8				
Change Period (Y+Rc), s	4.7							4.7				
Max Green Setting (Gmax), s	22.3							28.3				
Max Q Clear Time (g_c+I1), s	12.9							27.2				
Green Ext Time (p_c), s	4.8							0.8				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh	23.6	
HCM 6th LOS	C	

SimTraffic Post-Processor **Barlow Hotel**
Average Results from 10 Runs **Existing PM**
Volume and Delay by Movement **PM**

Intersection 5 **Petaluma Ave** **Side-street Stop**

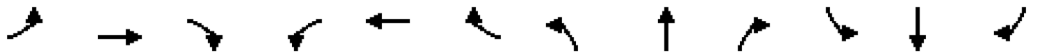
Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	652	484	74.2%	0.5	0.2	A
	Through	50	36	72.6%	0.8	0.4	A
	Right Turn	58	39	67.4%	0.4	0.4	A
	Subtotal	760	559	73.6%	0.5	0.2	A
SB	Left Turn						
	Through						
	Right Turn	82	83	101.2%	12.6	4.7	B
	Subtotal	82	83	101.2%	12.6	4.7	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	89	88	99.0%	18.2	5.9	C
	Right Turn	2	3	145.0%	4.5	9.0	A
	Subtotal	91	91	100.0%	18.0	6.1	C
Total		933	733	78.6%	4.1	1.1	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	874	3	6	867	214	8	1	3	95	0	27
Future Volume (veh/h)	43	874	3	6	867	214	8	1	3	95	0	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	48	971	3	7	963	238	9	1	3	106	0	30
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	157	1084	3	32	957	811	37	4	12	219	0	185
Arrive On Green	0.09	0.59	0.59	0.02	0.52	0.52	0.03	0.03	0.03	0.12	0.00	0.12
Sat Flow, veh/h	1753	1834	6	1753	1841	1560	1168	130	389	1753	0	1481
Grp Volume(v), veh/h	48	0	974	7	963	238	13	0	0	106	0	30
Grp Sat Flow(s),veh/h/ln	1753	0	1840	1753	1841	1560	1688	0	0	1753	0	1481
Q Serve(g_s), s	2.1	0.0	37.6	0.3	42.5	7.1	0.6	0.0	0.0	4.6	0.0	1.5
Cycle Q Clear(g_c), s	2.1	0.0	37.6	0.3	42.5	7.1	0.6	0.0	0.0	4.6	0.0	1.5
Prop In Lane	1.00		0.00	1.00		1.00	0.69		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	157	0	1088	32	957	811	53	0	0	219	0	185
V/C Ratio(X)	0.31	0.00	0.90	0.22	1.01	0.29	0.25	0.00	0.00	0.48	0.00	0.16
Avail Cap(c_a), veh/h	343	0	1237	257	957	811	206	0	0	536	0	453
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	34.9	0.0	14.5	39.6	19.6	11.1	38.7	0.0	0.0	33.3	0.0	32.0
Incr Delay (d2), s/veh	0.4	0.0	8.5	1.3	30.6	0.3	0.9	0.0	0.0	0.6	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	15.4	0.1	23.7	2.3	0.3	0.0	0.0	2.0	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.3	0.0	23.0	40.9	50.3	11.4	39.6	0.0	0.0	34.0	0.0	32.1
LnGrp LOS	D		C	D	F	B	D			C		C
Approach Vol, veh/h		1022			1208			13			136	
Approach Delay, s/veh		23.6			42.6			39.6			33.6	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.2	53.4		14.9	12.0	47.6		7.3				
Change Period (Y+Rc), s	4.7	5.1		4.7	4.7	5.1		4.7				
Max Green Setting (Gmax), s	12.0	55.0		25.0	16.0	32.0		10.0				
Max Q Clear Time (g_c+I1), s	2.3	39.6		6.6	4.1	44.5		2.6				
Green Ext Time (p_c), s	0.0	8.7		0.2	0.0	0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			33.9									
HCM 6th LOS			C									

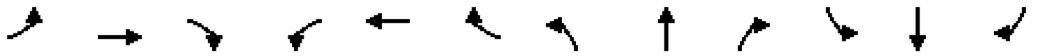


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	541	0	0	716	148	87	466	430	0	0	0
Future Volume (veh/h)	67	541	0	0	716	148	87	466	430	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1826	1826	0	0	1826	1826	1826	1826	1826			
Adj Flow Rate, veh/h	73	588	0	0	778	161	95	507	467			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	5	5	0	0	5	5	5	5	5			
Cap, veh/h	331	1034	0	0	896	186	167	938	472			
Arrive On Green	0.19	0.57	0.00	0.00	0.31	0.31	0.31	0.31	0.31			
Sat Flow, veh/h	1739	1826	0	0	2951	592	533	3001	1510			
Grp Volume(v), veh/h	73	588	0	0	472	467	321	281	467			
Grp Sat Flow(s),veh/h/ln	1739	1826	0	0	1735	1717	1799	1735	1510			
Q Serve(g_s), s	2.8	16.5	0.0	0.0	20.5	20.5	11.9	10.6	24.6			
Cycle Q Clear(g_c), s	2.8	16.5	0.0	0.0	20.5	20.5	11.9	10.6	24.6			
Prop In Lane	1.00		0.00	0.00		0.34	0.30		1.00			
Lane Grp Cap(c), veh/h	331	1034	0	0	544	538	562	542	472			
V/C Ratio(X)	0.22	0.57	0.00	0.00	0.87	0.87	0.57	0.52	0.99			
Avail Cap(c_a), veh/h	331	1034	0	0	598	592	562	542	472			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	27.4	11.1	0.0	0.0	25.9	25.9	23.0	22.6	27.4			
Incr Delay (d2), s/veh	0.1	2.3	0.0	0.0	16.9	17.1	1.5	1.0	38.7			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.1	6.3	0.0	0.0	10.4	10.3	5.1	4.3	13.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.5	13.4	0.0	0.0	42.8	43.0	24.5	23.6	66.1			
LnGrp LOS	C	B			D	D	C	C	E			
Approach Vol, veh/h		661			939			1069				
Approach Delay, s/veh		14.9			42.9			42.4				
Approach LOS		B			D			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.3			20.2	30.1		29.7				
Change Period (Y+Rc), s		5.0			5.0	* 5		4.7				
Max Green Setting (Gmax), s		45.3			13.0	* 28		25.0				
Max Q Clear Time (g_c+I1), s		18.5			4.8	22.5		26.6				
Green Ext Time (p_c), s		4.0			0.0	2.6		0.0				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	35.8
HCM 6th LOS	D

Notes

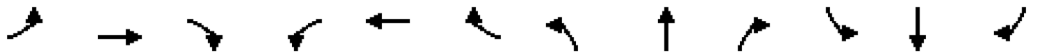
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	360	57	346	460	0	0	0	0	248	513	39
Future Volume (veh/h)	0	360	57	346	460	0	0	0	0	248	513	39
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		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	1841	1841	1841	1841	0				1841	1841	1841
Adj Flow Rate, veh/h	0	383	61	368	489	0				264	546	41
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	4	4	4	4	0				4	4	4
Cap, veh/h	0	457	386	416	1030	0				511	956	72
Arrive On Green	0.00	0.25	0.25	0.24	0.56	0.00				0.29	0.29	0.29
Sat Flow, veh/h	0	1841	1557	1753	1841	0				1753	3280	246
Grp Volume(v), veh/h	0	383	61	368	489	0				264	290	297
Grp Sat Flow(s),veh/h/ln	0	1841	1557	1753	1841	0				1753	1749	1777
Q Serve(g_s), s	0.0	12.5	1.9	12.8	10.1	0.0				7.9	8.9	9.0
Cycle Q Clear(g_c), s	0.0	12.5	1.9	12.8	10.1	0.0				7.9	8.9	9.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.14
Lane Grp Cap(c), veh/h	0	457	386	416	1030	0				511	510	518
V/C Ratio(X)	0.00	0.84	0.16	0.89	0.47	0.00				0.52	0.57	0.57
Avail Cap(c_a), veh/h	0	679	574	416	1058	0				666	664	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	22.5	18.6	23.3	8.3	0.0				18.7	19.0	19.0
Incr Delay (d2), s/veh	0.0	3.8	0.1	19.8	0.7	0.0				1.2	1.4	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	0.6	7.1	3.3	0.0				3.2	3.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	26.4	18.6	43.1	9.1	0.0				19.8	20.4	20.5
LnGrp LOS		C	B	D	A					B	C	C
Approach Vol, veh/h		444			857						851	
Approach Delay, s/veh		25.3			23.7						20.3	
Approach LOS		C			C						C	

Timer - Assigned Phs		2	3	4				8				
Phs Duration (G+Y+Rc), s		23.1	19.7	20.4				40.1				
Change Period (Y+Rc), s		4.7	4.7	4.7				4.7				
Max Green Setting (Gmax), s		24.0	15.0	23.3				36.3				
Max Q Clear Time (g_c+I1), s		11.0	14.8	14.5				12.1				
Green Ext Time (p_c), s		5.3	0.0	1.1				5.9				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	22.7
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	74	0	593	0	0	0	0	726	0
Future Volume (veh/h)	0	0	0	74	0	593	0	0	0	0	726	0
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		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	
Adj Sat Flow, veh/h/ln				1826	1870	1826				0	1826	0
Adj Flow Rate, veh/h				76	0	605				0	741	0
Peak Hour Factor				0.98	0.92	0.98				0.98	0.98	0.92
Percent Heavy Veh, %				5	2	5				0	5	0
Cap, veh/h				812	0	731				0	1138	0
Arrive On Green				0.47	0.00	0.47				0.00	0.33	0.00
Sat Flow, veh/h				1739	0	1566				0	3652	0
Grp Volume(v), veh/h				76	0	605				0	741	0
Grp Sat Flow(s),veh/h/ln				1739	0	1566				0	1735	0
Q Serve(g_s), s				1.1	0.0	15.1				0.0	8.2	0.0
Cycle Q Clear(g_c), s				1.1	0.0	15.1				0.0	8.2	0.0
Prop In Lane				1.00		1.00				0.00		0.00
Lane Grp Cap(c), veh/h				812	0	731				0	1138	0
V/C Ratio(X)				0.09	0.00	0.83				0.00	0.65	0.00
Avail Cap(c_a), veh/h				1006	0	906				0	1529	0
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				6.7	0.0	10.4				0.0	12.9	0.0
Incr Delay (d2), s/veh				0.0	0.0	5.3				0.0	0.9	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				0.3	0.0	5.0				0.0	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				6.7	0.0	15.7				0.0	13.8	0.0
LnGrp LOS				A		B					B	
Approach Vol, veh/h					681						741	
Approach Delay, s/veh					14.7						13.8	
Approach LOS					B						B	

Timer - Assigned Phs	2							8				
Phs Duration (G+Y+Rc), s	19.4							25.5				
Change Period (Y+Rc), s	4.7							4.5				
Max Green Setting (Gmax), s	19.8							26.0				
Max Q Clear Time (g_c+I1), s	10.2							17.1				
Green Ext Time (p_c), s	4.5							3.3				

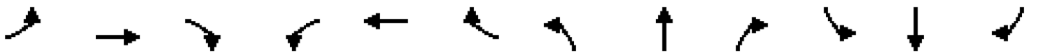
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	14.2
HCM 6th LOS	B

Because delay is lower in some Plus Project scenarios, we have carried over the No Project results for all scenarios

SimTraffic Post-Processor **Barlow Hotel**
Average Results from 10 Runs **Existing PP AM**
Volume and Delay by Movement **AM**

Intersection 5 **Petaluma Ave** **Side-street Stop**

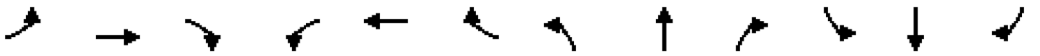
Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	547	518	94.8%	1.0	0.2	A
	Through	86	122	141.7%	1.6	0.5	A
	Right Turn	32	31	95.9%	1.0	0.4	A
	Subtotal	665	671	100.9%	1.1	0.2	A
SB	Left Turn						
	Through						
	Right Turn	74	75	100.7%	12.7	3.9	B
	Subtotal	74	75	100.7%	12.7	3.9	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	51	54	105.7%	19.0	3.8	C
	Right Turn						
	Subtotal	51	54	105.7%	19.0	3.8	C
Total		790	799	101.2%	3.7	0.6	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	789	6	5	748	125	11	1	7	146	1	60
Future Volume (veh/h)	75	789	6	5	748	125	11	1	7	146	1	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.93	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	80	839	6	5	796	133	12	1	7	155	1	64
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	993	7	23	804	665	45	4	26	268	3	216
Arrive On Green	0.12	0.54	0.54	0.01	0.43	0.43	0.05	0.05	0.05	0.15	0.15	0.15
Sat Flow, veh/h	1781	1854	13	1781	1870	1547	999	83	583	1781	22	1432
Grp Volume(v), veh/h	80	0	845	5	796	133	20	0	0	155	0	65
Grp Sat Flow(s),veh/h/ln	1781	0	1868	1781	1870	1547	1666	0	0	1781	0	1455
Q Serve(g_s), s	3.1	0.0	28.9	0.2	31.8	4.0	0.9	0.0	0.0	6.1	0.0	3.0
Cycle Q Clear(g_c), s	3.1	0.0	28.9	0.2	31.8	4.0	0.9	0.0	0.0	6.1	0.0	3.0
Prop In Lane	1.00		0.01	1.00		1.00	0.60		0.35	1.00		0.98
Lane Grp Cap(c), veh/h	212	0	1000	23	804	665	76	0	0	268	0	219
V/C Ratio(X)	0.38	0.00	0.85	0.21	0.99	0.20	0.26	0.00	0.00	0.58	0.00	0.30
Avail Cap(c_a), veh/h	379	0	1367	284	804	665	222	0	0	593	0	484
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	30.5	0.0	14.8	36.7	21.3	13.4	34.7	0.0	0.0	29.7	0.0	28.4
Incr Delay (d2), s/veh	0.4	0.0	4.4	1.7	29.3	0.2	0.7	0.0	0.0	0.7	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	11.4	0.1	18.7	1.3	0.4	0.0	0.0	2.6	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	31.0	0.0	19.2	38.3	50.6	13.6	35.3	0.0	0.0	30.4	0.0	28.7
LnGrp LOS	C		B	D	D	B	D			C		C
Approach Vol, veh/h		925			934			20			220	
Approach Delay, s/veh		20.2			45.2			35.3			29.9	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.7	45.3		16.0	13.6	37.4		8.1				
Change Period (Y+Rc), s	4.7	5.1		4.7	4.7	5.1		4.7				
Max Green Setting (Gmax), s	12.0	55.0		25.0	16.0	32.0		10.0				
Max Q Clear Time (g_c+I1), s	2.2	30.9		8.1	5.1	33.8		2.9				
Green Ext Time (p_c), s	0.0	9.4		0.4	0.1	0.0		0.0				

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		32.5	
HCM 6th LOS		C	

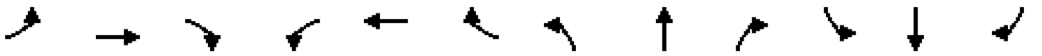


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	498	0	0	668	166	118	504	377	0	0	0
Future Volume (veh/h)	110	498	0	0	668	166	118	504	377	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.90	1.00		0.95			
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	1885	1885	0	0	1885	1885	1885	1885	1885			
Adj Flow Rate, veh/h	112	508	0	0	682	169	120	514	385			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1			
Cap, veh/h	399	1100	0	0	830	206	194	880	448			
Arrive On Green	0.22	0.58	0.00	0.00	0.30	0.30	0.30	0.30	0.30			
Sat Flow, veh/h	1795	1885	0	0	2872	688	659	2984	1518			
Grp Volume(v), veh/h	112	508	0	0	439	412	337	297	385			
Grp Sat Flow(s),veh/h/ln	1795	1885	0	0	1791	1675	1852	1791	1518			
Q Serve(g_s), s	4.1	12.3	0.0	0.0	18.2	18.3	12.6	11.2	19.2			
Cycle Q Clear(g_c), s	4.1	12.3	0.0	0.0	18.2	18.3	12.6	11.2	19.2			
Prop In Lane	1.00		0.00	0.00		0.41	0.36		1.00			
Lane Grp Cap(c), veh/h	399	1100	0	0	535	501	546	528	448			
V/C Ratio(X)	0.28	0.46	0.00	0.00	0.82	0.82	0.62	0.56	0.86			
Avail Cap(c_a), veh/h	399	1100	0	0	618	578	579	560	474			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	25.8	9.5	0.0	0.0	26.1	26.1	24.3	23.8	26.6			
Incr Delay (d2), s/veh	0.1	1.4	0.0	0.0	13.2	14.1	2.0	1.3	14.5			
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	1.7	4.7	0.0	0.0	9.2	8.8	5.6	4.7	8.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.9	10.9	0.0	0.0	39.3	40.2	26.3	25.2	41.1			
LnGrp LOS	C	B			D	D	C	C	D			
Approach Vol, veh/h		620			851			1019				
Approach Delay, s/veh		13.6			39.7			31.6				
Approach LOS		B			D			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		51.7			22.8	28.9		28.3				
Change Period (Y+Rc), s		5.0			5.0	* 5		4.7				
Max Green Setting (Gmax), s		45.3			13.0	* 28		25.0				
Max Q Clear Time (g_c+I1), s		14.3			6.1	20.3		21.2				
Green Ext Time (p_c), s		3.4			0.1	3.1		2.2				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	29.9
HCM 6th LOS	C

Notes

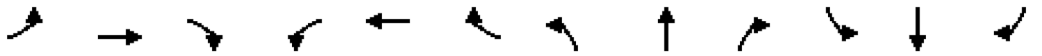
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	330	61	349	455	0	0	0	0	278	603	76
Future Volume (veh/h)	0	330	61	349	455	0	0	0	0	278	603	76
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00				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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	347	64	367	479	0				293	635	80
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	458	370	400	1010	0				568	999	126
Arrive On Green	0.00	0.24	0.24	0.22	0.54	0.00				0.32	0.32	0.32
Sat Flow, veh/h	0	1870	1510	1781	1870	0				1781	3130	393
Grp Volume(v), veh/h	0	347	64	367	479	0				293	360	355
Grp Sat Flow(s),veh/h/ln	0	1870	1510	1781	1870	0				1781	1777	1747
Q Serve(g_s), s	0.0	11.5	2.2	13.4	10.6	0.0				8.9	11.5	11.6
Cycle Q Clear(g_c), s	0.0	11.5	2.2	13.4	10.6	0.0				8.9	11.5	11.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.23
Lane Grp Cap(c), veh/h	0	458	370	400	1010	0				568	567	557
V/C Ratio(X)	0.00	0.76	0.17	0.92	0.47	0.00				0.52	0.63	0.64
Avail Cap(c_a), veh/h	0	653	527	400	1017	0				640	639	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	23.4	19.9	25.3	9.5	0.0				18.5	19.4	19.4
Incr Delay (d2), s/veh	0.0	1.7	0.1	25.6	0.7	0.0				1.0	2.1	2.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.9	0.7	8.1	3.7	0.0				3.7	4.8	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	25.0	20.0	50.9	10.2	0.0				19.6	21.6	21.7
LnGrp LOS		C	B	D	B					B	C	C
Approach Vol, veh/h		411			846						1008	
Approach Delay, s/veh		24.2			27.9						21.0	
Approach LOS		C			C						C	

Timer - Assigned Phs		2	3	4				8				
Phs Duration (G+Y+Rc), s		26.0	19.7	21.1				40.8				
Change Period (Y+Rc), s		4.7	4.7	4.7				4.7				
Max Green Setting (Gmax), s		24.0	15.0	23.3				36.3				
Max Q Clear Time (g_c+I1), s		13.6	15.4	13.5				12.6				
Green Ext Time (p_c), s		5.4	0.0	1.0				5.7				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			24.2									
HCM 6th LOS			C									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	183	0	688	0	0	0	0	774	0
Future Volume (veh/h)	0	0	0	183	0	688	0	0	0	0	774	0
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.94				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	
Adj Sat Flow, veh/h/ln				1870	1870	1870				0	1870	0
Adj Flow Rate, veh/h				191	0	717				0	806	0
Peak Hour Factor				0.96	0.92	0.96				0.96	0.96	0.92
Percent Heavy Veh, %				2	2	2				0	2	0
Cap, veh/h				905	0	754				0	1143	0
Arrive On Green				0.51	0.00	0.51				0.00	0.32	0.00
Sat Flow, veh/h				1781	0	1484				0	3741	0
Grp Volume(v), veh/h				191	0	717				0	806	0
Grp Sat Flow(s),veh/h/ln				1781	0	1484				0	1777	0
Q Serve(g_s), s				3.3	0.0	25.4				0.0	11.0	0.0
Cycle Q Clear(g_c), s				3.3	0.0	25.4				0.0	11.0	0.0
Prop In Lane				1.00		1.00				0.00		0.00
Lane Grp Cap(c), veh/h				905	0	754				0	1143	0
V/C Ratio(X)				0.21	0.00	0.95				0.00	0.70	0.00
Avail Cap(c_a), veh/h				912	0	759				0	1433	0
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				7.5	0.0	12.9				0.0	16.5	0.0
Incr Delay (d2), s/veh				0.2	0.0	21.8				0.0	1.5	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	11.3				0.0	4.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				7.7	0.0	34.7				0.0	17.9	0.0
LnGrp LOS				A		C					B	
Approach Vol, veh/h					908						806	
Approach Delay, s/veh					29.0						17.9	
Approach LOS					C						B	

Timer - Assigned Phs	2							8				
Phs Duration (G+Y+Rc), s	22.5							32.8				
Change Period (Y+Rc), s	4.7							4.7				
Max Green Setting (Gmax), s	22.3							28.3				
Max Q Clear Time (g_c+I1), s	13.0							27.4				
Green Ext Time (p_c), s	4.8							0.7				

Intersection Summary		
HCM 6th Ctrl Delay, s/veh	23.8	
HCM 6th LOS	C	

Because delay is lower in some Plus Project scenarios, we have carried over the No Project results for all scenarios

SimTraffic Post-Processor **Barlow Hotel**
Average Results from 20 Runs **Existing PP PM**
Volume and Delay by Movement **PM**

Intersection 5 **Petaluma Ave** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	653	572	87.6%	1.2	0.3	A
	Through	50	60	119.6%	2.2	0.6	A
	Right Turn	64	56	88.1%	0.7	0.4	A
	Subtotal	767	689	89.8%	1.2	0.3	A
SB	Left Turn						
	Through						
	Right Turn	82	84	102.0%	10.8	1.9	B
	Subtotal	82	84	102.0%	10.8	1.9	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	95	96	100.6%	19.3	4.8	C
	Right Turn	2	3	165.0%	5.3	11.7	A
	Subtotal	97	99	102.0%	19.1	4.9	C
Total		946	871	92.1%	4.3	1.2	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	950	10	10	940	230	10	10	10	100	0	30
Future Volume (veh/h)	50	950	10	10	940	230	10	10	10	100	0	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.94	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	56	1056	11	11	1044	256	11	11	11	111	0	33
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	159	1076	11	47	972	823	34	34	34	198	0	167
Arrive On Green	0.09	0.59	0.59	0.03	0.53	0.53	0.06	0.06	0.06	0.11	0.00	0.11
Sat Flow, veh/h	1753	1818	19	1753	1841	1560	558	558	558	1753	0	1476
Grp Volume(v), veh/h	56	0	1067	11	1044	256	33	0	0	111	0	33
Grp Sat Flow(s),veh/h/ln	1753	0	1837	1753	1841	1560	1674	0	0	1753	0	1476
Q Serve(g_s), s	2.8	0.0	52.5	0.6	49.0	8.6	1.8	0.0	0.0	5.6	0.0	1.9
Cycle Q Clear(g_c), s	2.8	0.0	52.5	0.6	49.0	8.6	1.8	0.0	0.0	5.6	0.0	1.9
Prop In Lane	1.00		0.01	1.00		1.00	0.33		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	159	0	1087	47	972	823	103	0	0	198	0	167
V/C Ratio(X)	0.35	0.00	0.98	0.24	1.07	0.31	0.32	0.00	0.00	0.56	0.00	0.20
Avail Cap(c_a), veh/h	302	0	1089	227	972	823	180	0	0	472	0	398
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	39.6	0.0	18.4	44.2	21.9	12.4	41.7	0.0	0.0	39.0	0.0	37.3
Incr Delay (d2), s/veh	0.5	0.0	22.8	1.0	51.1	0.3	0.7	0.0	0.0	0.9	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	25.7	0.3	32.5	2.8	0.7	0.0	0.0	2.4	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.1	0.0	41.2	45.2	73.0	12.7	42.3	0.0	0.0	39.9	0.0	37.6
LnGrp LOS	D		D	D	F	B	D			D		D
Approach Vol, veh/h		1123			1311			33			144	
Approach Delay, s/veh		41.2			61.0			42.3			39.4	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	60.0		15.2	13.1	54.1		10.4				
Change Period (Y+Rc), s	4.7	5.1		4.7	4.7	5.1		4.7				
Max Green Setting (Gmax), s	12.0	55.0		25.0	16.0	32.0		10.0				
Max Q Clear Time (g_c+I1), s	2.6	54.5		7.6	4.8	51.0		3.8				
Green Ext Time (p_c), s	0.0	0.4		0.2	0.0	0.0		0.0				

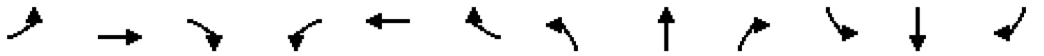
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			51.0									
HCM 6th LOS			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	590	0	0	780	160	100	510	470	0	0	0
Future Volume (veh/h)	80	590	0	0	780	160	100	510	470	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1826	1826	0	0	1826	1826	1826	1826	1826			
Adj Flow Rate, veh/h	87	641	0	0	848	174	109	554	511			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	5	5	0	0	5	5	5	5	5			
Cap, veh/h	303	1034	0	0	943	194	173	931	472			
Arrive On Green	0.17	0.57	0.00	0.00	0.33	0.33	0.31	0.31	0.31			
Sat Flow, veh/h	1739	1826	0	0	2956	588	555	2978	1510			
Grp Volume(v), veh/h	87	641	0	0	513	509	353	310	511			
Grp Sat Flow(s),veh/h/ln	1739	1826	0	0	1735	1718	1798	1735	1510			
Q Serve(g_s), s	3.5	18.8	0.0	0.0	22.6	22.6	13.4	12.0	25.0			
Cycle Q Clear(g_c), s	3.5	18.8	0.0	0.0	22.6	22.6	13.4	12.0	25.0			
Prop In Lane	1.00		0.00	0.00		0.34	0.31		1.00			
Lane Grp Cap(c), veh/h	303	1034	0	0	571	566	562	542	472			
V/C Ratio(X)	0.29	0.62	0.00	0.00	0.90	0.90	0.63	0.57	1.08			
Avail Cap(c_a), veh/h	303	1034	0	0	598	593	562	542	472			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.09	0.09	1.00	1.00	1.00			
Uniform Delay (d), s/veh	28.7	11.6	0.0	0.0	25.6	25.6	23.5	23.0	27.5			
Incr Delay (d2), s/veh	0.2	2.8	0.0	0.0	2.4	2.4	2.4	1.6	65.7			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.4	7.2	0.0	0.0	9.0	8.9	5.8	4.9	17.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.9	14.4	0.0	0.0	27.9	28.0	25.9	24.6	93.2			
LnGrp LOS	C	B			C	C	C	C	F			
Approach Vol, veh/h		728			1022			1174				
Approach Delay, s/veh		16.1			28.0			54.9				
Approach LOS		B			C			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.3			19.0	31.3		29.7				
Change Period (Y+Rc), s		5.0			5.0	* 5		4.7				
Max Green Setting (Gmax), s		45.3			13.0	* 28		25.0				
Max Q Clear Time (g_c+I1), s		20.8			5.5	24.6		27.0				
Green Ext Time (p_c), s		4.5			0.0	1.8		0.0				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	35.8
HCM 6th LOS	D

Notes

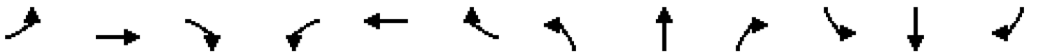
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	390	70	380	500	0	0	0	0	280	560	50
Future Volume (veh/h)	0	390	70	380	500	0	0	0	0	280	560	50
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		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	1841	1841	1841	1841	0				1841	1841	1841
Adj Flow Rate, veh/h	0	415	74	404	532	0				298	596	53
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	4	4	4	4	0				4	4	4
Cap, veh/h	0	483	409	397	1031	0				522	962	85
Arrive On Green	0.00	0.26	0.26	0.23	0.56	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	1841	1557	1753	1841	0				1753	3229	286
Grp Volume(v), veh/h	0	415	74	404	532	0				298	322	327
Grp Sat Flow(s),veh/h/ln	0	1841	1557	1753	1841	0				1753	1749	1767
Q Serve(g_s), s	0.0	14.2	2.4	15.0	11.8	0.0				9.5	10.5	10.6
Cycle Q Clear(g_c), s	0.0	14.2	2.4	15.0	11.8	0.0				9.5	10.5	10.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.16
Lane Grp Cap(c), veh/h	0	483	409	397	1031	0				522	521	526
V/C Ratio(X)	0.00	0.86	0.18	1.02	0.52	0.00				0.57	0.62	0.62
Avail Cap(c_a), veh/h	0	648	548	397	1031	0				636	634	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	23.2	18.9	25.6	9.0	0.0				19.7	20.0	20.0
Incr Delay (d2), s/veh	0.0	6.9	0.1	49.5	0.9	0.0				1.4	1.8	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.5	0.8	11.2	4.0	0.0				3.9	4.3	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	30.2	19.0	75.1	9.9	0.0				21.1	21.8	21.8
LnGrp LOS		C	B	F	A					C	C	C
Approach Vol, veh/h		489			936						947	
Approach Delay, s/veh		28.5			38.0						21.6	
Approach LOS		C			D						C	

Timer - Assigned Phs		2	3	4				8				
Phs Duration (G+Y+Rc), s		24.4	19.7	22.1				41.8				
Change Period (Y+Rc), s		4.7	4.7	4.7				4.7				
Max Green Setting (Gmax), s		24.0	15.0	23.3				36.3				
Max Q Clear Time (g_c+I1), s		12.6	17.0	16.2				13.8				
Green Ext Time (p_c), s		5.4	0.0	1.1				6.4				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	29.5
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	100	0	650	0	0	0	0	790	0
Future Volume (veh/h)	0	0	0	100	0	650	0	0	0	0	790	0
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		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	
Adj Sat Flow, veh/h/ln				1826	1870	1826				0	1826	0
Adj Flow Rate, veh/h				102	0	663				0	806	0
Peak Hour Factor				0.98	0.92	0.98				0.98	0.98	0.92
Percent Heavy Veh, %				5	2	5				0	5	0
Cap, veh/h				836	0	753				0	1147	0
Arrive On Green				0.48	0.00	0.48				0.00	0.33	0.00
Sat Flow, veh/h				1739	0	1566				0	3652	0
Grp Volume(v), veh/h				102	0	663				0	806	0
Grp Sat Flow(s),veh/h/ln				1739	0	1566				0	1735	0
Q Serve(g_s), s				1.6	0.0	18.6				0.0	9.9	0.0
Cycle Q Clear(g_c), s				1.6	0.0	18.6				0.0	9.9	0.0
Prop In Lane				1.00		1.00				0.00		0.00
Lane Grp Cap(c), veh/h				836	0	753				0	1147	0
V/C Ratio(X)				0.12	0.00	0.88				0.00	0.70	0.00
Avail Cap(c_a), veh/h				927	0	835				0	1408	0
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				7.0	0.0	11.4				0.0	14.2	0.0
Incr Delay (d2), s/veh				0.1	0.0	10.0				0.0	1.5	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.5	0.0	7.1				0.0	3.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				7.0	0.0	21.4				0.0	15.7	0.0
LnGrp LOS				A		C					B	
Approach Vol, veh/h					765						806	
Approach Delay, s/veh					19.5						15.7	
Approach LOS					B						B	

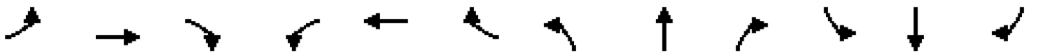
Timer - Assigned Phs	2							8				
Phs Duration (G+Y+Rc), s	20.8							28.0				
Change Period (Y+Rc), s	4.7							4.5				
Max Green Setting (Gmax), s	19.8							26.0				
Max Q Clear Time (g_c+I1), s	11.9							20.6				
Green Ext Time (p_c), s	4.2							2.5				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	17.6
HCM 6th LOS	B

SimTraffic Post-Processor **Barlow Hotel**
Average Results from 10 Runs **Future AM**
Volume and Delay by Movement **AM**

Intersection 5 **Petaluma Ave** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	600	503	83.9%	1.0	0.2	A
	Through	100	83	82.9%	1.4	0.5	A
	Right Turn	30	27	91.3%	0.7	0.3	A
	Subtotal	730	614	84.0%	1.1	0.2	A
SB	Left Turn						
	Through						
	Right Turn	90	92	101.7%	11.6	3.3	B
	Subtotal	90	92	101.7%	11.6	3.3	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	50	51	102.4%	18.2	5.0	C
	Right Turn						
	Subtotal	50	51	102.4%	18.2	5.0	C
Total		870	756	86.9%	3.6	0.8	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	870	10	10	830	140	20	10	10	160	10	70
Future Volume (veh/h)	90	870	10	10	830	140	20	10	10	160	10	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.92	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	926	11	11	883	149	21	11	11	170	11	74
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	1018	12	48	875	724	61	32	32	241	26	175
Arrive On Green	0.11	0.55	0.55	0.03	0.47	0.47	0.07	0.07	0.07	0.14	0.14	0.14
Sat Flow, veh/h	1781	1844	22	1781	1870	1547	833	436	436	1781	192	1291
Grp Volume(v), veh/h	96	0	937	11	883	149	43	0	0	170	0	85
Grp Sat Flow(s),veh/h/ln	1781	0	1866	1781	1870	1547	1705	0	0	1781	0	1482
Q Serve(g_s), s	4.6	0.0	40.8	0.5	42.2	5.1	2.2	0.0	0.0	8.2	0.0	4.7
Cycle Q Clear(g_c), s	4.6	0.0	40.8	0.5	42.2	5.1	2.2	0.0	0.0	8.2	0.0	4.7
Prop In Lane	1.00		0.01	1.00		1.00	0.49		0.26	1.00		0.87
Lane Grp Cap(c), veh/h	197	0	1030	48	875	724	125	0	0	241	0	201
V/C Ratio(X)	0.49	0.00	0.91	0.23	1.01	0.21	0.35	0.00	0.00	0.70	0.00	0.42
Avail Cap(c_a), veh/h	316	0	1137	237	875	724	189	0	0	493	0	410
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	37.7	0.0	18.2	43.0	24.0	14.1	39.8	0.0	0.0	37.3	0.0	35.8
Incr Delay (d2), s/veh	0.7	0.0	10.6	0.9	32.6	0.2	0.6	0.0	0.0	1.4	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	18.3	0.2	24.8	1.7	0.9	0.0	0.0	3.7	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.4	0.0	28.8	43.9	56.6	14.3	40.4	0.0	0.0	38.7	0.0	36.3
LnGrp LOS	D		C	D	F	B	D			D		D
Approach Vol, veh/h		1033			1043			43			255	
Approach Delay, s/veh		29.7			50.5			40.4			37.9	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	54.9		16.9	14.7	47.3		11.3				
Change Period (Y+Rc), s	4.7	5.1		4.7	4.7	5.1		4.7				
Max Green Setting (Gmax), s	12.0	55.0		25.0	16.0	32.0		10.0				
Max Q Clear Time (g_c+I1), s	2.5	42.8		10.2	6.6	44.2		4.2				
Green Ext Time (p_c), s	0.0	7.1		0.5	0.1	0.0		0.0				

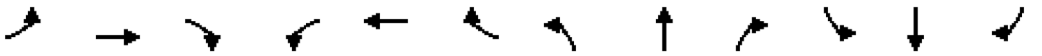
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			39.9									
HCM 6th LOS			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	550	0	0	740	190	140	560	420	0	0	0
Future Volume (veh/h)	130	550	0	0	740	190	140	560	420	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.91	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	1885	1885	0	0	1885	1885	1885	1885	1885			
Adj Flow Rate, veh/h	133	561	0	0	755	194	143	571	429			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1			
Cap, veh/h	346	1075	0	0	869	223	215	908	469			
Arrive On Green	0.19	0.57	0.00	0.00	0.32	0.32	0.31	0.31	0.31			
Sat Flow, veh/h	1795	1885	0	0	2850	708	697	2944	1520			
Grp Volume(v), veh/h	133	561	0	0	491	458	380	334	429			
Grp Sat Flow(s),veh/h/ln	1795	1885	0	0	1791	1673	1850	1791	1520			
Q Serve(g_s), s	5.2	14.6	0.0	0.0	20.7	20.7	14.3	12.7	21.8			
Cycle Q Clear(g_c), s	5.2	14.6	0.0	0.0	20.7	20.7	14.3	12.7	21.8			
Prop In Lane	1.00		0.00	0.00		0.42	0.38		1.00			
Lane Grp Cap(c), veh/h	346	1075	0	0	564	527	571	552	469			
V/C Ratio(X)	0.38	0.52	0.00	0.00	0.87	0.87	0.67	0.61	0.92			
Avail Cap(c_a), veh/h	346	1075	0	0	618	577	578	560	475			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	0.23	0.23	1.00	1.00	1.00			
Uniform Delay (d), s/veh	28.2	10.5	0.0	0.0	25.8	25.8	24.1	23.5	26.7			
Incr Delay (d2), s/veh	0.3	1.8	0.0	0.0	4.5	4.8	3.0	2.0	22.4			
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	2.2	5.7	0.0	0.0	8.9	8.3	6.5	5.4	10.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.4	12.3	0.0	0.0	30.4	30.7	27.1	25.5	49.1			
LnGrp LOS	C	B			C	C	C	C	D			
Approach Vol, veh/h		694			949			1143				
Approach Delay, s/veh		15.4			30.5			34.9				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.6			20.4	30.2		29.4				
Change Period (Y+Rc), s		5.0			5.0	* 5		4.7				
Max Green Setting (Gmax), s		45.3			13.0	* 28		25.0				
Max Q Clear Time (g_c+I1), s		16.6			7.2	22.7		23.8				
Green Ext Time (p_c), s		3.8			0.1	2.5		0.8				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	28.5
HCM 6th LOS	C

Notes

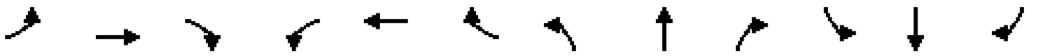
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	370	70	390	510	0	0	0	0	310	670	90
Future Volume (veh/h)	0	370	70	390	510	0	0	0	0	310	670	90
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00				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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	389	74	411	537	0				326	705	95
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	485	392	385	1016	0				573	997	134
Arrive On Green	0.00	0.26	0.26	0.22	0.54	0.00				0.32	0.32	0.32
Sat Flow, veh/h	0	1870	1512	1781	1870	0				1781	3100	417
Grp Volume(v), veh/h	0	389	74	411	537	0				326	404	396
Grp Sat Flow(s),veh/h/ln	0	1870	1512	1781	1870	0				1781	1777	1740
Q Serve(g_s), s	0.0	13.5	2.6	15.0	12.8	0.0				10.6	13.9	13.9
Cycle Q Clear(g_c), s	0.0	13.5	2.6	15.0	12.8	0.0				10.6	13.9	13.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.24
Lane Grp Cap(c), veh/h	0	485	392	385	1016	0				573	572	560
V/C Ratio(X)	0.00	0.80	0.19	1.07	0.53	0.00				0.57	0.71	0.71
Avail Cap(c_a), veh/h	0	628	507	385	1016	0				616	614	601
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	24.1	20.0	27.2	10.2	0.0				19.6	20.7	20.7
Incr Delay (d2), s/veh	0.0	4.3	0.1	65.2	1.0	0.0				1.4	3.9	4.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.1	0.9	12.9	4.6	0.0				4.4	6.1	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	28.4	20.1	92.4	11.1	0.0				21.0	24.5	24.7
LnGrp LOS		C	C	F	B					C	C	C
Approach Vol, veh/h		463			948						1126	
Approach Delay, s/veh		27.0			46.4						23.6	
Approach LOS		C			D						C	

Timer - Assigned Phs		2	3	4				8				
Phs Duration (G+Y+Rc), s		27.0	19.7	22.7				42.4				
Change Period (Y+Rc), s		4.7	4.7	4.7				4.7				
Max Green Setting (Gmax), s		24.0	15.0	23.3				36.3				
Max Q Clear Time (g_c+I1), s		15.9	17.0	15.5				14.8				
Green Ext Time (p_c), s		5.0	0.0	1.0				6.3				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	32.7
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	200	0	760	0	0	0	0	870	0
Future Volume (veh/h)	0	0	0	200	0	760	0	0	0	0	870	0
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.93				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	
Adj Sat Flow, veh/h/ln				1870	1870	1870				0	1870	0
Adj Flow Rate, veh/h				208	0	792				0	906	0
Peak Hour Factor				0.96	0.92	0.96				0.96	0.96	0.92
Percent Heavy Veh, %				2	2	2				0	2	0
Cap, veh/h				884	0	735				0	1205	0
Arrive On Green				0.50	0.00	0.50				0.00	0.34	0.00
Sat Flow, veh/h				1781	0	1482				0	3741	0
Grp Volume(v), veh/h				208	0	792				0	906	0
Grp Sat Flow(s),veh/h/ln				1781	0	1482				0	1777	0
Q Serve(g_s), s				3.8	0.0	28.3				0.0	12.9	0.0
Cycle Q Clear(g_c), s				3.8	0.0	28.3				0.0	12.9	0.0
Prop In Lane				1.00		1.00				0.00		0.00
Lane Grp Cap(c), veh/h				884	0	735				0	1205	0
V/C Ratio(X)				0.24	0.00	1.08				0.00	0.75	0.00
Avail Cap(c_a), veh/h				884	0	735				0	1389	0
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				8.2	0.0	14.4				0.0	16.7	0.0
Incr Delay (d2), s/veh				0.3	0.0	56.0				0.0	2.3	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				1.3	0.0	19.2				0.0	5.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				8.5	0.0	70.4				0.0	19.0	0.0
LnGrp LOS				A		F					B	
Approach Vol, veh/h					1000						906	
Approach Delay, s/veh					57.5						19.0	
Approach LOS					E						B	

Timer - Assigned Phs	2							8				
Phs Duration (G+Y+Rc), s	24.0							33.0				
Change Period (Y+Rc), s	4.7							4.7				
Max Green Setting (Gmax), s	22.3							28.3				
Max Q Clear Time (g_c+I1), s	14.9							30.3				
Green Ext Time (p_c), s	4.4							0.0				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	39.2
HCM 6th LOS	D

SimTraffic Post-Processor **Barlow Hotel**
Average Results from 10 Runs **Future PM**
Volume and Delay by Movement **PM**

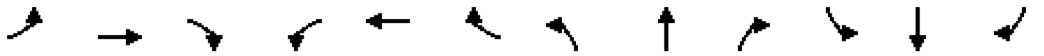
Intersection 5 **Petaluma Ave** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	730	446	61.1%	0.4	0.1	A
	Through	60	40	66.7%	0.6	0.3	A
	Right Turn	70	43	60.7%	0.3	0.3	A
	Subtotal	860	529	61.5%	0.4	0.1	A
SB	Left Turn						
	Through						
	Right Turn	100	107	106.8%	12.8	7.0	B
	Subtotal	100	107	106.8%	12.8	7.0	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	100	99	99.1%	17.6	10.4	C
	Right Turn	10	7	73.0%	9.9	9.9	A
	Subtotal	110	106	96.7%	16.9	10.4	C
Total		1,070	742	69.3%	4.7	2.4	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	954	10	10	947	232	10	10	10	104	0	30
Future Volume (veh/h)	50	954	10	10	947	232	10	10	10	104	0	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.94	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841	1841
Adj Flow Rate, veh/h	56	1060	11	11	1052	258	11	11	11	116	0	33
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, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	159	1076	11	47	972	824	34	34	34	198	0	167
Arrive On Green	0.09	0.59	0.59	0.03	0.53	0.53	0.06	0.06	0.06	0.11	0.00	0.11
Sat Flow, veh/h	1753	1818	19	1753	1841	1560	558	558	558	1753	0	1476
Grp Volume(v), veh/h	56	0	1071	11	1052	258	33	0	0	116	0	33
Grp Sat Flow(s),veh/h/ln	1753	0	1837	1753	1841	1560	1674	0	0	1753	0	1476
Q Serve(g_s), s	2.8	0.0	53.0	0.6	49.1	8.7	1.8	0.0	0.0	5.8	0.0	1.9
Cycle Q Clear(g_c), s	2.8	0.0	53.0	0.6	49.1	8.7	1.8	0.0	0.0	5.8	0.0	1.9
Prop In Lane	1.00		0.01	1.00		1.00	0.33		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	159	0	1088	47	972	824	103	0	0	198	0	167
V/C Ratio(X)	0.35	0.00	0.98	0.24	1.08	0.31	0.32	0.00	0.00	0.59	0.00	0.20
Avail Cap(c_a), veh/h	302	0	1088	226	972	824	180	0	0	472	0	397
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	39.7	0.0	18.5	44.3	21.9	12.4	41.7	0.0	0.0	39.1	0.0	37.4
Incr Delay (d2), s/veh	0.5	0.0	23.6	1.0	53.8	0.3	0.7	0.0	0.0	1.0	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	26.2	0.3	33.2	2.9	0.7	0.0	0.0	2.6	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	40.2	0.0	42.1	45.2	75.7	12.7	42.4	0.0	0.0	40.2	0.0	37.6
LnGrp LOS	D		D	D	F	B	D			D		D
Approach Vol, veh/h		1127			1321			33			149	
Approach Delay, s/veh		42.0			63.2			42.4			39.6	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	60.1		15.2	13.1	54.2		10.4				
Change Period (Y+Rc), s	4.7	5.1		4.7	4.7	5.1		4.7				
Max Green Setting (Gmax), s	12.0	55.0		25.0	16.0	32.0		10.0				
Max Q Clear Time (g_c+I1), s	2.6	55.0		7.8	4.8	51.1		3.8				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.0	0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			52.5									
HCM 6th LOS			D									

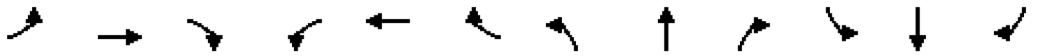


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	593	0	0	784	161	100	514	474	0	0	0
Future Volume (veh/h)	81	593	0	0	784	161	100	514	474	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1826	1826	0	0	1826	1826	1826	1826	1826			
Adj Flow Rate, veh/h	88	645	0	0	852	175	109	559	515			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	5	5	0	0	5	5	5	5	5			
Cap, veh/h	302	1034	0	0	946	194	172	932	472			
Arrive On Green	0.17	0.57	0.00	0.00	0.33	0.33	0.31	0.31	0.31			
Sat Flow, veh/h	1739	1826	0	0	2955	588	551	2982	1510			
Grp Volume(v), veh/h	88	645	0	0	516	511	356	312	515			
Grp Sat Flow(s),veh/h/ln	1739	1826	0	0	1735	1717	1798	1735	1510			
Q Serve(g_s), s	3.5	19.0	0.0	0.0	22.7	22.7	13.6	12.1	25.0			
Cycle Q Clear(g_c), s	3.5	19.0	0.0	0.0	22.7	22.7	13.6	12.1	25.0			
Prop In Lane	1.00		0.00	0.00		0.34	0.31		1.00			
Lane Grp Cap(c), veh/h	302	1034	0	0	573	567	562	542	472			
V/C Ratio(X)	0.29	0.62	0.00	0.00	0.90	0.90	0.63	0.58	1.09			
Avail Cap(c_a), veh/h	302	1034	0	0	598	593	562	542	472			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	28.8	11.6	0.0	0.0	25.5	25.5	23.6	23.1	27.5			
Incr Delay (d2), s/veh	0.2	2.8	0.0	0.0	19.8	20.0	2.5	1.7	68.5			
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	1.4	7.3	0.0	0.0	11.8	11.7	5.9	5.0	17.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	29.0	14.5	0.0	0.0	45.3	45.5	26.1	24.7	96.0			
LnGrp LOS	C	B			D	D	C	C	F			
Approach Vol, veh/h		733			1027			1183				
Approach Delay, s/veh		16.2			45.4			56.2				
Approach LOS		B			D			E				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.3			18.9	31.4		29.7				
Change Period (Y+Rc), s		5.0			5.0	* 5		4.7				
Max Green Setting (Gmax), s		45.3			13.0	* 28		25.0				
Max Q Clear Time (g_c+I1), s		21.0			5.5	24.7		27.0				
Green Ext Time (p_c), s		4.5			0.0	1.7		0.0				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	42.5
HCM 6th LOS	D

Notes

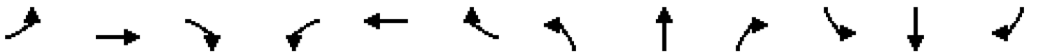
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	391	70	383	501	0	0	0	0	283	563	51
Future Volume (veh/h)	0	391	70	383	501	0	0	0	0	283	563	51
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		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	1841	1841	1841	1841	0				1841	1841	1841
Adj Flow Rate, veh/h	0	416	74	407	533	0				301	599	54
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	4	4	4	4	0				4	4	4
Cap, veh/h	0	484	409	396	1031	0				523	962	87
Arrive On Green	0.00	0.26	0.26	0.23	0.56	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	1841	1557	1753	1841	0				1753	3225	290
Grp Volume(v), veh/h	0	416	74	407	533	0				301	324	329
Grp Sat Flow(s),veh/h/ln	0	1841	1557	1753	1841	0				1753	1749	1766
Q Serve(g_s), s	0.0	14.3	2.4	15.0	11.9	0.0				9.6	10.6	10.6
Cycle Q Clear(g_c), s	0.0	14.3	2.4	15.0	11.9	0.0				9.6	10.6	10.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.16
Lane Grp Cap(c), veh/h	0	484	409	396	1031	0				523	522	527
V/C Ratio(X)	0.00	0.86	0.18	1.03	0.52	0.00				0.58	0.62	0.62
Avail Cap(c_a), veh/h	0	647	547	396	1031	0				634	633	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	23.3	18.9	25.7	9.0	0.0				19.7	20.0	20.1
Incr Delay (d2), s/veh	0.0	7.1	0.1	52.1	0.9	0.0				1.4	1.8	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.6	0.8	11.5	4.0	0.0				3.9	4.4	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	30.3	19.0	77.8	9.9	0.0				21.1	21.9	21.9
LnGrp LOS		C	B	F	A					C	C	C
Approach Vol, veh/h		490			940						954	
Approach Delay, s/veh		28.6			39.3						21.6	
Approach LOS		C			D						C	

Timer - Assigned Phs		2	3	4				8				
Phs Duration (G+Y+Rc), s		24.5	19.7	22.1				41.8				
Change Period (Y+Rc), s		4.7	4.7	4.7				4.7				
Max Green Setting (Gmax), s		24.0	15.0	23.3				36.3				
Max Q Clear Time (g_c+I1), s		12.6	17.0	16.3				13.9				
Green Ext Time (p_c), s		5.4	0.0	1.1				6.4				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	30.0
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	104	0	652	0	0	0	0	793	0
Future Volume (veh/h)	0	0	0	104	0	652	0	0	0	0	793	0
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		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	
Adj Sat Flow, veh/h/ln				1826	1870	1826				0	1826	0
Adj Flow Rate, veh/h				106	0	665				0	809	0
Peak Hour Factor				0.98	0.92	0.98				0.98	0.98	0.92
Percent Heavy Veh, %				5	2	5				0	5	0
Cap, veh/h				837	0	754				0	1147	0
Arrive On Green				0.48	0.00	0.48				0.00	0.33	0.00
Sat Flow, veh/h				1739	0	1566				0	3652	0
Grp Volume(v), veh/h				106	0	665				0	809	0
Grp Sat Flow(s),veh/h/ln				1739	0	1566				0	1735	0
Q Serve(g_s), s				1.6	0.0	18.7				0.0	10.0	0.0
Cycle Q Clear(g_c), s				1.6	0.0	18.7				0.0	10.0	0.0
Prop In Lane				1.00		1.00				0.00		0.00
Lane Grp Cap(c), veh/h				837	0	754				0	1147	0
V/C Ratio(X)				0.13	0.00	0.88				0.00	0.71	0.00
Avail Cap(c_a), veh/h				924	0	832				0	1404	0
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				7.0	0.0	11.4				0.0	14.3	0.0
Incr Delay (d2), s/veh				0.1	0.0	10.3				0.0	1.5	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.5	0.0	7.2				0.0	3.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				7.1	0.0	21.7				0.0	15.8	0.0
LnGrp LOS				A		C					B	
Approach Vol, veh/h					771						809	
Approach Delay, s/veh					19.7						15.8	
Approach LOS					B						B	

Timer - Assigned Phs	2							8				
Phs Duration (G+Y+Rc), s	20.9							28.1				
Change Period (Y+Rc), s	4.7							4.5				
Max Green Setting (Gmax), s	19.8							26.0				
Max Q Clear Time (g_c+I1), s	12.0							20.7				
Green Ext Time (p_c), s	4.2							2.5				

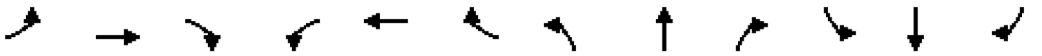
Intersection Summary	
HCM 6th Ctrl Delay, s/veh	17.7
HCM 6th LOS	B

Because delay is lower in some Plus Project scenarios, we have carried over the No Project results for all scenarios

SimTraffic Post-Processor **Barlow Hotel**
Average Results from 10 Runs **Future PP AM**
Volume and Delay by Movement **AM**

Intersection 5 **Petaluma Ave** **Side-street Stop**

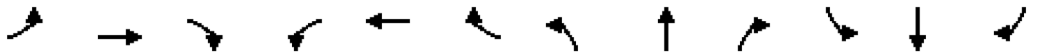
Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	601	540	89.8%	0.9	0.3	A
	Through	100	125	125.0%	1.5	0.4	A
	Right Turn	35	30	84.9%	0.8	0.7	A
	Subtotal	736	695	94.4%	1.0	0.3	A
SB	Left Turn						
	Through						
	Right Turn	90	86	95.9%	13.2	3.5	B
	Subtotal	90	86	95.9%	13.2	3.5	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	55	50	91.5%	22.7	6.9	C
	Right Turn						
	Subtotal	55	50	91.5%	22.7	6.9	C
Total		881	831	94.3%	3.8	0.9	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	873	10	10	836	142	20	10	10	163	10	70
Future Volume (veh/h)	90	873	10	10	836	142	20	10	10	163	10	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.92	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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	96	929	11	11	889	151	21	11	11	173	11	74
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	1018	12	48	876	725	61	32	32	243	26	176
Arrive On Green	0.11	0.55	0.55	0.03	0.47	0.47	0.07	0.07	0.07	0.14	0.14	0.14
Sat Flow, veh/h	1781	1844	22	1781	1870	1547	832	436	436	1781	192	1291
Grp Volume(v), veh/h	96	0	940	11	889	151	43	0	0	173	0	85
Grp Sat Flow(s),veh/h/ln	1781	0	1866	1781	1870	1547	1704	0	0	1781	0	1483
Q Serve(g_s), s	4.6	0.0	41.3	0.5	42.5	5.2	2.2	0.0	0.0	8.4	0.0	4.8
Cycle Q Clear(g_c), s	4.6	0.0	41.3	0.5	42.5	5.2	2.2	0.0	0.0	8.4	0.0	4.8
Prop In Lane	1.00		0.01	1.00		1.00	0.49		0.26	1.00		0.87
Lane Grp Cap(c), veh/h	197	0	1031	48	876	725	124	0	0	243	0	203
V/C Ratio(X)	0.49	0.00	0.91	0.23	1.01	0.21	0.35	0.00	0.00	0.71	0.00	0.42
Avail Cap(c_a), veh/h	314	0	1131	235	876	725	188	0	0	491	0	409
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00
Uniform Delay (d), s/veh	38.0	0.0	18.3	43.3	24.1	14.2	40.0	0.0	0.0	37.5	0.0	35.9
Incr Delay (d2), s/veh	0.7	0.0	10.9	0.9	34.0	0.2	0.6	0.0	0.0	1.4	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	18.6	0.2	25.3	1.8	0.9	0.0	0.0	3.8	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.7	0.0	29.2	44.2	58.1	14.4	40.6	0.0	0.0	38.9	0.0	36.4
LnGrp LOS	D		C	D	F	B	D			D		D
Approach Vol, veh/h		1036			1051			43			258	
Approach Delay, s/veh		30.1			51.7			40.6			38.1	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	55.2		17.1	14.7	47.6		11.3				
Change Period (Y+Rc), s	4.7	5.1		4.7	4.7	5.1		4.7				
Max Green Setting (Gmax), s	12.0	55.0		25.0	16.0	32.0		10.0				
Max Q Clear Time (g_c+I1), s	2.5	43.3		10.4	6.6	44.5		4.2				
Green Ext Time (p_c), s	0.0	6.9		0.5	0.1	0.0		0.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			40.7									
HCM 6th LOS			D									

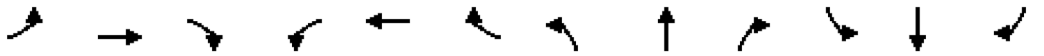


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	553	0	0	744	191	140	565	425	0	0	0
Future Volume (veh/h)	131	553	0	0	744	191	140	565	425	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.91	1.00		0.95			
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	1885	1885	0	0	1885	1885	1885	1885	1885			
Adj Flow Rate, veh/h	134	564	0	0	759	195	143	577	434			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98			
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1			
Cap, veh/h	342	1073	0	0	872	224	214	913	471			
Arrive On Green	0.19	0.57	0.00	0.00	0.32	0.32	0.31	0.31	0.31			
Sat Flow, veh/h	1795	1885	0	0	2850	708	691	2951	1520			
Grp Volume(v), veh/h	134	564	0	0	493	461	383	337	434			
Grp Sat Flow(s),veh/h/ln	1795	1885	0	0	1791	1673	1851	1791	1520			
Q Serve(g_s), s	5.2	14.7	0.0	0.0	20.8	20.8	14.4	12.8	22.1			
Cycle Q Clear(g_c), s	5.2	14.7	0.0	0.0	20.8	20.8	14.4	12.8	22.1			
Prop In Lane	1.00		0.00	0.00		0.42	0.37		1.00			
Lane Grp Cap(c), veh/h	342	1073	0	0	566	529	573	554	471			
V/C Ratio(X)	0.39	0.53	0.00	0.00	0.87	0.87	0.67	0.61	0.92			
Avail Cap(c_a), veh/h	342	1073	0	0	618	577	578	560	475			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	28.3	10.6	0.0	0.0	25.8	25.8	24.0	23.5	26.7			
Incr Delay (d2), s/veh	0.3	1.8	0.0	0.0	16.7	17.6	3.1	2.1	23.6			
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	2.2	5.8	0.0	0.0	10.9	10.3	6.5	5.5	10.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.6	12.4	0.0	0.0	42.5	43.4	27.2	25.5	50.3			
LnGrp LOS	C	B			D	D	C	C	D			
Approach Vol, veh/h		698			954			1154				
Approach Delay, s/veh		15.5			42.9			35.4				
Approach LOS		B			D			D				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.5			20.2	30.3		29.5				
Change Period (Y+Rc), s		5.0			5.0	* 5		4.7				
Max Green Setting (Gmax), s		45.3			13.0	* 28		25.0				
Max Q Clear Time (g_c+I1), s		16.7			7.2	22.8		24.1				
Green Ext Time (p_c), s		3.9			0.1	2.5		0.6				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	33.0
HCM 6th LOS	C

Notes

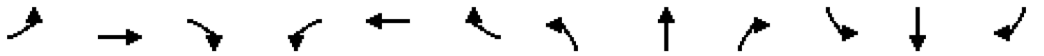
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	371	70	393	511	0	0	0	0	313	674	91
Future Volume (veh/h)	0	371	70	393	511	0	0	0	0	313	674	91
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		1.00				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
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	391	74	414	538	0				329	709	96
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	486	393	384	1016	0				573	997	135
Arrive On Green	0.00	0.26	0.26	0.22	0.54	0.00				0.32	0.32	0.32
Sat Flow, veh/h	0	1870	1512	1781	1870	0				1781	3097	419
Grp Volume(v), veh/h	0	391	74	414	538	0				329	406	399
Grp Sat Flow(s),veh/h/ln	0	1870	1512	1781	1870	0				1781	1777	1739
Q Serve(g_s), s	0.0	13.6	2.6	15.0	12.8	0.0				10.7	14.0	14.0
Cycle Q Clear(g_c), s	0.0	13.6	2.6	15.0	12.8	0.0				10.7	14.0	14.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		0.24
Lane Grp Cap(c), veh/h	0	486	393	384	1016	0				573	572	560
V/C Ratio(X)	0.00	0.80	0.19	1.08	0.53	0.00				0.57	0.71	0.71
Avail Cap(c_a), veh/h	0	626	506	384	1016	0				614	613	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	24.1	20.0	27.3	10.2	0.0				19.6	20.7	20.8
Incr Delay (d2), s/veh	0.0	4.5	0.1	68.4	1.0	0.0				1.5	4.0	4.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.1	0.9	13.2	4.6	0.0				4.5	6.1	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	28.6	20.1	95.7	11.2	0.0				21.1	24.7	24.9
LnGrp LOS		C	C	F	B					C	C	C
Approach Vol, veh/h		465			952						1134	
Approach Delay, s/veh		27.2			47.9						23.7	
Approach LOS		C			D						C	

Timer - Assigned Phs		2	3	4				8				
Phs Duration (G+Y+Rc), s		27.1	19.7	22.8				42.5				
Change Period (Y+Rc), s		4.7	4.7	4.7				4.7				
Max Green Setting (Gmax), s		24.0	15.0	23.3				36.3				
Max Q Clear Time (g_c+I1), s		16.0	17.0	15.6				14.8				
Green Ext Time (p_c), s		4.9	0.0	1.0				6.3				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	33.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	205	0	762	0	0	0	0	873	0
Future Volume (veh/h)	0	0	0	205	0	762	0	0	0	0	873	0
Initial Q (Qb), veh				0	0	0				0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.93				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	
Adj Sat Flow, veh/h/ln				1870	1870	1870				0	1870	0
Adj Flow Rate, veh/h				214	0	794				0	909	0
Peak Hour Factor				0.96	0.92	0.96				0.96	0.96	0.92
Percent Heavy Veh, %				2	2	2				0	2	0
Cap, veh/h				883	0	735				0	1206	0
Arrive On Green				0.50	0.00	0.50				0.00	0.34	0.00
Sat Flow, veh/h				1781	0	1481				0	3741	0
Grp Volume(v), veh/h				214	0	794				0	909	0
Grp Sat Flow(s),veh/h/ln				1781	0	1481				0	1777	0
Q Serve(g_s), s				3.9	0.0	28.3				0.0	13.0	0.0
Cycle Q Clear(g_c), s				3.9	0.0	28.3				0.0	13.0	0.0
Prop In Lane				1.00		1.00				0.00		0.00
Lane Grp Cap(c), veh/h				883	0	735				0	1206	0
V/C Ratio(X)				0.24	0.00	1.08				0.00	0.75	0.00
Avail Cap(c_a), veh/h				883	0	735				0	1388	0
HCM Platoon Ratio				1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00				0.00	1.00	0.00
Uniform Delay (d), s/veh				8.2	0.0	14.4				0.0	16.7	0.0
Incr Delay (d2), s/veh				0.3	0.0	57.2				0.0	2.3	0.0
Initial Q Delay(d3), s/veh				0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.4	0.0	19.4				0.0	5.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				8.5	0.0	71.6				0.0	19.1	0.0
LnGrp LOS				A		F					B	
Approach Vol, veh/h					1008						909	
Approach Delay, s/veh					58.2						19.1	
Approach LOS					E						B	

Timer - Assigned Phs	2							8				
Phs Duration (G+Y+Rc), s	24.1							33.0				
Change Period (Y+Rc), s	4.7							4.7				
Max Green Setting (Gmax), s	22.3							28.3				
Max Q Clear Time (g_c+I1), s	15.0							30.3				
Green Ext Time (p_c), s	4.4							0.0				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	39.7
HCM 6th LOS	D

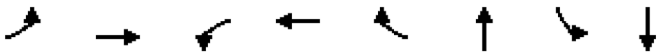
Because delay is lower in some Plus Project scenarios, we have carried over the No Project results for all scenarios

SimTraffic Post-Processor **Barlow Hotel**
Average Results from 10 Runs **Future PP PM**
Volume and Delay by Movement **PM**

Intersection 5 **Petaluma Ave** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph) Average	Served Volume (vph) Percent	Total Delay (sec/veh) Average	Total Delay (sec/veh) Std. Dev.	LOS
NB	Left Turn	731	553	75.7%	1.1	0.2	A
	Through	60	66	110.0%	1.3	0.6	A
	Right Turn	76	60	79.3%	0.9	0.3	A
	Subtotal	867	679	78.4%	1.1	0.2	A
SB	Left Turn						
	Through						
	Right Turn	100	101	100.6%	13.6	2.4	B
	Subtotal	100	101	100.6%	13.6	2.4	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn						
	Through	106	111	105.0%	20.9	4.8	C
	Right Turn	10	11	107.0%	10.9	10.8	B
	Subtotal	116	122	105.2%	20.2	4.8	C
Total		1,083	902	83.3%	5.3	0.8	A

ATTACHMENT C: QUEUE WORKSHEETS



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	48	970	7	956	236	13	101	30
v/c Ratio	0.21	0.77	0.03	0.86	0.23	0.06	0.42	0.06
Control Delay (s/veh)	38.6	17.6	38.7	28.1	4.9	34.7	40.4	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.6	17.6	38.7	28.1	4.9	34.7	40.4	0.2
Queue Length 50th (ft)	20	199	3	411	15	4	44	0
Queue Length 95th (ft)	72	#1032	20	#1023	73	27	120	0
Internal Link Dist (ft)		1065		569		135		847
Turn Bay Length (ft)	170		360		300			
Base Capacity (vph)	333	1266	249	1224	1094	206	520	687
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.77	0.03	0.78	0.22	0.06	0.19	0.04

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	72	585	934	597	463
v/c Ratio	0.38	0.54	0.60	0.62	0.74
Control Delay (s/veh)	38.8	12.9	19.9	27.6	17.3
Queue Delay	0.0	1.5	0.0	0.0	0.0
Total Delay (s/veh)	38.8	14.5	19.9	27.6	17.3
Queue Length 50th (ft)	34	160	178	135	77
Queue Length 95th (ft)	71	284	285	173	176
Internal Link Dist (ft)		53	1065	44	
Turn Bay Length (ft)					
Base Capacity (vph)	279	1098	1556	1097	673
Starvation Cap Reductn	0	322	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.26	0.75	0.60	0.54	0.69

Intersection Summary

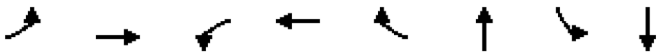
Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	382	61	365	488	261	583
v/c Ratio	0.80	0.13	0.93	0.48	0.51	0.57
Control Delay (s/veh)	36.7	2.9	61.6	11.3	24.3	22.6
Queue Delay	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay (s/veh)	36.7	2.9	61.6	11.6	24.3	22.6
Queue Length 50th (ft)	150	0	156	116	89	105
Queue Length 95th (ft)	253	14	#355	198	167	166
Internal Link Dist (ft)	347			182		339
Turn Bay Length (ft)		80				
Base Capacity (vph)	645	600	394	1191	631	1250
Starvation Cap Reductn	0	0	0	288	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.10	0.93	0.54	0.41	0.47

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBL	WBT	SBT
Lane Group Flow (vph)	71	603	738
v/c Ratio	0.14	0.50	0.47
Control Delay (s/veh)	4.3	1.5	9.4
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	4.3	1.5	9.4
Queue Length 50th (ft)	1	0	36
Queue Length 95th (ft)	17	0	148
Internal Link Dist (ft)		368	261
Turn Bay Length (ft)			
Base Capacity (vph)	1313	1432	2001
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.05	0.42	0.37

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	80	842	5	789	131	20	152	65
Protected Phases	5	2	1	6		8	4	4
Permitted Phases					6			
v/c Ratio	0.30	0.72	0.02	0.85	0.16	0.09	0.54	0.23
Control Delay (s/veh)	40.7	18.8	41.8	32.6	5.3	33.2	42.7	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.7	18.8	41.8	32.6	5.3	33.2	42.7	12.6
90th %ile Green (s)	13.4	55.0	10.0	51.6	51.6	10.0	19.5	19.5
90th %ile Term Code	Gap	Max	Min	Hold	Hold	Max	Gap	Gap
70th %ile Green (s)	11.0	55.0	0.0	39.3	39.3	10.0	14.1	14.1
70th %ile Term Code	Min	Max	Skip	Hold	Hold	Max	Gap	Gap
50th %ile Green (s)	11.0	47.7	0.0	32.0	32.0	0.0	10.8	10.8
50th %ile Term Code	Min	Hold	Skip	Max	Max	Skip	Gap	Gap
30th %ile Green (s)	11.0	47.7	0.0	32.0	32.0	0.0	10.0	10.0
30th %ile Term Code	Min	Hold	Skip	Max	Max	Skip	Min	Min
10th %ile Green (s)	0.0	39.7	0.0	39.7	39.7	0.0	10.0	10.0
10th %ile Term Code	Skip	Dwell	Skip	Dwell	Dwell	Skip	Min	Min
Queue Length 50th (ft)	30	156	2	289	4	5	60	0
Queue Length 95th (ft)	105	#839	16	#795	43	34	169	40
Internal Link Dist (ft)		1067		557		135		847
Turn Bay Length (ft)	170		360		300			
Base Capacity (vph)	372	1344	278	1251	1069	232	581	521
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.63	0.02	0.63	0.12	0.09	0.26	0.12

Intersection Summary
90th %ile Actuated Cycle: 113.7
70th %ile Actuated Cycle: 93.6
50th %ile Actuated Cycle: 68.3
30th %ile Actuated Cycle: 67.5
10th %ile Actuated Cycle: 59.5

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	111	505	846	629	380
Protected Phases	5	2	6	8	
Permitted Phases					8
v/c Ratio	0.51	0.44	0.54	0.65	0.58
Control Delay (s/veh)	40.6	10.7	18.6	28.9	8.7
Queue Delay	0.0	1.1	0.0	0.0	0.0
Total Delay (s/veh)	40.6	11.8	18.6	28.9	8.7
90th %ile Green (s)	13.0	45.3	27.6	25.0	25.0
90th %ile Term Code	Max	Coord	Coord	Max	Max
70th %ile Green (s)	10.9	44.9	29.3	25.4	25.4
70th %ile Term Code	Gap	Coord	Coord	Gap	Gap
50th %ile Green (s)	9.3	47.4	33.4	22.9	22.9
50th %ile Term Code	Gap	Coord	Coord	Gap	Gap
30th %ile Green (s)	8.0	50.8	38.1	19.5	19.5
30th %ile Term Code	Min	Coord	Coord	Gap	Gap
10th %ile Green (s)	0.0	54.4	54.4	15.9	15.9
10th %ile Term Code	Skip	Coord	Coord	Gap	Gap
Queue Length 50th (ft)	53	128	157	142	23
Queue Length 95th (ft)	98	212	246	189	93
Internal Link Dist (ft)		53	1067	44	
Turn Bay Length (ft)					
Base Capacity (vph)	290	1143	1577	1110	704
Starvation Cap Reductn	0	389	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.38	0.67	0.54	0.57	0.54

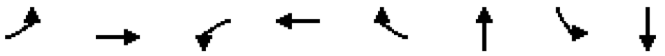
Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	346	64	364	478	289	710
Protected Phases	4		3	8	2	2
Permitted Phases		4				
v/c Ratio	0.76	0.14	0.92	0.48	0.51	0.64
Control Delay (s/veh)	35.5	3.3	60.0	11.9	23.3	22.8
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay (s/veh)	35.5	3.3	60.0	12.2	23.3	22.8
90th %ile Green (s)	23.3	23.3	15.0	43.0	24.0	24.0
90th %ile Term Code	Max	Max	Max	Hold	Max	Max
70th %ile Green (s)	20.3	20.3	15.0	40.0	24.0	24.0
70th %ile Term Code	Gap	Gap	Max	Hold	Max	Max
50th %ile Green (s)	17.1	17.1	15.0	36.8	24.0	24.0
50th %ile Term Code	Gap	Gap	Max	Hold	Max	Max
30th %ile Green (s)	14.1	14.1	15.0	33.8	21.1	21.1
30th %ile Term Code	Gap	Gap	Max	Hold	Gap	Gap
10th %ile Green (s)	9.8	9.8	15.0	29.5	16.0	16.0
10th %ile Term Code	Gap	Gap	Max	Hold	Gap	Gap
Queue Length 50th (ft)	139	0	157	123	96	127
Queue Length 95th (ft)	223	16	#349	192	185	205
Internal Link Dist (ft)	347			182		339
Turn Bay Length (ft)		80				
Base Capacity (vph)	648	596	396	1197	634	1242
Starvation Cap Reductn	0	0	0	281	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.11	0.92	0.52	0.46	0.57

Intersection Summary
90th %ile Actuated Cycle: 76.4
70th %ile Actuated Cycle: 73.4
50th %ile Actuated Cycle: 70.2
30th %ile Actuated Cycle: 64.3
10th %ile Actuated Cycle: 54.9
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBL	WBT	SBT
Lane Group Flow (vph)	185	715	803
Protected Phases		8	2
Permitted Phases	8		
v/c Ratio	0.27	0.55	0.58
Control Delay (s/veh)	8.8	1.7	14.6
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	8.8	1.7	14.6
90th %ile Green (s)	28.3	28.3	22.3
90th %ile Term Code	Max	Max	Max
70th %ile Green (s)	27.0	27.0	22.3
70th %ile Term Code	Ped	Ped	Max
50th %ile Green (s)	19.9	19.9	20.8
50th %ile Term Code	Gap	Gap	Gap
30th %ile Green (s)	15.3	15.3	16.1
30th %ile Term Code	Gap	Gap	Gap
10th %ile Green (s)	9.6	9.6	12.2
10th %ile Term Code	Gap	Gap	Gap
Queue Length 50th (ft)	27	0	88
Queue Length 95th (ft)	61	0	172
Internal Link Dist (ft)		368	261
Turn Bay Length (ft)			
Base Capacity (vph)	1039	1398	1739
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.18	0.51	0.46

Intersection Summary
90th %ile Actuated Cycle: 60
70th %ile Actuated Cycle: 58.7
50th %ile Actuated Cycle: 50.1
30th %ile Actuated Cycle: 40.8
10th %ile Actuated Cycle: 31.2



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	48	974	7	963	238	13	106	30
v/c Ratio	0.21	0.77	0.03	0.87	0.24	0.06	0.44	0.06
Control Delay (s/veh)	38.6	17.8	38.7	28.7	5.0	34.8	40.9	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.6	17.8	38.7	28.7	5.0	34.8	40.9	0.2
Queue Length 50th (ft)	20	201	3	~421	16	4	46	0
Queue Length 95th (ft)	72	#1039	20	#1033	75	27	125	0
Internal Link Dist (ft)		303		569		135		365
Turn Bay Length (ft)	170		360		300			
Base Capacity (vph)	332	1265	249	1223	1094	206	520	685
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.77	0.03	0.79	0.22	0.06	0.20	0.04

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	73	588	939	602	467
v/c Ratio	0.39	0.54	0.61	0.63	0.75
Control Delay (s/veh)	38.9	13.0	20.1	27.6	17.7
Queue Delay	0.0	1.6	0.0	0.0	0.0
Total Delay (s/veh)	38.9	14.6	20.1	27.6	17.7
Queue Length 50th (ft)	35	161	180	136	80
Queue Length 95th (ft)	72	285	287	175	181
Internal Link Dist (ft)		53	685	44	
Turn Bay Length (ft)					
Base Capacity (vph)	279	1097	1551	1098	674
Starvation Cap Reductn	0	321	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.26	0.76	0.61	0.55	0.69

Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	383	61	368	489	264	587
v/c Ratio	0.80	0.13	0.94	0.48	0.51	0.57
Control Delay (s/veh)	37.0	2.9	63.9	11.4	24.3	22.6
Queue Delay	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay (s/veh)	37.0	2.9	63.9	11.8	24.3	22.6
Queue Length 50th (ft)	154	0	~163	121	91	107
Queue Length 95th (ft)	254	14	#359	199	169	167
Internal Link Dist (ft)	347			182		339
Turn Bay Length (ft)		80				
Base Capacity (vph)	643	598	393	1186	629	1246
Starvation Cap Reductn	0	0	0	288	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.10	0.94	0.54	0.42	0.47

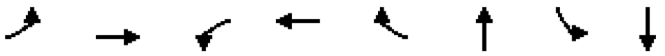
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBL	WBT	SBT
Lane Group Flow (vph)	76	605	741
v/c Ratio	0.15	0.50	0.48
Control Delay (s/veh)	4.6	1.5	9.5
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	4.6	1.5	9.5
Queue Length 50th (ft)	2	0	37
Queue Length 95th (ft)	19	0	148
Internal Link Dist (ft)		368	261
Turn Bay Length (ft)			
Base Capacity (vph)	1310	1432	1997
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.06	0.42	0.37

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	80	845	5	796	133	20	155	65
v/c Ratio	0.31	0.72	0.02	0.86	0.16	0.09	0.55	0.23
Control Delay (s/veh)	40.8	18.9	41.8	33.3	5.4	33.3	42.8	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.8	18.9	41.8	33.3	5.4	33.3	42.8	12.5
Queue Length 50th (ft)	30	159	2	294	5	5	61	0
Queue Length 95th (ft)	105	#847	16	#809	44	34	173	40
Internal Link Dist (ft)		304		557		135		379
Turn Bay Length (ft)	170		360		300			
Base Capacity (vph)	370	1339	278	1246	1065	231	579	519
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.63	0.02	0.64	0.12	0.09	0.27	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	112	508	851	634	385
v/c Ratio	0.51	0.45	0.54	0.65	0.59
Control Delay (s/veh)	40.7	10.9	18.8	28.6	9.0
Queue Delay	0.0	1.1	0.0	0.0	0.0
Total Delay (s/veh)	40.7	12.0	18.8	28.6	9.0
Queue Length 50th (ft)	54	129	159	144	25
Queue Length 95th (ft)	99	213	247	191	97
Internal Link Dist (ft)		53	688	44	
Turn Bay Length (ft)					
Base Capacity (vph)	290	1138	1564	1111	703
Starvation Cap Reductn	0	387	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.68	0.54	0.57	0.55

Intersection Summary

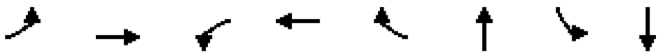
Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	347	64	367	479	293	715
v/c Ratio	0.76	0.14	0.93	0.48	0.51	0.64
Control Delay (s/veh)	35.7	3.3	62.3	12.0	23.4	22.7
Queue Delay	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay (s/veh)	35.7	3.3	62.3	12.3	23.4	22.7
Queue Length 50th (ft)	139	0	159	123	98	128
Queue Length 95th (ft)	224	16	#353	192	187	206
Internal Link Dist (ft)	347			182		339
Turn Bay Length (ft)		80				
Base Capacity (vph)	645	594	394	1191	631	1237
Starvation Cap Reductn	0	0	0	282	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.11	0.93	0.53	0.46	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBL	WBT	SBT
Lane Group Flow (vph)	191	717	806
v/c Ratio	0.28	0.56	0.58
Control Delay (s/veh)	8.9	1.7	14.7
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	8.9	1.7	14.7
Queue Length 50th (ft)	28	0	89
Queue Length 95th (ft)	63	0	173
Internal Link Dist (ft)		368	261
Turn Bay Length (ft)			
Base Capacity (vph)	1037	1397	1735
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.18	0.51	0.46

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	56	1067	11	1044	256	33	111	33
v/c Ratio	0.26	0.91	0.06	1.00	0.27	0.17	0.50	0.07
Control Delay (s/veh)	43.3	30.7	42.6	53.4	6.8	33.4	46.5	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.3	30.7	42.6	53.4	6.8	33.4	46.5	0.3
Queue Length 50th (ft)	29	511	6	~765	30	11	61	0
Queue Length 95th (ft)	80	#1192	26	#1163	88	47	129	0
Internal Link Dist (ft)		1065		569		135		847
Turn Bay Length (ft)	170		360		300			
Base Capacity (vph)	308	1175	231	1140	1031	198	482	651
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.91	0.05	0.92	0.25	0.17	0.23	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	87	641	1022	663	511
v/c Ratio	0.44	0.62	0.70	0.64	0.81
Control Delay (s/veh)	39.7	15.2	23.6	27.0	24.6
Queue Delay	0.0	1.9	0.0	0.0	0.0
Total Delay (s/veh)	39.7	17.1	23.6	27.0	24.6
Queue Length 50th (ft)	42	211	226	142	115
Queue Length 95th (ft)	82	315	#356	198	#285
Internal Link Dist (ft)		53	1065	44	
Turn Bay Length (ft)					
Base Capacity (vph)	279	1069	1466	1116	658
Starvation Cap Reductn	0	270	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.80	0.70	0.59	0.78

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	415	74	404	532	298	649
v/c Ratio	0.83	0.15	1.07	0.52	0.56	0.62
Control Delay (s/veh)	39.9	4.4	99.1	12.3	25.8	23.8
Queue Delay	0.0	0.0	0.0	0.7	0.0	0.0
Total Delay (s/veh)	39.9	4.4	99.1	12.9	25.8	23.8
Queue Length 50th (ft)	176	0	~224	143	111	127
Queue Length 95th (ft)	#304	22	#400	223	193	186
Internal Link Dist (ft)	347			182		339
Turn Bay Length (ft)		80				
Base Capacity (vph)	617	577	377	1138	604	1193
Starvation Cap Reductn	0	0	0	294	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.13	1.07	0.63	0.49	0.54

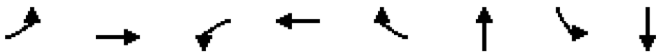
Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBL	WBT	SBT
Lane Group Flow (vph)	102	663	806
v/c Ratio	0.19	0.54	0.52
Control Delay (s/veh)	6.8	1.7	10.3
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	6.8	1.7	10.3
Queue Length 50th (ft)	8	0	48
Queue Length 95th (ft)	29	0	165
Internal Link Dist (ft)		368	261
Turn Bay Length (ft)			
Base Capacity (vph)	1248	1416	1903
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.08	0.47	0.42

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	96	937	11	883	149	43	170	85
v/c Ratio	0.41	0.81	0.06	0.94	0.18	0.21	0.63	0.29
Control Delay (s/veh)	46.2	24.4	44.2	45.0	6.6	36.9	48.8	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.2	24.4	44.2	45.0	6.6	36.9	48.8	14.6
Queue Length 50th (ft)	53	417	6	~602	13	17	96	6
Queue Length 95th (ft)	121	#1016	26	#984	55	59	188	51
Internal Link Dist (ft)		1067		557		135		847
Turn Bay Length (ft)	170		360		300			
Base Capacity (vph)	320	1156	240	1094	949	208	500	477
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.81	0.05	0.81	0.16	0.21	0.34	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	133	561	949	714	429
v/c Ratio	0.58	0.51	0.64	0.69	0.66
Control Delay (s/veh)	42.5	12.3	21.6	28.8	13.7
Queue Delay	0.0	1.4	0.0	0.0	0.0
Total Delay (s/veh)	42.5	13.7	21.6	28.8	13.7
Queue Length 50th (ft)	64	162	201	158	56
Queue Length 95th (ft)	114	243	286	218	153
Internal Link Dist (ft)		53	1067	44	
Turn Bay Length (ft)					
Base Capacity (vph)	290	1110	1486	1117	680
Starvation Cap Reductn	0	344	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.46	0.73	0.64	0.64	0.63

Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	389	74	411	537	326	800
v/c Ratio	0.81	0.16	1.08	0.53	0.57	0.71
Control Delay (s/veh)	38.6	4.5	101.8	12.9	25.1	25.1
Queue Delay	0.0	0.0	0.0	0.6	0.0	0.0
Total Delay (s/veh)	38.6	4.5	101.8	13.5	25.1	25.1
Queue Length 50th (ft)	161	0	~215	144	117	156
Queue Length 95th (ft)	256	22	#405	223	211	236
Internal Link Dist (ft)	347			182		339
Turn Bay Length (ft)		80				
Base Capacity (vph)	621	575	380	1147	608	1190
Starvation Cap Reductn	0	0	0	287	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.13	1.08	0.62	0.54	0.67

Intersection Summary

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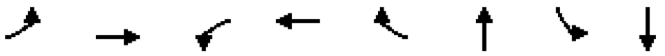
Queue shown is maximum after two cycles.

Lane Group	WBL	WBT	SBT
Lane Group Flow (vph)	208	792	906
v/c Ratio	0.30	0.61	0.65
Control Delay (s/veh)	9.7	2.2	16.3
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	9.7	2.2	16.3
Queue Length 50th (ft)	35	0	120
Queue Length 95th (ft)	72	0	200
Internal Link Dist (ft)		368	261
Turn Bay Length (ft)			
Base Capacity (vph)	958	1374	1606
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.22	0.58	0.56

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	56	1071	11	1052	258	33	116	33
v/c Ratio	0.26	0.91	0.06	1.01	0.27	0.17	0.51	0.07
Control Delay (s/veh)	43.4	31.3	42.7	55.5	6.8	33.4	47.0	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	43.4	31.3	42.7	55.5	6.8	33.4	47.0	0.3
Queue Length 50th (ft)	29	520	6	~778	31	11	63	0
Queue Length 95th (ft)	80	#1198	26	#1175	89	47	134	0
Internal Link Dist (ft)		303		569		135		365
Turn Bay Length (ft)	170		360		300			
Base Capacity (vph)	308	1173	230	1139	1030	198	481	651
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.91	0.05	0.92	0.25	0.17	0.24	0.05

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	88	645	1027	668	515
v/c Ratio	0.44	0.62	0.70	0.65	0.82
Control Delay (s/veh)	39.7	15.3	23.9	27.0	25.4
Queue Delay	0.0	1.9	0.0	0.0	0.0
Total Delay (s/veh)	39.7	17.2	23.9	27.0	25.4
Queue Length 50th (ft)	42	216	231	142	118
Queue Length 95th (ft)	83	317	#359	201	#293
Internal Link Dist (ft)		53	685	44	
Turn Bay Length (ft)					
Base Capacity (vph)	279	1069	1460	1118	656
Starvation Cap Reductn	0	266	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.32	0.80	0.70	0.60	0.79

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	416	74	407	533	301	653
v/c Ratio	0.83	0.15	1.08	0.52	0.57	0.62
Control Delay (s/veh)	40.0	4.4	102.1	12.3	26.0	23.9
Queue Delay	0.0	0.0	0.0	0.7	0.0	0.0
Total Delay (s/veh)	40.0	4.4	102.1	13.0	26.0	23.9
Queue Length 50th (ft)	176	0	~228	143	113	128
Queue Length 95th (ft)	#304	22	#404	224	194	187
Internal Link Dist (ft)	347			182		339
Turn Bay Length (ft)		80				
Base Capacity (vph)	616	577	376	1137	603	1192
Starvation Cap Reductn	0	0	0	295	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.13	1.08	0.63	0.50	0.55

Intersection Summary

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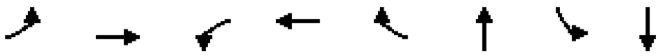
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	WBL	WBT	SBT
Lane Group Flow (vph)	106	665	809
v/c Ratio	0.20	0.54	0.53
Control Delay (s/veh)	6.9	1.7	10.5
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	6.9	1.7	10.5
Queue Length 50th (ft)	9	0	49
Queue Length 95th (ft)	30	0	165
Internal Link Dist (ft)		368	261
Turn Bay Length (ft)			
Base Capacity (vph)	1240	1414	1891
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.09	0.47	0.43

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	96	940	11	889	151	43	173	85
v/c Ratio	0.41	0.81	0.06	0.95	0.18	0.21	0.63	0.29
Control Delay (s/veh)	46.3	24.7	44.3	46.4	6.7	37.0	49.1	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.3	24.7	44.3	46.4	6.7	37.0	49.1	14.5
Queue Length 50th (ft)	53	420	6	~610	13	17	98	6
Queue Length 95th (ft)	121	#1025	26	#1000	56	60	191	51
Internal Link Dist (ft)		304		557		135		379
Turn Bay Length (ft)	170		360		300			
Base Capacity (vph)	319	1154	239	1093	949	207	499	476
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.81	0.05	0.81	0.16	0.21	0.35	0.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	NBT	NBR
Lane Group Flow (vph)	134	564	954	720	434
v/c Ratio	0.58	0.51	0.64	0.70	0.67
Control Delay (s/veh)	42.7	12.4	21.7	28.9	14.1
Queue Delay	0.0	1.4	0.0	0.0	0.0
Total Delay (s/veh)	42.7	13.8	21.7	28.9	14.1
Queue Length 50th (ft)	64	164	203	160	58
Queue Length 95th (ft)	115	245	288	220	159
Internal Link Dist (ft)		53	688	44	
Turn Bay Length (ft)					
Base Capacity (vph)	290	1110	1484	1118	679
Starvation Cap Reductn	0	342	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.46	0.73	0.64	0.64	0.64

Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	391	74	414	538	329	805
v/c Ratio	0.81	0.16	1.09	0.53	0.57	0.72
Control Delay (s/veh)	38.7	4.5	104.6	12.9	25.3	25.2
Queue Delay	0.0	0.0	0.0	0.6	0.0	0.0
Total Delay (s/veh)	38.7	4.5	104.6	13.5	25.3	25.2
Queue Length 50th (ft)	162	0	~219	144	119	158
Queue Length 95th (ft)	258	22	#409	223	213	238
Internal Link Dist (ft)	347			182		339
Turn Bay Length (ft)		80				
Base Capacity (vph)	621	574	379	1146	607	1189
Starvation Cap Reductn	0	0	0	288	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.13	1.09	0.63	0.54	0.68

Intersection Summary

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Queue shown is maximum after two cycles.

Lane Group	WBL	WBT	SBT
Lane Group Flow (vph)	214	794	909
v/c Ratio	0.31	0.61	0.65
Control Delay (s/veh)	9.8	2.2	16.3
Queue Delay	0.0	0.0	0.0
Total Delay (s/veh)	9.8	2.2	16.3
Queue Length 50th (ft)	37	0	121
Queue Length 95th (ft)	74	0	201
Internal Link Dist (ft)		368	261
Turn Bay Length (ft)			
Base Capacity (vph)	956	1373	1602
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.22	0.58	0.57

Intersection Summary